ANEXA Nr. 5.6

Fişa de verificare

a îndeplinirii standardelor Universităţii de prezentare la concurs pentru posturile de

Profesor universitar

Candidat: Andrei Rotaru

A) Fişa de îndeplinire a standardelor naţionale minimale necesare şi obligatorii pentru conferirea titlurilor didactice din învăţământul superior şi a gradelor profesionale de cercetare-dezvoltare

***(anexa nr. 4* - Comisia de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*)**

Îndeplinire standarde şi criterii pentru postul de *Profesor universitar*

Domeniul: Chimie

***Domeniul de cercetare declarat**: Chimie (Chimie fizică şi Ştiinţe termice)*

Criterii generale (Conform tabelului cerut de către Comisia de Chimie a CNATDCU)

Categorie	N_{max}	FIC	FIC_D	FIC_{AP}	FIC_{AC}	h index
Profesor/CSI/Habilitare	50	100	70	50	25	13
Andrei Rotaru	50 (asumat)	156,54 (îndeplinit)	156,54 (îndeplinit)	107,268 (îndeplinit)	88,302 (îndeplinit)	22 (îndeplinit)

N_{max} – primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact ai revistelor în care au fost publicate;
FIC – factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;
FIC_D – factorul de impact cumulat minimal din publicaţii în domeniile de cercetare declarate;
FIC_{AP} – factorul de impact cumulat minimal din publicaţii în calitate de autor principal (prim-autor şi autor de corespondenţă);
FIC_{AC}– factorul de impact cumulat minimal din publicaţii în calitate de autor de corespondenţă.

Note:

1. Pentru h index, am considerat exclusiv citările independente (fără autocitări).
2. h index se referă la întreaga carieră.
3. Toate standardele de Profesor/CSI/Habilitare ale CNATDCU pentru domeniul Chimie au fost îndeplinite de către candidat.

Toate standardele şi criteriile cerute (*conform anexei nr. 4* - Comisia de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*) au fost îndeplinite.

Conf. Univ. Dr. Andrei ROTARU **12.06.2023**

A1) Lista a 50 articole dintre cele N_{max} (50) premise şi punctajele obţinute pentru îndeplinirea standardelor şi criteriilor pentru Profesor/CSI/Habilitare de către Andrei Rotaru

Nr.	Titlul articolului Numele autorilor Revista, volumul, paginile, anul	Factor impact (Anul)	FIC	FIC_D	FIC_{AP}	FIC_{AC}	Citări pentru h index
1.	Local Structure and Order–Disorder Transitions in "Empty" Ferroelectric Tetragonal Tungsten Bronzes; Jason A. McNulty, David Pesquera, Jonathan Gardner, **Andrei Rotaru**, Helen Y. Playford, Matthew G. Tucker, Michael A. Carpenter, Finlay D. Morrison ***Chemistry of Materials,*** 2020, 32 (19), 8492–8501	9,811 (2020)	9,811	9,811			
2.	An innovative method for highly-efficient fabrication of carbon fiber precursors via acrylonitrile emulsion copolymerization coupled to a chemical oscillator; Luciana Sciascia, Davide Lenaz, **Andrei Rotaru**, Francesco Princivalle, Filippo Parisi ***Surfaces and Interfaces***, 37, 102686, 2023	6,137 (2021)	6,137	6,137			
3.	The in-depth study of Romanian prehistoric ceramics: Late Neolithic/Eneolithic pottery and clay materials from the Foeni Tell-Orthodox cemetery in Timiş county; Dan Vlase, Gabriela Vlase, Gabriela Ursuţ, Paula Sfirloaga, Florin Manea, Mihaela Budiul, **Andrei Rotaru***, Titus Vlase* ***Ceramics International,*** 49(9), 14941-14956, 2023	5,532 (2021)	5,532	5,532	2,766	2,766	
4.	Structural, thermal and superconducting properties of Ag_2O-doped $YBa_2Cu_3O_{7-x}$ composite materials; Ana Hărăbor, Petre Rotaru, Novac Adrian Hărăbor, Petr Nozar, **Andrei Rotaru*** ***Ceramics International***, 49(9), 14904-14916, 2023	5,532 (2021)	5,532	5,532	5,532	5,532	
5.	The influence of surface chemistry upon the textural, thermal and sorption properties of apple-pectin adsorbent materials; Tudor Lupaşcu, Elena Culighin, Oleg Petuhov, Tatiana Mitina, Maria Rusu, **Andrei Rotaru*** ***Journal of Thermal Analysis and Calorimetry***, 148, 4573–4587, 2023	4,755 (2021)	4,755	4,755	4,755	4,755	
6.	Thermal, physical and biological properties of new etheric dyes with chlorine and two azo groups of anthracene; Anca Moanță, Alice Carla Carabet, Ion Pălărie, **Andrei Rotaru**, Mariana Popescu, Marian Leulescu, Gabriela Iacobescu, Mihail Stoicescu,	4,755 (2021)	4,755	4,755			

	Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 148 (10), 4615-4639, 2023						
7.	Thermal stability, rheological and morpho-structural properties of the magnetorheological fluid MRF122 employed in spherical joint mechanisms; Daniela Sârbu, Nicu George Bîzdoacă, Nicoleta Cioateră, Cristian Ionel Vladu, **Andrei Rotaru***, Cristina Florina Pană, Daniela Maria Pătraşcu, Gabriel Florian, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 148, 1289–1308, 2023	4,755 (2021)	4,755	4,755	4,755	4,755	
8.	Sunset Yellow: Physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic orange azo-dye material; Marian Leulescu, Ion Pălărie, **Andrei Rotaru***, Anca Moanţă, Nicoleta Cioateră, Mariana Popescu, Gabriela Iacobescu, Emilian Morîntale, Mihaela Bojan, Maria Ciocîlteu, Iulian Petrişor, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry,*** 148, 1265–1287, 2023	4,755 (2021)	4,755	4,755	4,755	4,755	
9.	Azorubine: Physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic red azo-dye material; Marian Leulescu, **Andrei Rotaru***, Anca Moanţă, Gabriela Iacobescu, Ion Pălărie, Nicoleta Cioateră, Mariana Popescu, Marius Catalin Criveanu, Emilian Morîntale, Mihaela Bojan, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 143(6), 3945–3967, 2021	4,755 (2021)	4,755	4,755	4,755	4,755	
10.	The electro-mechanical control of element NiTi shape memory alloy strip while bending, based on thermal analysis evidence; Sonia Degeratu, G.E. Subţirelu, **Andrei Rotaru***, Nicu G. Bîzdoacă, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 143(6), 3805–3815, 2021	4,755 (2021)	4,755	4,755	4,755	4,755	
11.	Edible vegetable oils enriched with carotenoids extracted from by-products of sea buckthorn (*Hippophae rhamnoides ssp.* sinensis): the investigation of some characteristic properties, oxidative stability and the effect on thermal behaviour; Alexandru Radu Corbu, **Andrei Rotaru**, Violeta Nour; ***Journal of Thermal Analysis and Calorimetry,*** 2020, 142 (2), 735–747	4,626 (2020)	4,626	4,626			

12.	Thermomechanical, calorimetric and magnetic properties of a Ni-Ti shape memory alloy wire; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Nicolae Stănică, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 140, 527–544, 2020	4,626 (2020)	4,626	4,626	4,626	4,626	
13.	Ti-based composite materials with enhanced thermal and mechanical properties; Cristina Ileana Pascu, Stefan Gheorghe, **Andrei Rotaru***, Claudiu Nicolicescu, Nicoleta Cioatera, Adrian Sorin Rosca, Daniela Sarbu, Petre Rotaru ***Ceramics International***, 2020, 46 (18) Part B, 29358-29372	4,527 (2020)	4,527	4,527	4,527	4,527	
14.	Physical, thermal and biological properties of yellow dyes with two azodiphenylether groups of anthracene Carla Carabet, Anca Moanţă, Ion Pălărie, Gabriela Iacobescu, **Andrei Rotaru***, Marian Leulescu, Mariana Popescu, Petre Rotaru ***Molecules,*** Molecules 2020, 25(23), 5757	4,411 (2020)	4,411	4,411	4,411	4,411	
15.	Adsorption capacity of Vitamin B12 and Creatinine on highly-mesoporous activated carbons obtained from lignocellulosic raw materials; Tudor Lupaşcu, Oleg Petuhov, Nina Ţîmbaliuc, Silvia Cibotaru, **Andrei Rotaru*** ***Molecules,*** 25 (13), 3095, 2020	4,411 (2020)	4,411	4,411	4,411	4,411	
16.	Induced-Hydrophilicity and in vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment; Luminita Nicoleta Dumitrescu, Patricia Neacsu, Madalina G. Necula, Anca Bonciu, Valentina Marascu, Anisoara Cimpean, Antoniu Moldovan, **Andrei Rotaru***, Valentina Dinca**, Maria Dinescu** ***Molecules,*** 25 (3), 582, 2020	4,411 (2020)	4,411	4,411	1,470	1,470	
17.	Effect of local A-site strain on dipole stability in $A_6GaNb_9O_{30}$ (A = Ba, Sr, Ca) tetragonal tungsten bronze relaxor dielectrics. Andrew J. Miller, **Andrei Rotaru**, Donna C. Arnold, Finlay D. Morrison; ***Dalton Transactions***, 44, 10738-10745, 2015	4,177 (2015)	4,177	4,177			
18.	Structural, electrical and relaxor properties of Sc-In solid solution in tetragonal tungsten bronze ceramics; **Andrei Rotaru**, Finlay D. Morrison; ***Ceramics International,*** 45 (2) Part B, 2710-2718, 2019	3,830 (2019)	3,830	3,830	3,830		
19.	Orthorhombic YBCO-123 ceramic oxide superconductor: structural, resistive and thermal properties; Ana Harabor, Petre Rotaru, Novac Adrian Harabor, Petr Nozar, **Andrei Rotaru***; ***Ceramics International,*** 45 (2) Part B, 2899-2907,	3,830 (2019)	3,830	3,830	3,830	3,830	22

	2019						
20.	Origin and stability of dipolar response in a family of tetragonal tungsten bronze relaxors; **Andrei Rotaru**, Donna C. Arnold, Aziz Daoud-Aladine, Finlay D. Morrison; ***Physical Review B***, 83, 18, 184302, 2011	3,691 (2011)	3,691	3,691	3,691		43
21.	Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N'-donor linkers; Vasile Lozovan, Victor C. Kravtsov, Elena Gorincioi, **Andrei Rotaru**, Eduard B. Coropceanu, Nikita Siminel, Marina S. Fonari ***Polyhedron,*** 180, 114411, 2020	3,052 (2020)	3,052	3,052			
22.	Microstructural and high-temperature impedance spectroscopy study of $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In) relaxor dielectric ceramics with tetragonal tungsten bronze structure; **Andrei Rotaru***, Finlay D. Morrison; ***Ceramics International,*** 42, 11810-11821, 2016	2,986 (2016)	2,986	2,986	2,986	2,986	
23.	Physical and thermophysical properties of a commercial Ni-Ti shape memory alloy strip; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Cornelia A. Marinescu, Gabriela Iacobescu, Nicolae Stănică, Sonia Degeratu, Oana Gîngu, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 138(3), 1841-1851, 2019	2,731 (2019)	2,731	2,731	2,731	2,731	
24.	Tartrazine: physical and biophysical properties of the most widely employed artificial yellow food-colouring azo dye; Marian Leulescu, **Andrei Rotaru***, Ion Pălărie, Anca Moanță, Nicoleta Cioatera, Mariana Popescu, Emilian Morîntale, Maria Bubulică, Gabriel Florian, Ana Hărăbor, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 134 (1), 209-231, 2018	2,471 (2018)	2,471	2,471	2,471	2,471	40
25.	Thermal behaviour and thin film deposition by MAPLE technique of functional polymeric materials with potential use in optoelectronics; Catalin Constantinescu, **Andrei Rotaru**, Anca Nedelcea, Maria Dinescu; ***Materials Science in Semiconductor Processing,*** 30, 242-249, 2015	2,264 (2015)	2,264	2,264			25
26.	Thermokinetic study of CODA azoic liquid crystal and thin films deposition by matrix-assisted pulsed laser evaporation; **Andrei Rotaru**, Anca Moanță, Cătălin Constantinescu, Marius Dumitru, Horia Octavian Manolea, Andreea Andrei, Maria Dinescu; ***Journal of Thermal Analysis and Calorimetry,*** 128 (1), 89-105, 2017	2,209 (2017)	2,209	2,209	2,209		

27.	Hydroxyapatite-alendronate composite systems for biocompatible materials; Johny Neamtu, Maria-Viorica Bubulica, **Andrei Rotaru**, Catalin Ducu, Oana Elena Balosache, Valentin Costel Manda, Adina Turcu-Stiolica, Claudiu Nicolicescu, Razvan Melinte, Mariana Popescu, Octavian Croitoru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (2), 1567–1582, 2017	2,209 (2017)	2,209	2,209			23
28.	Thermal behaviour of CODA azoic dye liquid crystal and nanostructuring by drop cast and spin coating techniques; **Andrei Rotaru**, Marius Dumitru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 21–32, 2017	2,209 (2017)	2,209	2,209	2,209		
29.	Thermal and kinetic study of hexagonal boric acid *vs.* triclinic boric acid in air flow; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry***, 127 (1), 755–763, 2017	2,209 (2017)	2,209	2,209	2,209	2,209	
30.	Towards novel multiferroic & magnetoelectric materials: dipole stability in tetragonal tungsten bronzes. **Andrei Rotaru**, Andrew J. Miller, Donna C. Arnold, Finlay D. Morrison; ***Philosophical Transactions of the Royal Society A***, 372, 20120451, 2014	2,147 (2014)	2,147	2,147	2,147		23
31.	Thermal analysis and kinetic study of Petroşani bituminous coal from Romania in comparison with a sample of Ural bituminous coal; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry,*** 110, 3, 1283-1291, 2012	1,982 (2012)	1,982	1,982	1,982	1,982	37
32.	Discriminating within the kinetic models for heterogeneous processes of materials by employing a combined procedure under TKS-SP 2.0 software; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry,*** 126 (2), 919-932, 2016	1,953 (2016)	1,953	1,953	1,953	1,953	
33.	Elastic and anelastic relaxations accompanying relaxor dielectric behaviour of $Ba_6GaNb_9O_{30}$ tetragonal tungsten bronze from resonant ultrasound spectroscopy; **Andrei Rotaru***, Jason A. Schiemer, Michael A. Carpenter; ***Journal of Thermal Analysis and Calorimetry,*** 124 (2), 571-583, 2016	1,953 (2016)	1,953	1,953	1,953	1,953	
34.	Matrix assisted pulsed laser evaporation of zinc benzoate for ZnO thin films and non-isothermal decomposition kinetics; **Andrei Rotaru***, Catalin Constantinescu, Anca Mândruleanu, Petre Rotaru, Antoniu Moldovan, Katarina Győryová, Maria Dinescu, Vladimir Balek;	1,908 (2010)	1,908	1,908	1,908	1,908	26

	Thermochimica Acta, 498, 1-2, 81-91, 2010						
35.	DSC study on hyaluronan hydration and dehydration; Jiri Kucerik, Alena Prusova, **Andrei Rotaru**, Karol Flimel, Jiri Janacek, Pelegrino Conte; ***Thermochimica Acta,*** 523, 1-2, 245-249, 2011	1,805 (2011)	1,805	1,805			27
36.	Vogel-Fulcher analysis of relaxor dielectrics with the tetragonal tungsten bronze structure $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In); **Andrei Rotaru**, Finlay D. Morrison; ***Journal of Thermal Analysis and Calorimetry,*** 120 (2), 1249-1259, 2015	1,781 (2015)	1,781	1,781	1,781		
37.	Thermal behavior and antimicrobial assay of some new zinc(II) 2-aminobenzoate complex compounds with bioactive ligands; Annamaria Krajnikova, **Andrei Rotaru***, Katarina Gyoryova, Horia Octavian Manolea, Katarina Homzova, Jana Kovarova, Daniela Hudecova; ***Journal of Thermal Analysis and Calorimetry,*** 120, 1, 73-78, 2015	1,781 (2015)	1,781	1,781	1,781	1,781	
38.	Thermal analysis of azoic dyes; Part I. Non-isothermal decomposition kinetics of [4-(4-chlorobenzyloxy)-3-methylphenyl](*p*-tolyl)diazene in dynamic air atmosphere; **Andrei Rotaru***, George Brătulescu, Petre Rotaru; ***Thermochimica Acta,*** 489, 1-2, 63-69, 2009	1,742 (2009)	1,742	1,742	1,742	1,742	26
39.	Computational thermal and kinetic analysis. Software for non-isothermal kinetics by standard procedure; **Andrei Rotaru***, Mihai Goşa, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 94, 2 367-371, 2008	1,630 (2008)	1,630	1,630	1,630	1,630	35
40.	Thermal decomposition kinetics of some aromatic azomonoethers. Part II. Non-isothermal study of three liquid crystals in dynamic air atmosphere; **Andrei Rotaru***, Anna Kropidłowska, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 92, 1, 233-238, 2008	1,630 (2008)	1,630	1,630	1,630	1,630	38
41.	Thermal characterization of humic acids and other components of raw coal; **Andrei Rotaru***, Irina Nicolaescu, Petre Rotaru, Constantin Neaga; ***Journal of Thermal Analysis and Calorimetry,*** 92, 1, 297-300, 2008	1,630 (2008)	1,630	1,630	1,630	1,630	28
42.	Heteroleptic Cd(II) complex, potential precursor for semiconducting CdS layers. Thermal stability and non-isothermal decomposition; Anna Kropidłowska, **Andrei Rotaru**, Michal Strankowski, Barbara Becker, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 91, 3, 903-909, 2008	1,630 (2008)	1,630	1,630			29

43.	Multifunctional thin films of lactoferrin for biochemical use deposited by MAPLE technique; Catalin Constantinescu, Alexandra Palla-Papavlu, **Andrei Rotaru**, Paula Florian, Florica Chelu, Madalina Icriverzi, Anca Nedelcea, Valentina Dincă, Anca Roşeanu, Maria Dinescu; ***Applied Surface Science*****,** 255, 10, 5491-5495, 2009	1,616 (2009)	1,616	1,616			33
44.	CdS thin films obtained by thermal treatment of cadmium (II) complex precursor deposited by MAPLE technique; **Andrei Rotaru**, Anna Mietlarek-Kropidłowska, Catalin Constantinescu, Nicu Scărişoreanu, Marius Dumitru, Michal Strankowski, Petre Rotaru, Valentin Ion, Cristina Vasiliu, B. Becker, M. Dinescu; ***Applied Surface Science***, 255, 15, 6786-6789, 2009	1,616 (2009)	1,616	1,616	1,616		27
45.	Computational thermal and kinetic analysis. Complete standard procedure to evaluate the kinetic triplet form non-isothermal data; **Andrei Rotaru***, Mihai Goşa; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 421-426, 2009	1,587 (2009)	1,587	1,587	1,587	1,587	48
46.	Thermal decomposition kinetics of some aromatic azomonoethers. Part IV. Non-isothermal kinetics of 2-allyl-4-((4-(4-methylbenzyloxy)phenyl)diazenyl)phenol in air flow; **Andrei Rotaru***, Anca Moanţă, Gina Popa, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 485-491, 2009	1,587 (2009)	1,587	1,587	1,587	1,587	34
47.	Thermal decomposition kinetics of some aromatic azomonoethers. Part III. Non-isothermal study of 4-[(4-chlorobenzyl)oxy]-4'-chloro-azobenzene in dynamic air atmosphere; **Andrei Rotaru***, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 95, 1, 161-166, 2009	1,587 (2009)	1,587	1,587	1,587	1,587	31
48.	Thermal characteristics of Ni-Ti SMA (shape memory alloy) actuators; Sonia Degeratu, Petre Rotaru, Gheorghe Manolea, Horia Octavian Manolea, **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 695-700, 2009	1,587 (2009)	1,587	1,587	1,587	1,587	34
49.	Thermal stability of some new complexes bearing ligands with polymerisable groups; Mihaela Badea, Rodica Olar, Dana Marinescu, Eugen Segal, **Andrei Rotaru;** ***Journal of Thermal Analysis and Calorimetry*****,** 88, 2, 317-321, 2007	1,483 (2007)	1,483	1,483			26

50.	Thermal decomposition kinetics of some aromatic azomonoethers; Part I.Decomposition of 4-[(4-chlorobenzyl)oxy]-4'-nitro-azobenzene; **Andrei Rotaru**, Anca Moanţă, Ion Sălăgeanu, Petru Budrugeac, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 87, 2, 345-355, 2007	1,483 (2007)	1,483	1,483	1,483		23
	Indicatori	**N**	**FIC**	**FIC_D**	**FIC_{AP}**	**FIC_{AC}**	**h index**
	Total	**50**	**156,54**	**156,54**	**107,268**	**88,302**	**22**

''*'' – reprezintă autorul de corespondenţă, atunci când acesta este subsemnatul.
''**'' – reprezintă alţi autori de corespondenţă, pe lângă subsemnatul.

Toate standardele şi criteriile cerute (*conform anexei nr. 4* - Comisia de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*) au fost îndeplinite.

Conf. Univ. Dr. Andrei Rotaru **12.06.2023**

A2) Lista citărilor de tip ISI Web of Knowledge (Clarivate Analytics) şi BDI (Google Academics şi Scopus) ale lucrărilor publicate de către Andrei Rotaru

(Pentru verificarea fişei de îndeplinire a standardelor minimale necesare şi obligatorii pentru conferirea titlurilor didactice din învăţământul superior şi a gradelor profesionale de cercetare-dezvoltare în domeniul Chimie)

Lista de citări ale lucrărilor publicate	
Lucrare proprie care este citată	**Nr. citări**
Lucrări care citează lucrarea proprie	**Tipul citării**
1. Azorubine: physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic red azo dye material; Marian Leulescu, **Andrei Rotaru**, Anca Moanţă, Gabriela Iacobescu, Ion Pălărie, Nicoleta Cioateră, Mariana Popescu, Marius Cătălin Criveanu, Emilian Morîntale, Mihaela Bojan, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 143 (6), 3945-3967, 2021	**12 citări**
1. Abramov, V., Abramova, A., Bayazitov, V., Kameneva, S., Veselova, V., Kozlov, D., Sozarukova, M., Baranchikov, A., Fedulov, I., Nikonov, R. and Cravotto, G., 2022. Fast degradation of tetracycline and ciprofloxacin in municipal water under hydrodynamic cavitation/plasma with CeO2 nanocatalyst. Processes, 10(10), p.2063. 2. Xu, Y. and Ding, Z., 2022. Oxidation-Induced and Hydrothermal-Assisted Template-Free Synthesis of Mesoporous CeO2 for Adsorption of Acid Orange 7. Materials, 15(15), p.5209. 3. Kapoor, A., Singh, D., Pratibha, Rajput, J.K., Kumar, N. and Varnika, 2022. Investigation on solar light assisted degradation of perilous Chromotrope-FB and Ponceau-BS colorants by Ag-doped ZrFe2O4: a greener environmental remediation approach. International Journal of Environmental Analytical Chemistry, pp.1-27. 4. KARAKAYA, İ., 2022. Synthesis and characterization of azobenzene derived from 8-aminoquinoline in aqueous media. Journal of the Turkish Chemical Society Section A: Chemistry, 9(1), pp.85-114. 5. F. Hashemi-Shahraki, B. Shareghi, S. Farhadian. Characterizing the binding affinity and molecular interplay between quinoline yellow and pepsin. Journal of Molecular Liquids. 341, 117317, 2021. 6. A Raiol, AR da Cunha, V Manzoni, T Andrade-Filho, R Gester. Solvent enhancement and isomeric effects on the NLO properties of a photoinduced cis-trans azomethine chromophore: A sequential MC/QM study. Journal of Molecular Liquids. 340, 116887, 2021. 7. Nadiya VOROBEY, Kateryna KUKOL, Petro PUKHTAIEVYCH, Sergii KOTS. Influence of	**ISI**

carmoisine on the viability of Bradyrhizobium japonicum in vitro and physiological indices of soybean under symbiosis conditions. Journal of Central European Agriculture. 22(4), 735-747, 2021. 8. Olga Yu. Golubeva, Yulia A. Alikina, Tamara V. Khamova, Elizaveta V. Vladimirova, Olga V. Shamova. Aluminosilicate Nanosponges: Synthesis, Properties, and Application Prospects. Inorganic Chemistry. 60, 22, 17008–17018, 2021. 9. Al-Hawary, Sulieman Ibraheem Shelash, Ahmed Omar Bali, Shavan Askar, Holya A. Lafta, Zainab Jawad Kadhim, Bakhodir Kholdorov, Yassine Riadi, Reena Solanki, and Yasser Fakri Mustafa. "Recent advances in nanomaterials-based electrochemical and optical sensing approaches for detection of food dyes in food samples: A comprehensive overview." Microchemical Journal (2023): 108540. 10. Sunkur, M., and O. Gullu. "Carmoisine azo dye-modified Al/p-Si junction." Materials Chemistry and Physics 302 (2023): 127778.	
1. Halim, Giovania Evangeline, and Martin Tjahjono. "Evaluation of Color Models for Quantitative Determination of Food Dyes using Smartphone-Based Digital Image Analysis." JKPK (Jurnal Kimia dan Pendidikan Kimia) 8, no. 1: 86-100. 2. Kukol, Ekaterina, Nadiya Vorobey, Petro Pukhtaievych, and Sergii Kots. "Вплив біопрепаратів бульбочкових бактерій із кармоїзином на формування та функціонування симбіотичних систем соя–Bradyrhizobium japonicum." Plant varieties studying and protection 17, no. 2 (2021): 123-129.	**BDI**
2. Local Structure and Order–Disorder Transitions in "Empty" Ferroelectric Tetragonal Tungsten Bronzes; Jason A. McNulty, David Pesquera, Jonathan Gardner, **Andrei Rotaru**, Helen Y. Playford, Matthew G. Tucker, Michael A. Carpenter, Finlay D. Morrison	**5 citări**
1. Cao, Lei, Ying Yuan, Xiangjun Meng, Enzhu Li, and Bin Tang. "Ferroelectric-relaxor crossover and energy storage properties in Sr2NaNb5O15-based tungsten bronze ceramics." *ACS Applied Materials & Interfaces* 14, no. 7 (2022): 9318-9329. 2. Peng, Haonan, Zhen Liu, Zhengqian Fu, Kai Dai, Zhongqian Lv, Shaobo Guo, Zhigao Hu, Fangfang Xu, and Genshui Wang. "Superior Energy Density Achieved in Unfilled Tungsten Bronze Ferroelectrics via Multiscale Regulation Strategy." *Advanced Science* (2023): 2300227. 3. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." *Journal of Alloys and Compounds* 929 (2022): 167314. 4. He, Xiao-Juan, Yi-Chi Zhang, Ling Li, Ji Zhang, Zheng-Bin Gu, and Shan-Tao Zhang. "Relaxor-normal ferroelectric transition in (1− x) Sr0. 75Ba0. 25Nb2O6–x NaNbO3 ceramics." *Applied Physics Letters* 120, no. 18 (2022): 182902.	**ISI**
1. McCabe, Emma E. "Designing new polar materials." Elsevier, 2022.	**BDI**
3. Adsorption capacity of Vitamin B12 and Creatinine on highly-mesoporous activated carbons obtained from lignocellulosic raw materials; Tudor Lupaşcu, Oleg Petuhov, Nina Ţîmbaliuc, Silvia Cibotaru, **Andrei Rotaru*** ***Molecules,*** 25 (13), 3095, 2020	**10 citări**
1. Alzate-Arbelaez, Andrés Felipe, Farid B. Cortés, and Benjamín A. Rojano. "Antioxidants from Hyeronima macrocarpa Berries Loaded on Nanocellulose: Thermal and Antioxidant Stability." Molecules 27, no. 19 (2022): 6661. 2. Wang, Wei, Zhijuan Wang, Kai Li, Yuxin Liu, Delong Xie, Shaoyun Shan, Liang He, and Yi Mei. "Adsorption of uremic toxins using biochar for dialysate regeneration." Biomass Conversion and Biorefinery (2021): 1-13. 3. Blachnio, Magdalena, Anna Derylo-Marczewska, Szymon Winter, and Malgorzata Zienkiewicz-Strzalka. "Mesoporous Carbons of Well-Organized Structure in the Removal of Dyes from Aqueous Solutions." Molecules 26, no. 8 (2021): 2159. 4. Smiley, Erfan, Fariba Tadayon, and Mahmoud Reza Sohrabi. "Pre-Proof File Vitamin B2 Removal from Aqueous Solution Using Magnetic Nanoparticles/Orange Peel Composite: Optimization Using Response Surface Methodology." Iran. J. Chem. Chem. Eng. Research Article Vol 41, no. 11 (2022).	**ISI**
1. Gan, Yong X. "Activated carbon from biomass sustainable sources." C 7, no. 2 (2021): 39. 2. Ahmed, Ahmed S., Mohammed Alsultan, Rowaa Tareq Hameed, Yamama F. Assim, and Gerhard F. Swiegers. "High surface area activated charcoal for water purification." Journal of Composites Science 6, no. 10 (2022): 311. 3. Basha, Nilufer Anwar, Thirumalaisamy Rathinavel, and Harini Sridharan. "Activated Carbon from Coconut Shell: Synthesis and Its Commercial Applications-A Recent Review." Applied Science and Engineering Progress 16, no. 2 (2023): 6152-6152. 4. Ciobanu, Mihail, Nina Timbaliuc, and Tudor Lupascu. "Kinetics of caffeine adsorption from aqueous solutions on active charcoal AC-0-9." (2022). 5. SARDORBEK, YARMATOV, SARIMSAKOV ABDUSHKUR, KHEGAY LYUBOV, SHADMANOV ALISHER, and ERGASHEVA ZUMRAD. "ADSORPTION PROPERTIES OF HEMOSORBENT	**BDI**

BASED ON HYDROLYZED NATURAL SILK FIBROIN." PLANT CELL BIOTECHNOLOGY AND MOLECULAR BIOLOGY (2021): 201-207. 6. Ярматов, Сардорбек Собиржонович, and Абдушкур Абдухалилович Саримсаков. "ПОЛУЧЕНИЕ ПОЛИФУНКЦИОНАЛЬНОГО ГЕМОСОРБЕНТА ИЗ ВОЛОКНИСТЫХ ОТХОДОВ НАТУРАЛЬНОГО ШЕЛКА, И ЕГО СОРБЦИОННАЯ АКТИВНОСТЬ ПО ОТНОШЕНИЮ К ВИТАМИНУ В12." Universum: химия и биология 9 (87) (2021): 39-45.	
4. The electro-mechanical control of element NiTi shape memory alloy strip while bending, based on thermal analysis evidence; Sonia Degeratu, G.E. Subţirelu, **Andrei Rotaru**, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry***, 143(6), 3805–3815, 2021	**3 citări**
1. Zucchini, Azzurra, Tonci Balić-Žunić, Ines E. Collings, Michael Hanfland, and Paola Comodi. "High-pressure single-crystal synchrotron X-ray diffraction study of lillianite." *American Mineralogist* 107, no. 9 (2022): 1752-1759. 2. Dong, Yuqing, Ka-Wai Yeung, Wing-Cheung Law, Gary Chi-Pong Tsui, Xiaolin Xie, and Chak-Yin Tang. "Towards a consistent methodology for testing the electromechanical performance of strip polymer composite actuators." *Polymer Testing* 106 (2022): 107463.	**ISI**
1. G.E. Subtirelu, S. Degeratu. Virtual Instrumentation for Study of Shape Memory Alloys Strip while Bending. Annals of the University of Craiova, Electrical Engineering series, 44(1), 29-35, 2020	**BDI**
5. Thermomechanical, calorimetric and magnetic properties of a Ni-Ti shape memory alloy wire; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru**, Nicolae Stănică, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 140, 527–544, 2020	**9 citări**
1. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 2. Chekotu, Josiah Cherian, Russell Goodall, David Kinahan, and Dermot Brabazon. "Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process parameters." Materials & Design 218 (2022): 110715. 3. Vashishtha, Himanshu, and Jayant Jain. "Influence of laser power on precipitate formation and multiple step transformation kinetics in NiTi shape memory alloy weld joints." Journal of Alloys and Compounds 893 (2022): 162307. 4. Jovanović-Medojević, Milica, Aleksandra Dragičević, Ivana Milanović, Lidija Matija, and Slavoljub Živković. "Opto-magnetic imaging spectroscopy in analyzing rotary NiTi endodontic instruments." Journal of the Mechanical Behavior of Biomedical Materials 141 (2023): 105789. 5. Zhao, Haibo, and Kun Wu. "Experimental and numerical investigation of the transient thermal characteristics of twisted nitinol wires in a continuous torsional refrigeration system." Plos one 17, no. 11 (2022): e0277415. 6. Mohammed, S. S., E. Balci, F. Dagdelen, and S. Saydam. "Comparison of Thermodynamic Parameters and Corrosion Behaviors of Ti50Ni25Nb25 and Ti50Ni25Ta25 Shape Memory Alloys." Physics of Metals and Metallography 123, no. 14 (2022): 1427-1435.	**ISI**
1. Raimondi, Francesca, Duarte Martins, Raluca Coenen, Elena Panaioli, Diala Khraiche, Nathalie Boddaert, Damien Bonnet et al. "Prevalence of Venovenous Shunting and High-Output State Quantified with 4D Flow MRI in Patients with Fontan Circulation." Radiology: Cardiothoracic Imaging 3, no. 6 (2021): e210161. 2. Zelenaya, Anna E., Vasily I. Lutsyk, and Viktor D. Baldanov. "Computer model of Cu-Ni-Mn isobaric phase diagram: verification of crystallisation intervals and change of the three-phase reaction type." Condensed Matter and Interphases 24, no. 4 (2022): 466-474. 3. Chekotu, Josiah Cherian, and Dermot Brabazon. "In Silico Finite Element Approach on Mechanical Behavior in Superelastic Nitinol." In Key Engineering Materials, vol. 926, pp. 213-219. Trans Tech Publications Ltd, 2022.	**BDI**
6. Physical and thermophysical properties of a commercial Ni-Ti shape memory alloy strip; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru**, Cornelia A. Marinescu, Gabriela Iacobescu, Nicolae Stănică, Sonia Degeratu, Oana Gîngu, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 138(3), 1841-1851, 2019	**5 citări**
1. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 2. Chekotu, Josiah Cherian, Russell Goodall, David Kinahan, and Dermot Brabazon. "Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process	**ISI**

parameters." Materials & Design 218 (2022): 110715. 3. Yun, Min Ju, Yeon Hyang Sim, Dong Yoon Lee, and Seung I. Cha. "Automated shape-transformable self-solar-tracking tessellated crystalline Si solar cells using in-situ shape-memory-alloy actuation." Scientific Reports 12, no. 1 (2022): 1597. 4. Ke, Jun, Lan Chen, Jin Gao, and Zhen-yu Wu. "Improving the dynamic stiffness and vibration characteristics of 3D orthogonal woven by implanting SMA instead of a warp yarn." Composite Structures (2023): 116637. 5. Yun, Min Ju, Yeon Hyang Sim, Dong Yoon Lee, and Seung I. Cha. "Self-shape-transformable 3D tessellated bifacial crystalline Si solar cell module enabling extra energy gain through intervals and an integrated actuator." Sustainable Energy & Fuels 6, no. 1 (2022): 89-97.	
7. Ti-based composite materials with enhanced thermal and mechanical properties; Cristina Ileana Pascu, Stefan Gheorghe, **Andrei Rotaru**, Claudiu Nicolicescu, Nicoleta Cioatera, Adrian Sorin Rosca, Daniela Sarbu, Petre Rotaru. ***Ceramics International***, 46 (18, Part B), 29358-29372, 2020	**7 citări**
1. Pascu, Cristina Ileana, Claudiu Nicolicescu, Nicoleta Cioateră, Ștefan Gheorghe, Ionuț Geonea, and Anca Didu. "Characterization of Titanium Alloy Obtained by Powder Metallurgy." *Materials* 15, no. 6 (2022): 2057. 2. Alazwari, Mashhour A., Essam B. Moustafa, Ahmed B. Khoshaim, and Mohammed A. Taha. "Mechanical and wear evolution of in situ synthesized Ti–Cu alloy matrix hybrid composite reinforced by low-cost activated carbon and silica fume waste ceramic for industrial applications." *Journal of Materials Research and Technology* 22 (2023): 2284-2296. 3. Dwivedi, Shashi Prakash, and Shubham Sharma. "Recovery of Al2O3/Al powder from aluminum dross to utilize as reinforcement along with graphene in the synthesis of aluminum-based composite." *Particulate Science and Technology* (2023): 1-13.	**ISI**
1. Mostafizur Rahman, Sadnan Mohosin Mondol. Mechanical Behaviors of Al-Based Metal Composites Fabricated by Stir Casting Technique. Journal of Engineering Advancements Vol. 01(04) 2020, pp 144-149. 2. Donchak, Volodymyr, Yurij Stetsyshyn, Michael Bratychak, Georg Broza, Khrystyna Harhay, Nataliia Stepina, Mariia Kostenko, and Stanislav Voronov. "Nanoarchitectonics at surfaces using multifunctional initiators of surface-initiated radical polymerization for fabrication of the nanocomposites." *Applied Surface Science Advances* 5 (2021): 100104. 3. Prakash, Jayavelu Udaya, Charles Sarala Rubi, Sivaprakasam Palani, Sunder Jebarose Juliyana, and Arasumugam Divya Sadhana. "Optimization of machining parameters in drilling of LM6/B4C/Fly ash hybrid composites." *Manufacturing Review* 9 (2022): 28. 4. PASCU, Cristina Ileana, Ștefan GHEORGHE, Claudiu NICOLICESCU, and VIDA-SIMITI Ioan. "RESEARCH ABOUT THE TRIBOLOGICAL PROPERTIES IMPROVEMENT OF AN ALLOY BASED ON TITANIUM HYDRIDE POWDER FOR AUTOMOTIVE COMPONENTS." *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING* 64, no. 1 (2021).	**BDI**
8. Induced-Hydrophilicity and in vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment; Luminita Nicoleta Dumitrescu, Patricia Neacsu, Madalina G. Necula, Anca Bonciu, Valentina Marascu, Anisoara Cimpean, Antoniu Moldovan, **Andrei Rotaru**, Valentina Dinca, Maria Dinescu. ***Molecules*,** 25(3), 582, 2020	**17 citări**
1. R. Birjega, A. Matei, V. Marascu, A. Vlad, M.D. Ionita, M. Dinescu, R. Zavoianu, M.C. Corobea. Stearic Acid/Layered Double Hydroxides Composite Thin Films Deposited by Combined Laser Techniques. Molecules. 2020, 25(18), 4097. 2. S. Singh, N. Shauloff, C.P. Sharma, R. Shimoni, C.J. Arnusch, R. Jelinek. Carbon Dot-Polymer Nanoporous Membrane for Recyclable Sunlight-Sterilized Facemasks. Journal of Colloid and Interface Science. 592, 342-348, 2021. 3. Papež, Nikola, Tatiana Pisarenko, Erik Ščasnovič, Dinara Sobola, Ștefan Ţălu, Rashid Dallaev, Klára Částková, and Petr Sedlák. "A brief introduction and current state of polyvinylidene fluoride as an energy harvester." Coatings 12, no. 10 (2022): 1429. 4. Caciandone, Mara, Adelina-Gabriela Niculescu, Aurelian Radu Roșu, Valentina Grumezescu, Irina Negut, Alina Maria Holban, Ovidiu Oprea et al. "PEG-functionalized magnetite nanoparticles for modulation of microbial biofilms on voice prosthesis." Antibiotics 11, no. 1 (2022): 39. 5. Spirescu, Vera Alexandra, Raluca Șuhan, Adelina-Gabriela Niculescu, Valentina Grumezescu, Irina Negut, Alina Maria Holban, Ovidiu-Cristian Oprea et al. "Biofilm-resistant nanocoatings based on ZnO nanoparticles and linalool." Nanomaterials 11, no. 10 (2021): 2564.	**ISI**

6. Dumitrescu, Nicoleta-Luminita, Madalina Icriverzi, Anca Bonciu, Paula Florian, Antoniu Moldovan, Anca Roseanu, Laurentiu Rusen, Valentina Dinca, and Florin Grama. "New Poly (N-isopropylacrylamide-butylacrylate) Copolymer Biointerfaces and Their Characteristic Influence on Cell Behavior In Vitro." International Journal of Molecular Sciences 23, no. 7 (2022): 3988. 7. Behera, C., N. Pradhan, P. R. Das, and R. N. P. Choudhary. "Development of self-standing, lightweight and flexible polymer-cobalt ferrite nanocomposites for field sensor." Journal of Polymer Research 29, no. 2 (2022): 65. 8. Hu, Dan, Zhong Zhang, Wenjun Li, Xiaoxiao Qin, Runguang Zhang, Li Yuan, and Xingbin Yang. "Promoting adsorption performance and mechanical strength in composite porous gel film." International Journal of Biological Macromolecules 223 (2022): 1115-1125. 9. Tu, Zhengdong, Feng Han, Zhuang Zhu, Qifan Yu, Changjiang Liu, Yu Bao, Bin Li, and Feng Zhou. "Sustained release of basic fibroblast growth factor in micro/nanofibrous scaffolds promotes annulus fibrosus regeneration." Acta Biomaterialia (2023). 10. Gherasim, Oana, Alexandru Mihai Grumezescu, Valentina Grumezescu, Ecaterina Andronescu, Irina Negut, Alexandra Cătălina Bîrcă, Bianca Gălățeanu, and Ariana Hudiță. "Bioactive coatings loaded with osteogenic protein for metallic implants." Polymers 13, no. 24 (2021): 4303. 11. Dinca, Valentina, Gabriela Toader, Raluca Gavrila, Oana Brincoveanu, Adrian Dinescu, Edina Rusen, Aurel Diacon, and Alexandra Mocanu. "Surface Modification Using MAPLE Technique for Improving the Mechanical Performance of Adhesive Joints." Nanomaterials 13, no. 6 (2023): 964. 12. Wang, Xinlin, Rudong Zhu, Xiangkui Wang, Fengjiao Liu, Yan Gao, Rongfeng Guan, and Yalei Chen. "Flexible and washable CDs@ Eu-MOFs/PVDF Multifunctional thin films as highly selective sensing for nitrobenzene and 4-Nitrophenol." Inorganic Chemistry Communications (2023): 110423. 13. Chen, Wen-Cheng, Bo-Yuan Huang, Ssu-Meng Huang, Shih-Ming Liu, Kai-Chi Chang, Chia-Ling Ko, and Chih-Lung Lin. "In vitro evaluation of electrospun polyvinylidene fluoride hybrid nanoparticles as direct piezoelectric membranes for guided bone regeneration." Biomaterials Advances 144 (2023): 213228. 14. Dumitrescu, Luminita Nicoleta, Madalina Icriverzi, Anca Bonciu, Anca Roșeanu, Antoniu Moldovan, and Valentina Dinca. "In Vitro Effect of Replicated Porous Polymeric Nano-MicroStructured Biointerfaces Characteristics on Macrophages Behavior." Nanomaterials 11, no. 8 (2021): 1913. 15. Vasnev, V. A., G. D. Markova, V. V. Istratov, and O. V. Baranov. "Hydrophilic Modified Siloxane Coatings." Polymer Science, Series B 64, no. 2 (2022): 137-141.	
1. Sengwa, R. J. "Thermal and dielectric properties of PVDF/PEO/SiO2 nanodielectrics for flexible radioelectronic device technologies." Hybrid Advances 2 (2023): 100028. 2. Nandhini, Shankar Nisha, Natarajan Sisubalan, V. Anand Gideon, Kokkarachedu Varaprasad, Tippabattini Jayaramudu, and Emmanuel Rotimi Sadiku. "The importance of polymers in the preparation of medical devices for human body applications." In Polymeric Biomaterials for Healthcare Applications, pp. 1-39. Woodhead Publishing, 2022.	**BDI**
9. Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N'-donor linkers; Vasile Lozovan, Victor C. Kravtsov, Elena Gorincioi, **Andrei Rotaru**, Eduard B. Coropceanu, Nikita Siminel, Marina S. Fonari. ***Polyhedron,*** 180, 114411, 2020.	**10 citări**
1. V. Lozovan, V.C. Kravtsov, E.B. Coropceanu, A.V. Siminel, O.V. Kulikova, N.V. Costriucova, M.S. Fonari. Water-sulfate anion interplay in the evolution of solid state architectures and emission properties of Zn and Cd coordination networks with four azine ligands. Journal of Solid State Chemistry. Volume 286, June 2020, 121312. 2. G. Lee, J.H. Yoon, K. Kwon, H. Han, J.H. Song, K.S. Lim, W.R. Lee. Dimensional selective syntheses of metal–organic frameworks using mixed organic ligands. Inorganica Chimica Acta. DOI:10.1016/j.ica.2020.119739, Volume 513, 1 December 2020, 119739. 3. V. Lozovan, V.C. Kravtsov, E.B. Coropceanu, N. Siminel, O.V. Kulikova, N.V. Costriucova, M.S. Fonari. Seven Zn(II) and Cd(II) 1D coordination polymers based on azine donor linkers and decorated with 2-thiophenecarboxylate: Syntheses, structural parallels, Hirshfeld surface analysis, and spectroscopic and inclusion properties. Polyhedron. 2020;188:114702. 4. Mahsa Armaghan, Ezzat Najafi, Tim-Oliver Knedel, Walter Frank, Christoph Janiak. Synthesis and Single Crystal Structure Characterization of Dinuclear and Polymeric Mixed-ligand Coordination Compounds of Zinc(II) and Cadmium(II) with the Bridging Ligand 1,2-Bis(pyridin-4-ylmethylene)hydrazine. DOI:10.1002/zaac.202000357. Zeitschrift fur Anorganishe und Allgemeine Chemie, 646, 1861–1868 (2020) 5. Victor Ch. Kravtsov,Vasile Lozovan, Nikita Siminel, Eduard B. Coropceanu, Olga V. Kulikova, Natalia V. Costriucova, Marina S. Fonari. From 1D to 2D Cd(II) and Zn(II) Coordination Networks by Replacing	**ISI**

Monocarboxylate with Dicarboxylates in Partnership with Azine Ligands: Synthesis, Crystal Structures, Inclusion, and Emission Properties. Molecules 2020, 25(23), 5616. 6. Chakraborty, Gouri, In-Hyeok Park, Raghavender Medishetty, and Jagadese J. Vittal. "Two-dimensional metal-organic framework materials: Synthesis, structures, properties and applications." Chemical Reviews 121, no. 7 (2021): 3751-3891. 7. Zhao, Jinyu, Jiaxi Yuan, Ziyu Fang, Senhe Huang, Zhenying Chen, Feng Qiu, Chenbao Lu, Jinhui Zhu, and Xiaodong Zhuang. "One-dimensional coordination polymers based on metal–nitrogen linkages." Coordination Chemistry Reviews 471 (2022): 214735. 8. Reiss, Aurora, Nicoleta Cioateră, Aurelian Dobrițescu, Mihaela Rotaru, Alice Carla Carabet, Filippo Parisi, Anca Elena Gănescu, Irina Daniela Dăbuleanu, Cezar Ionuț Spînu, and Petre Rotaru. "Bioactive co (Ii), ni (ii), and cu (ii) complexes containing a tridentate sulfathiazole-based (onn) schiff base." Molecules (Basel, Switzerland) 26, no. 10 (2021): 1-18. 9. Lozovan, Vasile, Victor Ch Kravtsov, Natalia V. Costriucova, Anatolii V. Siminel, Olga V. Kulikova, and Marina S. Fonari. "Tunability in dimension, metal and ligand coordination modes and emission properties in Cd (II) and Zn (II) coordination networks based on 4, 4'-(hydrazine-1, 2-diyilidenebis (methanylylidene)) dibenzoic acid linker." Journal of Solid State Chemistry 310 (2022): 123021. 10. Wekesa, Amon K., George S. Nyamato, Chrispin O. Kowenje, and Stephen O. Ojwach. "Coordination behavior and binding properties of 2, 6-pyridinedimethanol with Cu (II), Zn (II), and Cd (II) cations." Inorganica Chimica Acta 539 (2022): 121042.	
10. Edible vegetable oils enriched with carotenoids extracted from by-products of sea buckthorn (*Hippophae rhamnoides ssp.* sinensis): the investigation of some characteristic properties, oxidative stability and the effect on thermal behaviour; Alexandru Radu Corbu, **Andrei Rotaru**, Violeta Nour. ***Journal of Thermal Analysis and Calorimetry***, 142 (2), 735–747, 2020.	**20 citări**
1. PP Valerio, JM Frias, EC Cren. Thermal degradation kinetics of carotenoids: Acrocomia aculeata oil in the context of nutraceutical food and bioprocess technology. Journal of Thermal Analysis and Calorimetry. 2021;143:2983–2994. 2. Tafadzwa Kaseke, Umezuruike Linus Opara, Olaniyi Amos Fawole. Quality and Antioxidant Properties of Cold-Pressed Oil from Blanched and Microwave-Pretreated Pomegranate Seed. Foods. 2021, 10(4), 712. 3. M. Sharma, R. Bahat. Extraction of Carotenoids from Pumpkin Peel and Pulp: Comparison between Innovative Green Extraction Technologies (Ultrasonic and Microwave-Assisted Extractions Using Corn Oil). Foods. 2021; 10(4):787. 4. Chen, Aruhan, Xiaowei Feng, Byambasuren Dorjsuren, Chimedragchaa Chimedtseren, Tsend-Ayush Damda, and Chunhong Zhang. "Traditional food, modern food and nutritional value of Sea buckthorn (Hippophae rhamnoides L.): A review." Journal of Future Foods 3, no. 3 (2023): 191-205. 5. Szabo, Katalin, Bernadette-Emőke Teleky, Floricuta Ranga, Ioana Roman, Hattab Khaoula, Emna Boudaya, Amina Ben Ltaief, Wael Aouani, Mangkorn Thiamrat, and Dan Cristian Vodnar. "Carotenoid recovery from tomato processing by-products through green chemistry." Molecules 27, no. 12 (2022): 3771. 6. Sharma, Minaxi, Shehzad Hussain, Tatsiana Shalima, Riina Aav, and Rajeev Bhat. "Valorization of seabuckthorn pomace to obtain bioactive carotenoids: An innovative approach of using green extraction techniques (ultrasonic and microwave-assisted extractions) synergized with green solvents (edible oils)." Industrial Crops and Products 175 (2022): 114257. 7. Bhimjiyani, Vidhi H., Venu Babu Borugadda, Satyanarayan Naik, and Ajay K. Dalai. "Enrichment of flaxseed (Linum usitatissimum) oil with carotenoids of sea buckthorn pomace via ultrasound-assisted extraction technique: Enrichment of flaxseed oil with sea buckthorn." Current Research in Food Science 4 (2021): 478-488. 8. Agyare, Anita Nkansah, Chang Hong An, and Qi Liang. "Goji berry (Lycium Barbarum L.) carotenoids enrichment through 'green'extraction method improves oxidative stability and maintains fatty acids of yak ghee with microwave heating and storage." Foods 11, no. 3 (2022): 369. 9. Ramos-Escudero, Fernando, Raquel B. Gomez-Coca, Ana María Muñoz, and María del Carmen Pérez-Camino. "Oil from three aguaje morphotypes (Mauritia flexuosa Lf) extracted by supercritical fluid with CO2: Chemical composition and chromatic properties." Frontiers in Sustainable Food Systems 6 (2022): 39. 10. Sousa, Gabriela, Mariana I. Alves, Marta Neves, Carla Tecelão, and Suzana Ferreira-Dias. "Enrichment of sunflower oil with ultrasound-assisted extracted bioactive compounds from Crithmum maritimum L." Foods 11, no. 3 (2022): 439. 11. Tsai, Shu-Yao, Wen-Jhen Sun, Yao-Chien Wu, and Chun-Ping Lin. "Peanut skin extracts applied on shelf life of button mushrooms and antioxidant effect of sacha inchi oil via isothermal calorimetry." Journal	**ISI**

of Thermal Analysis and Calorimetry 148, no. 4 (2023): 1629-1638. 12. Aleksieiev, Andrii, Marcin Masłowski, Magdalena Efenberger-Szmechtyk, and Krzysztof Strzelec. "The Influence of Freeze-Dried Alcohol-Water Extracts from Common Yarrow (Achillea millefolium L.) and German Chamomile (Matricaria chamomilla L.) on the Properties of Elastomer Vulcanizates." International Journal of Molecular Sciences 23, no. 23 (2022): 15048. 13. Kaseke, T., U. L. Opara, and O. A. Fawole. "Quality and Antioxidant Properties of Cold-Pressed Oil from Blanched and Microwave-Pretreated Pomegranate Seed. Foods 2021, 10, 712." Plant Extracts (2021): 53. 14. Linares, Guillermo, and Meliza Lindsay Rojas. "Ultrasound-Assisted Extraction of Natural Pigments From Food Processing By-Products: A Review." Frontiers in Nutrition 9 (2022).	
1. JL Rivera Royo. Enriquecimiento de aceite oliva virgen extra con astaxantina de Xanthophyllomyces dendrorhous. Universidad de Zaragoza. Trabajo Fin de Grado. 2020. 2. Nour, Violeta. "Oxidative stability, physico-chemical and sensory properties of mayonnaise enriched with carotenoids from sea buckthorn pomace during refrigerated storage." J. Food Nutr. Res 60, no. 2 (2021): 168-177. 3. Rahmalia, Winda, Christina Dasilia, Thamrin Usman, Dwi Imam Prayitno, and Siti Nani Nurbaeti. "Astaxanthin and omega-3-rich oil from fermented Acetes (Cincalok) and its application as bioactive additive and sunscreen in lotion." OCL 29 (2022): 18. 4. GHALIAOUI, Nora. "Seaweed natural pigments: Extraction, chemical characterization and study of biological properties." PhD diss., 2021. 5. Prayitno, Dwi Imam, Eko Nurcahya Dewi, Delianis Pringgenies, and Tatas Hardo Panintingjati Brotosudarmo. "Green ultrasound-assisted extraction of astaxanthin from fermented rebon shrimp (cincalok) using vegetable oils as solvents." OCL 29 (2022): 15. 6. Ballesta Santana, Sandra Milena. "Extracción verde de carotenoides de ahuyama (Cucurbita moschata Duch) usando aceite vegetal para su adición como colorante natural en una matriz alimentaria." PhD diss., Universidad Nacional de Colombia.	**BDI**
11. Orthorhombic YBCO-123 ceramic oxide superconductor: structural, resistive and thermal properties; Ana Harabor, Petre Rotaru, Novac Adrian Harabor, Petr Nozar, **Andrei Rotaru**. ***Ceramics International,*** 45 (2) Part B, 2899-2907, 2019	**22 citări**
1. Y. Slimani, M.A. Almessiere, E. Hannachi, A. Manikandan, R. Algarni, A. Baykal, F. Ben Azzouz. Flux pinning properties of YBCO added by WO3 nanoparticles. Journal of Alloys and Compounds. 810 (2019) 151884. 2. E.Y. El-Yakoubi, A. Nafidi, K. Khallouq, A. Aboulkassim, M. Bellioua. Isovalent Substitutions and the Number of Oxygen Atoms by Chains Control of Structure and Superconductivity in High Tc Superconductors. International Journal of Engineering Research & Technology (IJERT), 8 (2019) 486. 3. O. Ozturk, ARA Nefrow, F. Bulut, H. Ada, M.B. Turkoz, G. Yldirim. Effect of Co/Cu partial replacement on fundamental features of Y-123 ceramics. Journal of Materials Science: Materials in Electronics. DOI:10.1007/s10854-020-0281-2; 31:7630–7641 (2020). 4. SE Jasim, MA Jusoh, MA Kamarudin, F Esa, R Nazlan. Effect of Processing Parameters on the Morphology, Particulate, and Superconducting Properties of Electrospun YBCO Nanostructures. Journal of Nano Research. 63, 89-97, 63:89-97 (2020). 5. S. Safran, F. Bulut, A.R.A. Nefrow, H. Ada, O. Ozturk. Characterization of the CoFe2O4/Cu displacement effect in the Y123 superconductor matrix on critical properties. Journal of Materials Science: Materials in Electronics. 31, 20578–20588 (2020). 6. Abdelaziz Labrag, Mustapha Bghour, Ahmed Abou El Hassan, Habiba El Hamidi, Ahmed Taoufik, Said Laasri. The activation energy U (T, B) in high temperature superconductor. European Physical Journal - Applied Physics. 92, 20601 (2020). 7. Hannachi, E., M. I. Sayyed, Aljawhara H. Almuqrin, and K. G. Mahmoud. "Study of the structure and radiation-protective properties of yttrium barium copper oxide ceramic doped with different oxides." Journal of Alloys and Compounds 885 (2021): 161142. 8. Gadzhimagomedov, S. Kh, D. K. Palchaev, Zh Kh Murlieva, M. Kh Rabadanov, M. Yu Presnyakov, E. V. Yastremsky, N. S. Shabanov, R. M. Emirov, and A. E. Rabadanova. "YBCO nanostructured ceramics: Relationship between doping level and temperature coefficient of electrical resistance." Journal of Physics and Chemistry of Solids 168 (2022): 110811. 9. Dahiya, Mamta, Rohit Kumar, Dheeraj Kumar, Dinesh Kumar, and Neeraj Khare. "Enhanced flux pinning properties of NaNbO3 nanorods added YBCO composite superconductor." Journal of Alloys and Compounds 883 (2021): 160840. 10. Shen, Lei, Yuanjie Wang, Jie Cheng, Feng Xu, and Xingyi Zhang. "Origin of micro-scale local hotspots during the microwave processing of the YBCO conductive ceramics." Scripta Materialia 216	**ISI**

(2022): 114762. 11. Lenaz, Davide, Stefano Giovanoni, Francesco Parrino, Danilo Bersani, and Filippo Parisi. "Maturation stages of glauconites: A combined electron microprobe, Raman, and thermogravimetric study." Ceramics International 49, no. 9 (2023): 14927-14933. 12. Kumar, Gaurav, Mamta Dahiya, Rohit Kumar, Dinesh Kumar, and Neeraj Khare. "Enhanced critical current density and pinning properties in KNbO3 nanoparticles added YBCO superconductor." Applied Physics A 129, no. 4 (2023): 291. 13. Ozturk, O., A. R. A. Nefrow, F. Bulut, S. Kurnaz, and S. Safran. "Comparison of the Dopant Effect and Sample Preparation Method on Y-123 Superconductors." Journal of Superconductivity and Novel Magnetism 34 (2021): 2821-2832. 14. Gao, Ping. "Optical and Electrochemical Properties of Silver-doped Yttrium Barium Copper Oxide as High-Temperature Superconducting Materials." INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE 16, no. 6 (2021). 15. Toumvong, Wipawadee, Pornnita Chitcharoentaweechoke, and Nuchnapa Tangboriboon. "Bio-dielectric based on superconductors yttrium calcium barium copper oxide (YCaBaCuO) from eggshell as calcium oxide source via sol-gel process." Materials Science-Poland 39, no. 3 (2021): 305-318.	
1. JD Rojas, DA Arias, A Mariño. LEVITATION-SUSPENSION FORCE MEASUREMENT SYSTEM FOR HIGH TC SUPERCONDUCTORS. MOMENTO. Issue 60, p. 55-66, 2020. eISSN 2500-8013. Print ISSN 0121-4470. DOI:10.15446/mo.n60.84228. 2. Diego Andrés Arias-Arana, Juan Diego Rojas-Zambrano, Álvaro Mariño-Camargo. Attraction and repulsion forces in melt-textured and sintered YBCO-superconductors: a comparative study. Revista Facultad de Ingeniería Universidad de Antioquia. No.96, pp. 44-50, Jul-Sep 2020. 3. Mendes, Diogo André Pereira. Impressão 3D de Materiais Supercondutores. Mestre em Engenharia de Energias Renováveis. (2019) 4. А.В. Марченко. ДОРОНИН ВЯЧЕСЛАВ АЛЕКСАНДРОВИЧ. СВЕРХТОНКИЕ ВЗАИМОДЕЙСТВИЯ И ЭФФЕКТИВНЫЕ ЗАРЯДЫ АТОМОВ В СВЕРХПРОВОДНИКАХ НА ОСНОВЕ МЕТАЛЛОКСИДОВ МЕДИ, ОПРЕДЕЛЕННЫЕ МЕТОДОМ ЭМИССИОННОЙ МЁССБАУЭРОВСКОЙ СПЕКТРОСКОПИИ. Специальность 01.04.07 –физика конденсированного состояния. Санкт-Петербург. Russian Federation. 2020. 5. J. M. Juárez-López, G. Castillo-Hernandez, M. G. Romero-Sanchez, J. Santos-Cruz, I. Ponomaryova, F.J. de Moure-Flores. Structural characterization of the YBa2Cu3Oσ superconductor with phases [σ= 6.87, 6.89 and 6.9] obtained by solid state reaction. 2020 17th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE), Mexico City, Mexico. November 11-13, 2020. 7. Jukna, Artūras. "The investigation of vortex motion in the YBCO devices manufactured utilizing a Gaussian-shaped optical spot from a continuous-wave laser." Materials science 29, no. 1 (2023): 15-20.	**BDI**
12. Structural, electrical and relaxor properties of Sc-In solid solution in tetragonal tungsten bronze ceramics; **Andrei Rotaru**, Finlay D. Morrison. ***Ceramics International***, 45 (2) Part B, 2710-2718, 2019	**4 citări**
1. JB Felder, W Wong-Ng, RA Qabbani, RS Roth, BH Toby, JY Chan. Structural Investigation of the "Tripled-Tetragonal-Tungsten-Bronze" Phases Sr2M10-xO27-y (M= Nb, Ta). Polyhedron, DOI:10.1016/j.poly.2019.06.003, 2019. Volume: 170 Pages: 359-363. 2. S Wu, C Sun, X Yang, C Hu, L Liu, L Fang. Effect of strontium substitution on the structure and dielectric properties of unfilled tungsten bronze Ba4-xSrxSmFe0. 5Nb9. 5O30 ceramics. Ceramics International. Volume 46, Issue 7, May 2020, Pages 9240-9248. 3. E. Gil-González, A. Perejón, P.E. Sánchez-Jiménez, D. Roman-Gonzalez, L.A. Perez-Maqueda. Control of experimental conditions in reaction flash sintering of complex stoichiometry ceramics. Ceramics International, Volume 46, Issue 18, Part B, 15 December 2020, Pages 29413-29420.	**ISI**
1. Karim Chourti, Amine Bendahhou, Fath Allah Rabie, Mohamed Loutou, Soufian El barkany, Mohamed Abou-salama. Effects of Gd-substitution on structural, and impedance spectroscopic study of Sr2Sm1−xGdxTi2Nb3O15 tungsten bronze ceramics. Materialstoday: Proceedings. DOI:10.1016/j.matpr.2021.02.010. 2021.	**BDI**
13. Azoic dyes: from thermal properties to a wide range of applications. Chapter 4 in: Advanced Engineering Materials. Recent Developments for Medical, Technological and Industrial Applications; **A. Rotaru**, A. Moanta. ***Academica Greifswald***, ISBN: 978-3-940237-38-5, Germany, 2016.	**2 citări**
1. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim.	**ISI**

2018; DOI: 10.1007/s10973-018-7766-x 2. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101.	
14. Tartrazine: physical, thermal and biophysical properties of the most widely employed synthetic yellow food-coloring azo dye; M. Leulescu, **A. Rotaru**, I. Pălărie, A. Moanţă, N. Cioateră, M. Popescu, E. Morîntale, V.M. Bubulică MV, G. Florian, A. Hărăbor, P. Rotaru P. ***Journal of Thermal Analysis and Calorimetry***. 2018;134:209–31.	**40 citări**
1. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; 136, pages1249–1268 (2019). 2. M Wang, M Cui, W Liu, X Liu. Highly dispersed conductive polypyrrole hydrogels as sensitive sensor for simultaneous determination of ascorbic acid, dopamine and uric acid. Journal of Electroanalytical Chemistry, Volume 832, 1 January 2019, Pages 174-181. 3. S. Tiwari, M.K. Deb. Modified silver nanoparticles-enhanced single drop microextraction of tartrazine in food samples coupled with diffuse reflectance Fourier transform infrared spectroscopic analysis. Analytical Methods. Anal. Methods, 2019,11, 3552-3562. 4. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 5. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2020) 140:613–623. 6. F. Parisi, G. Lazzara, M. Merli, S. Milioto, F. Princivale, L. Sciascia. Simultaneous Removal and Recovery of Metal Ions and Dyes from Wastewater through Montmorillonite Clay Mineral. Nanomaterials 9(12), 2019, 1699. 7. F. Casanova Monteiro, E. Hass Caetano, P. de Jesus Cubas, A. Vedam Pupin, J. F. Haas Leandro Monteiro, S.T. Fujiwara. Bi2Fe4O9 in pellet form is an alternative in the wastewater treatment process. Journal of Environmental Science and Health Part A. 55 (6), 677-685, 2020. 8. A. Alcantara-Cobos, E. Gutiérrez-Segura, M. Solache-Ríos, A. Amaya-Chávez, D.A. Solís-Casados. Tartrazine removal by ZnO nanoparticles and a zeolite-ZnO nanoparticles composite and the phytotoxicity of ZnO nanoparticles. Microporous and Mesoporous Materials. 302, 1 August 2020, 110212. 9. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 10. Januário, Eduarda Freitas Diogo, Taynara Basso Vidovix, Natália de Camargo Lima Beluci, Rebecca Manesco Paixão, Luiz Henrique Biscaia Ribeiro da Silva, Natália Cândido Homem, Rosangela Bergamasco, and Angélica Marquetotti Salcedo Vieira. "Advanced graphene oxide-based membranes as a potential alternative for dyes removal: a review." Science of The Total Environment 789 (2021): 147957. 11. Alsantali, Reem I., Qandeel Alam Raja, Abdullah YA Alzahrani, Amina Sadiq, Nafeesa Naeem, Ehsan Ullah Mughal, Munirah M. Al-Rooqi, Nizar El Guesmi, Ziad Moussa, and Saleh A. Ahmed. "Miscellaneous azo dyes: A comprehensive review on recent advancements in biological and industrial applications." Dyes and Pigments 199 (2022): 110050. 12. Zheng, Yuhong, Shuduan Mao, Jiangwei Zhu, Li Fu, Najmeh Zare, and Fatemeh Karimi. "Current status of electrochemical detection of sunset yellow based on bibliometrics." Food and Chemical Toxicology 164 (2022): 113019. 13. Rigueto, Cesar Vinicius Toniciolli, Mateus Torres Nazari, Marieli Rosseto, Lillian Avila Massuda, Ingridy Alessandretti, Jeferson Steffanello Piccin, and Aline Dettmer. "Emerging contaminants adsorption by beads from chromium (III) tanned leather waste recovered gelatin." Journal of Molecular Liquids 330 (2021): 115638. 14. Teixeira, Valéria Maria Costa, Roberta França Gomes da Silva, Odinei Hess Gonçalves, Carla Pereira, Lillian Barros, Isabel CFR Ferreira, Evandro Bona, and Fernanda Vitória Leimann. "Chemometric approaches to evaluate the substitution of synthetic food dyes by natural compounds: The case of nanoencapsulated curcumin, spirulina, and hibiscus extracts." LWT 154 (2022): 112786. 15. Pramanik, Ashim, Koushik Mondal, Subrata Biswas, Sudip Kumar Pal, Sujit Kumar Ghosh, Tapan Ganguly, and Pathik Kumbhakar. "Sticky note paper-based plasmonic random laser for artifact-free imaging." Applied Physics B 128, no. 9 (2022): 167. 16. Joshi, Ritu, Insuck Baek, Rahul Joshi, Moon S. Kim, and Byoung-Kwan Cho. "Detection of fabricated eggs using Fourier transform infrared (FT-IR) spectroscopy coupled with multivariate classification techniques." Infrared Physics & Technology 123 (2022): 104163.	**ISI**

17. Marin, Nicoleta Mirela, and Ioana Stanculescu. "Application of amberlite IRA 402 resin adsorption and laccase treatment for acid blue 113 removal from aqueous media." Polymers 13, no. 22 (2021): 3991. 18. Kołodziejczak-Radzimska, Agnieszka, Michał Bielejewski, Joanna Zembrzuska, Filip Ciesielczyk, Teofil Jesionowski, and Long D. Nghiem. "Exploring the functionality of an active ZrF-laccase biocatalyst towards tartrazine decolorization." Environmental Technology & Innovation (2023): 103201. 19. Singh, Harpreet, Anuj Goyal, Sanjeev K. Bhardwaj, Madhu Khatri, and Neha Bhardwaj. "Highly robust UiO-66@ PVDF metal–organic framework beads for tartrazine removal from aqueous solutions." Materials Science and Engineering: B 288 (2023): 116165. 20. Hossain, Md Shamim, Gobindo Kumar Paul, Shafi Mahmud, Md Abu Saleh, Md Salah Uddin, Amit Kumar Dutta, Apurba Kumar Roy et al. "Mixed dye degradation by Bacillus pseudomycoides and Acinetobacter haemolyticus isolated from industrial effluents: A combined affirmation with wetlab and in silico studies." Arabian Journal of Chemistry 15, no. 9 (2022): 104078. 21. Fennouh, Radia, Oumessaâd Benturki, Asma Mokhati, Asma Benturki, Badreddine Belhamdi, and Mohamed Trari. "Preparation and characterization of highly mesoporous activated carbon from Ziziphus Spina-Christi for tartrazine adsorption from a simulated effluent." Biomass Conversion and Biorefinery (2023): 1-17. 22. Hossain, Md Shamim, Gobindo Kumar Paul, Shafi Mahmud, Md Abu Saleh, Md Salah Uddin, Amit Kumar Dutta, Apurba Kumar Roy, Ananda Kumar, Kumar Paul, and Sudhangshu Kumar Biswas. "industrial effluents: A combined affirmation with wetlab and in silico studies." Arabian Journal of Chemistry 15 (2022): 104078. 23. Torras, Núria, Jon Zabalo, Eduardo Abril, Albane Carré, María García-Díaz, and Elena Martínez. "A simple DLP-bioprinting strategy produces cell-laden crypt-villous structures for an advanced 3D gut model." bioRxiv (2022): 2022-02. 24. Gholipour, Arsalan, and Shahrzad Rahmani. "The synthesis of fluorescent carbon quantum dots for tartrazine detection in food: a novel one-step microwave heating approach." Fullerenes, Nanotubes and Carbon Nanostructures (2023): 1-9. 25. Suri, Akansha, and Vinita Khandegar. "Exclusion of Pharmaceutical Compounds by UA Assisted EC Process." Journal of Hazardous, Toxic, and Radioactive Waste 25, no. 2 (2021): 04021004.	
1. A Moanță, A Ristache. Interaction of collagen with an azo dye. Annals of the University of Craiova. The Chemistry Series. Volume XLV, No. 1 (2018) 3-9. 2. H Ouassif, EM Moujahid, R Lahkale, R Sadik. F. Zahra Bouragba, El mouloudi Sabbar, M. Diouri. Zinc-Aluminum layered double hydroxide: High efficient removal by adsorption of tartrazine dye from aqueous solution. Surfaces and Interfaces, 18 (2020) 100401. 3. Catalina Saltos E., David Chuquer S., Katherine Pazmiño V., Lenys Fernández M., Fernanda Pilaquinga F. Remoción de tartrazina en agua usando nanopartículas de hierro cerovalentes (REMOVAL OF TARTRAZINE IN WATER USING ZERO-VALENT IRON NANOPARTICLES). infoANALÍTICA 7 (2), 2019, 95-109. 4. L. Rojas-Bedoya, C. Gómez-López, N. Marín-Pareja. Extraction of metabolites from Calendula officinalis and evaluation of their colorant and antibacterial capacity. Rev. colomb. biotecnol vol.22 no.1 Bogotá Jan./June 2020. DOI: 10.15446/rev.colomb.biote.v22n1.79999. 5. Sanjeev Kumar, Ekta Lathwal, Gourav Kumar, Bhavna Saroha, Suresh Kumar, Sutapa Mahata, Pranab Kumar Sahoo, Vilas D. Nasare. Synthesis of pyrazole based novel aurone analogs and their cytotoxic activity against MCF-7 Cell line. Chemical Data Collections. 2020. S2405-8300(20)30264-0. DOI: 10.1016/j.cdc.2020.100559. 6. Alaa Masikh Zebalah Al-Daamy, Naseer Marza Hamza Al-Zubiady. Study of The Toxic Effect of Tartrazine Dye on Some Biochemical Parameters in Male Albino Rats. Scientific Journal of Medical Research. 4(16), 111–117, 2020. 7. A. Siadaty, A. Nemati, N. Najafzadeh. Prevalence of Tartrazine Dye Use in Grilled Chicken Production Centers: A Case Study of Ardabil Province. Journal of Health. Vol. 11, No. 5, Pages 691-698, 2021. 8. Lyrioa, Marcos VV, Danieli G. Debonaa, Nathália dos S. Conceiçãoa, Francisco M. Gomesa, Alan R. Pereiraa, Henrique A. Frizzeraa, Jessica L. Reisa et al. "COMPARANDO A EFICIÊNCIA ANALÍTICA DAS TÉCNICAS FTIR, UV-VIS, CLAE-DAD E ESI (+) MS NO ESTUDO DE CORANTES ALIMENTARES." QUIMICA NOVA (2023). 9. Burcă, Ion, Valentin Badea, Calin Deleanu, and Vasile-Nicolae Bercean. "5-((8-Hydroxyquinolin-5-yl) diazenyl)-3-methyl-1H-pyrazole-4-carboxylic Acid." Molbank 2021, no. 2 (2021): M1238. Marahel, Farzaneh. "PRE-PROOF FILE." Iran. J. Chem. Chem. Eng. Research Article Vol 41, no. 12 (2022). 10. Ahmadi, Mostafa, and Alireza Geramizadegan. "Design and Evaluation Sensor Starch-capped ZnSNPs Synthesis for Determination trace Tartrazine Color in Real Samples with Kinetic Spectrophotometric	**BDI**

Method." 11. Koller, Kerstin. "Melt processing decoloration of plastics/Author DIin Kerstin Koller, BSc." (2022). Carranza Salazar, Joselyn Judicsa. "Degradación por fotocatálisis de colorantes en medio acuoso utilizando mezclas de dióxido de titanio (TiO2) y óxido de zinc (ZnO)." (2022). 12. Cabral, Lucas Lacerda. "Carvão ativado de casca de maracujá como adsorvente alternativo na remoção de corantes alimentícios sintéticos em solução aquosa mono e multicomponente." Master's thesis, Universidade Tecnológica Federal do Paraná, 2022. 13. Araujo, Maria Angélica. "Intercalação de corantes alimentícios em hidroxissal lamelar de zinco para aplicação em cupcakes." Bachelor's thesis, Universidade Tecnológica Federal do Paraná, 2022. 14. nekcihC dellirG ni esU eyD enizartraT fo ecnelaverP" .سد یادتـ ی, ذ عمـ تی, ذ جفـ زاده, dna ذ وروز Production Centers: A Case Study of Ardabil Province." یل اردبـ شت هدا بـ و سلامت مجـ له 11, no. 5: 191-198. 15. کبابی: مطالعه موردی استان نوروز. "شیوع استفاده از رنگ تارترازین در مراکز تهیه جوجهandسیادتی, نعمتی*, نجفـزاده, .no. 5 (2021): 691-698 ,11 *مجله سلامت و بهداشت* اردبیل."	
15. Hydroxyapatite–alendronate composite systems for biocompatible materials; Johny Neamtu, Maria-Viorica Bubulica, **Andrei Rotaru**, Catalin Ducu, Oana Elena Balosache, Valentin Costel Manda, Adina Turcu-Stiolica, Claudiu Nicolicescu, Razvan Melinte, Mariana Popescu, Octavian Croitoru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (2), 1567–1582, 2017	**23 citări**
1. M.V. Ciocalteu, A.G. Mocanu, A. Mocanu, C. Ducu, O.E. Balosache, V.C. Manda, A. Turcu-Stiolica, C. Nicolicescu, R. Melinte, M. Balasoiu, O. Croitoru, J. Neamtu. Hydroxyapatite-ciprofloxacin delivery system: Synthesis, characterisation and antibacterial activity. Acta Pharmaceutica, Vol. 68 No.2 2018. 2. J da Silva Buriti, MEV Barreto, KO Santos, MVL Fook. Thermal, morphological, spectroscopic and biological study of chitosan, hydroxyapatite and wollastonite biocomposites. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-7498-y. 2018. 3. AG MOCANU, AT STIOLICA, I BELU, MV CIOCILTEU, VC MANDA, C NICOLICESCU, J NEAMTU. Quality by Design for Ciprofloxacin Encapsulation in PLGA. Revista de Chimie, 1332-1338;69(6), 2018. 4. G Ciobanu, M Harja; Cerium-doped hydroxyapatite/collagen coatings on titanium for bone implants. Ceramics International, 10.1016/j.ceramint.2018.07.290; 2018 5. A. Turcu Stiolica, M.V. Bubulica, O.E. Nicolaescu, O. Croitoru, m. Popescu, V.C. Manda, A. Simionescu, J. Neamtu. A Design of Experiment Approach to the Synthesis of Alendronate-incorporated Hydroxyapatite. Rev. Chim. 69(8); 1944-1948; 2018. 6. MARIA-VIORICA CIOCÎLTEU, PAULINA PODGOREANU, CRISTINA DELCARU, MARIANA-CARMEN CHIFIRIUC, COSTEL VALENTIN MANDA, ANDREI BIȚĂ, MARIANA POPESCU, EMILIA AMZOIU, OCTAVIAN CROITORU, CORALIA BLEOTU, MARINELA BOSTAN, JOHNY NEAMȚU. PLGA-GENTAMICIN BIOCOMPOSITE MATERIALS WITH POTENTIAL ANTIMICROBIAL APPLICATIONS IN ORTHOPEDICS. FARMACIA. 2019, Vol. 67, 4, 580-586. 7. O. IONESCU (FILIP), M.V. Ciocalteu, C.V.Manda, I.A.Neacsu, A.Ficai, E. Amzoiu, A. Turcu Stiolica, O. Croitoru, J. Neamtu. Bone-Graft Delivery Systems of Type PLGA-gentamicin and Collagen-hydroxyapatite-gentamicine. Materiale Plastice, 56(3), (2019), 534. 8. O.E. Nicolaescu, A.Turcu-Stiolica, R.M. Varut, A.G. Mocanu, I. Belu, L.E. Sima, J. Neamtu. Evaluation of Mesenchymal Stem Cells and Osteoblasts' Adhesion and Proliferation in the Presence of HA-AL Biomaterials. Coatings 2019, 9(12), 782. 9. TJ Levingstone, S Herbaj, NJ Dunne. Calcium Phosphate Nanoparticles for Therapeutic Applications in Bone Regeneration. Nanomaterials, 9, (2019), 1570. 10. F. Ciulu-Costinescu, P. Podgoreanu, C. Delcaru, A. Simionescu, E.F. Georgescu, M. Bostan, M.C. Chifiriuc. ANTIMICROBIAL ASSAY OF A CAPSAICIN -α-CYCLODEXTRIN INCLUSION COMPLEX AGAINST PLANKTONIC AND ADHERENT CELLS. Farmacia. 67(3) (2019) 496-503. 11. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 12. Pylostomou, Athanasia, Oznur Demir-Oguz, and Dagnija Loca. "Calcium phosphate bone cements as local drug delivery systems for bone cancer treatment." Biomaterials Advances (2023): 213367. 13. Zhao, Yi, Yanhui Qiu, Zixuan Fang, Fangfang Pu, Ruixue Sun, Kezheng Chen, and Yuanzheng Tang. "Preparation and characterization of Sr-substituted hydroxyapatite/reduced graphene oxide 3D scaffold as drug carrier for alendronate sodium delivery." Ceramics International 48, no. 24 (2022): 36601-36608. 14. Farkas, Noémi-Izabella, Graziella Liana Turdean, Liliana Bizo, Laura Marincaș, Oana Cadar, Lucian Barbu-Tudoran, and Barabás Réka. "The effect of chemical composition and morphology on the drug delivery properties of hydroxyapatite-based biomaterials." Ceramics International (2023). 15. Mostafa, Sahar Ibrahim, Marwa S. Ismail, Hagag A. Mohammed, Manal F. Osman, and Noha A.	**ISI**

Elwassefy. "Magnetic hydroxyapatite bisphosphonate-based composites: a bone-targeting nanosystem." Emergent Materials (2022): 1-12. 16. Turcu-Ştiolică, A., M. V. Ciocîlteu, P. Podgoreanu, I. Neacşu, O. L. Ionescu, C. Nicolicescu, J. Neamţu, E. Amzoiu, E. Amzoiu, and C. V. Manda. "PLGA-Gentamicin and PLGA-Hydroxyapatite-Gentamicin Microspheres for Medical Applications." Pharmaceutical Chemistry Journal 56, no. 5 (2022): 645-653.	
1. A Bigi, E Boanin. Calcium Phosphates as Delivery Systems for Bisphosphonates. Journal of functional biomaterials, DOI: J. Funct. Biomater. 2018, 9(1), 6; DOI:10.3390/jfb9010006. 2018 2. MDCR Silva. Análise do potencial bioativo de vidros à base de borofosfato. Dissertação de Mestrado. http://repositorio.ufsm.br/handle/1/16823 (2019). 3. L.T. Rotaru, R.M. Varut, O. Nicolaescu, A. Enescu, M. Puticiu, C. Florescu, A.Enescu. CHARACTERIZATION OF HA-AL FILMS OBTAINED BY MAPLE DEPOSITION ON TITANIUM SUBSTRATES. Journal of Science and Arts. No. 3(48), pp. 709-714, 2019. 4. 陈崧, **何**远丽, 谢雯佳, 钟林娜, and **王**剑. "**磷酸**钙纳米颗粒药物递送系统在骨组织工程研究与应用中的优势." **中国**组织工程研**究** 25, no. 22 (2021): 3565. 5. Santos, Giovanny C. dos, Julia L. Rodrigues, Júllia R. de Souza, Luiz C. da Silva-Filho, and Bruno HST da Silva. "A QUÍMICA POR TRÁS DOS MEDICAMENTOS DISTRIBUÍDOS PELO PROGRAMA FARMÁCIA POPULAR NO BRASIL: ROTAS SINTÉTICAS, RELAÇÃO ESTRUTURA-ATIVIDADE E PERSPECTIVAS FUTURAS." Química Nova 44 (2021): 1280-1299. 6. Chen, Song, Yuanli He, Wenjia Xie, Linna Zhong, and Jian Wang. "Advantages of calcium phosphate nanoparticles for drug delivery in bone tissue engineering research and application." Chinese Journal of Tissue Engineering Research 25, no. 22 (2021): 3565. 7. Lopes, Débora Ribeiro. "Resistência à corrosão em solução de hank de ligas e compósitos de magnésio submetidos à deformação plástica severa por torção sob alta pressão." (2021).	**BDI**
16. Thermokinetic study of CODA azoic liquid crystal and thin films deposition by matrix-assisted pulsed laser evaporation; **Andrei Rotaru**, Anca Moanţă, Cătălin Constantinescu, Marius Dumitru, Horia Octavian Manolea, Andreea Andrei, Maria Dinescu; ***Journal of Thermal Analysis and Calorimetry,*** 128 (1), 89-105, 2017.	**6 citări**
1. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 2. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4 3. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 4. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 5. Baul, Bianca, Adriana Ledeţi, Denisa Cîrcioban, Amalia Ridichie, Titus Vlase, Gabriela Vlase, Francisc Peter, and Ionuţ Ledeţi. 2023. "Thermal Stability and Kinetics of Degradation of Moxonidine as Pure Ingredient vs. Pharmaceutical Formulation" *Processes* 11, no. 6: 1738. https://doi.org/10.3390/pr11061738	**ISI**
1. Anna Paola Caricato, Wangyao Ge, Adrienne D. Stiff-Roberts. UV- and RIR-MAPLE: Fundamentals and Applications. In book: Advances in the Application of Lasers in Materials Science pp 275-308. Part of the Springer Series in Materials Science book series (SSMATERIALS, volume 274). 2018.	**BDI**
17. Thermal behaviour of CODA azoic dye liquid crystal and nanostructuring by drop cast and spin coating techniques; **Andrei Rotaru**, Marius Dumitru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 21-32, 2017.	**11 citări**
1. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4. 2018. 2. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 3. Nesrin Şener, Mahmut Gür, M. Serdar Çavuş, Merve Zurnaci, İzzet Şener. Synthesis, Characterization, and Theoretical Calculation of New Azo Dyes Derived from [1,5-a]Pyrimidine-5-one Having Solvatochromic Properties. Journal of Heterocyclic Chemistry. DOI: 10.1002/jhet.3497, 2019.	**ISI**

4. A. Milia, M. Bruno, G. Cavallaro, G. Lazzara, S. Milioto. Adsorption isotherms and thermal behavior of hybrids based on quercetin and inorganic fillers. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08257-x, 2019. 5. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 6. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4. 7. F. Parisi, G. Lazzara, M. Merli, S. Milioto, F. Princivale, L. Sciascia. Simultaneous Removal and Recovery of Metal Ions and Dyes from Wastewater through Montmorillonite Clay Mineral. Nanomaterials 9(12), 2019, 1699. 8. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 9. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 10. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 11. Korkmaz, Burak, Ahmet Kırsoy, Mustafa Okutan, Yeşim Gürsel, and Bahire Filiz Senkal. "Synthesis and investigation of new cholesteryl carbamate-based liquid crystals." Journal of Materials Science: Materials in Electronics 33, no. 15 (2022): 12224-12238.	
18. Thermal and kinetic study of hexagonal boric acid *vs.* triclinic boric acid in air flow; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 755-763, 2017.	**14 citări**
1. Siavash Aghili, Masoud Panjepour, Mahmood Meratian, Kinetic analysis of formation of boron trioxide from thermal decomposition of boric acid under non-isothermal conditions; Journal of Thermal Analysis and Calorimetry, 131(1), 2443–2455, 2018. 2. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4(0123456789().,-volV)(0123456789().,-volV), 2018. 3. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărășescu, I. Petrișor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208. 4. C Huber, S Setoodeh Jahromy, C Jordan, M Schreiner, M Harasek, A Werner, F Winter. Boric Acid: A High Potential Candidate for Thermochemical Energy Storage. Energies, 12, 1086. 2019. 5. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 6. Clemens Huber, Saman Setoodeh Jahromy, Felix Birkelbach, Jakob Weber, Christian Jordan, Manfred Schreiner, Michael Harasek, Franz Winter. The multistep decomposition of boric acid. Energy Science and Engineering. DOI:10.1002/ese3.622, (2020). 7. R. Ghelich, M.R. Jahannama, H. Abdizadeh, F.S. Torknik, M.R. Vaezi. Hafnium diboride nonwoven mats with porosity/morphology tuned via different heat treatments. Materials Chemistry and Physics. DOI:10.1016/j.matchemphys.2020.122876. (2020). 8. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 9. Larsson, Elin, Olivier Donzel-Gargand, Jannica Heinrichs, and Staffan Jacobson. "Tribofilm formation of a boric acid fuel additive–Material characterization; challenges and insights." Tribology International 171 (2022): 107541. 10. Reiss, Aurora, Nicoleta Cioateră, Aurelian Dobrițescu, Mihaela Rotaru, Alice Carla Carabet, Filippo Parisi, Anca Elena Gănescu, Irina Daniela Dăbuleanu, Cezar Ionuț Spînu, and Petre Rotaru. "Bioactive co (Ii), ni (ii), and cu (ii) complexes containing a tridentate sulfathiazole-based (onn) schiff base." Molecules (Basel, Switzerland) 26, no. 10 (2021): 1-18. 11. Schmatz-Engert, Patrick, Felix Herold, Silvio Heinschke, Lea Totzauer, Kathrin Hofmann, Alfons Drochner, Anke Weidenkaff et al. "Oxygen-Functionalized Boron Nitride for the Oxidative Dehydrogenation of Propane–The Case for Supported Liquid Phase Catalysis." ChemCatChem 14, no. 8 (2022): e202200068. 12. Aghili, Siavash, Masoud Panjepour, and Mahmood Meratian. "The kinetics and mechanism of B 2 O 3	**ISI**

formation from the chemically-synthesized HBO 2 under non-isothermal conditions." Reaction Kinetics, Mechanisms and Catalysis (2021): 1-17.	
1. E.S. Gorlanov, V.L. Ugolkov. To the low temperature synthesis of titanium diboride. Metallurgy and Materials Science. DOI:10.21285/1814-3520-2018-2-153-165. 2018 2. Larsson, Elin. "New insights into lubricated tribological contacts." PhD diss., Acta Universitatis Upsaliensis, 2022.	**BDI**
19. Microstructural and high-temperature impedance spectroscopy study of $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In) relaxor dielectric ceramics with tetragonal tungsten bronze structure; **Andrei Rotaru**, Finlay D. Morrison; ***Ceramics International,*** 42, 11810-11821, 2016	**6 citări**
1. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060. 2. Vandana Kuldeep, Oroosa Subohi, Rajnish Kurchania, Investigations on dielectric, electrical and ferroelectric properties of xBaTiO3-(1 − x) NiFe2O4 multiferroic composite ceramics. Applied Physics A, 125 (2019) 631. 3. E. Gil-González, A. Perejón, P.E. Sánchez-Jiménez, D. Roman-Gonzalez, L.A. Perez-Maqueda. Control of experimental conditions in reaction flash sintering of complex stoichiometry ceramics. Ceramics International, DOI:10.1016/j.ceramint.2020.05.091, (2020). 4. FM Casallas-Caicedo, E Vera Lopez, J Roa-Rojas. Impedance spectroscopy study of electrical response and correlation with structural properties in the La2SrFe2CoO9 triple complex perovskite. Physica B: Condensed Matter. 412865, 2021, DOI: 10.1016/j.physb.2021.412865 5. Bendahhou, Amine, Pascal Marchet, Soufian El Barkany, and Mohamed Abou-Salama. "Structural and impedance spectroscopic study of Zn-substituted Ba5CaTi2Nb8O30 tetragonal tungsten bronze ceramics." Journal of Alloys and Compounds 882 (2021): 160716. 6. Jalaja, M. A., and Soma Dutta. "Complex Impedance Spectroscopy studies to unravel electrical properties and processes in Al+ 3-modified PLZT." Journal of Materials Science: Materials in Electronics (2022): 1-11.	**ISI**
1. Chourti, Karim, Amine Bendahhou, Fath Allah Rabie, Mohamed Loutou, and Mohamed Abou-salama. "Effects of Gd-substitution on structural, and impedance spectroscopic study of Sr2Sm1−xGdxTi2Nb3O15 tungsten bronze ceramics." Materials Today: Proceedings 45 (2021): 7450-7456.	**BDI**
20. Discriminating within the kinetic models for heterogeneous processes of materials by employing a combined procedure under TKS-SP 2.0 software; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry,*** 126 (2), 919-932, 2016	**8 citări**
1. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017. 2. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4(0123456789().,-volV)(0123456789().,-volV), 2018. 3. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărăşescu, I. Petrişor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208. 4. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 5. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 6. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. DOI: 10.1016/j.ceramint.2018.09.060. Volume: 45 Issue: 2 Special Issue: SI Pages: 2742-2750 Part: B Published: FEB 1 2019. 7. Silva, Carolina RG, Silvia L. Fialho, Jamile Barbosa, Bárbara CR Araújo, Guilherme Carneiro, Rita CO Sebastião, Wagner N. Mussel, Maria I. Yoshida, and Maria B. de Freitas-Marques. "Compatibility by a nonisothermal kinetic study of azathioprine associated with usual excipients in the product quality review process." Journal of the Brazilian Chemical Society 32 (2021): 638-651.	**ISI**
1. Syrkov, Andrey G., and Lyudmila A. Yachmenova. "Features of obtaining metallurgical products in the	**BDI**

solid-state hydride synthesis conditions." Записки Горного института 256 (2022): 651-662.	
21. Elastic and anelastic relaxations accompanying relaxor dielectric behaviour of $Ba_6GaNb_9O_{30}$ tetragonal tungsten bronze from resonant ultrasound spectroscopy; **Andrei Rotaru**, Jason A. Schiemer, Michael A. Carpenter; ***Journal of Thermal Analysis and Calorimetry*,** 124, 571-583, 2016	**5 citări**
1. F. Silva Bellucci, F. C. Lobatode Almeida, D. Lincon da Silva Agostini, M. A. Lima Nobre, A. Tabone Paschoalini, A. Eloizo Job. Evolution of thermal properties of natural rubber nanocomposites functionalized by nickel–zinc ferrite and potassium strontium niobate nanopowders. Journal of Thermal Analysis and Calorimetry. 126, 3, 1397–1406, 2016. 2. Sun, X. F., Li, P. F., Liao, W. Q., Wang, Z., Gao, J., Ye, H. Y., & Zhang, Y. (2017). Notable Broad Dielectric Relaxation and Highly Efficient Red Photoluminescence in a Perovskite-Type Compound:(N-Methylpyrrolidinium) MnCl3. *Inorganic Chemistry*. 3. G Linyu, FJ Romero, V Franco, JM Martín-Olalla, MC Gallardo, EKH Salje, Y Zhou, O. Aktas. Correlations between elastic, calorimetric, and polar properties of ferroelectric PbSc0. 5Ta0. 5O3 (PST). Appl. Phys. Lett. 115(16), (2019), 161904. 4. Aktas, O., M. Kangama, G. Linyu, X. Ding, M. A. Carpenter, and E. K. H. Salje. "Probing the dynamic response of ferroelectric and ferroelastic materials by simultaneous detection of elastic and piezoelectric properties." Journal of Alloys and Compounds 903 (2022): 163857. 5. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483.	**ISI**
22. Effect of local A-site strain on dipole stability in $A_6GaNb_9O_{30}$ (A = Ba, Sr, Ca) tetragonal tungsten bronze relaxor dielectrics. Andrew J. Miller, **Andrei Rotaru**, Donna C. Arnold, Finlay D. Morrison; ***Dalton Transactions***, 44, 10738-10745, 2015	**18 citări**
1. Velayutham, T. S., Salim, N. I. F., Gan, W. C., & Majid, W. A. Effect of cerium addition on the microstructure, electrical and relaxor behavior of Sr0.5Ba0.5Nb2O6 ceramics. Journal of Alloys and Compounds, 666, 334-340, 2016. 2. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 3. Hajlaoui, T., Josse, M., Harnagea, C., & Pignolet, A. Tetragonal tungsten bronze Ba2 EuFeNb 4 O 15–based composite thin films multiferroic at room temperature. *Materials Research Bulletin*, *86*, 30-37, 2017. 4. Huang, Z., Teramura, K., Asakura, H., Hosokawa, S., & Tanaka, T. (2017). Flux method fabrication of potassium rare-earth tantalates for CO 2 photoreduction using H2O as an electron donor. Catalysis Today, DOI: 10.1016/j.cattod.2017.03.043, 2017. 5. Hassen, A. B., Rhouma, F. I. H., Dhahri, J., Abdelmoula, N., Taibi, K., Belmabrouk, H., & Zaidi, M. (2017). Relaxor ceramic with a high relative permittivity and low dielectric loss in Cr doped Ca0. 67La0. 22TiO3. *Journal of Alloys and Compounds*, *726*, 378-387. 6. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 7. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060. 8. Y. C. Ao, Y. Shi, C. Z. Zhao, Y. Huang, J. Q. Shi, K. R. Zhou, Q. J. Zhou, Z. P. Li, T. Wei. Effects of B-Site Substitution on Up-Conversion Luminescence and Ferroelectric Properties in Er3+-Doped Strontium Barium Niobate. J. Electron, Mater., DOI:10.1007/s11664-018-6751-2. 2018. 9. Z. Raddaoui, S. El Kossi, J. Dhahri, N. Abdelmoula, K. Taibi. Study of diffuse phase transition and relaxor ferroelectric behavior of $Ba_{0.97}Bi_{0.02}Ti_{0.9}Zr_{0.05}Nb_{0.04}O_3$ ceramic. 9, 2412-2425. 2019. 10. C Li, YH Huang, JS Hong, XQ Liu, J Li, YJ Wu. Magnetoelectric effect in Sm-substituted tungsten bronze structure Ba4(SmxLa1-x)2Fe2Nb8O30 ceramics. Journal of Alloys and Compounds. 786; 126-133. 2019 11. YN Li, D Zhao, RJ Zhang, FF Li, LY Shi, QX Yao, XY Han, XQCui. A new diphosphate Ba2LiGa(P2O7)(2): synthesis, crystal structure and Eu3+-activated fluorescence performance. DALTON TRANSACTIONS Volume: 48 Issue: 36 Pages: 13780-13788 Published: SEP 28 2019 12. S Xu, Z Deng, S Shen, L Wei, Z Yangman. Structural and electrical effects of Ag substitution in tungsten bronze Sr2AgxNa1− xNb5O15 ceramics. Ceramics International. DOI: 10.1016/j.ceramint.2020.02.199, 2020. 13. J. Massoudi, M. Smari, K. Nouri, E. Dhahri, K. Khirouni, S. Bertaina, L. Bessais, El Kebir Hlil,	**ISI**

Magnetic and spectroscopic properties of Ni-Zn- Al ferrite spinel: from the nanoscale to microscale. RSC Advances, 10, 34556, 2020. 14. Fernandez, Abel, Megha Acharya, Han-Gyeol Lee, Jesse Schimpf, Yizhe Jiang, Djamila Lou, Zishen Tian, and Lane W. Martin. "Thin-film Ferroelectrics." Advanced Materials 34, no. 30 (2022): 2108841. 15. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." Journal of Alloys and Compounds 929 (2022): 167314. 16. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483.	
1. T. Hajlaoui. PhD thesis. Synthèse et étude des couches minces composites multiferroïques à base des bronzes de tungstène quadratiques. Université du Québec, Institut national de la recherche scientifique. 2017. 2. JN Kiran, M Sreenivasulu, KS Rao, KS Rao, S. Nagamani, T. Nagamalleswari. Study of structural and mechanical aspects of Praseodymium and Europium doped SrBi2Nb2O9 ceramics. Materials Today: Proceedings. (2019) DOI: 10.1016/j.matpr.2019.10.119.	**BDI**
23. Vogel-Fulcher analysis of relaxor dielectrics with the tetragonal tungsten bronze structure $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In); **Andrei Rotaru**, Finlay D. Morrison; ***Journal of Thermal Analysis and Calorimetry,*** 120, 2, 1249-1259, 2015	**20 citări**
1. WB Feng, XL Zhu, XQ Liu, XM Chen. "Crystal structure, ferroelectricity and polar order in a Ba4R2Zr4Nb6O30 (R= La, Nd, Sm) tetragonal tungsten bronze new system." *Journal of Materials Chemistry C* 5.16 (2017): 4009-4016. 2. J. Gardner, F.D. Morrison. Manipulation of polar order in the "empty" tetragonal tungsten bronzes: Ba4-xSrxDy0.67□1.33Nb10O30, x = 0, 0.25, 0.5, 1, 2, 3. Applied Physics Letters, 109, 7, 072901, 2016. 3. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 4. Duran, A., Ostos, C., Arnache, O., Siqueiros, J. M., & García-Guaderrama, M. (2017). Multiferroic properties of the $Y_2BiFe_5O_{12}$ garnet. *Journal of Applied Physics*, *122*(13), 134101. 5. CM Kavanagh, P Lightfoot, FD Morrison. Superexchange-mediated negative thermal expansion in Nd-doped $BiFeO_3$. *J. Mater. Chem. C, 2018,6, 3260-3270* 6. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 7. Wang Chen, Ting Ting Gao, Xiao Li Zhu, and Xiang Ming Chen. Structural and dielectric characteristics of Ba3Ln3Ti5Nb5O30 (Ln = La, Nd, Sm) filled tungsten bronze ceramics. Journal of Applied Physics 123, 124106 (2018); doi: 10.1063/1.4989454. 8. D Bochenek, P Niemiec, R Skulski, M Adamczyk, D Brzezińska. Electrophysical properties of the multicomponent PBZT-type ceramics doped by Sn^{4+}. DOI: 10.1007/s10832-018-0142-1. (2018) 9. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060. 10. Z Guo, S Wu, C Hu, L Liu, L Fang. Preparation and Dielectric Properties of Ba4-xSm2Fe2-xNb8+xO30 Tungsten Bronze Ceramics with an Adjustable Structure that Changes from Filled to Unfilled. Materials Research Bulletin. DOI: 10.1016/j.materresbull.2019.02.003, 2019. 11. BR Surapaneni, P Viswarupachary, DM Potukuchi. Structure, morphology, infra-red and dielectric investigations in Er+ 3 doped nano phased lithium-barium-strontium-sodium niobates. Materials Research Express, DOI:10.1088/2053-1591/ab0e5c, 2019. 12. BX Wang, H Zheng, Y Ren, M Krogstad, JF Mitchell, D Phelan. Single Crystal Growth of Relaxor Ferroelectric Ba2PrFeNb4O15 by the Optical Floating Zone Method. Cryst. Growth Des. (2019) DOI: 10.1021/acs.cgd.9b01147. 13. Elena Buixaderas, Martin Kempa, Šarūnas Svirskas, Christelle Kadlec, Viktor Bovtun, Maxim Savinov, Marek Paściak, and Jan Dec, Dynamics of mesoscopic polarization in the uniaxial tetragonal tungsten bronze (SrxBa1−x)Nb2O6, PHYSICAL REVIEW B, 100 (2019) 184113. 14. S.A. Riquelme, Koduri Ramam, Dielectric and piezoelectric properties of lead free BZT-BCT/PVDF flexible composites for electronic applications. Materials Research Express. 2019. DOI: 10.1088/2053-1591/ab522c. 15. Jianhang Shi, Mark E. Johnson, Mingwan Zhang, Pu-Xian Gao. Antiferromagnetic and dielectric behaviour in polycrystalline GdFe0.5Cr0.5O3 thin film. APL Mater. 8, 031106 (2020); https://doi.org/10.1063/1.5142177	**ISI**

16. de Beauvoir, Thomas Hérisson, Tom Delage, and Michaël Josse. "Ferroelectric to relaxor crossover in Li solid solutions derived from Ba2Nd□ 2FeNb4O15." Ceramics International 47, no. 8 (2021): 10658-10664. 17. Feng, Wenbin, Sidi Long, Yi Wan, and Dunpu Zhang. "Effect of B-site Zr and Hf substitution on ferroelectric polar order for tetragonal tungsten bronze ceramic." Journal of Asian Ceramic Societies 10, no. 2 (2022): 396-404.	
1. J. Gardener. PhD Thesis. University of St Andrews. 2015 2. Rebecca M. Smith, Jonathan Gardner, Finlay D. Morrison, S. E. Rowley, Catarina Ferraz, M. A. Carpenter, Jiasheng Chen, Jack Hodkinson, Siân E. Dutton, and J. F. Scot. Quantum critical points in ferroelectric relaxors: Stuffed tungsten bronze K3Li2Ta5O15 and lead pyrochlore (Pb2Nb2O7). Phys. Rev. Materials 2, 084409, 2018 (DOI: 10.1103/PhysRevMaterials.2.084409) 3. Thomas Herisson de Beauvoir. Prospective crystal-chemistry: relaxors, ferroics and low temperature SPS. PhD Thesis. Université de Bordeaux. 2017	**BDI**
24. Thermal behaviour and thin film deposition by MAPLE technique of functional polymeric materials with potential use in optoelectronics; Catalin Constantinescu, **Andrei Rotaru**, Anca Nedelcea, Maria Dinescu; ***Materials Science in Semiconductor Processing,*** 30, 242-249, 2015	**25 citări**
1. Constantinescu, C., Rapp, L., Rotaru, P., Delaporte, P., & Alloncle, A. P. Polyvinylphenol (PVP) microcapacitors printed by laser-induced forward transfer (LIFT): multilayered pixel design and thermal analysis investigations. Journal of Physics D: Applied Physics, 49(15), 155301, 2016. 2. Matei, A., Marinescu, M., Constantinescu, C., Ion, V., Mitu, B., Ionita, I., Dinescu M; Emandi, A. Nonlinear optical studies on 4-(ferrocenylmethylimino)-2-hydroxy-benzoic acid thin films deposited by matrix-assisted pulsed laser evaporation (MAPLE). Applied Surface Science, 374, 206-212, 2016. 3. Lv, P., Zhao, Y., Liu, F., Li, G., Dai, X., Ji, X., Qiu, X. (2016). Fabrication of Polyaniline/Polyimide Composite Fibers with Electrically Conductive Properties. Applied Surface Science, (2016), 367, 335-341, 2016. 4. LI, Lei; ZHANG, Zunju. Biosynthesis of Gold Nanoparticles Using Green Alga Pithophora oedogoniawith Their Electrochemical Performance for Determining Carbendazim in Soil. International Journal of Electrochemical Science, 11: 4550-4559, 2016. 5. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015). 6. Constantinescu C; Rapp L; Rotaru P; Delaporte P; Alloncle AP; Pulsed laser processing of poly (3, 3‴-didodecyl quarter thiophene) semiconductor for organic thin film transistors. Chemical Physics, 450, 32-38 (2015). 7. Dinari, M., & Asadi, P. Thermal, mechanical and optical transport properties of nanocomposite materials based on triethoxysilane-terminated polyimide and TiO 2 nanoparticles. *RSC Advances*, *5*(75), 60745-60753, 2015. 8. Ion V; Matei A; Constantinescu C; Ionita I; Marinescu M; Dinescu M; Emandi A; MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING 36 78-83 (2015). 9. Sava, B. A., Tardei, C., Simonescu, C. M., Boroica, L., & Melinescu, A. Hydroxyapatite nanopowders obtained by sol-gel method, synthesis and properties. OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, 9(11-12), 1415-1424 (2015). 10. Darwish, Abdalla M., et al. "Polymer nano-composite films with inorganic upconversion phosphor and electro-optic additives made by concurrent triple-beam matrix assisted and direct pulsed laser deposition." *Composites Part B: Engineering* 109 (2017): 82-90. 11. Dinari, M., Nabiyan, A., Ensafi, A. A., & Jafari-Asl, M. (2015). Polybenzimidazole and polybenzimidazole/MoS 2 hybrids as an active nitrogen sites: hydrogen generation application. *RSC Advances*, *5*(122), 100996-101005. 12. Marinescu, M., Potmischil, F., Florea, M., & Constantinescu, C. Thermal behaviour of sym-octahydroacridines and their corresponding N (10)-oxides. *Journal of Thermal Analysis and Calorimetry*, 1-9, 2017. 13. F.M. Ali, F. Maiz. Structural, optical and AFM characterization of PVA:La^{3+} polymer films. Physica B:	**ISI**

Condensed Matter. 530(1), 19–23, (2018) 14. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4, 2018. 15. G. Santhosh, B.S. Madhukar, G.P. Nayaka, B. Siddaramaiah, Luminescent down-shifting aluminosilicate nanocomposites: an efficient UVA shielding material for photovoltaics. Journal of Materials Science: Materials in Electronics. DOI: 10.1007/s10854-018-8658-3 (2018) 16. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 17. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 18. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1 19. S Palsaniya, HB Nemade, AK Dasmahapatra. Heterostructured Layer Growth of Polyaniline by Vacuum Thermal Evaporation and Fabrication of Thin-Film Capacitors. The Journal of Physical Chemistry C. (2019), 123, 45, 27959-27968. 20. Dina S. Ahmed, Gamal A. El-Hiti, Hanan Ibraheem, Mohammad Hayal Alotaibi, Mustafa Abdallh, Ahmed A. Ahmed, Mustafa Ismael, Emad Yousif. Enhancement of Photostabilization of Poly(vinyl chloride) Doped with Sulfadiazine Tin Complexes. Journal of Vinyl & Additive Technology. 2019. DOI: 10.1002/vnl.21752. 21. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504	
1. Yabagi, Jibrin Alhaji; Kimpa, Mohammed Isah; Muhammad, Muhammad Nmayaya; Uthaman, Kasim Isah; Zaidi, Embong; Agam, Mohd Arif. Structural Transformation of Polystyrene Nanosphere Produce Positive and Negative Resists by Controlled Laser Exposure. Advanced Science Letters. 23(7) 6613-6617, (2017). 2. Anna Paola Caricato, Wangyao Ge, Adrienne D. Stiff-Roberts. UV- and RIR-MAPLE: Fundamentals and Applications. In book: Advances in the Application of Lasers in Materials Science pp 275-308. Part of the Springer Series in Materials Science book series (SSMATERIALS, volume 274). 2018. 3. V. Dinca, Q.Liu, S. Brajnicov, A. Bonciu, A. Vlad, C.Z. Dinu. Composites formed from tungsten trioxide and graphene oxide for the next generation of electrochromic interfaces. Composites Communications. 2020. DOI:10.1016/j.coco.2019.11.015 4. AM Darwish, SS Sarkisov, DN Patel. Nanocomposite Windows Converting Solar Power into Electricity for Self-Sustaining Buildings. In: Bumajdad A., Bouhamra W., Alsayegh O., Kamal H., Alhajraf S. (eds) Gulf Conference on Sustainable Built Environment. Springer, Cham. https://doi.org/10.1007/978-3-030-39734-0_21	**BDI**
25. Thermal behavior and antimicrobial assay of some new zinc(II) 2-aminobenzoate complex compounds with bioactive ligands; Annamaria Krajnikova, **Andrei Rotaru**, Katarina Gyoryova, Horia Octavian Manolea, Katarina Homzova, Jana Kovarova, Daniela Hudecova; ***Journal of Thermal Analysis and Calorimetry,*** 120, 1, 73-78, 2015	**12 citări**
1. Homzová, K., Győryová, K., Hudecová, D., Koman, M., Melník, M., & Kovářová, J. Synthesis, thermal, spectral, and biological properties of zinc (II) 4-aminobenzoate complexes. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6184-9, 2017. 2. Soliman, Madiha H., Gehad G. Mohamed, and Galal H. Elgemeie. "Novel synthesis of 2-imino-2H-chromene-3-carboximide metal complexes." Journal of Thermal Analysis and Calorimetry 123, 1, 583-594, 2016. 3. Acar, N., Atakol, O., Sopacı, Ş. B., Duman, D. C., Svoboda, I., & Öz, S. The investigations of thermal behavior, kinetic analysis, and biological activity of trinuclear complexes prepared ONNO-type Schiff bases with nitrito and nitrato μ-bridges. *Journal of Thermal Analysis and Calorimetry*, 1-19. 4. Ledeti, A., Vlase, G., Vlase, T., Circioban, D., Dehelean, C., & Ledeti, I. Kinetic study for solid-state degradation of mental disorder therapeutic agents. *Journal of Thermal Analysis and Calorimetry*, 1-11, 2017. 5. P. Košicka, K. Gyoryova, L.Smolko, R. Gyepes, D. Hudecova. Synthesis, crystal structures, spectral, thermal and antimicrobial properties of new Zn(II) 5-iodo- and 5-bromosalicylates. *Journal of Molecular Structure*, 1155; 232-238, 2018.	**ISI**

6. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 7. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4(0123456789().,-volV)(0123456789().,-volV), 2018. 8. Romana Smolkova, Lukas Smolko, Katarina Gyoryova, Katarina Homzova, Peter Tomcik, Daniela Hudecova, Lenka Findorakova. New zinc (II) 3-aminobenzoates with bioactive ligands: synthesis, thermal, spectral and antimicrobial properties. Thermochimica Acta. DOI:10.1016/j.tca.2018.09.004 (2018). 9. A. Atakol, I. Svoboda, H. Dal, O. Atakol, H. Nazir. New Energetic Silver(I) Complexes With Nnn Type Pyrazolylpyridine Ligands And Oxidizing Anions. Journal of Molecular Structure. DOI: 10.1016/j.molstruc.2020.128001. (2020). 10. Gürpınar, K., Tuncer, Y. G., Sopacı, Ş. B., Akay, M. A., Nazır, H., Svoboda, I., ... & İnal, E. K. (2021). Some Nitrogen Rich Energetic Material Synthesis by Nucleophilic Substitution Reaction from Polynitro Aromatic Compounds. Acta Chimica Slovenica, 68(4), 930-944. 11. Reiss, Aurora, Nicoleta Cioateră, Aurelian Dobrițescu, Mihaela Rotaru, Alice Carla Carabet, Filippo Parisi, Anca Elena Gănescu, Irina Daniela Dăbuleanu, Cezar Ionuţ Spînu, and Petre Rotaru. "Bioactive co (Ii), ni (ii), and cu (ii) complexes containing a tridentate sulfathiazole-based (onn) schiff base." Molecules (Basel, Switzerland) 26, no. 10 (2021): 1-18.	
1. Elso Manuel Cruz Cruz, Liliana Mireya Aguilar Castro. Cracterización in silico de salicilideniminas con potencialidades de uso en medicina. In silico characterization of salicylidenimines with a potential use in medicine. Revista Electrónica Dr. Zoilo E. Marinello Vidaurreta. 42(6). (2018).	**BDI**
26. Towards novel multiferroic & magnetoelectric materials: dipole stability in tetragonal tungsten bronzes. **Andrei Rotaru**, Andrew J. Miller, Donna C. Arnold, Finlay D. Morrison; ***Philosophical Transactions of the Royal Society A***, 372, 20120451, 2014	**23 citări**
1. Hu, C., Sun, Z., Zhu, Q., Lu, F., Li, C., Liu, L., & Fang, L. Relaxor behaviour and ferroelectric properties of a new Ba4SmFe0.5Nb9.5O30 tungsten bronze ceramic. Ceramics International, 42(13), 14999-15004, 2016. 2. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 3. Gardner, J., Yu, F., Tang, C., Kockelmann, W., Zhou, W., & Morrison, F. D. (2016). Relaxor-to-ferroelectric crossover and disruption of polar order in 'empty'tetragonal tungsten bronzes. Chemistry of Materials, 28 (13), pp 4616–4627, 2016. 4. Hu C; Sun Z; Zhu Q; Fang L; L Laijun; Dielectric and ferroelectric properties of unfilled tungsten bronze KBa3RNb10O30 ceramics. JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 26 (1) 515-520 (2015). 5. Hu, C., Zhu, Q., Sun, Z., Guo, Z., Liu, L., & Fang, L. (2017). Dielectric properties of unfilled tetragonal tungsten bronze Ba4PrFe0.5Nb9.5O30 ceramics. *Journal of Wuhan University of Technology-Mater. Sci. Ed.*, *32*(4), 904-909. 6. Afqir, M., Tachafine, A., Fasquelle, D., Elaatmani, M., Carru, J. C., Zegzouti, A., & Daoud, M. (2017). Dielectric properties of SrBi 1.8 RE 0.2 Nb 2 O 9 (RE= Yb, Tm, Tb, Gd, Eu, Sm and Ce) ceramics. *Solid State Sciences*. 7. Zhuo Wang, Yu-Jia Xiao, Tian Wang, Qiao-Li Wu. Enhanced dielectric properties of tungsten bronze Ba6FeNb9O30 prepared by microwave hydrothermal method. Journal of Alloys and Compounds. DOI:10.1016/j.jallcom.2017.12.324 (2018). 8. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 9. Zhuo Wang, Yu Jia, Xiao Tian, Wang Qiao, Li Wu, Enhanced single-phased multiferroic properties of Ca-doped filled tetragonal tungsten bronze Ba4Sm2Fe2Nb8O30 ceramics. Journal of Materials Science: Materials in Electronics. DOI:10.1007/s10854-018-8718-8, 2018. 10. C Li, YH Huang, JS Hong, XQ Liu, J Li, YJ Wu. Magnetoelectric effect in Sm-substituted tungsten bronze structure Ba4(SmxLa1-x)2Fe2Nb8O30 ceramics. Journal of Alloys and Compounds. 786; 126-133. 2019 11. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1 12. ZJ Yang, XQ Liu, XL Zhu, XM Chen. Crossover from normal to relaxor ferroelectric in Sr0.25Ba0.75(Nb1−xTax)2O6 ceramics with tungsten bronze structure. Appl. Phys. Lett. 117, 122902	**ISI**

(2020). DOI:10.1063/5.0020853. 13. NK Jaladi, KS Rao, H Workineh, JA Kiran, S Nagaman. Synthesis, Structural and Dielectric Studies on SrBi2-xGdxNb2O9 Lead Free Ceramics. Journal of Advanced Ceramics. 10.21203/rs.3.rs-91046/v1. 14. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." Journal of Alloys and Compounds 929 (2022): 167314. 15. Nagamani, S., J. Nitchal Kiran, B. Siva Basivi Reddy, B. Nageswara Rao, J. Anindhya Kiran, and K. Sambasiva Rao. "Dielectric relaxation in layer-structured SrBi2− x Gd x Nb2O9 (x= 0.0, 0.4, 0.6, and 0.8) lead-free ceramics." Journal of Materials Science: Materials in Electronics 33, no. 16 (2022): 12997-13011. 16. Guo, Xiaoying, Xiao Zheng, Zuheng Jin, Changzheng Hu, Laijun Liu, and Liang Fang. "Changing the crystal phase structure and dielectric properties of Sr4− xBaxSmFe0. 5Nb9. 5O30 ceramics by adjusting the vacancy." Journal of Alloys and Compounds 924 (2022): 166550. 17. Bunin, M. A., O. A. Bunina, and K. S. Chumachenko. "The surface piezoresponse of tetragonal tungsten bronze oxides with different ordering of cations in A-sublattice." In Journal of Physics: Conference Series, vol. 1967, no. 1, p. 012016. IOP Publishing, 2021.	
1. C Pascual-Gonzalez, G Schileo, A Feteira. Chapter 22: Single-phase, composite and laminate multiferroics. Magnetic, Ferroelectric, and Multiferroic Metal Oxides. A volume in Metal Oxides. Pages 527–543. 2018. 2. NI Ilic, BD Stojanovic. Chapter 25: Properties of single multiferroics: Complex transition metal oxides. Magnetic, Ferroelectric, and Multiferroic Metal Oxides. A volume in Metal Oxides. Pages 527–543. 2018 3. Gerhard Henning Olsen. PhD thesis. Ferroelectric Tungsten Bronzes. Norwegian University of Science and Technology. 2016 4. Thameur Hajlaoui. PhD thesis. Synthèse et étude des couches minces composites multiferroïques à base des bronzes de tungstène quadratiques. Université du Québec, Institut national de la recherche scientifique. 2017. 5. S. Yin, Y. Asakura. Recent research progress on mixed valence state tungsten based materials. Tungsten. DOI:10.1007/s42864-019-00001-0, 1, pages5–18(2019). 6. Buixaderas, Elena, and Jan Dec. "Chap. 8: Phonons and Relaxations in Unfilled Tetragonal Tungsten-Bronzes." PEROVSKITES AND OTHER FRAMEWORK STRUCTURE CRYSTALLINE MATERIALS: 2d-PEROVSKITES, AURIVILLIUS, RUDDLESDEN-POPPER, DION-JACOBSON PHASES, TUNGSTEN BRONZES, CLAYS, AND OTHERS 1 (2021): 281.	**BDI**
27. Thermal analysis and kinetic study of Petroșani bituminous coal from Romania in comparison with a sample of Ural bituminous coal; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry*,** 110, 3, 1283-1291, 2012	**37 citări**
1. Constantinescu, C., Rapp, L., Rotaru, P., Delaporte, P., & Alloncle, A. P. Polyvinylphenol (PVP) microcapacitors printed by laser-induced forward transfer (LIFT): multilayered pixel design and thermal analysis investigations. Journal of Physics D: Applied Physics, 49(15), 155301, 2016. 2. Zhang, Hong-Xi. "Determination of Aromatic Structures of Bituminous Coal Using Sequential Oxidation." Industrial & Engineering Chemistry Research 55.10: 2798-2805, 2016. 3. Hetmańczyk, Łukasz, and Joanna Hetmańczyk. "Phase transition, thermal dissociation and dynamics of NH 3 ligands in [Cd (NH 3) 4](ReO 4) 2." Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 164: 24-32, 2016. 4. Wang, H., Zhang, J., Wang, G., Xu, R., Zhang, P., Liu, S., & Song, T. Characteristics and kinetic analysis of co-combustion of brown coal and anthracite. Journal of Thermal Analysis and Calorimetry,Volume 126, 2, 447–454, 2016. 5. Hetmańczyk, Łukasz, and Joanna Hetmańczyk. "Phase transition and dynamics of NH 3 ligands in [Zn (NH 3) 4](ReO 4) 2." Vibrational Spectroscopy, 86, 40-49, 2016. 6. Jiang, X., Chen, D., Ma, Z., & Yan, J. (2017). Models for the combustion of single solid fuel particles in fluidized beds: A review. *Renewable and Sustainable Energy Reviews*, *68*, 410-431. 7. Fan, DM ; Zhu, ZP; Na, YJ; Lu, QG. ”Thermogravimetric analysis of gasification reactivity of coal chars with steam and CO2 at moderate temperatures”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 599-607, (2013); 8. Cioabla, AE; Tordai, GT; Rotaru, P; Socaciu, M; Ionel, I. ”Experimental approach of co-firing and anaerobic fermentation of biomass and coal, and their thermochemical properties”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 110, 395-403, (2012); 9. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. ” Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013).	**ISI**

10. Akbarzadeh, Hossein; Chalaturnyk, Richard J. Structural changes in coal at elevated temperature pertinent to underground coal gasification: A review. INTERNATIONAL JOURNAL OF COAL GEOLOGY. 131, 126-146, (2014)
11. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014).
12. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014).
13. Hetmanczyk, L; Hetmanczyk; Comparison of vibrational dynamics, thermal behaviour, and phase transition in [Ni(NH3)4](ReO4)2 and [Ni(NH3)6](ReO4)2, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1415-1428 (2015).
14. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015).
15. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015).
16. Gingu O; Rotaru P; Milea A; Marin A; Nicolicescu C; Sima G; Tanasescu S; THERMOCHIMICA ACTA 606 1-11 (2015).
17. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015).
18. Zhong, X., Li, L., Chen, Y., Dou, G., & Xin, H. Changes in thermal kinetics characteristics during low-temperature oxidation of low-ranking coals under lean-oxygen conditions. Energy & Fuels, (2017).
19. Naktiyok, J., Bayrakçeken, H., Özer, A. K., & Gülaboğlu, M. Ş. Investigation of combustion kinetics of Umutbaca-lignite by thermal analysis technique. *Journal of Thermal Analysis and Calorimetry*, DOI: 10.1007/s10973-017-6149-z (2017).
20. Epshtein, S. A., Kossovich, E. L., Kaminskii, V. A., Durov, N. M., Dobryakova, N. N. Solid fossil fuels thermal decomposition features in air and argon. Fuel, 199, 145-156. (2017)
21. Makomaski G, Zielinski J, Thermal properties of group components of the pitch–PET compositions, DOI: 10.1007/s10973-017-6310-8, (2017).
22. Deng, J., Li, Q., Xiao, Y., & Wen, H. (2017). The effect of oxygen concentration on the non-isothermal combustion of coal. Thermochimica Acta. DOI: 10.1016/j.tca.2017.04.009. 2017.
23. Yu, L., Zhang, T., Su, H., Jing, H., Liu, R., & Zhang, Q. (2017). Influence of heat treatment on dynamic and physical properties of anthracite coal. Géotechnique Letters, 1-7 (2017).
24. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017).
25. J. Naktiyok. The determination of the self-heating temperature of coal by means of TGA analysis. Energy & Fuels, DOI: 10.1021/acs.energyfuels.7b02296, 2018
26. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4, 2018.
27. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărăşescu, I. Petrişor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208.
28. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060.
29. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x
30. Qing-Wei Li, Yang Xiao, Cai-Ping Wang, Jun Deng, Chi-Min Shu. Thermokinetic characteristics of coal spontaneous combustion based on thermogravimetric analysis. Fuel. 250, 235-244, 2019.
31. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865.
32. LF Ren, QW Li, J Deng, X Yang, L Ma, WF Wang. Inhibiting effect of CO2 on the oxidative combustion thermodynamics of coal. RSC Advances, 2019, 9, 41126-41134.
33. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504.
34. Reiss, Aurora, Nicoleta Cioateră, Aurelian Dobrițescu, Mihaela Rotaru, Alice Carla Carabet, Filippo

Parisi, Anca Elena Gănescu, Irina Daniela Dăbuleanu, Cezar Ionuţ Spînu, and Petre Rotaru. "Bioactive co (Ii), ni (ii), and cu (ii) complexes containing a tridentate sulfathiazole-based (onn) schiff base." Molecules (Basel, Switzerland) 26, no. 10 (2021): 1-18. 35. Zhou, Liang, Ruxiang Qin, Guanglong Dai, Mingyun Tang, and Jinwei Qiu. "Effect of Weakly Acidic and Weakly Alkaline Water Immersion on the Crystal Structure and Oxidative Thermodynamic Properties of Long-Flame Coal." Combustion Science and Technology (2022): 1-18. 36. Liu, Ning, Lulu Sun, Haishan Wang, Qiming Huang, Quanlin Shi, and Meiru Yao. "Effects of Liquid Nitrogen Freezing on Secondary Oxidation and Spontaneous Combustion of Coal." Available at SSRN 4110682.	
1. Kasani, H. A. (2016). *Reservoir-Geomechanics of Underground Coal Gasification (UCG)* (Doctoral dissertation, University of Alberta).	**BDI**
28. Thermal behaviour of some solid combustibles and the non-isothermal kinetics of their decomposition and burning; **Andrei Rotaru**; ***PhD Thesis***, University POLITEHNICA of Bucharest, 2011	**1 citări**
1. P. Budrugeac. A simple and precise differential incremental isoconversional method to kinetic analysis of heterogeneous processes under arbitrary temperature programs. Thermochimica Acta. DOI: 10.1016/j.tca.2018.01.025, (2018)	**ISI**
29. Origin and stability of dipolar response in a family of tetragonal tungsten bronze relaxors; **Andrei Rotaru**, Donna C. Arnold, *Aziz* Daoud-Aladine, Finlay D. Morrison; ***Physical Review B***, 83, 18, 184302, 2011	**43 citări**
1. Zhu, XL; Li, K; Rafiq, MA; Liu, XQ; Chen, XM. ”Relaxor nature in lead-free Sr5LaTi3Nb7O30 tetragonal tungsten bronze ceramics”, JOURNAL OF APPLIED PHYSICS, 114, 124102, (2013); 2. Zhang, ST; Yuan, GL; Chen, J; Gu, ZB; Yang, B; Yin, J; Cao, WW. ”Structural Evolving Sequence and Porous Ba6Zr2Nb8O30 Ferroelectric Ceramics with Ultrahigh Breakdown Field and Zero Strain”, JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 96, 555-560, (2013); 3. Yao, YB; Mak, CL. ” Effects of Ca-dopant on the pyroelectric, piezoelectric and dielectric properties of (Sr0.6Ba0.4)(4)Na2Nb10O30 ceramics” JOURNAL OF ALLOYS AND COMPOUNDS”, 544, 87-93, (2012). 4. Shvartsman, VV; Lupascu, DC. ” Lead-Free Relaxor Ferroelectrics” JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 95, 1-26, (2012); 5. Hu, C; Hou, L; Fang, L; Liu, L. ”Preparation and dielectric properties of unfilled tungsten bronze ferroelectrics Ba4RETiNb9O30”, JOURNAL OF ALLOYS AND COMPOUNDS, 581, 547-552, (2013); 6. Lin, Kun; Rong, Yangchun; Wu, Hui; Huang, Qingzhen; You, Li; Ren, Yang; Fan, Longlong; Chen, Jun; Xing, Xianran. Ordered Structure and Thermal Expansion in Tungsten Bronze Pb2K0.5Li0.5Nb5O15. INORGANIC CHEMISTRY. 53 (17), 9174-9180, (2014). 7. Gardner, Jonathan; Morrison, Finlay D. A-site size effect in a family of unfilled ferroelectric tetragonal tungsten bronzes: Ba4R0.67Nb10O30 (R = La, Nd, Sm, Gd, Dy and Y). DALTON TRANSACTIONS. 43 (30), 11687-11695, (2014). 8. Albino, M.; Veber, P.; Pechev, S.; Labrugere, C.; Velazquez, M.; Maglione, M.; Josse, M. Growth and Characterization of Ba(2)LnFeNb(4)O(15) (Ln = Pr, Nd, Sm, Eu) Relaxor Single Crystals. CRYSTAL GROWTH & DESIGN. 14 (2), 500-512, (2014). 9. Zhu, Xiao Li; Li, Kun; Chen, Xiang Ming. Ferroelectric Transition and Low-Temperature Dielectric Relaxations in Filled Tungsten Bronzes. JOURNAL OF THE AMERICAN CERAMIC SOCIETY. 97 (2), 329-338, (2014). 10. Yang, B; Yang, P; Wei, LL; Wang, ZM; Yang, ZY; Chao, XL; Yang, ZP; Structural modulation and electrical properties in ferroelectric niobates (Ca0.28Ba0.72)(2.5-0.5x)KxNb5O15 (0.0 <= x <= 0.6) ceramics. CERAMICS INTERNATIONAL 41 (10) 13988-13997 (2015). 11. Jun, BE; Jeong, JH; Choi, BC; Hwang, YH; Relaxation and phase-transition characteristics of relaxor ferroelectric potassium lithium niobate. JOURNAL OF THE KOREAN PHYSICAL SOCIETY 66 (11) 1736-1743 (2015). 12. Kim, J-Y; Kim; Y-I; Local structure and dielectric behavior of tetragonal tungsten bronzes beta-SrTa2O6 and beta '-SrTa2O6. JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 123 (1437) 419-422 (2015). 13. J. Gardner, F.D. Morrison. Manipulation of polar order in the “empty” tetragonal tungsten bronzes: Ba4-xSrxDy0.67□1.33Nb10O30, x = 0, 0.25, 0.5, 1, 2, 3. Applied Physics Letters, 109, 7, 072901, 2016. 14. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba 4 Pr 2 Fe 2 Nb 8 O 30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 15. Hu, C., Sun, Z., Zhu, Q., Lu, F., Li, C., Liu, L., & Fang, L. Relaxor behavior and ferroelectric	**ISI**

properties of a new Ba 4 SmFe 0.5 Nb 9.5 O 30 tungsten bronze ceramic. Ceramics International, 42(13), 14999-15004, 2016.
16. Neqali, A., Belboukhari, A., Bensaid, H., El Bouari, A., Bih, L., Alimoussa, A., Habouti, S., Mezzane, D. Diffuse phase transition and impedance spectroscopy analysis of Ba2. 15− x Na0. 7+ x Nb5− x W x O15 (x= 0.25) ferroelectric ceramic. Applied Physics A, 122(625), 1-8, 2016.
17. Gardner, J., Yu, F., Tang, C., Kockelmann, W., Zhou, W., & Morrison, F. D. (2016). Relaxor-to-ferroelectric crossover and disruption of polar order in 'empty'tetragonal tungsten bronzes. Chemistry of Materials, 28 (13), pp 4616–4627, 2016.
18. WB Feng, XL Zhu, XQ Liu, XM Chen. "Crystal structure, ferroelectricity and polar order in a Ba4R2Zr4Nb6O30 (R= La, Nd, Sm) tetragonal tungsten bronze new system." *Journal of Materials Chemistry C* 5.16 (2017): 4009-4016.
19. Aftabuzzaman, M., Helal, M. A., Paszkowski, R., Dec, J., Kleemann, W., & Kojima, S. (2017). Electric field and aging effects of uniaxial ferroelectrics SrxBa1− xNb2O6 probed by Brillouin scattering. *Scientific Reports*, (2017); 7: 11615.
20. CM Kavanagh, P Lightfoot, FD Morrison. Superexchange-mediated negative thermal expansion in Nd-doped $BiFeO_3$. *J. Mater. Chem. C, 2018,6, 3260-3270*
21. Zhuo Wang, Yu-Jia Xiao, Tian Wang, Qiao-Li Wu. Enhanced dielectric properties of tungsten bronze Ba6FeNb9O30 prepared by microwave hydrothermal method. Journal of Alloys and Compounds. DOI:10.1016/j.jallcom.2017.12.324 (2018).
22. Wang Chen, Ting Ting Gao, Xiao Li Zhu, and Xiang Ming Chen. Structural and dielectric characteristics of Ba3Ln3Ti5Nb5O30 (Ln = La, Nd, Sm) filled tungsten bronze ceramics. Journal of Applied Physics 123, 124106 (2018); doi: 10.1063/1.4989454.
23. Kun Li, Xiao Li Zhu, Xiao Qiang Liu, Xiao Ma, Mao Sen Fu, Jan Kroupa, Stanislav Kamba & Xiang Ming Chen, Electric-field-induced phase transition and pinched P–E hysteresis loops in Pb-free ferroelectrics with a tungsten bronze structure. NPG Asia Materials. DOI:10.1038/s41427-018-0013-x (2018).
24. C Hu, Z Guo, S Wu, Z Sun, C Li, L Liu, L Fang. High-temperature dielectric relaxation mechanism in Ba4SmFe0. 5Nb9. 5O30 tungsten bronze ceramics. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.109. (2018)
25. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060.
26. Laura J. Vera Stimpson, Jessica M. Powell, Gavin B. G. Stenning, Marek Jura, and Donna C. Arnold. Spin-glass behaviour in KxRu4-yNiyO8 hollandite materials. Phys. Rev. B 98, 174429, 2018.
27. L. Liu, Y. Wang, Y. Wang, R. Lv. Low-temperature dielectric anomalies in KSr2Nb5O15 ceramics with tetragonal tungsten bronze structure: The effect of microstructure. Journal of Alloys and Compounds 815 (2020) 152397.
28. BX Wang, H Zheng, Y Ren, M Krogstad, JF Mitchell, D Phelan. Single Crystal Growth of Relaxor Ferroelectric Ba2PrFeNb4O15 by the Optical Floating Zone Method. Cryst. Growth Des. (2019) DOI: 10.1021/acs.cgd.9b01147.
29. L Cao, Y Yuan, B Tang, E Li, S Zhang. Excellent thermal stability, high efficiency and high power density of (Sr0. 7Ba0. 3) 5LaNb7Ti3O30–based tungsten bronze ceramics. Journal of the European Ceramic Society. DOI:10.1016/j.jeurceramsoc.2020.01.022, (2020).
30. S Chu, K Lin, T Yang, C Yu, Y Cao, Y Zhang, Y Sun, Z Li, X Jiang, Z Lin, Q Li, J Chen, K Kato, H Wu, Q Huang, X Xing. Large Nonlinear Optical Effect in Tungsten Bronze Structures via Li/Na Cross-Substitutions. Chemical Communications, DOI:10.1039/D0CC03479G. (2020).
31. Y Qian, J Wang, SU Asif, J Xie, W Hu. Origins of dielectric relaxations in AgNb7O18 ceramic. Ceramics International, DOI:10.1016/j.ceramint.2020.06.078. (2020).
32. Cao, Lei, Ying Yuan, Xiangjun Meng, Enzhu Li, and Bin Tang. "Ferroelectric-relaxor crossover and energy storage properties in Sr2NaNb5O15-based tungsten bronze ceramics." ACS Applied Materials & Interfaces 14, no. 7 (2022): 9318-9329.
33. Krayzman, Victor, Alexeï Bosak, Helen Y. Playford, Bruce Ravel, and Igor Levin. "Incommensurate Modulation and Competing Ferroelectric/Antiferroelectric Modes in Tetragonal Tungsten Bronzes." Chemistry of Materials 34, no. 22 (2022): 9989-10002.
34. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483.
35. He, Qiuwei, Siegbert Schmid, Xue Chen, Biaolin Peng, ChunChun Li, Changzheng Hu, Laijun Liu, and Manuel Hinterstein. "Structure and relaxor ferroelectric behavior of the novel tungsten bronze type

ceramic Sr5BiTi3Nb7O30." Journal of Applied Physics 131, no. 16 (2022): 164102.	
1. Albino, M. (2013). *Synthèse et caractérisation structurale et diélectrique de céramiques et de monocristaux relaxeurs de structure TTB* (Doctoral dissertation, Université Sciences et Technologies-Bordeaux I). 2. Lima, C. V., Nobre, M. A. L., Lanfredi, S., & Prudente-SP, P. Caracterização Dielétrica a Alta Temperatura da Cerâmica de Óxido Niobato de Estrôncio e Potássio Dopado com Ferro por Espectroscopia de Impedância. 3. Bellucci, F. S. (2013). Preparación y caracterización de nanocompuestos multifuncionales obtenidos con nanopartículas ferroeléctricas y paramagnéticas en películas de caucho natural. 4. Palácio, G. (2013). Efeito da adição de níquel nas propriedades elétricas de nanopós de niobato de potássio e estrôncio de estrutura tungstênio bronze. 5. Moraes, P. G. P., Palácio, G., Lima, A. R. F., Lanfredi, S., Nobre, M. A. L., & Funcionais–LaCCeF, C. CARACTERIZAÇÃO ESTRUTURAL DE NANOPÓS DE NIOBATOS DE ESTRÔNCIO E POTÀSSIO DOPADOS COM NÍQUEL PELO MÉTODO POLIOL MODIFICADO. 6. S Jindal, A Vasisth, S Devi. Review on dielectric study of polycrystalline rare earth substituted Tungsten Bronze electroceramics for high temperature applications. International Journal of ChemTech Research. (2017);10(15):135-145. 7. J. Gardener. PhD Thesis. University of St Andrews. 2015 8. Rebecca M. Smith, Jonathan Gardner, Finlay D. Morrison, S. E. Rowley, Catarina Ferraz, M. A. Carpenter, Jiasheng Chen, Jack Hodkinson, Siân E. Dutton, and J. F. Scot. Quantum critical points in ferroelectric relaxors: Stuffed tungsten bronze K3Li2Ta5O15 and lead pyrochlore (Pb2Nb2O7). Phys. Rev. Materials 2, 084409, 2018 (DOI: 10.1103/PhysRevMaterials.2.084409)	**BDI**
30. DSC study on hyaluronan hydration and dehydration; Jiri Kucerik, Alena Prusova, **Andrei Rotaru**, Karol Flimel, Jiri Janacek, Pelegrino Conte; ***Thermochimica Acta*****,** 523, 1-2, 245-249, 2011	**27 citări**
1. Vecchio, S; Materazzi, S; Wo, LW; Curtis, SD. "Thermoanalytical study of imidazole-substituted coordination compounds: Cu(II)- and Zn(II)-complexes of bis(1-methylimidazol-2-yl)ketone", THERMOCHIMICA ACTA , 568, 31-37; 2013; 2. Mlcoch, T ; Kucerik, J, "Hydration and drying of various polysaccharides studied using DSC", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1177-1185 (2013); 3. Panagopoulou, A; Molina, JV; Kyritsis, A; Pradas, MM; Lluch, AV; Ferrer, GG; Pissis, P. " Glass Transition and Water Dynamics in Hyaluronic Acid Hydrogels", FOOD BIOPHYSICS, 8, 192-202, (2013); 4. Liu, LM; Wang, BH; Gao, Y; Bai, TC. " Chitosan fibers enhanced gellan gum hydrogels with superior mechanical properties and water-holding capacity", CARBOHYDRATE POLYMERS, 97, 152-158, (2013); 5. Prusova, A; Vergeldt, FJ; Kucerik, J. " Influence of water content and drying on the physical structure of native hyaluronan", CARBOHYDRATE POLYMERS, 95, 515-521, (2013); 6. Kucerik, J; Prusova, A; Smejkalova, Velebny, V. " Response to "A note on An alternative DSC approach to study hydration of hyaluronan"", CARBOHYDRATE POLYMERS, 98, 1561-1564, (2013); 7. Cavallaro, G; Lazzara, G; Milioto, S; " Sustainable nanocomposites based on halloysite nanotubes and pectin/polyethylene glycol blend", POLYMER DEGRADATION AND STABILITY, Online first, DOI: 10.1016.polymdegradstab.2013.09.012, (2013). 8. Kucerik, J; Schwarz, J; Jager, A; Bertmer, M; Schaumann, GE. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014). 9. Mondek J; Pekar M; CARBOHYDRATE POLYMERS 129 168–174 (2015). 10. Raja IS; Fathima NN; INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES 72 437-444 (2015). 11. Constantinescu, C., Rapp, L., Rotaru, P., Delaporte, P., & Alloncle, A. P. Polyvinylphenol (PVP) microcapacitors printed by laser-induced forward transfer (LIFT): multilayered pixel design and thermal analysis investigations. Journal of Physics D: Applied Physics, 49(15), 155301 (2016). 12. Savu, I. D., Savu, S. V., & Sirbu, N. A. Heat affected zones in polymer laser marking. Journal of Thermal Analysis and Calorimetry, 115(2), 1427-1437 (2014). 13. DelGiorno, K. E., Carlson, M., Osgood, R., Provenzano, P. P., Brockenbough, J. S., Thompson, C. B., ... & Hingorani, S. R. Interstitial pressure and vascular collapse in pancreas cancer: fluids and solids, measurement and meaning. Cancer cell, 26(1), 16, (2014). 14. Wang N., Wang YY., Chen XB., Bai TC. The physical-chemistry properties of poly(vinyl alcohol)/chitosan composite hydrogels. Scientia Sinica chimica. 44. 1591-1598. (2014).	**ISI**

15. Bertolino, V., Cavallaro, G., Lazzara, G., Merli, M., Milioto, S., Parisi, F., & Sciascia, L. Effect of the biopolymer charge and the nanoclay morphology on nanocomposite materials. Industrial & Engineering Chemistry Research, 55(27), 7373-7380, 2016. 16. Constantinescu, C., Rapp, L., Rotaru, P., Delaporte, P., & Alloncle, A. P. Polyvinylphenol (PVP) microcapacitors printed by laser-induced forward transfer (LIFT): multilayered pixel design and thermal analysis investigations. Journal of Physics D: Applied Physics, 49(15), 155301, 2016. 17. Huerta-Angeles, G., Brandejsová, M., Kulhánek, J., Pavlík, V., Šmejkalová, D., Vágnerová, H., & Velebný, V. Linolenic acid grafted hyaluronan: Process development, structural characterization, biological assessing, and stability studies. Carbohydrate polymers, 152, 815-824, 2016. 18. Ma, Y., Bai, T., & Wang, F. The physical and chemical properties of the polyvinylalcohol/polyvinylpyrrolidone/hydroxyapatite composite hydrogel. Materials Science and Engineering: C, 59, 948-957, 16. - 18. 10. 2013. 19. Vecchio Ciprioti, S., Catauro, M., Bollino, F., & Tuffi, R. Thermal behavior and dehydration kinetic study of SiO2/PEG hybrid gel glasses. Polymer Engineering & Science. 2017. 20. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 21. Wei Guo, Lishan Zhao, Xin Gao, Zexian Cao, Qiang Wang. Accurate quantification of hydration number for polyethylene glycol molecules*. Chinese Phys. B; 27 055101; 2018. 22. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1 23. Makvandi, Pooyan, Francesca Della Sala, Mario di Gennaro, Nicola Solimando, Maurizio Pagliuca, and Assunta Borzacchiello. "A Hyaluronic Acid-Based Formulation with Simultaneous Local Drug Delivery and Antioxidant Ability for Active Viscosupplementation." ACS omega 7, no. 12 (2022): 10039-10048. 24. Balaji, A., S. Kannan, R. Purushothaman, S. Mohanakannan, A. Haja Maideen, J. Swaminathan, B. Karthikeyan, and P. Premkumar. "Banana fiber and particle-reinforced epoxy biocomposites: mechanical, water absorption, and thermal properties investigation." Biomass Conversion and Biorefinery (2022): 1-11. 25. Prabhu, P., B. Karthikeyan, R. Ravi Raja Malar Vannan, and A. Balaji. "Mechanical, thermal and morphological analysis of hybrid natural and glass fiber-reinforced hybrid resin nanocomposites." Biomass Conversion and Biorefinery (2022): 1-15.	
1. MONDEK, Jakub, and Miloslav PEKAŘ. "EXCITED-STATE PROTON TRANSFER STUDY IN POTENTIAL HYALURONAN-SURFACTANT DRUG NANOCARRIERS.", Nanocon, 2013, Brno, Czech Republic, EU, 2016. 2. A Balaji, B Karthikeyan, J Swaminathan. Comparative mechanical, thermal, and morphological study of untreated and NaOH-treated bagasse fiber-reinforced cardanol green composites. Advanced Composites and Hybrid Materials. DOI: 10.1007/s42114-019-00079-7, 2, pages125–132(2019)	**BDI**
31. Matrix assisted pulsed laser evaporation of zinc benzoate for ZnO thin films and non-isothermal decomposition kinetics; **Andrei Rotaru**, Catalin Constantinescu, Anca Mândruleanu, Petre Rotaru, Antoniu Moldovan, Katarina Győryová, Maria Dinescu, Vladimir Balek; ***Thermochimica Acta,*** 498, 1-2, 81-91, 2010	**26 citări**
1. Patrascu, F; Badea, M; Grecu, MN; Stanica, N; Marutescu, L; Marinescu, D; Spinu, C; Tigae, C; Olar, R. ”Thermal, spectral, magnetic and antimicrobial behaviour of new Ni(II), Cu(II) and Zn(II) complexes with a hexaazamacrocyclic ligand”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1421-1429, (2013); 2. Badea, M; Iosub, E; Chifiriuc, CM; Marutescu, L; Iorgulescu, EE; Lazar, V; Marinescu, D; Bleotu, C; Olar, R. ”Thermal, spectral, electrochemical and biologic characterization of new Pd(II) complexes with ligands bearing biguanide moieties”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1753-1761, 2013; 3. Sunil, AC; Langner, EHG; Marais, C; Bezuidenhoudt, BCB. ” Thermo-analytical determination of intermediates in the copper catalysed rearrangement of o-toluic acid to meta-cresol”, CATALYSIS SCIENCE & TECHNOLOGY, 3, 2227-2233, (2013); 4. Alan, I; Kriza, A; Badea, M; Stanica, N; Olar, R. ” Synthesis and characterisation of Co(II), Ni(II), Zn(II) and Cd(II) complexes with 5-bromo-N,N '-bis-(salicylidene)-o-tolidine”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 483-490, (2013); 5. Sapkal, RT; Shinde, SS; Sapkal, DM; Babar, AR; Shinde, VV; Jalkute, CB; Moholkar, AV; Rajpure, KY; Sonawane, KD; Patil, PS;Bhosale, CH. ” Photoelectrocatalytic activity of spray deposited ZnO thin	**ISI**

films against E. coli Davis", MATERIALS RESEARCH INNOVATIONS, 16, 417-424, (2012); 6. Bijini, BR; Prasanna, S; Deepa, M; Nair, CMK; Babu, KR. "Crystal structure, spectral, thermal and dielectric studies of a new zinc benzoate single crystal", SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, 97, 1002-1006, (2012); 7. Constantinescu, C; Morintale, E; Ion, V; Moldovan, A; Luculescu, C; Dinescu, M; Rotaru, P. " Thermal, morphological and optical investigations of Cu(DAB)(2) thin films produced by matrix-assisted pulsed laser evaporation and laser-induced forward transfer for sensor development", THIN SOLID FILMS, 520, 3904-3909, (2012); 8. Ciolan, F; Patron, L; Mureseanu, M; Rotaru, P; Georgescu, I. " Synthesis and Characterization of Cu(II), Ni(II) and Co(II) Binuclear Complexes with a new Schiff base (1,3-bis[ortho-(2-carboxy-phenyliminomethyl)-phenoxy]propane)", REVISTA DE CHIMIE, 63, 34-39, (2012); 9. Ciolan, F; Patron, L; Marinescu, G; Cioatera, N; Mureseanu, M. " Synthesis and Characterization of Zn(II) Binuclear Complexes with three Schiff bases derived from some Amino Acids and 2,2 '-(propane-1,3-diyldioxy)dibenzaldehyde", REVISTA DE CHIMIE, 62, 1145-1149, (2011); 10. Scorei, RI; Rotaru, P. "Calcium Fructoborate-Potential Anti-inflammatory Agent", BIOLOGICAL TRACE ELEMENT RESEARCH, 143, 1223-1238, (2011); 11. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 12. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 13. Rotaru, P; Scorei, R; Harabor, A; Dumitru, MD. "Thermal analysis of a calcium fructoborate sample", THERMOCHIMICA ACTA, 506, 8-13, (2010); 14. Badea, Mihaela; Vlaicu, Ioana Dorina; Olar, Rodica; Constand, Madalina; Bleotu, Coralia; Chifiriuc, Mariana Carmen; Marutescu, Luminita; Lazar, Veronica; Grecu, Maria Nicoleta; Marinescu, Dana. Thermal behaviour and characterisation of new biologically active Cu(II) complexes with benzimidazole as main ligand.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 118 (2), 1119-1133, (2014). 15. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015). 16. Constantinescu C; Rapp L; Rotaru P; Delaporte P; Alloncle AP; Pulsed laser processing of poly (3, 3‴-didodecyl quarter thiophene) semiconductor for organic thin film transistors. Chemical Physics, 450, 32-38 (2015). 17. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 18. Flores-Carrasco, G., Carrillo-López, J., Martínez-Martínez, R., Espinosa-Torres, N. D., Muñoz, L., Milosevic, O., & Rabanal, M. E. (2016). Optical and morpho-structural properties of ZnO nanostructured particles synthesized at low temperature via air-assisted USP method. Applied Physics A, 122(173), 1-10, 2016. 19. Flores-Carrasco, G., Muñoz-Fernandez, L., Alcántara-Iniesta, S., Soto-Cruz, B. S., Milosevic, O., & Rabanal, M. E. (2017). Structural and functional properties of ZnO thin films grown on Si substrates by air assisted USP method from non-aqueous solutions at low-temperature. *Advanced Powder Technology*. 20. Khairy, M., Amin, N. H., & Kamal, R. Optical and kinetics of thermal decomposition of PMMA/ZnO nanocomposites. *Journal of Thermal Analysis and Calorimetry*, 1-14., 2017. 21. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 22. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4(0123456789().,-volV)(0123456789().,-volV), 2018. 23. Dazhi Chen, Yuxuan Liu, Yong J. Yuan. Investigation of Formaldehyde Adsorption on ZnO (0001) Surface by Density Functional Theory. Russian Journal of Physical Chemistry A 94(2):423-428; (2020). DOI: 10.1134/S0036024420020089	
1. Rejitha, K. S. (2013). Thermal decomposition studies of some Nickel Amine complexes in the solid state. 2. **肖卓炳**, **郭**满满, & **郭瑞**轲. (2013). 热分析-红外联用研究京尼平, **京尼平苷的熔点**, 热分解机理及其动力学分析. ***天然****产物研究与开发*, (2013 **年** 10), 1325-1333. 3. F. Ciolan, A. Ganescu. Thermal Analysis of some Binuclear Bioactive Complexes Derived from an	**BDI**

Aromatic Dialdehyde and L-Tryptophan. Annals of the University of Craiova The Chemistry Series. Volume XLIV, No. 2 (2017) 58-64.	
32. Computational thermal and kinetic analysis. Complete standard procedure to evaluate the kinetic triplet form non-isothermal data; **Andrei Rotaru**, Mihai Goşa; ***Journal of Thermal Analysis and Calorimetry***, 97, 2, 421-426, 2009	**48 citări**
1. Espinola, JGD; Martins, EPS; Aguiar, FP; Silva, HRM; Fonseca, MG; Arakaki, LNH; Teotnio, EES. "Thermal decomposition study of bismuth (III) trichloride complex with 1,10-phenanthroline as the ligand", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 106, 601-606, (2011); 2. Jelic, D; Tomic-Tucakovic, B; Mentus, S. "A kinetic study of copper(II) oxide powder reduction with hydrogen, based on thermogravimetry", THERMOCHIMICA ACTA, 521, 211-217, (2011); 3. Vyazovkin, S. "Thermal Analysis", ANALYTICAL CHEMISTRY, 82, 4936-4949, (2010); 4. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. "Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 5. Cavallaro, G; De Lisi, R; Lazzara, G; Milioto, S. "Polyethylene glycol/clay nanotubes composites Thermal properties and structure", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112, 383-389, (2013); 6. Harabor, A; Rotaru, P; Harabor, NA. "Thermal and spectral behavior of (Y,Eu)VO4 powder", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1211-1219, (2013); 7. Dogan, F; Topallar, H; Kaya, I; Yurekli, M; " The effect of the oxidant used during polymerization on the solid-state decomposition kinetics of poly(4-methyl catechol)", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1515-1522, (2013); 8. Siewert, C; Demyan, MS; Kucerik, J. " Interrelations between soil respiration and its thermal stability", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 110, 413-419, (2012); 9. Tomic-Tucakovic, B; Majstorovic, D; Jelic, D; Mentus, S. " Thermogravimetric study of the kinetics of Co3O4 reduction by hydrogen", THERMOCHIMICA ACTA, 541, 15-24, (2012); 10. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013); 11. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014). 12. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 13. Kucerik, Jiri; Schwarz, Jette; Jaeger, Alexander; Bertmer, Marko; Schaumann, Gabriele E. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014). 14. Danoiu, Suzana; Rotaru, P.; Degeratu, Sonia; Rizescu, S.; Bizdoaca, N. G. Shape memory alloy-based smart module structure working under intense thermo-mechanical stress. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1323-1330, (2014). 15. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015). 16. Constantinescu C; Rapp L; Rotaru P; Delaporte P; Alloncle AP; CHEMICAL PHYSICS 450 32-38 (2015). 17. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 18. Gingu O; Rotaru P; Milea A; Marin A; Nicolicescu C; Sima G; Tanasescu S; THERMOCHIMICA ACTA 606 1-11 (2015). 19. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 20. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 21. Mavhengere, P., Vittee, T., Wagner, N. J., & Kauchali, S. An algorithm for determining kinetic parameters for the dissociation of complex solid fuels. Journal of the Southern African Institute of Mining and Metallurgy, 116(1), 55-63. (2016). 22. Burnham, A. K. (2015). Use and misuse of logistic equations for modeling chemical kinetics. Journal of Thermal Analysis and Calorimetry, 1-10. 23. Mentus, S. V., Pašti, I. A., & Gavrilov, N. M.Thermogravimetric way to test the oxidation resistance of	**ISI**

Pt/C catalysts for fuel cells. BULGARIAN CHEMICAL COMMUNICATIONS, 45, 64-68. (2013).
24. Mavhengere, P., Vittee, T., Wagner, N. J., Kauchali, S. An algorithm for determining kinetic parameters for the dissociation of complex solid fuels. Journal of the Southern African Institute of Mining and Metallurgy, 116, 1, 55-63, 2016.
25. Constantinescu, C., Rapp, L., Rotaru, P., Delaporte, P., & Alloncle, A. P. Polyvinylphenol (PVP) microcapacitors printed by laser-induced forward transfer (LIFT): multilayered pixel design and thermal analysis investigations. Journal of Physics D: Applied Physics, 49(15), 155301, 2016.
26. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017.
27. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017).
28. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4, 2018.
29. P. Budrugeac. A simple and precise differential incremental isoconversional method to kinetic analysis of heterogeneous processes under arbitrary temperature programs. Thermochimica Acta. DOI: 10.1016/j.tca.2018.01.025, (2018)
30. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărășescu, I. Petrișor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208.
31. A Alonso, M Lázaro, P Lázaro, D Lázaro, D Alvear. LLDPE kinetic properties estimation combining thermogravimetry and differential scanning calorimetry as optimization targets. Journal of Thermal Analysis and Calorimetry. DOI: 10.1007/s10973-019-08199-4, 2019.
32. REN Ning, WANG Fang, ZHANG Jianjun, ZHENG Xinfang, Progress in Thermal Analysis Kinetics. Acta Physico-Chimica Sinica, DOI:10.3866/PKU.WHXB201905062, 2019.
33. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1
34. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865.
35. NS Vrandečić, M Erceg, B Andričić, I Blanco, FA Bottino. Characterization of poly (ethylene oxide) modified with different phenyl hepta isobutyl polyhedral oligomeric silsesquioxanes. Journal of Thermal Analysis and Calorimetry. 2021. DOI:10.1007/s10973-020-10076-4.
36. Irma Kremer, Tihomir Tomić, Zvonimir Katančić, Zlata Hrnjak-Murgić, Matko Erceg & Daniel R. Schneider. Catalytic decomposition and kinetic study of mixed plastic waste. Clean Technologies and Environmental Policy (2020) DOI:10.1007/s10098-020-01930-y
37. Carolina R. G. Silva, Silvia L. Fialho, Jamile Barbosa, Bárbara C. R. Araújo, Guilherme Carneiro, Rita C. O. Sebastião, Wagner N. Mussel, Maria I. Yoshida, Maria B. de Freitas-Marques. Compatibility by a Nonisothermal Kinetic Study of Azathioprine Associated with Usual Excipients in the Product Quality Review Process. Journal of the Brazilian Chemical Society. 32(3), 638-651, 2021.
38. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis of mechanically non-recyclable waste plastics mixture: Kinetics and pyrolysis in laboratory-scale reactor." Journal of environmental management 296 (2021): 113145.
39. Hussain, Ijaz, Saheed A. Ganiyu, Hassan Alasiri, and Khalid Alhooshani. "A state-of-the-art review on waste plastics-derived aviation fuel: Unveiling the heterogeneous catalytic systems and techno-economy feasibility of catalytic pyrolysis." Energy Conversion and Management 274 (2022): 116433.
40. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis and kinetic study of real-world waste plastics: multi-layered and mixed resin types of plastics." Clean Technologies and Environmental Policy (2022): 1-17.
41. Tian, Liying, Ruotong Li, Yilan Sun, Jianfeng Zou, Shengyong Liu, Peng Ma, Hongge Tao et al. "Insight into derivative Weibull mixture model in describing simulated distributed activation energy model and distillers dried grains with solubles pyrolysis processes." Waste Management 153 (2022): 219-228.
42. Freitas-Marques, Maria Betânia de, Talita Santos do Valle, Bárbara Caroline Rodrigues de Araujo, Rita de Cássia de Oliveira Sebastião, Wagner da Nova Mussel, Maria Irene Yoshida, and Christian Fernandes. "Thermal energy and tableting effects in benznidazole product: the impacts of industrial processing." Drug Development and Industrial Pharmacy just-accepted (2023): 1-26.

43. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." Journal of thermal analysis and calorimetry 148, no. 4 (2023): 1599-1611.	
1. Pratap, A., & Patel, A. T. (2012). *Crystallization Kinetics of Metallic Glasses*. INTECH Open Access Publisher. 2. Mentus, S. V., Pašti, I. A., & Gavrilov, N. M. (2013). Thermogravimetric way to test the oxidation resistance of Pt/C catalysts for fuel cells. *BULGARIAN CHEMICAL COMMUNICATIONS*, *45*, 64-68. 3. Urrutia, D. L. ANÁLISIS TÉRMICO DE LA FASE SÓLIDA. 4. 韩运晴, & 刘乃安. (2011). 面向固体热解单一活化能计算的等转化率动力学分析方法研究. *火灾科学*, *20*(1), 9-15. 5. Moyo, P. (2013). *The application of a Distributed Activation Energy based model to the gasification and combustion of coal and biomass char blends* (Doctoral dissertation, Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg).	**BDI**
33. CdS thin films obtained by thermal treatment of cadmium (II) complex precursor deposited by MAPLE technique; **Andrei Rotaru**, Anna Mietlarek-Kropidłowska, Catalin Constantinescu, Nicu Scărişoreanu, Marius Dumitru, Michal Strankowski, Petre Rotaru, Valentin Ion, Cristina Vasiliu, Barbara Becker, Maria Dinescu; ***Applied Surface Science***, 255, 15, 6786-6789, 2009	**27 citări**
1. Rodina, TA; Loseva, OV; Ivanov, AV; Gerasimenko, AV; Sergienko, VI; Zaeva, AS; Korneeva, EV. ”Formation of the ionic gold(III) complex [Au-3{S2CN(CH2)(4)O}(6)][Au2Cl8][AuCl4] in chemisorption systems [M{S2CN(CH2)(4)O}(2)] (n) -[AuCl4](-)/2 M HCl (M = Cd, Zn): Supramolecular structure and thermal behavior”, RUSSIAN JOURNAL OF COORDINATION CHEMISTRY, 39, 694-703, (2013); 2. Patrascu, F; Badea, M; Grecu, MN; Stanica, N; Marutescu, L; Marinescu, D; Spinu, C; Tigae, C; Olar, R. ”Thermal, spectral, magnetic and antimicrobial behaviour of new Ni(II), Cu(II) and Zn(II) complexes with a hexaazamacrocyclic ligand”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1421-1429, (2013); 3. Arunraja, L; Thirumoorthy, P; Dhatchinamurthy, L. ”Theoretical Survey on Cadmium Sulfide Thin Films for Solar Cell Applications”, ASIAN JOURNAL OF CHEMISTRY, 25, S270-S272, (2013); 4. Constantinescu, C; Morintale, E; Ion, V; Moldovan, A; Luculescu, C; Dinescu, M; Rotaru, P. ”Thermal, morphological and optical investigations of Cu(DAB)(2) thin films produced by matrix-assisted pulsed laser evaporation and laser-induced forward transfer for sensor development”, THIN SOLID FILMS, 520, 3904-3909, (2013); 5. Ciolan, F; Patron, L; Mureseanu, M; Rotaru, P; Georgescu, I. ”Synthesis and Characterization of Cu(II), Ni(II) and Co(II) Binuclear Complexes with a new Schiff base (1,3-bis[ortho-(2-carboxy-phenyliminomethyl)-phenoxy]propane)”, REVISTA DE CHIMIE, 63, 34-39, (2012); 6. Toma, O; Iftimie, S; Besleaga, C; Mitran, TL; Ghenescu, V; Porumb, O; Toderas, A; Radu, M; Ion, L; Antohe, S. ”NEW INVESTIGATIONS APPLIED ON CADMIUM SULFIDE THIN FILMS FOR PHOTOVOLTAIC APPLICATIONS”, CHALCOGENIDE LETTERS, 8, 747-756, (2011); 7. Ciolan, F; Patron, L; Marinescu, G; Cioatera, N; Mureseanu, M. ”Synthesis and Characterization of Zn(II) Binuclear Complexes with three Schiff bases derived from some Amino Acids and 2,2 '-(propane-1,3-diyldioxy)dibenzaldehyde”, REVISTA DE CHIMIE, 62, 1145-1149, (2011); 8. Scorei, RI; Rotaru, P; ”Calcium Fructoborate-Potential Anti-inflammatory Agent”, BIOLOGICAL TRACE ELEMENT RESEARCH, 143, 1223-1238, (2011); 9. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. ”Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 10. Cristescu, R; Popescu, C; Socol, G; Visan, A; Mihailescu, IN; Gittard, SD; Miller, PR; Martin, TN; Narayan, RJ; Andronie, A; Stamatin, I; Chrisey, DB. ”Deposition of antibacterial of poly(1,3-bis-(p-carboxyphenoxy propane)-co-(sebacic anhydride)) 20:80/gentamicin sulfate composite coatings by MAPLE”, APPLIED SURFACE SCIENCE, 257, 5287-5292, (2011); 11. Cristescu, R; Popescu, C; Popescu, AC; Grigorescu, S; Mihailescu, IN; Ciucu, AA; Iordache, S; Andronie, A; Stamatin, I; Fagadar-Cosma, E; Chrisey, DB. ”MAPLE deposition of Mn(III) metalloporphyrin thin films: Structural, topographical and electrochemical investigations”, APPLIED SURFACE SCIENCE, 257, 5293-5297, (2011); 12. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. ”Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene”,	**ISI**

JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 13. Rotaru, P; Scorei, R; Harabor, A; Dumitru, MD. "Thermal analysis of a calcium fructoborate sample", THERMOCHIMICA ACTA, 506, 8-13, (2010); 14. Tatucu, M; Rotaru, P; Rau, I; Spinu, C; Kriza, A. "Thermal behaviour and spectroscopic investigation of some methyl 2-pyridyl ketone complexes", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 100, 1107-1114, (2010); 15. Mayo, DC; Omari, P; Airuoyo, IJ; Pan, Z; Schriver, KE; Avanesyan, SM; Park, HK; Mu, RR; Haglund Jr, RF. " Resonant infrared matrix-assisted pulsed laser evaporation of TiO2 nanoparticle films", Applied Physics A – Materials Science and Processing, 110, 923-928, (2013); 16. Pladzyk, A; Ponikiewski, L; Stanulewicz, N; Hnatejko, Z. "Zn(II) and Cd(II) coordination polymers with tri-tert-butoxysilanethiol and bipyridines. Synthesis, crystal structure and spectroscopy", Optical Materials, Online first, http://dx.doi.org/10.1016/j.optmat.2013.10.034, (2013); 17. Mietlarek-Kropidlowska, Anna; Chojnacki, Jaroslaw; Strankowski, Michal; Fahmi, Amir; Gazda, Maria; Becker, Barbara. Cadmium complex possessing simultaneously silanethiolato- and dithiocarbamato-ligands. A novel single-source precursor of cadmium sulfide. Journal of Thermal Analysis and Calorimetry. 118 (2), 993-1001, (2014). 18. He, Gang; Shynkaruk, Olena; Lui, Melanie W, Rivard E. Small Inorganic Rings in the 21st Century: From Fleeting Intermediates to Novel Isolable Entities. CHEMICAL REVIEWS. 114 (16), 7815-7880, (2014). 19. Zaeva, A. S.; Ivanov, A. V.; Gerasimenko, A. V. Adduct formation of cadmium(II) N,N-cyclo-hexamethylenedithiocarbamate, [Cd-2{S2CN(CH2)(6)}(4)], with morpholine: Synthesis, molecular structure, and thermal behavior of a crystalline adduct cis-[Cd{NH(CH2)(4)O}(2){S2CN(CH2)(6)}(2)]. RUSSIAN JOURNAL OF COORDINATION CHEMISTRY. 40 (1), 34-42, (2014). 20. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 21. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 22. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 23. G. Bakiyaraj, J.B.M. Krishna, G.S. Taki, K. Selvaraju, R. Dhanasekaran. 45 keV N^{5+} ions induced spikes on CdS thin films: Morphological, structural and optical properties. Applied Surface Science. DOI:10.1016/j.apsusc.2018.02.208, (2018) 24. Agnieszka Pladzyk, Daria Kowalkowska-Zedler, Anna Ciborska, Andreas Schnepf, Anna Dołega. Complexes of silanethiolate ligands: Synthesis, structure, properties andapplication. Coordination Chemistry Reviews, 437, 213761, 2021.	
1. Morintale, E., Neacsa, D., Constantinescu, C., Dinescu, M., & Rotaru, P. (2010). Thermal behaviour and spectral analysis of the organometallic complex Cu (II) 2, 2'–dixydroxy azobenzene. *Physics AUC*, *20*, 37-42. 2. Arunraja, L., Thirumoorthy, P., & Dhatchinamurthy, L. (2013). Theoretical Survey on Cadmium Sulfide Thin Films for Solar Cell Applications. *Asian Journal of Chemistry*, *25*(Supplementary Issue), S270. 3. F. Ciolan, A. Ganescu. Thermal Analysis of some Binuclear Bioactive Complexes Derived from an Aromatic Dialdehyde and L-Tryptophan. Annals of the University of Craiova The Chemistry Series. Volume XLIV, No. 2 (2017) 58-64.	**BDI**
34. Thermal decomposition kinetics of some aromatic azomonoethers. Part IV. Non-isothermal kinetics of 2-allyl-4-((4-(4-methylbenzyloxy)phenyl)diazenyl)phenol in air flow; **Andrei Rotaru**, Anca Moanță, Gina Popa, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 485-491, 2009	**34 citări**
1. Moanta, A; Samide, A; Ionescu, C; Tutunaru, B; Dobritescu, A; Fruchier, A; Barragan-Montero, V. "Synthesis and Characterization of an Azo Dye: 4-(phenyldiazenyl) phenyl 2-furoate. Electrochemical and XPS Study of its Adsorption and Inhibitive Properties on Corrosion of Carbon Steel in Saline Water", INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, 8, 780-796, (2013); 2. Huang, MX; Zhou, CR; Han, XW. "Investigation of thermal decomposition kinetics of taurine", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 589-593, (2013); 3. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. "Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 4. Moanta, A; Tutunaru, B; Rotaru, P. "Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY,	**ISI**

111, 1273-1279, (2013);
5. Huang, MX; Lv, SC; Zhou, CR. ”Thermal decomposition kinetics of glycine in nitrogen atmosphere”, THERMOCHIMICA ACTA, 552, 60-64, (2013);
6. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. ”Thermal and microstructural analysis of Cu(II) 2,2 ‘-dihydroxy azobenzene and thin films deposition by MAPLE technique”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011);
7. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. ”Structural characterization, thermal investigation, and liquid crystalline 39hermos39r of 4-[(4-chlorobenzyl)oxy]-3,4 ‘-dichloroazobenzene”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010);
8. Cusu, JP; Musuc, AM; Matache, M; Oancea, D. ”Kinetics of exothermal decomposition of some ketone-2,4-dinitrophenylhydrazones”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 110, 1259-1266, (2012);
9. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition kinetics of glyphosate”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012);
10. Cusu, JP; Musuc, AM; Oancea, D. ”Thermal stabilities of some benzaldehyde 2,4-dinitrophenylhydrazones”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 123-129, (2012);
11. Kucerik, J; David, J; Weiter, M; Vala, M; Vynuchal, J; Ouzzane, I; Salyk, O. ”Stability and physical structure tests of piperidyl and morpholinyl derivatives of diphenyl-diketo-pyrrolopyrroles (DPP)”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 108, 467-473, (2012);
12. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. ” Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013).
13. Samide, Adriana; Tutunaru, B.; Ionescu, Catalina; Rotaru, P.; Simoiu, Luminita, Aminophylline: thermal characterization and its inhibitory properties for the carbon steel corrosion in acidic environment. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 631-639, (2014).
14. Samide, Adriana; Rotaru, Petre; Ionescu, Catalina; Tutunaru, Bogdan; Moanta, Anca; Barragan-Montero, Veronique. Thermal behaviour and adsorption properties of some benzothiazole derivatives. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 651-659, (2014).
15. Kucerik, Jiri; Schwarz, Jette; Jaeger, Alexander; Bertmer, Marko; Schaumann, Gabriele E. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014).
16. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014).
17. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015).
18. Li W-L; Zhou C-; Zhang L; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 121 (2) 797-806 (2015).
19. Yang, L., Liu, Y., Ma, C., Wu, Y., Liu, W., Zhang, C., Wang, F., Li, L. Kinetics of non-isothermal decomposition and flame retardancy of goatskin fiber treated with melamine-based flame retardant. Fibers and Polymers, 17(7), 1018-1024, 2016.
20. Zhang, Chang-Wei, Cheng-Zhang Wang, Ran Tao. “Thermal Decomposition Kinetics of Ginkgo biloba Leaves Polyprenol in Nitrogen Atmosphere.” International Journal of Chemical Kinetics 48, 11, 671-678, 2016.
21. Changwei ZHANG, Chengzhang WANG, Ran TAO, THERMAL STABILITY AND THERMAL DECOMPOSITION KINETICS OF GINKGO BILOBA LEAVES WASTE RESIDUE, Thermal Science, 2017, DOI:10.2298/TSCI170117154Z
22. Al-Maydama, Hussein M.; Al Kahali, Mohamed S.; Abduljabbar, Adlia A.; Aaad, Abdulbasset M. The Photocatalytic, Thermal Degradation Kinetics and Lifetime Prediction of Some Commercial Reactive Dyes. Iran. J. Chem. Chem. Eng. Vol. 36, No. 4, 2017
23. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x
24. Linkun Jiang, Pengfei Zhang, Lingyun Dong, Kai Liu. Thermal degradation kinetic study of creatinol phosphate and model selection. Journal of Thermal Analysis and Calorimetry. 10.1007/s10973-019-08337-y (2019)
25. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior,

optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 26. Genieva, S., L. Gonsalvesh, V. Georgieva, M. Tavlieva, and L. Vlaev. "Kinetic analysis and pyrolysis mechanism of raw and impregnated almond shells." Thermochimica Acta 698 (2021): 178877. 27. Antar, Kaïs, and Mohamed Jemal. "Recovery of calcium sulfide from Tunisian phosphogypsum and olive mill wastewaters: a thermogravimetric and kinetic study." Journal of Thermal Analysis and Calorimetry 147, no. 5 (2022): 3931-3946. 28. Lan, Chenchen, Ran Liu, Shuhui Zhang, Qing Lyu, Yanjia Gao, and Guangshi Yan. "Influence mechanism of CaO on gasification characteristics and kinetic behaviors of carbon-CO2 reaction." Fuel 311 (2022): 122583. 29. Yanwu, Yu, Ma Hui, Guo Jiahu, Meng Jingwei, Jing Suming, Cheng Guimin, and Wei Zihui. "Thermal Analysis of a New Heat-Resistant Energetic Material." Science of Advanced Materials 14, no. 1 (2022): 147-154.	
1. Kamel, L. T. (2015). Non-isothermal decomposition kinetics of theobromine in nitrogen atmosphere. *European Journal of Chemistry*, *6*(2), 199-203. 2. Šumar-Ristović, M. (2012). Termička stabilnost, mehanizam i kinetika razgradnje kompleksa kobalta (II), cinka (II) i kadijuma (II) sa N-benziloksikarbonilglicinom. 3. Zhang, L., Huang, M., & Zhou, C. (2013). Thermal Stability and Decomposition Kinetics of Polysuccinimide. *American Journal of Analytical Chemistry*, *2013*. 4. JIAO Shuai-shuai, ZHAN Zi-li. Study on non-isothermal thermal decomposition kinetics of serine. Journal of Chemical Engineering of Chinese Universities. Vol. 33 Issue (5): 1107-1112 DOI: 10.3969/j.issn.1003-9015.2019.05.011. 5. P Li, J Zhang, B Luo, Y Li, J Ji, D He, Q Tian, Y Chen. Kinetics of Carbothermal Reduction Process of Different Size Phosphate Rocks. Open Engeneering. 11:281–2932021, 2021.	**BDI**
35. Thermal characteristics of Ni-Ti SMA (shape memory alloy) actuators; Sonia Degeratu, Petre Rotaru, Gheorghe Manolea, Horia Octavian Manolea, **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 695-700, 2009	**34 citări**
1. Torra, V; Auguet, C; Isalgue, A; Carreras, G; Lovey, FC. "Metastable effects on martensitic transformation in SMA Part IX. Static aging for morphing by temperature and stress", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112, 777-780, (2013); 2. Degeratu, S; Rotaru, P; Rizescu, S; Bizdoaca, NG. "Thermal study of a shape memory alloy (SMA) spring actuator designed to insure the motion of a barrier structure", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1255-1262, (2013); 3. Huang, J; Chen, X; Zhong, LR. "Analysis and Testing of MR Shear Transmission Driven by SMA Spring", ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, 307207, (2013); 4. Nespoli, A; Villa, E; Besseghini, S. "Thermo-mechanical properties of snake-like NiTi wires and their use in miniature devices", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 39-47, (2012); 5. Nespoli, A; Besseghini, S. "A complete 40hermos-mechanical study of a NiTiCu shape memory alloy wire", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 103, 821-826, (2011); 6. Dagdelen, Fethi; Ercan, Ercan. The surface oxidation 40hermos40r of Ni-45.16%Ti shape memory alloys at different temperatures. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 115 (1), 561-565, (2014); 7. Danoiu, Suzana; Rotaru, P.; Degeratu, Sonia; Rizescu, S.; Bizdoaca, N. G. Shape memory alloy-based smart module structure working under intense 40hermos-mechanical stress. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1323-1330, (2014). 8. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014). 9. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 10. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărășescu, I. Petrișor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208. 11. C. Ades, S. Dilibal, E. Engeberg. Shape memory alloy tube actuators inherently enable internal fluidic cooling for a robotic finger under force control. Smart Materials and Structures. DOI: 10.1088/1361-665X/ab931f (2020). 12. Ajit Behera, Dipen Kumar Rajak, Reza Kolahchi, Maria-Luminiţa Scutaru, Catalin I. Pruncu. Current Global Scenario of Sputtered Deposited NiTi Smart Systems. Journal of Materials Research and	**ISI**

Technology. DOI:10.1016/j.jmrt.2020.10.032 (2020) 13. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 14. T Wang, R Tian, X Yang, Z Zhang, X Zhang. A Novel Dynamic Absorber with Variable Frequency and Damping. Shock and Vibration, 8833089, 2021, DOI:10.1155/2021/8833089. 15. Almadani, Ibrahim Khalil, Ibrahim Sufian Osman, and Nasir Ghazi Hariri. "In-Depth Assessment and Optimized Actuation Method of a Novel Solar-Driven Thermomechanical Actuator via Shape Memory Alloy." Energies 15, no. 10 (2022): 3807. 16. Shreekrishna, Suhas, Radhika Nachimuthu, and Viswajith S. Nair. "A review on shape memory alloys and their prominence in automotive technology." Journal of Intelligent Material Systems and Structures 34, no. 5 (2023): 499-524. 17. Wang, Tian, Ruilan Tian, Xinwei Yang, Ziwen Zhang, and Xiaolong Zhang. "A novel dynamic absorber with variable frequency and damping." Shock and Vibration 2021 (2021): 1-10.	
1. Nespoli, A., Biffi, C. A., Casati, R., Villa, E., Tuissi, A., & Passaretti, F. (2012). *New Developments on Mini/Micro Shape Memory Actuators*. ISBN 978-953-51-0798-9. 2. Morintale, E., & Harabor, A. (2013). Use of heat flows from DSC curve for calculation of specific heat of the solid materials. *Physics AUC*, *23*, 89-94. 3. Ma, J. Z., & Liu, P. W. (2012). Design analysis in frictional fan clutch driven by SMA spring. In *Applied Mechanics and Materials* (Vol. 101, pp. 7-10). Trans Tech Publications. 4. Degeratu, S., Bizdoaca, N. G., Rizescu, S., Rotaru, P., Degeratu, V., & Tont, G. (2010). Barrier structures using shape memory alloy springs. In *Proceedings of the International Conference on Development, Energy, Enviroment, Economics* (pp. 367-372). 5. Degeratu, S., Rizescu, S., Bizdoaca, N. G., Caramida, C., & Degeratu, V. (2011, December). Analyzing and modeling performance of a new SMA actuator-based barrier structure. In *Electrical and Electronics Engineering (ELECO), 2011 7th International Conference on* (pp. II-120). IEEE. 6. **麻建坐**, **魏**书华, & 钟莉蓉. (2013). **形状**记忆合金控制的圆筒式磁流变液无级传动. ***中国机械工程***, *24*(5), 599-603. 7. Zhou, Y., Ma, J. Z., & Zuo, D. (2011). A Self-Adaptive Fan Clutch for Automobile. In *Advanced Materials Research* (Vol. 197, pp. 339-343). Trans Tech Publications. 8. Ma, J., Wei, S., & Zhong, L. (2013). Cylindrical magnetorheological fluid stepless transmission controlled by shape memory alloy. *Zhongguo Jixie Gongcheng(China Mechanical Engineering)*, *24*(5), 599-603. 9. ERCAN, E. (2015). Şekil Hatırlamalı Ni-45.16% Ti Alaşımının Hava Atmosferinde Sıcaklığın Oksidasyon Davranışına Etkisi. *Bitlis Eren Üniversitesi Fen Bilimleri Dergisi*, *4*(1). 10. JJ Lima, Dinâmica e controle de manipuladores robóticos flexíveis, excitados por carregamento não-linear e não-ideal, PhD Thesis, UNESP, 2018 11. Qiao Zhen, Huang Jin. Research on Magnetorheological Fluid Self-generating Electricity Transmission of Temperature-controlledby SMA. **重**庆理工大学,**重**庆,400054 (2015). DOI:10.3969/j.issn.1004-132X.2015.24.016 12. **形状**记忆合金控制的磁流变制动器. 《机械强度》2016年 第2期 | 赵柏森 傅田 马睿 重庆工业职业技术学院机械工程学院 重庆401120 13. Jin Huang, Zhen Qiao, Beibei Fan. Properties of MR Transmission under Thermal Affect. International Conference on Advanced Manufacturing and Industrial Application (ICAMIA 2015). Advances in Engineering Research. 6-9. (2015). 14. N. Mahagani, E. Igbokwe, O. Aberefa, V. Bodiba, M.O. Daramola and S. E. Iyuke. Production of CNT Yarns from Methane Gas for Use as Filaments in Incandescent Bulbs: Thermodynamic Properties of As-spun CNT Yarns. Journal of Physics: Conference Series. 1378 (2019) 022019. 15. N. Mahagani, Thermodynamic and Kinetic Study of the Production of Carbon Nanotube Yarn from Chemical Vapour Deposition Reactor. PhD Thesis, University of the Witwatersrand, Johannesburg, South Africa, https://hdl.handle.net/10539/28780. 2019. 16. Y. Tijjani, MECHANICAL AND THERMAL PROPERTIES OF CNT-REINFORCED QUARTZITE NANO-COMPOSITE FOR FURNACE LINING. PhD Thesis. Universiti Putra Malaysia, 2018. 17. Ades, Craig Joseph. "Embodied Biological Computers: Closing the Loop on Sensorimotor Integration of Dexterous Robotic Hands." PhD diss., Florida Atlantic University, 2022.	**BDI**
36. Isoconversional linear integral kinetics of the non-isothermal evaporation of 4-[(4-chlorobenzyl)oxy]-4'-trifluoromethyl-azobenzene; **Andrei Rotaru**, Mihai Goşa, Eugen Segal;	**6 citări**

***Studia Universitatis Babes-Bolyai Chemia*,** 54, 3 185-192, 2009	
1. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 2. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 3. Moanta, A; Tutunaru, B; Rotaru, P. "Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1273-1279, (2013). 4. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 5. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 6. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101.	**ISI**
37. Thermal analysis of azoic dyes; Part I. Non-isothermal decomposition kinetics of [4-(4-chlorobenzyloxy)-3-methylphenyl](*p*-tolyl)diazene in dynamic air atmosphere; **Andrei Rotaru,** George Brătulescu, Petre Rotaru; ***Thermochimica Acta*,** 489, 1-2, 63-69, 2009	**26 citări**
1. Moanta, A; Tutunaru, B; Rotaru, P. "Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1273-1279, (2013); 2. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 3. Cavallaro, G; De Lisi, R; Lazzara, G; Milioto, S, "Polyethylene glycol/clay nanotubes composites Thermal properties and structure", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112, 383-389, (2013); 4. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline 42ehaviour of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 5. Albano, C; Catano, L; Perera, R; Karam, A; Gonzalez, G. "Thermodegradative and morphological 42ehaviour of composites of HDPE with surface-treated hydroxyapatite", Polymer Bulletin, 64, 67-79, (2010); 6. Samide, Adriana; Tutunaru, B.; Ionescu, Catalina; Rotaru, P.; Simoiu, Luminita, Aminophylline: thermal characterization and its inhibitory properties for the carbon steel corrosion in acidic environment. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 631-639, (2014). 7. Samide, Adriana; Rotaru, Petre; Ionescu, Catalina; Tutunaru, Bogdan; Moanta, Anca; Barragan-Montero, Veronique. Thermal behaviour and adsorption properties of some benzothiazole derivatives. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 651-659, (2014). 8. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014). 9. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 10. Yancey B; Vyazovkin S; PHYSICAL CHEMISTRY CHEMICAL PHYSICS 17 (15) 10209-10217 (2015). 11. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 12. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015). 13. Constantinescu C; Rapp L; Rotaru P; Delaporte P; Alloncle AP; CHEMICAL PHYSICS 450 32-38 (2015). 14. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 15. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND	**ISI**

CALORIMETRY 120 (2) 1151-1161 (2015). 16. Gingu O; Rotaru P; Milea A; Marin A; Nicolicescu C; Sima G; Tanasescu S; THERMOCHIMICA ACTA 606 1-11 (2015). 17. Makaremi, M., Pasbakhsh, P., Cavallaro, G., Lazzara, G., Aw, Y. K., Lee, S. M., & Milioto, S. (2017). Effect of morphology and size of halloysite nanotubes on functional pectin bionanocomposites for food packaging applications. *ACS Applied Materials & Interfaces*. 18. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4, 2018. 19. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 20. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1 21. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 22. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 23. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 24. Liu, Shang-Hao, Rui-Lei Guo, Fei-Hong Li, and Chin-Lung Chiang. "Thermal analysis and pyrolysis products analysis of 4, 4′-azobis (4-cyanovaleric acid) by using thermal analysis methods and combination technology." *Journal of Thermal Analysis and Calorimetry* (2022): 1-8. 25. Reiss, Aurora, Nicoleta Cioateră, Aurelian Dobrițescu, Mihaela Rotaru, Alice Carla Carabet, Filippo Parisi, Anca Elena Gănescu, Irina Daniela Dăbuleanu, Cezar Ionuţ Spînu, and Petre Rotaru. "Bioactive co (Ii), ni (ii), and cu (ii) complexes containing a tridentate sulfathiazole-based (onn) schiff base." *Molecules (Basel, Switzerland)* 26, no. 10 (2021): 1-18. 26. CIMPOIAŞU, Vily Marius, Ion PĂLĂRIE, George BRĂTULESCU, Constanta DASCĂLU, and Petre Rotaru. "THE OPTICAL BIREFRINGENCE STUDY OF [4-(4-CHLOROBENZYLOXY)-3-METHYLPHENYL](p-TOLYL) DIAZENE DYE." *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS* 83, no. 4 (2021): 205-216.	
38. Thermal decomposition kinetics of some aromatic azomonoethers. Part III. Non-isothermal study of 4-[(4-chlorobenzyl)oxy]-4′-chloro-azobenzene in dynamic air atmosphere; **Andrei Rotaru**, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 95, 1, 161-166, 2009	**31 citări**
1. Moanta, A; Samide, A; Ionescu, C; Tutunaru, B; Dobritescu, A; Fruchier, A; Barragan-Montero, V. ”Synthesis and Characterization of an Azo Dye: 4-(phenyldiazenyl) phenyl 2-furoate. Electrochemical and XPS Study of its Adsorption and Inhibitive Properties on Corrosion of Carbon Steel in Saline Water”, INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, 8, 780-796, (2013); 2. Moanta, A; Tutunaru, B; Rotaru, P. ”Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1273-1279, (2013); 3. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. ”Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 4. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. ”Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 5. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition kinetics of glyphosate”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012); 6. Kucerik, J; David, J; Weiter, M; Vala, M; Vynuchal, J; Ouzzane, I; Salyk, O. ”Stability and physical structure tests of piperidyl and morpholinyl derivatives of diphenyl-diketo-pyrrolopyrroles (DPP)”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 108, 467-473, (2012); 7. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. ”Thermal and microstructural	**ISI**

analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 8. Li, D; Wang, M; Yang, CQ; Wang, J; Ren, GD. "Solid State Characterizations and Analysis of Stability in Azelnidipine Polymorphs", CHEMICAL & PHARMACEUTICAL BULLETIN, 60, 995-1002, (2012); 9. Daoudi, MI; Triki, A; Redjaimia, A. "DSC study of the kinetic parameters of the metastable phases formation during non-isothermal annealing of an Al-Si-Mg alloy", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 627-633, (2011); 10. Zhang, QH; Li, HQ; Liu, HT. "Study on Polymerization Kinetics of Methylene Diphenyl Diisocyanate", ACTA CHIMICA SINICA, 69, 605-609, (2011); 11. Gokakakar, SD; Salker, AV. "Thermal studies of cobalt, iron and tin metalloporphyrins", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 101, 809-813, (2010); 12. Moanta, A; Ionescu, C; Tutunaru, B; Dumitru, M. "Thermal and Electron Impact Decomposition of 4-hydroxy-4 '-cyano-azobenzene", REVISTA DE CHIMIE, 61, 657-659, (2010); 13. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013); 14. Samide, Adriana; Tutunaru, B.; Ionescu, Catalina; Rotaru, P.; Simoiu, Luminita, Aminophylline: thermal characterization and its inhibitory properties for the carbon steel corrosion in acidic environment. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 631-639, (2014). 15. Samide, Adriana; Rotaru, Petre; Ionescu, Catalina; Tutunaru, Bogdan; Moanta, Anca; Barragan-Montero, Veronique. Thermal behaviour and adsorption properties of some benzothiazole derivatives. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 651-659, (2014). 16. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 17. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 18. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 19. Burescu A; Sava I ; Lisa G; Bruma M; JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 16 (11-12) 1456-1462 (2014). 20. A. Harabor, P. Rotaru, N. Harabor, Ni-susbtituted non-stoichiometric (Bi,Pb,Cu)−2223 superconductor: excess conductivity, XRD analysis and thermal behaviour. Ceramics International. 2018. DOI: 10.1016/j.ceramint.2018.09.060. 21. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 22. S. J. Porobic, A. D. Krstic, D.J. Jovanovic, J.M. Ladarevic, D.B. Kantic, D.Z.Mijin, M. Marincovic-Cincovic. Synthesis and thermal properties of arylazo pyridone dyes. Dyes and Pigments, 2019, DOI: 10.1016/j.dyepig.2019.107602 23. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 24. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 25. Katnić, Đurica, Milena Marinović-Cincović, Slavica J. Porobić, Ivica Vujčić, Aleksandra Šaponjić, Biljana Sikirić, and Dragana Živojinović. "Characterization and kinetics of thermal decomposition behavior of plum and fig pomace biomass." Journal of Cleaner Production 352 (2022): 131637.	
1. Turmanova, S., Genieva, S., & Vlaev, L. (2011). Kinetics of nonisothermal degradation of some polymer composites: change of entropy at the formation of the activated complex from the reagents. *Journal of Thermodynamics*, *2011*. 2. 张琴花, **李会泉**, & **柳海涛**. (2010). **二苯甲**烷二异氰酸酯 (MDI) **聚合反**应动力学研究. *化学学报*, *69*(06), 605-609. 3. Gavernet, L., Villalba, M. L., Blanch, L. B., & Lick, I. D. (2013). Kinetic study of benzyl sulfamide synthesis by thermolysis of N-(benzyl)-N´-(tert-butoxycarbolyl) sulfamide. *European Journal of Chemistry*, *4*(1), 44-48. 4. **朱干宇**, **李会泉**, 邬慧雄, **曹妍**, **柳海涛**, **李新涛**, ... & **唐清**. (2012). **苯氨基甲酸甲**酯热解制备苯基异氰酸酯的非等温动力学. *过程工程学报*, *12*(004), 608-612. 5. Vlaev, L. T., Georgieva, V. G., & Tavlieva, M. P. (2015). On the Kinetic Mechanism of Non-Isothermal	**BDI**

Degradation of Solids. *Reactions and Mechanisms in Thermal Analysis of Advanced Materials*, 547-578. 6. SJ Porobic. Sinteza, struktura i svojstva novih azo boja na bazi 6-hidroksi-4-metil-2-okso-1, 2-dihidropiridin-3-karboksamida. PhD Thesis, University of Belgrade, Serbia. 2020.	
39. Multifunctional thin films of lactoferrin for biochemical use deposited by MAPLE technique; Catalin Constantinescu, Alexandra Palla-Papavlu, **Andrei Rotaru**, Paula Florian, Florica Chelu, Madalina Icriverzi, Anca Nedelcea, Valentina Dincă, Anca Roşeanu, Maria Dinescu; ***Applied Surface Science*,** 255, 10, 5491-5495, 2009	**33 citări**
1. Nozaki, R; Nakayama, S; Senna, M. "Smooth silk fibroin nanofilm deposited by 1064-nm pulsed laser beam from an opaque target", THIN SOLID FILMS, 542, 214-218, (2013); 2. Dinca, V; Mattle, T; Papavlu, AP; Rusen, L; Luculescu, C; Lippert, T; Dinescu, M. "Polyethyleneimine patterns obtained by laser-transfer assisted by a Dynamic Release Layer onto Themanox soft substrates for cell adhesion study", APPLIED SURFACE SCIENCE, 278, 190-197, (2013); 3. Rusen, L; Mustaciosu, C; Mitu, B; Filipescu, M; Dinescu, M; Dinca, V. "Protein-resistant polymer coatings obtained by matrix assisted pulsed laser evaporation", APPLIED SURFACE SCIENCE, 278, 198-202, (2013); 4. Mihaiescu, DE; Cristescu, R; Dorcioman, G; Popescu, CE; Nita, C; Socol, G; Mihailescu, IN; Grumezescu, AM; Tamas, D; Enculescu, M; Negrea, RF; Ghica, C; Chifiriuc, C; Bleotu, C; Chrisey, DB. "Functionalized magnetite silica thin films fabricated by MAPLE with antibiofilm properties", BIOFABRICATION, 5, 015007, (2013); 5. Dinescu, M; Matei, A; Dinca, V; Papavlu, AP; Di Pietrantonio, F; Cannata, D; Benetti, M; Verona, E; Lippert, T. "LASER PROCESSING OF ORGANIC MATERIALS: APPLICATIONS IN TISSUE ENGINEERING AND CHEMICAL SENSING", ROMANIAN REPORTS IN PHYSICS, 65, 1019-1031, (2013); 6. Riggs, BC; Dias, AD; Schiele, NR; Cristescu, R; Huang, Y; Corr, DT; Chrisey, DB. "Matrix-assisted pulsed laser methods for biofabrication", MRS BULLETIN, 36, 1043-1050, (2011); 7. Jelinek, M; Remsa, J; Kocourek, T; Kubesova, B; Schurek, J; Myslik, V. "MAPLE activities and applications in gas sensors", APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 105, 643-649, (2011); 8. Palla-Papavlu, A; Dinca, V; Dinescu, M; Di Pietrantonio, F; Cannata, D; Benetti, M; Verona, E. "Matrix-assisted pulsed laser evaporation of chemoselective polymers", APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 105, 651-659, (2011); 9. Xavier, PL; Chaudhari, K; Verma, PK; Pal, SK; Pradeep, T. "Luminescent quantum clusters of gold in transferrin family protein, lactoferrin exhibiting FRET", NANOSCALE, 2, 2769-2776, (2010); 10. Cristescu, R; Popescu, C; Popescu, AC; Mihailescu, IN; Ciucu, AA; Andronie, A; Iordache, S; Stamatin, I; Fagadar-Cosma, E; Chrisey, DB. "Functional porphyrin thin films deposited by matrix assisted pulsed laser evaporation", MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, 169, 106-110, (2010); 11. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 12. Yang, Wei; Xu, Chenqi; Liu, Fuguo; Yuan, Fang; Gao, Yanxiang. Native and Thermally Modified Protein-Polyphenol Coassemblies: Lactoferrin-Based Nanoparticles and Submicrometer Particles as Protective Vehicles for (-)-Epigallocatechin-3-gallate. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 62 (44) 10816-10827, (2014). 13. Palla-Papavlu, A; Rusen, L; Dinca, V; Filipescu, M; Lippert, T; Dinescu, M. Characterization of ethylcellulose and hydroxypropyl methylcellulose thin films deposited by matrix-assisted pulsed laser evaporation. Applied Surface Science. 302, 87-91, (2014). 14. Dinca, V; Florian, PE; Sima, LE; Rusen, L; Constantinescu, C; Evans, RW; Dinescu, M; Roseanu, A. MAPLE-based method to obtain biodegradable hybrid polymeric thin films with embedded antitumoral agents.BIOMEDICAL MICRODEVICES. 16 (1), 11-21, (2014). 15. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 16. Marinescu, M., Tudorache, D. G., Marton, G. I., Zalaru, C. M., Popa, M., Chifiriuc, M. C., Stavarache CE, Constantinescu, C. Density functional theory molecular modeling, chemical synthesis, and antimicrobial behaviour of selected benzimidazole derivatives. Journal of Molecular Structure, 1130, 463-471, 2016. 17. Maria Marinescu, Ludmila Otilia Cinteza, George Iuliu Marton, Luminita Gabriela Marutescu, Mariana-Carmen Chifiriuc, Catalin Constantinescu. Density functional theory molecular modeling and antimicrobial behaviour of selected 1,2,3,4,5,6,7,8-octahydroacridine-N(10)-oxides. Journal of Molecular	**ISI**

Structure, 1144, 14-23, 2017. 18. Axente, E., Sopronyi, M., Ghimbeu, C. M., Nita, C., Airoudj, A., Schrodj, G., & Sima, F. (2017). Matrix-Assisted Pulsed Laser Evaporation: A novel approach to design mesoporous carbon films. *Carbon*; Volume 122, October 2017, Pages 484-495. 19. C.D. Alin, F. Grama, R. Papagheorghe, S. Brajnicov, V. Ion, S.Vizireanu, A. Palla-Papavlu, M. Dinescu. Tuning the physicochemical properties of hernia repair meshes by matrix-assisted pulsed laser evaporation. Applied Physics A 125(6), 2019. 20. Derong Yin, Yonglong Hong, Luyuan Chen, Satoshi Komasa, Yuanyuan Yang, Honghao Zhang, Sifan Yan, Hiroshi Nishizaki, Tetsuji Kusumoto, Wen Sui, Takayoshi Kawazoe, Joji Okazaki. Lactoferrin Coating Improves the Antibacterial and Osteogenic Properties of Alkali-Treated Titanium with Nanonetwork Structures. Journal of Nanomaterials. DOI:10.1155/2020/2516975. 2020. 21. Bonciu, Anca, Alina Vasilescu, Valentina Dinca, and Serban F. Peteu. "Interfaces obtained by MAPLE for chemical and biosensors applications." Sensors and Actuators Reports 3 (2021): 100040. 22. Ghilini, Fiorela, Natalia Fagali, Diego E. Pissinis, Guillermo Benítez, and Patricia L. Schilardi. "Multifunctional titanium surfaces for orthopedic implants: Antimicrobial activity and enhanced osseointegration." ACS Applied Bio Materials 4, no. 8 (2021): 6451-6461. 23. Yang, Songlin, and Jin Zhang. "Enhanced room-temperature magnetoresistance of hybrid graphene nanosheets produced by a laser-assisted process." Journal of Materials Science 57, no. 10 (2022): 5885-5893. 24. Bonciu, A., L. Cremer, A. Calugaru, E. Vlase, C. Coman, Alexandra Palla-Papavlu, Dan Alin Cristian, and F. Grama. "Laser engineered polymer thin films as drug delivery systems." Applied Physics A 129, no. 5 (2023): 327. 25. Wuppaladhodi, Vishnuvardhana, Songlin Yang, Hossein Pouri, and Jin Zhang. "Laser-assisted process for the deposition of nanostructured anti-microbial coatings on hydrogels." Optics & Laser Technology 164 (2023): 109485. 26. Wuppaladhodi, Vishnuvardhana, Songlin Yang, Hossein Pouri, and Jin Zhang. "Enhanced mechanical properties of silicone hydrogels coated with metallic nanoparticles by using the laser-assisted process." Journal of Applied Physics 133, no. 16 (2023).	
1. Morintale, E., Constantinescu, C., & Dinescu, M. (2010). Thin films development by pulsed laser-assisted deposition. *Physics AUC*, *20*, 43-56. 2. Tiwari, A., Patra, H. K., & Wang, X. (Eds.). (2016). *Advanced Materials Interfaces*. John Wiley & Sons. 3. Naot, D., Cornish, J., & Palmano, K. (2012). *Lactoferrin-A Potential Anabolic Intervention in Osteoporosis*. INTECH Open Access Publisher. 4.CAZAN, M., SIMA, L. E., DINCA, V., DINESCU, M., POPESCU, C. R., COSTIN, G. E., ... & IANCU, I. (2013). MAPLE COATING OF ZIRCONIA WITH PEG-PCL EMBEDDED CYPRINOL FOR EAR IMPLANT APPLICATIONS. *Romanian Journal of Biochemistry*, *50*(1), 3-14. 5. Sima, F., Axente, E., Ristoscu, C., Gallet, O., Anselme, K., & Mihailescu, I. N. (2016). Bioresponsive Surfaces and Interfaces Fabricated by Innovative Laser Approaches. *Advanced Materials Interfaces*, 427-462. 6. A. Palla-Papavlu, V. Dinca, M. Filipescu, M. Dinescu. Matrix-Assisted Pulsed Laser Evaporation of Organic Thin Films: Applications in Biology and Chemical Sensors. Chapter 8 in "Laser Ablation - From Fundamentals to Applications", book edited by Tatiana E. Itina, ISBN 978-953-51-3700-9, 2017. 7. Buchberger, Gerda, Martina Muck, Cristina Plamadeala, and Johannes Heitz. "Laser Structuring for Biomedical Applications." In Ultrafast Laser Nanostructuring: The Pursuit of Extreme Scales, pp. 1105-1165. Cham: Springer International Publishing, 2023.	**BDI**
40. Computational thermal and kinetic analysis. Software for non-isothermal kinetics by standard procedure; **Andrei Rotaru**, Mihai Goșa, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry*,** 94, 2 367-371, 2008	**35 citări**
1. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. ”Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 2. Harabor, A; Rotaru, P; Harabor, NA. ”Thermal and spectral behavior of (Y,Eu)VO4 powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1211-1219, (2013); 3. Refat, MS, ”Synthesis, spectroscopic characterization, thermal, and photostability studies of 2-(2 '-hydroxy-5 '-phenyl)-5-aminobenzotriazole complexes”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1095-1103, (2010); 4. Refat, MS; Mohamed, GG; de Farias, RF; Powell, AK; El-Garib, MS; El-Korashy, SA; Hussien, MA. ”Spectroscopic, thermal and kinetic studies of coordination compounds of Zn(II), Cd(II) and Hg(II) with	**ISI**

norfloxacin", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 225-232, (2010);
5. Refat, MS. "Synthesis, characterization, thermal and antimicrobial studies of diabetic drug models: Complexes of vanadyl(II) sulfate with ascorbic acid (vitamin C), riboflavin (vitamin B2) and nicotinamide (vitamin B3)", JOURNAL OF MOLECULAR STRUCTURE, 969, 163-171, (2010);
6. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013);
7. Danoiu, Suzana; Rotaru, P.; Degeratu, Sonia; Rizescu, S.; Bizdoaca, N. G. Shape memory alloy-based smart module structure working under intense thermo-mechanical stress. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1323-1330, (2014).
8. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014).
9. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014).
10. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015).
11. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015).
12. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015).
13. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017.
14. Almalki, A. S., & Refat, M. S. (2017). Synthesis and Photostability of 2-(4-isobutoxyphenyl)-6-Hydrazino-1, 8-Naphthalimide as Fluorescence Dye and Its Selenium Nanoscale Complex Doped in Polymethyl Methacrylate Polymeric Sheet Exposed to UV-Vis Radiation. *Journal of Computational and Theoretical Nanoscience*, *14*(9), 4616-4623.
15. FAI Al-Khodir. Synthesis, Spectroscopic Interpretations, and Antioxidant Efficiency of Two Vital Selenium Complexes. Acta Physica Polonica A, 132(4): 1265-1271.2017
16. New biologically active mixed-ligand Co(II) and Ni(II) complexes of enrofloxacin. A. Reiss, N. Cioatera, M.C. Chifiriuc, G. Munteanu, A. Ganescu, I. Dabuleanu, G. Avram, C.I. Spinu, P. Rotaru. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-6994-4, 2018.
17. P. Budrugeac. A simple and precise differential incremental isoconversional method to kinetic analysis of heterogeneous processes under arbitrary temperature programs. Thermochimica Acta. DOI: 10.1016/j.tca.2018.01.025, (2018)
18. G. Florian, A.R. Gabor, C.A. Nicolae, G. Iacobescu, N. Stănică, P. Mărășescu, I. Petrișor, M. Leulescu, S. Degeratu, O. Gingu, P. Rotaru. Physical properties (thermal, thermomechanical, magnetic, and adhesive) of some smart orthodontic wires. J. Therm. Anal. Calorim. 2018; 134(1):189–208.
19. SA Sadeek, SM Abd El-Hamid, AA Mohamed, Wael A. Zordok , Hassan A. El-Sayed. Spectroscopic characterization, thermogravimetry, density functional theory and biological studies of some mixed-ligand complexes of meloxicam and 2,2′-bipyridine with some transition metals. Applied Organometallic Chemistry. DOI: 10.1002/aoc.4889 (2019).
20. A Alonso, M Lázaro, P Lázaro, D Lázaro, D Alvear. LLDPE kinetic properties estimation combining thermogravimetry and differential scanning calorimetry as optimization targets. Journal of Thermal Analysis and Calorimetry. DOI: 10.1007/s10973-019-08199-4, 2019.
21. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1
22. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865.
23. SMA El-Hamid, SA Sadeek, WA Zordok, WH El-Shwiniy. Synthesis, spectroscopic studies, DFT calculations, cytotoxicity and antimicrobial activity of some metal complexes with ofloxacin and 2, 2 0-bipyridine. J. Mol. Struct., 1176 (2019) 422-433.
24. S.A. Sadeek , A.A. Mohamed, H.A. El-Sayed, M.S. El-Attar Spectroscopic characterization, thermogravimetric and antimicrobial studies of some new metal complexes derived from4-(4-Isopropyl phenyl)-2-oxo-6-phenyl 1,2-dihyropyridine-3-carbonitrile (L). Applied Organometallic Chemistry. 2019. DOI: 10.1002/aoc.5334
25. M.A.Gamil, S.A. Sadeek, W.A.Zordok, W.A.Elshwiniy. Spectroscopic, DFT modeling and biological

study of some new mixed ligand metal complexes derived from gatifloxacin and pregabalin. Journal of Molecular Structure. DOI:10.1016/j.molstruc.2020.127941, 2020. 26. NS Vrandečić, M Erceg, B Andričić, I Blanco, FA Bottino. Characterization of poly (ethylene oxide) modified with different phenyl hepta isobutyl polyhedral oligomeric silsesquioxanes. Journal of Thermal Analysis and Calorimetry. 2021. DOI:10.1007/s10973-020-10076-4. 27. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Zlata Hrnjak-Murgić, Matko Erceg, and Daniel R. Schneider. "Catalytic decomposition and kinetic study of mixed plastic waste." Clean Technologies and Environmental Policy 23 (2021): 811-827. 28. Walaa H. El-Shwiniy, Asmaa G. Ibrahim, Sadeek A. Sadeek, Wael A. Zordok. Synthesis, structural elucidation, molecular modeling and antimicrobial studies of 6-(2-hydroxyphenylimine)-2-thioxotetrahydropyrimidin-4(1H)-one (L) Schiff base metal complexes. Applied Organometallic Chemistry. DOI:10.1002/aoc.6174, 2021. 29. Carolina R. G. Silva, Silvia L. Fialho, Jamile Barbosa, Bárbara C. R. Araújo, Guilherme Carneiro, Rita C. O. Sebastião, Wagner N. Mussel, Maria I. Yoshida, Maria B. de Freitas-Marques. Compatibility by a Nonisothermal Kinetic Study of Azathioprine Associated with Usual Excipients in the Product Quality Review Process. Journal of the Brazilian Chemical Society. 32(3), 638-651, 2021. 30. Walaa H. El-Shwiniy, Mohamed G. Abd Elwahed, Reham M. Saeed, Wael A. Zordok, Sameh I. El-Desoky. Structural elucidation, molecular modeling, and biological and antioxidant studies of phenanthroline/nicotinamide metals complexes. Applied Organometallic Chemistry. DOI:10.1002/aoc.6231. (2021) 31. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis of mechanically non-recyclable waste plastics mixture: Kinetics and pyrolysis in laboratory-scale reactor." Journal of environmental management 296 (2021): 113145. 32. Fadl, A. M., S. A. Sadeek, Laila Magdy, M. I. Abdou, and W. H. El-Shiwiniy. "Multi-functional epoxy composite coating incorporating mixed Cu (II) and Zr (IV) complexes of metformin and 2, 2\-bipyridine as intensive network cross-linkers exhibiting anti-corrosion, self-healing and chemical-resistance performances for steel petroleum platforms." Arabian Journal of Chemistry 14, no. 10 (2021): 103367. 33. Fadl, A. M., M. I. Abdou, W. A. Zordok, and S. A. Sadeek. "Intrinsic anti-corrosion, self-healing and mechanical resistance behaviors of epoxy composite coating intercalated with novel mixed Ni (II), Pd (II), and Cd (II) complex cross-linking accelerators for steel petroleum tanks." Journal of Materials Research and Technology 15 (2021): 2242-2275. 34. El-Shwiniy, Walaa H., Manar A. Gamil, Sadeek A. Sadeek, and Wael A. Zordok. "Study molecular modeling and the effect of some biological metals on the efficiency of norfloxacin in presence of 3-(bromoacetyl) coumarin." Applied Organometallic Chemistry 35, no. 12 (2021): e6448.	
1. El-Shwiniy, Walaa H., Manar A. Gamil, Sadeek A. Sadeek, Wael A. Zordok, Mohamed El-Telbany, Ahmed F. El-farargy, and Mohamed S. El-Attar. "Structural Characterization and Antimicrobial Studies of Some New Mixed Ligand Complexes of Lomefloxacin and 3-(Bromoacetyl) coumarin with Some Metals." ChemistrySelect 7, no. 29 (2022): e202202078.	**BDI**
41. Thermal decomposition kinetics of some aromatic azomonoethers. Part II. Non-isothermal study of three liquid crystals in dynamic air atmosphere; **Andrei Rotaru***, Anna Kropidłowska, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 233-238, 2008	**38 citări**
1. Moanta, A; Samide, A; Ionescu, C; Tutunaru, B; Dobritescu, A; Fruchier, A; Barragan-Montero, V. ”Synthesis and Characterization of an Azo Dye: 4-(phenyldiazenyl) phenyl 2-furoate. Electrochemical and XPS Study of its Adsorption and Inhibitive Properties on Corrosion of Carbon Steel in Saline Water”, INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, 8, 780-796, (2013); 2. Moanta, A; Tutunaru, B; Rotaru, P. ”Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel”, Journal of thermal analysis and calorimetry, 111, 1273-1279, (2013); 3. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. ”Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 4. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. ”Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 5. Moanta, A; Ionescu, C; Tutunaru, B; Dumitru, M. ”Thermal and Electron Impact Decomposition of 4-hydroxy-4 '-cyano-azobenzene”, REVISTA DE CHIMIE, 61, 657-659, (2010); 6. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition	**ISI**

kinetics of glyphosate", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012);
7. Huang, MX; Zhou, CR; Han, XW. "Investigation of thermal decomposition kinetics of taurine", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 589-593, (2013);
8. Huang, MX; Lv, SC; Zhou, CR. "Thermal decomposition kinetics of glycine in nitrogen atmosphere", THERMOCHIMICA ACTA, 552, 60-64, (2013);
9. Zhang, QH; Li, HQ; Liu, HT. "Study on Polymerization Kinetics of Methylene Diphenyl Diisocyanate", ACTA CHIMICA SINICA, 69, 605-609, (2011);
10. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011);
11. Constantinescu, C; Morintale, E; Ion, V; Moldovan, A; Luculescu, C; Dinescu, M; Rotaru, P. " Thermal, morphological and optical investigations of Cu(DAB)(2) thin films produced by matrix-assisted pulsed laser evaporation and laser-induced forward transfer for sensor development", THIN SOLID FILMS, 520, 3904-3909, (2012);
12. Cusu, JP; Musuc, AM; Oancea, D. "Thermal stabilities of some benzaldehyde 2,4-dinitrophenylhydrazones", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 123-129, (2012);
13. Todan, L; Andronescu, C; Vuluga, DM; Culita, DC; Zaharescu, M. "Thermal behavior of silicophosphate gels obtained from different precursors", JOURNAL OF THERMAL ANALYSIS & CALORIMETRY, 114, 91-99, (2013);
14. Lisa, G; Paius, C; Raicu-Luca, A; Hurduc, N. "Azo-polysiloxanes thermal stability study: Thermal stability of azo-polysiloxanes with biological applications", HIGH PERFORMANCE POLYMERS, 24, 530-537, (2012);
15. Materazzi, S; Vecchio, S. "Evolved Gas Analysis by Infrared Spectroscopy", APPLIED SPECTROSCOPY REVIEWS, 45, 241-273, (2010);
16. Chen, JR; Cheng, SY; Yuan, MH; Kossoy, AA; Shu, CM. "Hierarchical kinetic simulation for autocatalytic decomposition of cumene hydroperoxide at low temperatures", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 96, 751-758, (2009).
17. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013);
18. Samide, Adriana; Tutunaru, B.; Ionescu, Catalina; Rotaru, P.; Simoiu, Luminita, Aminophylline: thermal characterization and its inhibitory properties for the carbon steel corrosion in acidic environment. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 631-639, (2014).
19. Samide, Adriana; Rotaru, Petre; Ionescu, Catalina; Tutunaru, Bogdan; Moanta, Anca; Barragan-Montero, Veronique. Thermal behaviour and adsorption properties of some benzothiazole derivatives. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 651-659, (2014).
20. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014).
21. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015).
22. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015).
23. Li W-L; Zhou C-; Zhang L; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 121 (2) 797-806 (2015).
24. Li W-L; Zhou C-; Zhang L; JOURNAL OF APPLIED POLYMER SCIENCE 132 (40) 42374 (2015).
25. Zhang, G. Z., H. C. Zheng, and X. Xiang. "Thermal decomposition and kinetics studies on the 2, 2-dinitropropyl acrylate–styrene copolymer and 2, 2-dinitropropyl acrylate–vinyl acetate copolymer." Journal of thermal analysis and calorimetry 111: 1039-1044. (2013)
26. de Jesus, J. Y., de Carvalho Dantas, E. S., Serafini, M. R., dos Passos Menezes, P., Cardoso, J. C., Albuquerque-Jr, R. L. C., de Souza Araújo, A. A. Development and physicochemical properties of extract of Morinda citrifolia Linn/pectin-based membranes. Journal of Thermal Analysis and Calorimet. 123; 2003-20012, 2016.
27. Changwei ZHANG, Chengzhang WANG, Ran TAO, THERMAL STABILITY AND THERMAL DECOMPOSITION KINETICS OF GINKGO BILOBA LEAVES WASTE RESIDUE, Thermal Science, 2017, DOI:10.2298/TSCI170117154Z
28. J.-L. Tu, J.-J. Yuan. Thermal Decomposition Behavior of Hydroxytyrosol (HT) in Nitrogen

Atmosphere Based on TG-FTIR Methods. Molecules. 23(2), 404, (2018). 29. Jiao-jiao Yuan, Jun-ling Tu, Yong-jun Xu, Frank G.F. Qin, Bing Li, Cheng-zhang Wang. Thermal stability and products chemical analysis of olive leaf extract after enzymolysis based on TG–FTIR and Py–GC–MS. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-018-7083-4, (2018). 30. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 31. Linkun Jiang, Pengfei Zhang, Lingyun Dong, Kai Liu. Thermal degradation kinetic study of creatinol phosphate and model selection. Journal of Thermal Analysis and Calorimetry. 10.1007/s10973-019-08337-y (2019) 32. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 33. Antar, Kaïs, and Mohamed Jemal. "Recovery of calcium sulfide from Tunisian phosphogypsum and olive mill wastewaters: a thermogravimetric and kinetic study." Journal of Thermal Analysis and Calorimetry 147, no. 5 (2022): 3931-3946. 34. Worzakowska, Marta, Małgorzata Sztanke, and Krzysztof Sztanke. "Pyrolysis and oxidative decomposition mechanism of trifluoromethylated fused triazinones." Journal of Analytical and Applied Pyrolysis 157 (2021): 105226.	
1. Kamel, Laila Tosson. "Non-isothermal decomposition kinetics of theobromine in nitrogen atmosphere." European Journal of Chemistry 6.2 (2015): 199-203. 2. **曹**亚蒙, **周彩荣**, & **刘中平**. (2015). **葡萄糖酸**亚锡热分解动力学. 郑州大学学报 (**理学版**), (2015 **年** 03), 77-81. 3. **楊宜恒**. (2013). **馬達定子**絕緣特性在加速試驗中之壽命預測. **中央大學機械工程學系學位論文**, 1-138. 4. Yanwu, Yu, Ma Hui, Guo Jiahu, Meng Jingwei, Jing Suming, Cheng Guimin, and Wei Zihui. "Thermal Analysis of a New Heat-Resistant Energetic Material." Science of Advanced Materials 14, no. 1 (2022): 147-154.	**BDI**
42. Thermal characterization of humic acids and other components of raw coal; **Andrei Rotaru**, Irina Nicolaescu, Petre Rotaru, Constantin Neaga; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 297-300, 2008	**28 citări**
1. Cihlář, Z., Vojtová, L., Michlovská, L., & Kučerík, J. Preparation and hydration characteristics of carbodiimide crosslinked lignite humic acids. Geoderma, 274, 10-17. (2016). 2. Bertolino, V., Cavallaro, G., Lazzara, G., Merli, M., Milioto, S., Parisi, F., & Sciascia, L. Effect of the biopolymer charge and the nanoclay morphology on nanocomposite materials. Industrial & Engineering Chemistry Research, 55(27), 7373-7380, 2016. 3. Liu, L., Sawut, A., Abliz, S., Nurulla, I., Dolat, B., & Yimit, M. Ultraviolet-induced polymerization of superabsorbent composites based on sodium humate and its urea release behavior. RSC Advances, 6(103), 101123-101132, 2016. 4. Cavallaro, G., Lazzara, G., Milioto, S., & Parisi, F. Halloysite nanotubes with fluorinated cavity: an innovative consolidant for paper treatment. Clay Minerals, 51(3), 445-455, 2016. 5. Cavallaro, G ; Donato, DI; Lazzara, G; Milioto, S. ”Determining the selective impregnation of waterlogged archaeological woods with poly(ethylene) glycols mixtures by differential scanning calorimetry”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1449-1455, (2013); 6. Cioabla, AE; Tordai, GT; Rotaru, P; Socaciu, M; Ionel, I. ”Experimental approach of co-firing and anaerobic fermentation of biomass and coal, and their thermochemical properties”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 110, 395-403, (2012); 7. Pospisilova, L; Formanek, P; Kucerik, J; Liptaj, T; Losak, T; Martensson, A. ”Land use effects on carbon quality and soil biological properties in Eutric Cambisol”, ACTA AGRICULTURAE SCANDINAVICA SECTION B-SOIL AND PLANT SCIENCE, 61, 661-669, (2011); 8. Francioso, O; Montecchio, D; Gioacchini, P; Cavani, L; Ciavatta, C; Trubetskoj, O; Trubetskaya, O. ”Structural differences of Chernozem soil humic acids SEC-PAGE fractions revealed by thermal (TG-DTA) and spectroscopic (DRIFT) analyses”, GEODERMA, 152, 264-268, (2009); 9. Cavallaro, Giuseppe; Lazzara, Giuseppe; Milioto, Stefana; Parisi, Filippo. Halloysite nanotubes as sustainable nanofiller for paper consolidation and protection. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 117 (3), 1293-1298, (2014). 10. Arcudi, Francesca; Cavallaro, Giuseppe; Lazzara, Giuseppe; Massaro, Marina; Milioto, Stefana; Noto, Renato; Riela, Serena. JOURNAL OF PHYSICAL CHEMISTRY C. 118 (37), 15095-15101, (2014). 11. Klucakova, Martina; Novackova, Kristyna. JOURNAL OF SOILS AND SEDIMENTS. 14 (2), 360-	**ISI**

367, (2014). 12. Kosobucki, P., & Buszewski, B. (2014). Natural Organic Matter in Ecosystems-a Review. *Nova Biotechnologica et Chimica*, *13*(2), 109-129. 13. Cavallaro, G., Lazzara, G., Milioto, S., Parisi, F., & Ruisi, F. Nanocomposites based on esterified colophony and halloysite clay nanotubes as consolidants for waterlogged archaeological woods. Cellulose, DOI: 10.1007/s10570-017-1369-8 (2017). 14. J Kucerík, D Tokarski, MS Demyan, I Merbach, C Siewert. Linking soil organic matter thermal stability with contents of clay, bound water, organic carbon and nitrogen. Geoderma. (2018), 316: 38–46. 15. M Huculak-Mączka, J Hoffmann, K Hoffmann. Evaluation of the possibilities of using humic acids obtained from lignite in the production of commercial fertilizers. - Journal of Soils and Sediments, DOI:10.1007/s11368-017-1907-x,(2018). 16. L Lisuzzo, G Cavallaro, F Parisi, S Milioto, G Lazzara; Colloidal stability of halloysite clay nanotubes; Ceramics International, DOI: 10.1016/j.ceramint.2018.07.289; 2018. 17. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 18. Khutsishvili, S.S., Tikhonov, N.I., Pavlov, D.V. et al., Gold- and silver-containing bionanocomposites based on humic substances extracted from coals. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY DOI:10.1007/s10973-019-08059-1, 2019. 19. J Deng, JJ Song, JY Zhao, YN Zhang, YX Zhang, Chi-Min Shu. Gases and thermal behavior during high-temperature oxidation of weathered coal. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08103-0, 2019. 20. A. Milia, M. Bruno, G. Cavallaro, G. Lazzara, S. Milioto. Adsorption isotherms and thermal behavior of hybrids based on quercetin and inorganic fillers. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08257-x, 2019. 21. Jan David, Helena Doležalová Weissmannová, Zacharias Steinmetz, Lucie Kabelíková, Michael Scott Demyan, JanaŠimečková, DavidTokarski, ChristianSiewert, Gabriele E.Schaumann, JiříKučerík. Introducing a soil universal model method (SUMM) and its application for qualitative and quantitative determination of poly(ethylene), poly(styrene), poly(vinyl chloride) and poly(ethylene terephthalate) microplastics in a model soil. Chemosphere. Volume 225, June 2019, Pages 810-819. 22. FATMA KARA, DUYGU ADIGÜZEL, UFUK ATMACA, MURAT ÇELİK, JALE NAKTİYOK. Characterization and kinetics analysis of the thermal decomposition of the humic substance from hazelnut husk. Turkish Jounrnal of Chemistry (2020) 44: 1483-1494. 23. Matjie, Ratale, John Bunt, Wilden Stokes, Hanno Bijzet, Katlego Mphahlele, Romanus Uwaoma, and Christien Strydom. "Interactions between kaolinite, organic matter, and potassium compounds at elevated temperatures during pyrolysis of caking coal and its density-separated fractions." Energy & Fuels 35, no. 16 (2021): 13268-13280. 24. Volkov, Dmitry S., Olga B. Rogova, and Mikhail A. Proskurnin. "Temperature dependences of IR spectra of humic substances of brown coal." Agronomy 11, no. 9 (2021): 1822. 25. Garcia-Mina, Jose M., Javier Aranaz, David De Hita, Maite Olaetxea Indaburu, Oscar Urrutia, Marta Fuentes, Roberto Baigorri et al. "The molecular conformation, but not disaggregation, of humic acid in water solution plays a crucial role in promoting plant development in the natural environment." Frontiers in Plant Science 14 (2023): 1468. 26. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." Journal of thermal analysis and calorimetry 148, no. 4 (2023): 1599-1611.	
1. Sîrbu, C., Cioroianu, T., & Rotaru, P. (2010). About the humic acids and thermal behaviour of some humic acids. *Physics AUC*, *20*(part 1), 120-126. 2. Ng, Wei Sung, Yi Yang, Xiuzhu Su, Shuiping Zhong, and Miao Chen. "Characterization of Preg-Robbing Carbonaceous Minerals from the Shuiyindong Carlin-Type Gold Deposit Via Spectroscopic Techniques." *Mining, Metallurgy & Exploration* (2022): 1-20.	**BDI**
43. Thermal analysis and thin films deposition by matrix assisted pulsed laser evaporation of a 4CN type azomonoether; **Andrei Rotaru**, Catalin Constantinescu, Petre Rotaru, Anca Moanţă, Marius Dumitru, Margareta Socaciu, Maria Dinescu, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 92, 1, 279-284, 2008	**20 citări**
1. Constantinescu, C; Morintale, E; Ion, V; Moldovan, A; Luculescu, C; Dinescu, M; Rotaru, P. ” Thermal,	**ISI**

morphological and optical investigations of Cu(DAB)(2) thin films produced by matrix-assisted pulsed laser evaporation and laser-induced forward transfer for sensor development", THIN SOLID FILMS, 520, 3904-3909, (2012); 2. Riggs, BC; Dias, AD; Schiele, NR; Cristescu, R; Huang, Y; Corr, DT; Chrisey, DB. "Matrix-assisted pulsed laser methods for biofabrication", MRS BULLETIN, 36, 1043-1050, (2011); 3. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 4. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 5. Chen, CC; Wang, TC; Chen, LY; Dai, JH; Shu, CM. "Loss prevention in the petrochemical and chemical-process high-tech industries in Taiwan", JOURNAL OF LOSS PREVENTION IN THE PROCESS INDUSTRIES, 23, 531-538, (2010); 6. Constantinescu, C; Emandi, A; Vasiliu, C; Negrila, C; Logofatu, C; Cotarlan, C; Lazarescu, M. "Thin films of Cu(II)-o,o '-dihydroxy azobenzene nanoparticle-embedded polyacrylic acid (PAA) for nonlinear optical applications developed by matrix assisted pulsed laser evaporation (MAPLE)", APPLIED SURFACE SCIENCE, 255, 5480-5485, (2009). 7. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 8. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 9. Constantinescu C; Diallo AK; D'Aleo A; Fages F; Rotaru P; Videlot-Ackermann C; Delaporte P; Alloncle AP; SYNTHETIC METALS 209 29-33 (2015). 10. Constantinescu C; Rapp L; Rotaru P; Delaporte P; Alloncle AP; CHEMICAL PHYSICS 450 32-38 (2015). 11. Grumezescu, AM; Cristescu R; Chifiriuc, MC; Dorcioman G; Socol, G; Mihailescu IN; Mihaiescu DE; Ficai A; Vasile OR; Enculescu M; Chrisey DB; BIOFABRICATION 7 (1) 015014 (2015). 12. Rădulescu, D., Voicu, G., Oprea, A. E., Andronescu, E., Grumezescu, V., Holban, A. M., Vasile, B.S.; Surdu, A.V.; Grumezescu A.M.; Socol, G.; Mogoantă, L.; Mogosanu, G.D.; Balaure, P.C.; Radulescu, R.; Chifiriuc, M.C. Mesoporous silica coatings for cephalosporin active release at the bone-implant interface. Applied Surface Science, 374, 165-171, 2016. 13. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 14. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 15. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 16. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 17. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 18. Reiss A, Cioateră N, Dobrițescu A, Rotaru M, Carabet AC, Parisi F, Gănescu A, Dăbuleanu I, Spînu CI, Rotaru P. Bioactive Co(II), Ni(II), and Cu(II) Complexes Containing a Tridentate Sulfathiazole-Based (ONN) Schiff Base. Molecules. 2021; 26(10):3062. 19. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." *Journal of thermal analysis and calorimetry* 148, no. 4 (2023): 1599-1611.	
1. Morintale, E., Constantinescu, C., & Dinescu, M. (2010). Thin films development by pulsed laser-assisted deposition. *Physics AUC, 20*, 43-56.	**BDI**
44. Heteroleptic Cd(II) complex, potential precursor for semiconducting CdS layers. Thermal stability and non-isothermal decomposition; Anna Kropidłowska, **Andrei Rotaru**, Michal Strankowski, Barbara Becker, Eugen Segal;	**29 citări**

Journal of Thermal Analysis and Calorimetry, 91, 3, 903-909, 2008	
1. Patrascu, F; Badea, M; Grecu, MN; Stanica, N; Marutescu, L; Marinescu, D; Spinu, C; Tigae, C; Olar, R. ”Thermal, spectral, magnetic and antimicrobial behaviour of new Ni(II), Cu(II) and Zn(II) complexes with a hexaazamacrocyclic ligand”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1421-1429, (2013); 2. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. ”Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 3. Ciolan, F; Patron, L; Mureseanu, M; Rotaru, P; Georgescu, I. ”Synthesis and Characterization of Cu(II), Ni(II) and Co(II) Binuclear Complexes with a new Schiff base (1,3-bis[ortho-(2-carboxy-phenyliminomethyl)-phenoxy]propane)”, REVISTA DE CHIMIE, 63, 34-39, (2012); 4. Ciolan, F; Patron, L; Marinescu, G; Cioatera, N; Mureseanu, M. ”Synthesis and Characterization of Zn(II) Binuclear Complexes with three Schiff bases derived from some Amino Acids and 2,2 '-(propane-1,3-diyldioxy)dibenzaldehyde”, REVISTA DE CHIMIE, 62, 1145-1149, (2011); 5. Scorei, RI; Rotaru, P. ”Calcium Fructoborate-Potential Anti-inflammatory Agent”, BIOLOGICAL TRACE ELEMENT RESEARCH, 143, 1223-1238, (2011); 6. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. ”Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 7. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. ”Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 8. Rotaru, P; Scorei, R; Harabor, A; Dumitru, MD. ”Thermal analysis of a calcium fructoborate sample”, THERMOCHIMICA ACTA, 506, 8-13, (2010); 9. Tatucu, M; Rotaru, P; Rau, I; Spinu, C; Kriza, A. ”Thermal behaviour and spectroscopic investigation of some methyl 2-pyridyl ketone complexes”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 100, 1107-1114, (2010); 10. Hou, XY; Chen, SP; Gao, SL. ”Synthesis, Crystal Structure and Nonisothermal Kinetics of Complex Co(tda)(5-mphen)(H2O)”, CHEMICAL RESEARCH IN CHINESE UNIVERSITIES, 25, 383-387, (2009); 11. Mianowski, A. ”CONSEQUENCES OF HOLBA-SESTAK EQUATION”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 96, 507-513, (2009); 12. Sanchez-Jimenez, PE; Criado, JM; Perez-Maqueda, LA. ”Kissinger kinetic analysis of data obtained under different heating schedules”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 94, 427-432, (2008); 13. Kropidlowska, A; Chojnacki, J; Becker, B. ”Tetra-n-butylammonium iodido-(pyrrolidine-1-carbodithioato-kappa S-2,S')(tris-tert-butoxysilanethiolato-kappa S)cadmate(II)”, ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, 64, M832-U936, (2008); 14. Kropidlowska, A; Chojnacki, J; Fahmi, A; Becker, B. ”In search of molecular precursors for cadmium sulfide-new complexes with a sulfur-rich kernel: cadmium(II) tri-tert-butoxysilanethiolates with additional diethyldithiocarbamato ligand”, DALTON TRANSACTIONS, 47, 6825-6831, (2008); 15. Pladzyk, A; Olszewska, J; Baranowska, K; Dziurzynska, AM. ”Cobalt(II) silanethiolato complexes with dimethylpyridines: crystal structures and spectroscopic studies”, TRANSITION METAL CHEMISTRY, 35, 821-827, (2010); 16. Benavidez, E; Santini, L; Brandaleze, E. ”Decomposition kinetic of carbonaceous materials used in a mold flux design”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 103, 485-493, (2011); 17. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. ” Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013). 18. Pladzyk, A; Ponikiewski, L; Stanulewicz, N; Hnatejko, Z. ”Zn(II) and Cd(II) coordination polymers with tri-tert-butoxysilanethiol and bipyridines. Synthesis, crystal structure and spectroscopy”, Optical Materials, 36, 554-561 (2013). 19. Mietlarek-Kropidlowska, Anna; Chojnacki, Jaroslaw; Strankowski, Michal; Fahmi, Amir; Gazda, Maria; Becker, Barbara. Cadmium complex possessing simultaneously silanethiolato- and dithiocarbamato-ligands. A novel single-source precursor of cadmium sulfide. Journal of Thermal Analysis and Calorimetry. 118 (2), 993-1001, (2014). 20. Ristovic, M. Sumar; Minic, D. M.; Blagojevic, V.; Andelkovic, K. Kinetics of Multi-Step Processes of Thermal Degradation of Co(II) Complex With N-Benzyloxycarbonylglycinato Ligand. Deconvolution of DTG Curves. Science of Sintering. 46 (1), 37-53, (2014).	**ISI**

21. Degeratu S; Rotaru P; Rizescu S; Danoiu S; Bizdoaca NG; Alboteanu L; Manolea HO; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (3) 1679-1692 (2015). 22. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 23. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 24. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1 25. A. Plota, A. Masek. Lifetime Prediction Methods for Degradable Polymeric Materials—A Short Review. Materials 2020, 13(20), 4507; https://doi.org/10.3390/ma13204507 26. Agnieszka Pladzyk, Daria Kowalkowska-Zedler, Anna Ciborska, Andreas Schnepf, Anna Dołega. Complexes of silanethiolate ligands: Synthesis, structure, properties andapplication. Coordination Chemistry Reviews, 437, 213761, 2021. 27. Wang, Yang, Guowei Feng, Nan Lin, Huiqing Lan, Qiang Li, Dichang Yao, and Jing Tang. "A Review of Degradation and Life Prediction of Polyethylene." Applied Sciences 13, no. 5 (2023): 3045.	
1.Šumar-Ristović, M. (2012). Termička stabilnost, mehanizam i kinetika razgradnje kompleksa kobalta (II), cinka (II) i kadijuma (II) sa N-benziloksikarbonilglicinom. 2. F. Ciolan, A. Ganescu. Thermal Analysis of some Binuclear Bioactive Complexes Derived from an Aromatic Dialdehyde and L-Tryptophan. Annals of the University of Craiova The Chemistry Series. Volume XLIV, No. 2 (2017) 58-64.	**BDI**
45. Influence of the preparation method on the ampicilin incorporation in hydrotalcite-like compounds; Rodica Zăvoianu, Octavian Dumitru Pavel, Anca Cruceanu, Mihaela Florea, Ruxandra Bîrjega, **Andrei Rotaru**, Corina Bradu, Petre Rotaru; ***Nanoporous Materials V*** (World Scientific Publishing Co. Pte Ltd., A. Sayari & M. Jaroniec Eds.), International Symposium on Nanoporous Materials V (Nano-5), Vancouver Canada 25-28 May 2008, 717-728, ISBN-13 978-981-277-915-1, 2008	**1 citare**
1. Zavoianu, R, Birjega, R, Pavel, OD, Cruceanu, A, Paduraru, C. "Ampicillin release from hydrotalcite-supported ampicillin drugs—Effect of Mg/Al ratio." Journal of Biotechnology, 136, S445, (2008).	**ISI**
46. Thermal stability of some new complexes bearing ligands with polymerisable groups; Mihaela Badea, Rodica Olar, Dana Marinescu, Eugen Segal, **Andrei Rotaru;** ***Journal of Thermal Analysis and Calorimetry*****,** 88, 2, 317-321, 2007	**26 citări**
1. Patrascu, F; Badea, M; Grecu, MN; Stanica, N; Marutescu, L; Marinescu, D; Spinu, C; Tigae, C; Olar, R. ”Thermal, spectral, magnetic and antimicrobial behaviour of new Ni(II), Cu(II) and Zn(II) complexes with a hexaazamacrocyclic ligand”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1421-1429, (2013); 2. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. ”Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 3. Ciolan, F; Patron, L; Mureseanu, M; Rotaru, P; Georgescu, I. ”Synthesis and Characterization of Cu(II), Ni(II) and Co(II) Binuclear Complexes with a new Schiff base (1,3-bis[ortho-(2-carboxy-phenyliminomethyl)-phenoxy]propane)”, REVISTA DE CHIMIE, 63, 34-39, (2012); 4. Ciolan, F; Patron, L; Marinescu, G; Cioatera, N; Mureseanu, M. ”Synthesis and Characterization of Zn(II) Binuclear Complexes with three Schiff bases derived from some Amino Acids and 2,2 '-(propane-1,3-diyldioxy)dibenzaldehyde”, REVISTA DE CHIMIE, 62, 1145-1149, (2011); 5. Scorei, RI; Rotaru, P. ”Calcium Fructoborate-Potential Anti-inflammatory Agent”, BIOLOGICAL TRACE ELEMENT RESEARCH, 143, 1223-1238, (2011); 6. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. ”Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 7. Rotaru, P; Scorei, R; Harabor, A; Dumitru, MD. ”Thermal analysis of a calcium fructoborate sample”, THERMOCHIMICA ACTA, 506, 8-13, (2010); 8. Constantinescu, C; Morintale, E; Ion, V; Moldovan, A; Luculescu, C; Dinescu, M; Rotaru, P. ” Thermal, morphological and optical investigations of Cu(DAB)(2) thin films produced by matrix-assisted pulsed laser evaporation and laser-induced forward transfer for sensor development”, THIN SOLID FILMS, 520, 3904-3909, (2012); 9. Tatucu, M; Rotaru, P; Rau, I; Spinu, C; Kriza, A. ”Thermal behaviour and spectroscopic investigation of some methyl 2-pyridyl ketone complexes”, JOURNAL OF THERMAL ANALYSIS AND	**ISI**

CALORIMETRY, 100, 1107-1114, (2010); 10. Badea, M; Olar, R; Marinescu, D; Lazar, V; Chifiriuc, C; Vasile, G. "Thermal behaviour of new biological active cadmium mixed ligands complexes", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 97, 781-785, (2009); 11. Badea, M; Olar, R; Marinescu, D; Vasile, G. "Thermal stability of new complexes bearing both acrylate and aliphatic amine as ligands", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 92, 205-208, (2008); 12. Badea, M; Olar, R; Marinescu, D; Vasile, G; "Thermal behavior of some new triazole derivative complexes", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 92, 209-214, (2008); 13. Bucur, Cristina; Badea, Mihaela; Chifiriuc, Mariana Carmen; Bleotu, Coralia; Iorgulescu, Emilia Elena; Badea, Irinel Adriana; Grecu, Maria Nicoleta; Lazar, Veronica; Patriciu, Oana-Irina; Marinescu, Dana; Olar, Rodica. Studies on thermal, spectral, magnetic and biological properties of new Ni(II), Cu(II) and Zn(II) complexes with a bismacrocyclic ligand bearing an aromatic linker. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 115 (3), 2179-2189, (2014); 14. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013). 15. Badea, Mihaela; Vlaicu, Ioana Dorina; Olar, Rodica; Constand, Madalina; Bleotu, Coralia; Chifiriuc, Mariana Carmen; Marutescu, Luminita; Lazar, Veronica; Grecu, Maria Nicoleta; Marinescu, Dana. Thermal behaviour and characterisation of new biologically active Cu(II) complexes with benzimidazole as main ligand.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 118 (2), 1119-1133, (2014). 16. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014). 17. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox.JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 18. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 19. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 20. Nie, F. M., Li, Z., Lu, F., & Chen, J. (2009). Crystal structure of (picolinato-N, O)[tris (2-benzimdazolyl-N, N′, N ″-methyl) amine] copper (II) perchlorate–methanol–water (1: 1: 2),[Cu (C24H21N7)(C6H4NO2)] ClO4· CH3OH· 2H2O. *Zeitschrift für Kristallographie-New Crystal Structures*, *224*(2), 272-274. 21. A. Reiss, M. C. Chifiriuc, E. Amzoiu, N. Cioatera, I. Dabuleanu, P. Rotaru, New metal(II) complexes with ceftazidime Schiff base, Journal of Thermal Analysis and Calorimetry, 10.1007/s10973-017-6832-0 (2017). 22. R.Olar, G. Vasile-Scaeteanu, G.M. Danila, C.G. Daniliuc, R. Cerc Korosec, N. Celan Korosin, M. Badea. Synthesis and characterization of cobalt acrylate–melamine co-crystals. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-018-7264-1. 2018 23. O. Gingu, S.Tanasescu, G. Stoian, N. Lupu, P. Rotaru. Nanostructured AgCu system at repeated melting. Structure and thermal behaviour. J. Therm. Anal. Calorim. 2019; DOI: 10.1007/s10973-019-08566-1	
1. Pomogailo, A. D., & Dzhardimalieva, G. I. (2014). Thermolysis of Metallopolymers and Their Precursors as a Way for Synthesis of Nanocomposites. In *Nanostructured Materials Preparation via Condensation Ways* (pp. 287-388). Springer Netherlands. 2. F. Ciolan, A. Ganescu. Thermal Analysis of some Binuclear Bioactive Complexes Derived from an Aromatic Dialdehyde and L-Tryptophan. Annals of the University of Craiova The Chemistry Series. Volume XLIV, No. 2 (2017) 58-64. 3. Igor E. Uflyand, Gulzhian I. Dzhardimalieva. The Conjugate Thermolysis-Thermal Polymerization of Metal Chelate Monomers and Thermolysis of Polymers Formed In Situ. Nanomaterials Preparation by Thermolysis of Metal Chelates pp 351-423. 2018.	**BDI**
47. Thermal decomposition kinetics of some aromatic azomonoethers; Part I.Decomposition of 4-[(4-chlorobenzyl)oxy]-4'-nitro-azobenzene; **Andrei Rotaru**, Anca Moanţă, Ion Sălăgeanu, Petru Budrugeac, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*,** 87, 2, 345-355, 2007	**23 citări**
1. Moanta, A; Samide, A; Ionescu, C; Tutunaru, B; Dobritescu, A; Fruchier, A; Barragan-Montero, V. "Synthesis and Characterization of an Azo Dye: 4-(phenyldiazenyl) phenyl 2-furoate. Electrochemical and XPS Study of its Adsorption and Inhibitive Properties on Corrosion of Carbon Steel in Saline Water",	**ISI**

INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, 8, 780-796, (2013); 2. Moanta, A; Tutunaru, B; Rotaru, P. "Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1273-1279, (2013); 3. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 4. Moanta, A; Ionescu, C; Tutunaru, B; Dumitru, M. "Thermal and Electron Impact Decomposition of 4-hydroxy-4 '-cyano-azobenzene", REVISTA DE CHIMIE, 61, 657-659, (2010); 5. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. "Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 6. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011); 7. Perez, JM; Teixeira, SR; Rincon JM; Romero, M. "Understanding the Crystallization Mechanism of a Wollastonite Base Glass Using Isoconversional, IKP Methods and Master Plots", JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 95, 3441-3447, (2012); 8. Perez, JM; Rincon, JM; Romero, M. "Study of mullite formation in porcelain stoneware applying isoconversional and IKP methods", CERAMICS INTERNATIONAL, 36, 2329-2335, (2010); 9. Yu, SJ; Wang, SX; Tan, ZC; Liao, CQ; Li, YS. "Synthesis, characterization and TG-DTA study of diethyl 5-(4-hydroxyethoxyphenylazo)isophthalate", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 97, 993-997, (2009); 10. Dou, BL; Dupont, V; Williams, PT; Chen, HS; Ding, YL. "Thermogravimetric kinetics of crude glycerol", BIORESOURCE TECHNOLOGY, 100, 2613-2620, (2009); 11. Hamciuc, C; Ipate, AM; Hamciuc, E; Lisa, G. "Thermal degradation kinetics of some aromatic poly(1,3,4-oxadiazole-ethers)", HIGH PERFORMANCE POLYMERS, 20, 296-310, (2008); 12. Budrugeac, P. "Kinetics of the complex process of thermo-oxidative degradation of poly(vinyl alcohol)", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 92, 291-296, (2008); 13. Logvinenko, V; Mikhailov, K; Yukhin, Y. "The kinetics of thermal decomposition of bismuth oxohydroxolaurate", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 88, 47-49, (2007); 14. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R. " Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013). 15. Samide, Adriana; Tutunaru, B.; Ionescu, Catalina; Rotaru, P.; Simoiu, Luminita, Aminophylline: thermal characterization and its inhibitory properties for the carbon steel corrosion in acidic environment. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 631-639, (2014). 16. Samide, Adriana; Rotaru, Petre; Ionescu, Catalina; Tutunaru, Bogdan; Moanta, Anca; Barragan-Montero, Veronique. Thermal behaviour and adsorption properties of some benzothiazole derivatives. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 651-659, (2014). 17. Harabor, Ana; Rotaru, P.; Scorei, R. I.; Harabor, N. A. Non-conventional hexagonal structure for boric acid. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1375-1384, (2014). 18. Harabor, Ana; Rotaru, P.; Harabor, N. A. Thermal properties, texture, second-order stress, and magnetic susceptibility of the Bi1.8Pb0.3Sr2Ca2Cu3.3Ox. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (1), 227-234, (2014). 19. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 20. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 21. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 22. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 23. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4	
48. On the inappropriate fit of diffusion functions at thermal decomposition of some azomonoethers in liquid state;	**2 citări**

Andrei Rotaru, Anna Kropidłowska, Petre Rotaru; ***Annals of the University of Craiova-Physics AUC*** 17, 2, 115-118, 2007	
1. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 2. Constantinescu, C; Morintale, E; Emandi, A; Dinescu, M; Rotaru, P. "Thermal and microstructural analysis of Cu(II) 2,2 '-dihydroxy azobenzene and thin films deposition by MAPLE technique", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 707-716, (2011).	**ISI**
49. Kinetic study of the thermal decomposition of some aromatic ortho-chlorinated azomonoethers; 1. Decomposition of 4-[(2-chlorobenzyl)oxy)-4'-triflouromethyl-azobenzene; **Andrei Rotaru**, Bogdan Jurca, Anca Moanţă, Ion Sălăgeanu, Eugen Segal; ***Revue Roumaine de Chimie*****,** 51, 5, 373-378, 2006	**8 citări**
1. Moanta, A; Tutunaru, B; Rotaru, P. "Spectral and thermal studies of 4-(phenyldiazenyl)phenyl 2-furoate as corrosion inhibitor for carbon steel", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1273-1279, (2013); 2. Moanta, A; Ionescu, C; Rotaru, P; Socaciu, M; Harabor, A. "Structural characterization, thermal investigation, and liquid crystalline behavior of 4-[(4-chlorobenzyl)oxy]-3,4 '-dichloroazobenzene", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1079-1086, (2010); 3. Pascu, CI; Gingu, O; Rotaru, P; Vida-Simiti, I; Harabor, A; Lupu, N. "Bulk titanium for structural and biomedical applications obtaining by spark plasma sintering (SPS) from titanium hydride powder", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 849-857, (2013); 4. Manolea, HO; Rotaru, P; Manolea, G; Morintale, E; Rica, R." Thermal and spectral behaviour of a light-cured methacrylate-based composite material used in dentistry", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Online first, DOI: 10.1007/s10973-013-3170-8, (2013). 5. Moanta A; Samide A; Rotaru P; Ionescu C; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 119 (2) 1139-1145 (2015). 6. Moanta A; Ionescu C; Dragoi M; Rotaru P; Tutunaru B; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 120 (2) 1151-1161 (2015). 7. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 8. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101.	**ISI**
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h index calculat exclusiv din citări independente (fără autocitări), conform: J.E. Hirsch. An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences of the United States of America, PNAS November 15, 2005 102 (46) 16569-16572	**22**

Toate standardele şi criteriile cerute (*conform anexei nr. 4* - Comisia de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*) au fost îndeplinite.

Conf. Univ. Dr. Andrei Rotaru **12.06.2023**

B) Fişa de îndeplinire a standardelor minimale ale Universității Babeş-Bolyai, stabilite prin aprobare de către Senatul Universității Babeş-Bolyai, la propunerea facultăților de către Andrei Rotaru

Facultatea: Facultatea de Inginerie
Domeniul: Chimie

2. Pentru funcţiile de profesor sunt necesare cumulativ:

a) articole ştiinţifice

•îndeplinirea standardelor minimale de la nivel naţional

Domeniul: Chimie
Domeniul de cercetare declarat*: Chimie (Chimie fizică şi Ştiinţe termice)*

Criterii generale conform cerinţelor Comisiei de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*

Categorie criterii	***Număr cerut pentru Profesor universitar***	***Număr realizat de Andrei Rotaru***	***Îndeplinire criteriu***
$\mathbf{N_{max}}$	50	50 (asumat)	Da (îndeplinit)
FIC	100	156,54	Da (îndeplinit)
$\mathbf{FIC_D}$	70	156,54	Da (îndeplinit)
$\mathbf{FIC_{AP}}$	50	107,268	Da (îndeplinit)
$\mathbf{FIC_{AC}}$	25	88,302	Da (îndeplinit)

N_{max} – primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact ai revistelor în care au fost publicate;
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FIC_D – factorul de impact cumulat minimal din publicaţii în domeniile de cercetare declarate;
FIC_{AP} – factorul de impact cumulat minimal din publicaţii în calitate de autor principal (prim-autor şi autor de corespondenţă);
FIC_{AC}– factorul de impact cumulat minimal din publicaţii în calitate de autor de corespondenţă.

Toate standardele şi criteriile cerute (*conform anexei nr. 4* - Comisia de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*) au fost îndeplinite.

•publicarea în calitate de autor sau autor co-autor a minim 8 articole ştiinţifice în reviste cu factor de impact indexate Web of Science Thomson-Reuters.

Număr articole cerut pentru Profesor universitar în reviste cu factor de impact indexate Web of Science Thomson-Reuters	***Număr realizat de Andrei Rotaru***	***Îndeplinire criteriu***
8	53	Da (îndeplinit)

Nr.	Lista articolelor publicate în reviste cu factor de impact indexate Web of Science Thomson-Reuters *Titlul, Autorii, Jurnalul, Volumul, Paginile/Numă referinţă, Anul.*	Factor impact (anul)
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2.	Structural, thermal and superconducting properties of Ag_2O-doped $YBa_2Cu_3O_{7-x}$ composite materials; Ana Hărăbor, Petre Rotaru, Novac Adrian Hărăbor, Petr Nozar, **Andrei Rotaru*** ***Ceramics International***, 49(9), 14904-14916, 2023	5,532 (2021)
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4.	Thermal, physical and biological properties of new etheric dyes with chlorine and two azo groups of anthracene; Anca Moanţă, Alice Carla Carabet, Ion Pălărie, **Andrei Rotaru**, Mariana Popescu, Marian Leulescu, Gabriela Iacobescu, Mihail Stoicescu, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 148 (10), 4615-4639, 2023	4,755 (2021)
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8.	Azorubine: Physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic red azo-dye material; Marian Leulescu, **Andrei Rotaru***, Anca Moanţă, Gabriela Iacobescu, Ion Pălărie, Nicoleta Cioateră, Mariana Popescu, Marius Catalin Criveanu, Emilian Morîntale, Mihaela Bojan, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry,*** 2021, 143(6), 3945–3967, 2021	4,755 (2021)
9.	The electro-mechanical control of element NiTi shape memory alloy strip while bending, based on thermal analysis evidence; Sonia Degeratu, G.E. Subţirelu, **Andrei Rotaru***, Nicu G. Bîzdoacă, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 2021, 143(6), 3805–3815, 2021	4,755 (2021)
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	Carla Carabet, Anca Moanţă, Ion Pălărie, Gabriela Iacobescu, **Andrei Rotaru***, Marian Leulescu, Mariana Popescu, Petre Rotaru ***Molecules,*** 2020, 25(23), 5757	
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12.	Local Structure and Order–Disorder Transitions in "Empty" Ferroelectric Tetragonal Tungsten Bronzes; Jason A. McNulty, David Pesquera, Jonathan Gardner, **Andrei Rotaru**, Helen Y. Playford, Matthew G. Tucker, Michael A. Carpenter, Finlay D. Morrison ***Chemistry of Materials,*** 2020, 32 (19), 8492–8501	9,811 (2020)
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14.	Adsorption capacity of Vitamin B12 and Creatinine on highly-mesoporous activated carbons obtained from lignocellulosic raw materials; Tudor Lupaşcu, Oleg Petuhov, Nina Ţîmbaliuc, Silvia Cibotaru, **Andrei Rotaru*** ***Molecules,*** 25 (13), 3095, 2020	4,411 (2020)
15.	Induced-Hydrophilicity and in vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment; Luminita Nicoleta Dumitrescu, Patricia Neacsu, Madalina G. Necula, Anca Bonciu, Valentina Marascu, Anisoara Cimpean, Antoniu Moldovan, **Andrei Rotaru***, Valentina Dinca*, Maria Dinescu* ***Molecules,*** 25 (3), 582, 2020	4,411 (2020)
16.	Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N'-donor linkers; Vasile Lozovan, Victor C. Kravtsov, Elena Gorincioi, **Andrei Rotaru**, Eduard B. Coropceanu, Nikita Siminel, Marina S. Fonari ***Polyhedron,*** 180, 114411, 2020	3,052 (2020)
17.	Thermomechanical, calorimetric and magnetic properties of a Ni-Ti shape memory alloy wire; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Nicolae Stănică, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 140, 527–544, 2020	4,626 (2020)
18.	Physical and thermophysical properties of a commercial Ni-Ti shape memory alloy strip; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Cornelia A. Marinescu, Gabriela Iacobescu, Nicolae Stănică, Sonia Degeratu, Oana Gîngu, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 138(3), 1841-1851, 2019	2,731 (2019)
19.	Structural, electrical and relaxor properties of Sc-In solid solution in tetragonal tungsten bronze ceramics; **Andrei Rotaru**, Finlay D. Morrison; ***Ceramics International,*** 45 (2) Part B, 2710-2718, 2019	3,830 (2019)
20.	Orthorhombic YBCO-123 ceramic oxide superconductor: structural, resistive and thermal properties; Ana Harabor, Petre Rotaru, Novac Adrian Harabor, Petr Nozar, **Andrei Rotaru***;	3,830 (2019)

	Ceramics International, 45 (2) Part B, 2899-2907, 2019	
21.	Tartrazine: physical and biophysical properties of the most widely employed artificial yellow food-colouring azo dye; Marian Leulescu, **Andrei Rotaru***, Ion Pălărie, Anca Moanţă, Nicoleta Cioatera, Mariana Popescu, Emilian Morîntale, Maria Bubulică, Gabriel Florian, Ana Hărăbor, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 134 (1), 209-231, 2018	2,471 (2018)
22.	Thermokinetic study of CODA azoic liquid crystal and thin films deposition by matrix-assisted pulsed laser evaporation; **Andrei Rotaru**, Anca Moanţă, Cătălin Constantinescu, Marius Dumitru, Horia Octavian Manolea, Andreea Andrei, Maria Dinescu; ***Journal of Thermal Analysis and Calorimetry,*** 128 (1), 89-105, 2017	2,209 (2017)
23.	Hydroxyapatite-alendronate composite systems for biocompatible materials; Johny Neamtu, Maria-Viorica Bubulica, **Andrei Rotaru**, Catalin Ducu, Oana Elena Balosache, Valentin Costel Manda, Adina Turcu-Stiolica, Claudiu Nicolicescu, Razvan Melinte, Mariana Popescu, Octavian Croitoru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (2), 1567–1582, 2017	2,209 (2017)
24.	Thermal behaviour of CODA azoic dye liquid crystal and nanostructuring by drop cast and spin coating techniques; **Andrei Rotaru**, Marius Dumitru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 21–32, 2017	2,209 (2017)
25.	Thermal and kinetic study of hexagonal boric acid *vs.* triclinic boric acid in air flow; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry***, 127 (1), 755–763, 2017	2,209 (2017)
26.	Discriminating within the kinetic models for heterogeneous processes of materials by employing a combined procedure under TKS-SP 2.0 software; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry,*** 126 (2), 919-932, 2016	1,953 (2016)
27.	Microstructural and high-temperature impedance spectroscopy study of $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In) relaxor dielectric ceramics with tetragonal tungsten bronze structure; **Andrei Rotaru***, Finlay D. Morrison; ***Ceramics International,*** 42, 11810-11821, 2016	2,986 (2016)
28.	Elastic and anelastic relaxations accompanying relaxor dielectric behaviour of $Ba_6GaNb_9O_{30}$ tetragonal tungsten bronze from resonant ultrasound spectroscopy; **Andrei Rotaru***, Jason A. Schiemer, Michael A. Carpenter; ***Journal of Thermal Analysis and Calorimetry,*** 124 (2), 571-583, 2016	1,953 (2016)
29.	Effect of local A-site strain on dipole stability in $A_6GaNb_9O_{30}$ (A = Ba, Sr, Ca) tetragonal tungsten bronze relaxor dielectrics. Andrew J. Miller, **Andrei Rotaru**, Donna C. Arnold, Finlay D. Morrison; ***Dalton Transactions***, 44, 10738-10745, 2015	4,177 (2015)
30.	Vogel-Fulcher analysis of relaxor dielectrics with the tetragonal tungsten bronze structure $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In); **Andrei Rotaru**, Finlay D. Morrison; ***Journal of Thermal Analysis and Calorimetry,*** 120 (2), 1249-1259, 2015	1,781 (2015)
31.	Thermal behaviour and thin film deposition by MAPLE technique of functional polymeric materials with potential use in optoelectronics; Catalin Constantinescu, **Andrei Rotaru**, Anca Nedelcea, Maria Dinescu; ***Materials Science in Semiconductor Processing,*** 30, 242-249, 2015	2,264 (2015)
32.	Thermal behavior and antimicrobial assay of some new zinc(II) 2-aminobenzoate complex compounds with bioactive ligands;	1,781 (2015)

	Annamaria Krajnikova, **Andrei Rotaru***, Katarina Gyoryova, Horia Octavian Manolea, Katarina Homzova, Jana Kovarova, Daniela Hudecova; ***Journal of Thermal Analysis and Calorimetry,*** 120, 1, 73-78, 2015	
33.	Towards novel multiferroic & magnetoelectric materials: dipole stability in tetragonal tungsten bronzes. **Andrei Rotaru**, Andrew J. Miller, Donna C. Arnold, Finlay D. Morrison; ***Philosophical Transactions of the Royal Society A***, 372, 20120451, 2014	2,147 (2014)
34.	Thermal analysis and kinetic study of Petroşani bituminous coal from Romania in comparison with a sample of Ural bituminous coal; **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry,*** 110, 3, 1283-1291, 2012	1,982 (2012)
35.	Origin and stability of dipolar response in a family of tetragonal tungsten bronze relaxors; **Andrei Rotaru**, Donna C. Arnold, *Aziz* Daoud-Aladine, Finlay D. Morrison; ***Physical Review B***, 83, 18, 184302, 2011	3,691 (2011)
36.	DSC study on hyaluronan hydration and dehydration; Jiri Kucerik, Alena Prusova, **Andrei Rotaru**, Karol Flimel, Jiri Janacek, Pelegrino Conte; ***Thermochimica Acta,*** 523, 1-2, 245-249, 2011	1,805 (2011)
37.	Matrix assisted pulsed laser evaporation of zinc benzoate for ZnO thin films and non-isothermal decomposition kinetics; **Andrei Rotaru***, Catalin Constantinescu, Anca Mândruleanu, Petre Rotaru, Antoniu Moldovan, Katarina Győryová, Maria Dinescu, Vladimir Balek; ***Thermochimica Acta,*** 498, 1-2, 81-91, 2010	1,908 (2010)
38.	Computational thermal and kinetic analysis. Complete standard procedure to evaluate the kinetic triplet form non-isothermal data; **Andrei Rotaru***, Mihai Goşa; ***Journal of Thermal Analysis and Calorimetry,*** 97, 2, 421-426, 2009	1,587 (2009)
39.	CdS thin films obtained by thermal treatment of cadmium (II) complex precursor deposited by MAPLE technique; **Andrei Rotaru**, Anna Mietlarek-Kropidłowska, Catalin Constantinescu, Nicu Scărişoreanu, Marius Dumitru, Michal Strankowski, Petre Rotaru, Valentin Ion, Cristina Vasiliu, B. Becker, M. Dinescu; ***Applied Surface Science***, 255, 15, 6786-6789, 2009	1,616 (2009)
40.	Thermal decomposition kinetics of some aromatic azomonoethers. Part IV. Non-isothermal kinetics of 2-allyl-4-((4-(4-methylbenzyloxy)phenyl)diazenyl)phenol in air flow; **Andrei Rotaru***, Anca Moanţă, Gina Popa, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 97, 2, 485-491, 2009	1,587 (2009)
41.	Thermal characteristics of Ni-Ti SMA (shape memory alloy) actuators; Sonia Degeratu, Petre Rotaru, Gheorghe Manolea, Horia Octavian Manolea, **Andrei Rotaru***; ***Journal of Thermal Analysis and Calorimetry,*** 97, 2, 695-700, 2009	1,587 (2009)
42.	Isoconversional linear integral kinetics of the non-isothermal evaporation of 4-[(4-chlorobenzyl)oxy]-4'-trifluoromethyl-azobenzene; **Andrei Rotaru***, Mihai Goşa, Eugen Segal; ***Studia Universitatis Babes-Bolyai Chemia,*** 54, 3 185-192, 2009	0,086 (2009)
43.	Thermal analysis of azoic dyes; Part I. Non-isothermal decomposition kinetics of [4-(4-chlorobenzyloxy)-3-methylphenyl](*p*-tolyl)diazene in dynamic air atmosphere; **Andrei Rotaru***, George Brătulescu, Petre Rotaru; ***Thermochimica Acta,*** 489, 1-2, 63-69, 2009	1,742 (2009)

44.	Thermal decomposition kinetics of some aromatic azomonoethers. Part III. Non-isothermal study of 4-[(4-chlorobenzyl)oxy]-4'-chloro-azobenzene in dynamic air atmosphere; **Andrei Rotaru***, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 95, 1, 161-166, 2009	1,587 (2009)
45.	Multifunctional thin films of lactoferrin for biochemical use deposited by MAPLE technique; Catalin Constantinescu, Alexandra Palla-Papavlu, **Andrei Rotaru**, Paula Florian, Florica Chelu, Madalina Icriverzi, Anca Nedelcea, Valentina Dincă, Anca Roşeanu, Maria Dinescu; ***Applied Surface Science*****,** 255, 10, 5491-5495, 2009	1,616 (2009)
46.	Computational thermal and kinetic analysis. Software for non-isothermal kinetics by standard procedure; **Andrei Rotaru***, Mihai Goşa, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry*****,** 94, 2 367-371, 2008	1,630 (2008)
47.	Thermal decomposition kinetics of some aromatic azomonoethers. Part II. Non-isothermal study of three liquid crystals in dynamic air atmosphere; **Andrei Rotaru***, Anna Kropidłowska, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 233-238, 2008	1,630 (2008)
48	Thermal characterization of humic acids and other components of raw coal; **Andrei Rotaru***, Irina Nicolaescu, Petre Rotaru, Constantin Neaga; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 297-300, 2008	1,630 (2008)
49.	Thermal analysis and thin films deposition by matrix assisted pulsed laser evaporation of a 4CN type azomonoether; **Andrei Rotaru**, Catalin Constantinescu, Petre Rotaru, Anca Moanţă, Marius Dumitru, Margareta Socaciu, Maria Dinescu, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 279-284, 2008	1,630 (2008)
50.	Heteroleptic Cd(II) complex, potential precursor for semiconducting CdS layers. Thermal stability and non-isothermal decomposition; Anna Kropidłowska, **Andrei Rotaru**, Michal Strankowski, Barbara Becker, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 91, 3, 903-909, 2008	1,630 (2008)
51.	Thermal stability of some new complexes bearing ligands with polymerisable groups; Mihaela Badea, Rodica Olar, Dana Marinescu, Eugen Segal, **Andrei Rotaru;** ***Journal of Thermal Analysis and Calorimetry*****,** 88, 2, 317-321, 2007	1,483 (2007)
52.	Thermal decomposition kinetics of some aromatic azomonoethers; Part I.Decomposition of 4-[(4-chlorobenzyl)oxy]-4'-nitro-azobenzene; **Andrei Rotaru**, Anca Moanţă, Ion Sălăgeanu, Petru Budrugeac, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 87, 2, 345-355, 2007	1,483 (2007)
53.	Kinetic study of the thermal decomposition of some aromatic ortho-chlorinated azomonoethers; 1. Decomposition of 4-[(2-chlorobenzyl)oxy)-4'-triflouromethyl-azobenzene; **Andrei Rotaru**, Bogdan Jurca, Anca Moanţă, Ion Sălăgeanu, Eugen Segal; ***Revue Roumaine de Chimie*****,** 51, 5, 373-378, 2006	0,208 (2006)

•publicarea în calitate de autor sau autor-corespondent a minim 3 articole în articole aflate în una din quartilele Q1 sau Q2 de la Web of Science. **Se pot lua în calcul oricare din quartilele Q1, Q2 din ultimele 5 ediţii ale Thomson-Reuters.*

Număr articole cerut pentru Profesor universitar în Quartilele Q1, Q2	*Număr realizat de Andrei Rotaru*	*Îndeplinire criteriu*
3	27 *(din care 19 în Q1 şi 8 în Q2)*	Da (îndeplinit)

Nr.	**Lista articolelor ştiinţifice în reviste cu factor de impact indexate Web of Science Thomson-Reuters. *Se pot lua în calcul oricare din quartilele Q1, Q2 din ultimele 5 ediţii ale Thomson-Reuters.** *Titlul, Autorii, Jurnalul, Volumul, Paginile/Numă referinţă, Anul.*	**Quartila Q1,Q2**
1.	The in-depth study of Romanian prehistoric ceramics: Late Neolithic/Eneolithic pottery and clay materials from the Foeni Tell-Orthodox cemetery in Timiş county; Dan Vlase, Gabriela Vlase, Gabriela Ursuţ, Paula Sfirloaga, Florin Manea, Mihaela Budiul, **Andrei Rotaru***, Titus Vlase* ***Ceramics International,*** 49(9), 14941-14956, 2023	Q1
2.	Structural, thermal and superconducting properties of Ag_2O-doped $YBa_2Cu_3O_{7-x}$ composite materials; Ana Hărăbor, Petre Rotaru, Novac Adrian Hărăbor, Petr Nozar, **Andrei Rotaru*** ***Ceramics International***, 49(9), 14904-14916, 2023	Q1
3.	The influence of surface chemistry upon the textural, thermal and sorption properties of apple-pectin adsorbent materials; Tudor Lupaşcu, Elena Culighin, Oleg Petuhov, Tatiana Mitina, Maria Rusu, **Andrei Rotaru*** ***Journal of Thermal Analysis and Calorimetry***, 148, 4573–4587, 2023	Q1
4.	Thermal, physical and biological properties of new etheric dyes with chlorine and two azo groups of anthracene; Anca Moanță, Alice Carla Carabet, Ion Pălărie, **Andrei Rotaru**, Mariana Popescu, Marian Leulescu, Gabriela Iacobescu, Mihail Stoicescu, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 148 (10), 4615-4639, 2023	Q1
5.	An innovative method for highly-efficient fabrication of carbon fiber precursors via acrylonitrile emulsion copolymerization coupled to a chemical oscillator; Luciana Sciascia, Davide Lenaz, **Andrei Rotaru**, Francesco Princivalle, Filippo Parisi ***Surfaces and Interfaces***, 37, 102686, 2023	Q1
6.	Thermal stability, rheological and morpho-structural properties of the magnetorheological fluid MRF122 employed in spherical joint mechanisms; Daniela Sârbu, Nicu George Bîzdoacă, Nicoleta Cioateră, Cristian Ionel Vladu, **Andrei Rotaru***, Cristina Florina Pană, Daniela Maria Pătraşcu, Gabriel Florian, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 148, 1289–1308, 2023	Q1
7.	Sunset Yellow: Physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic orange azo-dye material; Marian Leulescu, Ion Pălărie, **Andrei Rotaru***, Anca Moanţă, Nicoleta Cioateră, Mariana Popescu, Gabriela Iacobescu, Emilian Morîntale, Mihaela Bojan, Maria Ciocîlteu, Iulian Petrişor, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry,*** 148, 1265–1287, 2023	Q1
8.	Azorubine: Physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic red azo-dye material; Marian Leulescu, **Andrei Rotaru***, Anca Moanţă, Gabriela Iacobescu, Ion Pălărie, Nicoleta Cioateră, Mariana Popescu, Marius Catalin Criveanu, Emilian Morîntale, Mihaela Bojan, Petre Rotaru	Q1

	Journal of Thermal Analysis and Calorimetry, 2021, 143(6), 3945–3967, 2021	
9.	The electro-mechanical control of element NiTi shape memory alloy strip while bending, based on thermal analysis evidence; Sonia Degeratu, G.E. Subţirelu, **Andrei Rotaru***, Nicu G. Bîzdoacă, Petre Rotaru ***Journal of Thermal Analysis and Calorimetry***, 2021, 143(6), 3805–3815, 2021	Q1
10.	Physical, thermal and biological properties of yellow dyes with two azodiphenylether groups of anthracene Carla Carabet, Anca Moanţă, Ion Pălărie, Gabriela Iacobescu, **Andrei Rotaru***, Marian Leulescu, Mariana Popescu, Petre Rotaru ***Molecules,*** 2020, 25(23), 5757	Q2
11.	Ti-based composite materials with enhanced thermal and mechanical properties; Cristina Ileana Pascu, Stefan Gheorghe, **Andrei Rotaru***, Claudiu Nicolicescu, Nicoleta Cioatera, Adrian Sorin Rosca, Daniela Sarbu, Petre Rotaru ***Ceramics International***, 2020, 46 (18, Part B), 29358-29372	Q1
12.	Local Structure and Order–Disorder Transitions in "Empty" Ferroelectric Tetragonal Tungsten Bronzes; Jason A. McNulty, David Pesquera, Jonathan Gardner, **Andrei Rotaru**, Helen Y. Playford, Matthew G. Tucker, Michael A. Carpenter, Finlay D. Morrison ***Chemistry of Materials,*** 2020, 32 (19), 8492–8501	Q1
13.	Edible vegetable oils enriched with carotenoids extracted from by-products of sea buckthorn (*Hippophae rhamnoides ssp.* sinensis): the investigation of some characteristic properties, oxidative stability and the effect on thermal behaviour; Alexandru Radu Corbu, **Andrei Rotaru**, Violeta Nour; ***Journal of Thermal Analysis and Calorimetry,*** 2020, 142 (2), 735–747	Q1
14.	Adsorption capacity of Vitamin B12 and Creatinine on highly-mesoporous activated carbons obtained from lignocellulosic raw materials; Tudor Lupaşcu, Oleg Petuhov, Nina Ţîmbaliuc, Silvia Cibotaru, **Andrei Rotaru*** ***Molecules,*** 25 (13), 3095, 2020	Q2
15.	Induced-Hydrophilicity and in vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment; Luminita Nicoleta Dumitrescu, Patricia Neacsu, Madalina G. Necula, Anca Bonciu, Valentina Marascu, Anisoara Cimpean, Antoniu Moldovan, **Andrei Rotaru***, Valentina Dinca*, Maria Dinescu* ***Molecules,*** 25 (3), 582, 2020	Q2
16.	Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N'-donor linkers; Vasile Lozovan, Victor C. Kravtsov, Elena Gorincioi, **Andrei Rotaru**, Eduard B. Coropceanu, Nikita Siminel, Marina S. Fonari ***Polyhedron,*** 180, 114411, 2020	Q2
17.	Thermomechanical, calorimetric and magnetic properties of a Ni-Ti shape memory alloy wire; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Nicolae Stănică, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 140, 527–544, 2020	Q1
18.	Physical and thermophysical properties of a commercial Ni-Ti shape memory alloy strip; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru***, Cornelia A. Marinescu, Gabriela Iacobescu, Nicolae Stănică, Sonia Degeratu, Oana Gîngu, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 138(3), 1841-1851, 2019	Q1

19.	Structural, electrical and relaxor properties of Sc-In solid solution in tetragonal tungsten bronze ceramics; **Andrei Rotaru**, Finlay D. Morrison; ***Ceramics International,*** 45 (2) Part B, 2710-2718, 2019	Q1
20.	Orthorhombic YBCO-123 ceramic oxide superconductor: structural, resistive and thermal properties; Ana Harabor, Petre Rotaru, Novac Adrian Harabor, Petr Nozar, **Andrei Rotaru***; ***Ceramics International,*** 45 (2) Part B, 2899-2907, 2019	Q1
21.	Tartrazine: physical and biophysical properties of the most widely employed artificial yellow food-colouring azo dye; Marian Leulescu, **Andrei Rotaru***, Ion Pălărie, Anca Moanţă, Nicoleta Cioatera, Mariana Popescu, Emilian Morîntale, Maria Bubulică, Gabriel Florian, Ana Hărăbor, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 134 (1), 209-231, 2018	Q2
22.	Thermokinetic study of CODA azoic liquid crystal and thin films deposition by matrix-assisted pulsed laser evaporation; **Andrei Rotaru**, Anca Moanţă, Cătălin Constantinescu, Marius Dumitru, Horia Octavian Manolea, Andreea Andrei, Maria Dinescu; ***Journal of Thermal Analysis and Calorimetry,*** 128 (1), 89-105, 2017	Q2
23.	Hydroxyapatite-alendronate composite systems for biocompatible materials; Johny Neamtu, Maria-Viorica Bubulica, **Andrei Rotaru**, Catalin Ducu, Oana Elena Balosache, Valentin Costel Manda, Adina Turcu-Stiolica, Claudiu Nicolicescu, Razvan Melinte, Mariana Popescu, Octavian Croitoru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (2), 1567–1582, 2017	Q2
24.	Microstructural and high-temperature impedance spectroscopy study of $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In) relaxor dielectric ceramics with tetragonal tungsten bronze structure; **Andrei Rotaru***, Finlay D. Morrison; ***Ceramics International,*** 42, 11810-11821, 2016	Q1
25.	Effect of local A-site strain on dipole stability in $A_6GaNb_9O_{30}$ (A = Ba, Sr, Ca) tetragonal tungsten bronze relaxor dielectrics. Andrew J. Miller, **Andrei Rotaru**, Donna C. Arnold, Finlay D. Morrison; ***Dalton Transactions***, 44, 10738-10745, 2015	Q1
26.	Towards novel multiferroic & magnetoelectric materials: dipole stability in tetragonal tungsten bronzes. **Andrei Rotaru**, Andrew J. Miller, Donna C. Arnold, Finlay D. Morrison; ***Philosophical Transactions of the Royal Society A***, 372, 20120451, 2014	Q2
27.	Origin and stability of dipolar response in a family of tetragonal tungsten bronze relaxors; **Andrei Rotaru**, Donna C. Arnold, *Aziz* Daoud-Aladine, Finlay D. Morrison; ***Physical Review B***, 83, 18, 184302, 2011	Q1

b) minim două cărţi de specialitate publicate în calitate de autor sau co-autor, sau două capitole de carte în edituri de prestigiu din străinătate. **Se vor lua în considerare cărţile publicate cu ISBN.**

Număr de cărţi de specialitate publicate în calitate de autor sau co-autor	***Număr realizat de Andrei Rotaru***	***Îndeplinire criteriu***
2	2	Da (îndeplinit)
sau		

Număr de capitole de carte de specialitate publicate în calitate de autor sau co-autor în edituri de prestigiu din străinătate	*Număr realizat de Andrei Rotaru*	*Îndeplinire criteriu*
2	2	Da (îndeplinit)

Nr.	**Lista de cărţi şi capitole în cărţi de specialitate publicate cu ISBN** *Titlul, Autorii, Nr. pagini, Editura, ISBN, Ţara, Anul.*
	Cărţi
1.	Tetragonal Tungsten Bronzes. Relaxor dielectric niobates-report on a case study. **Andrei Rotaru** (Autor); 192 pag., SITECH, ISBN 978-606-11-4970-4, România, 2015.
2.	Chimie fizică II. Cinetică chimică – Manual didactic; **Andrei Rotaru** (Autor); 159 pag., SITECH, ISBN 978-606-11-6804-0, România, 2019.
	Capitole de carte în străinătate
1.	Azoic dyes: from thermal properties to a wide range of applications; **Andrei Rotaru**, Anca Moanta (Autori); Capitolul 4 în: Advanced Engineering Materials. Recent Developments for Medical, Technological and Industrial Applications; 38 pag., Academica Greifswald, ISBN 978-3-940237-38-5, Germania, 2016.
2.	Methodologies for obtaining carburized steels by powder metallurgy; Marius Catalin Criveanu, **Andrei Rotaru** (Autori); Capitolul 6 în: Advanced Engineering Materials. Recent Developments for Medical, Technological and Industrial Applications; 49 pag., Academica Greifswald, ISBN 978-3-940237-38-5, Germania, 2016.

c) vizibilitatea internaţională prin citări.

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Domeniul: Chimie

Domeniul de cercetare declarat*: Chimie (Chimie fizică şi Ştiinţe termice)*

Criterii generale conform cerinţelor Comisiei de Chimie a CNATDCU *la Ordinul nr. 6129 din 20.12.2016 emis de către Ministerul Educaţiei Naţionale şi Cercetării Ştiinţifice*

Categorie criterii	*Număr cerut pentru Profesor universitar*	*Număr realizat de Andrei Rotaru*	*Îndeplinire criteriu*
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•minim 20 de citări ale publicaţiilor propri (fără considerarea autocitărilor) în articole indexate Web of Science Thomson-Reuters în cel puţin 5 reviste (cu factor de impact) diferite din străinătate. În plus, candidatul trebuie să fie citat de cel puţin 5 lucrări cu autori care au afiliere la instituţii de învăţământ superior de străinătate.

***Număr citări ale publicaţiilor propri (fără autocitări) în articole indexate Web of Science Thomson-Reuters în cel puţin 5 reviste (cu factor de impact)* diferite din străinătate**	***Număr realizat de Andrei Rotaru***	***Îndeplinire criteriu***
20 (în minim 5 rev.)	243 (în 81 reviste)	Da (îndeplinit)
şi		
Număr lucrări (cu factor de impact) care citează publicaţiile propri (fără autocitări) în articole indexate Web of Science Thomson-Reuters, ale unor autori care au afiliere la instituţii de învăţământ superior de străinătate	***Număr realizat de Andrei Rotaru***	***Îndeplinire criteriu***
5	165	Da (îndeplinit)

Lista de citări ale lucrărilor publicate conform criteriului	
Lucrare proprie care este citată	**Nr. citări**
Lucrări care citează lucrarea proprie	**Tipul citării**
1. Azorubine: physical, thermal and bioactive properties of the widely employed food, pharmaceutical and cosmetic red azo dye material; Marian Leulescu, **Andrei Rotaru**, Anca Moanţă, Gabriela Iacobescu, Ion Pălărie, Nicoleta Cioateră, Mariana Popescu, Marius Cătălin Criveanu, Emilian Morîntale, Mihaela Bojan, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 143 (6), 3945-3967, 2021	**10 citări**
1. Abramov, V., Abramova, A., Bayazitov, V., Kameneva, S., Veselova, V., Kozlov, D., Sozarukova, M., Baranchikov, A., Fedulov, I., Nikonov, R. and Cravotto, G., 2022. Fast degradation of tetracycline and ciprofloxacin in municipal water under hydrodynamic cavitation/plasma with CeO2 nanocatalyst. Processes, 10(10), p.2063. 2. Xu, Y. and Ding, Z., 2022. Oxidation-Induced and Hydrothermal-Assisted Template-Free Synthesis of Mesoporous CeO2 for Adsorption of Acid Orange 7. Materials, 15(15), p.5209. 3. Kapoor, A., Singh, D., Pratibha, Rajput, J.K., Kumar, N. and Varnika, 2022. Investigation on solar light assisted degradation of perilous Chromotrope-FB and Ponceau-BS colorants by Ag-doped ZrFe2O4: a greener environmental remediation approach. International Journal of Environmental Analytical Chemistry, pp.1-27. 4. KARAKAYA, İ., 2022. Synthesis and characterization of azobenzene derived from 8-aminoquinoline in aqueous media. Journal of the Turkish Chemical Society Section A: Chemistry, 9(1), pp.85-114. 5. F. Hashemi-Shahraki, B. Shareghi, S. Farhadian. Characterizing the binding affinity and molecular interplay between quinoline yellow and pepsin. Journal of Molecular Liquids. 341, 117317, 2021. 6. A Raiol, AR da Cunha, V Manzoni, T Andrade-Filho, R Gester. Solvent enhancement and isomeric effects on the NLO properties of a photoinduced cis-trans azomethine chromophore: A sequential MC/QM study. Journal of Molecular Liquids. 340, 116887, 2021. 7. Nadiya VOROBEY, Kateryna KUKOL, Petro PUKHTAIEVYCH, Sergii KOTS. Influence of carmoisine on the viability of Bradyrhizobium japonicum in vitro and physiological indices of soybean under symbiosis conditions. Journal of Central European Agriculture. 22(4), 735-747, 2021. 8. Olga Yu. Golubeva, Yulia A. Alikina, Tamara V. Khamova, Elizaveta V. Vladimirova, Olga V. Shamova. Aluminosilicate Nanosponges: Synthesis, Properties, and Application Prospects. Inorganic Chemistry. 60, 22, 17008–17018, 2021.	**ISI**

9. Al-Hawary, Sulieman Ibraheem Shelash, Ahmed Omar Bali, Shavan Askar, Holya A. Lafta, Zainab Jawad Kadhim, Bakhodir Kholdorov, Yassine Riadi, Reena Solanki, and Yasser Fakri Mustafa. "Recent advances in nanomaterials-based electrochemical and optical sensing approaches for detection of food dyes in food samples: A comprehensive overview." Microchemical Journal (2023): 108540. 10. Sunkur, M., and O. Gullu. "Carmoisine azo dye-modified Al/p-Si junction." Materials Chemistry and Physics 302 (2023): 127778.	
2. Local Structure and Order–Disorder Transitions in "Empty" Ferroelectric Tetragonal Tungsten Bronzes; Jason A. McNulty, David Pesquera, Jonathan Gardner, **Andrei Rotaru**, Helen Y. Playford, Matthew G. Tucker, Michael A. Carpenter, Finlay D. Morrison	**4 citări**
1. Cao, Lei, Ying Yuan, Xiangjun Meng, Enzhu Li, and Bin Tang. "Ferroelectric-relaxor crossover and energy storage properties in Sr2NaNb5O15-based tungsten bronze ceramics." *ACS Applied Materials & Interfaces* 14, no. 7 (2022): 9318-9329. 2. Peng, Haonan, Zhen Liu, Zhengqian Fu, Kai Dai, Zhongqian Lv, Shaobo Guo, Zhigao Hu, Fangfang Xu, and Genshui Wang. "Superior Energy Density Achieved in Unfilled Tungsten Bronze Ferroelectrics via Multiscale Regulation Strategy." *Advanced Science* (2023): 2300227. 3. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." *Journal of Alloys and Compounds* 929 (2022): 167314. 4. He, Xiao-Juan, Yi-Chi Zhang, Ling Li, Ji Zhang, Zheng-Bin Gu, and Shan-Tao Zhang. "Relaxor-normal ferroelectric transition in (1− x) Sr0. 75Ba0. 25Nb2O6–x NaNbO3 ceramics." *Applied Physics Letters* 120, no. 18 (2022): 182902.	**ISI**
3. Adsorption capacity of Vitamin B12 and Creatinine on highly-mesoporous activated carbons obtained from lignocellulosic raw materials; Tudor Lupaşcu, Oleg Petuhov, Nina Ţîmbaliuc, Silvia Cibotaru, **Andrei Rotaru*** ***Molecules,*** 25 (13), 3095, 2020	**4 citări**
1. Alzate-Arbelaez, Andrés Felipe, Farid B. Cortés, and Benjamín A. Rojano. "Antioxidants from Hyeronima macrocarpa Berries Loaded on Nanocellulose: Thermal and Antioxidant Stability." Molecules 27, no. 19 (2022): 6661. 2. Wang, Wei, Zhijuan Wang, Kai Li, Yuxin Liu, Delong Xie, Shaoyun Shan, Liang He, and Yi Mei. "Adsorption of uremic toxins using biochar for dialysate regeneration." Biomass Conversion and Biorefinery (2021): 1-13. 3. Blachnio, Magdalena, Anna Derylo-Marczewska, Szymon Winter, and Malgorzata Zienkiewicz-Strzalka. "Mesoporous Carbons of Well-Organized Structure in the Removal of Dyes from Aqueous Solutions." Molecules 26, no. 8 (2021): 2159. 4. Smiley, Erfan, Fariba Tadayon, and Mahmoud Reza Sohrabi. "Pre-Proof File Vitamin B2 Removal from Aqueous Solution Using Magnetic Nanoparticles/Orange Peel Composite: Optimization Using Response Surface Methodology." Iran. J. Chem. Chem. Eng. Research Article Vol 41, no. 11 (2022).	**ISI**
4. The electro-mechanical control of element NiTi shape memory alloy strip while bending, based on thermal analysis evidence; Sonia Degeratu, G.E. Subţirelu, **Andrei Rotaru**, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry***, 143(6), 3805–3815, 2021	**2 citări**
1. Zucchini, Azzurra, Tonci Balić-Žunić, Ines E. Collings, Michael Hanfland, and Paola Comodi. "High-pressure single-crystal synchrotron X-ray diffraction study of lillianite." *American Mineralogist* 107, no. 9 (2022): 1752-1759. 2. Dong, Yuqing, Ka-Wai Yeung, Wing-Cheung Law, Gary Chi-Pong Tsui, Xiaolin Xie, and Chak-Yin Tang. "Towards a consistent methodology for testing the electromechanical performance of strip polymer composite actuators." *Polymer Testing* 106 (2022): 107463.	**ISI**
5. Thermomechanical, calorimetric and magnetic properties of a Ni-Ti shape memory alloy wire; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru**, Nicolae Stănică, Nicu G. Bîzdoacă, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 140, 527–544, 2020	**6 citări**
1. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 2. Chekotu, Josiah Cherian, Russell Goodall, David Kinahan, and Dermot Brabazon. "Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process parameters." Materials & Design 218 (2022): 110715. 3. Vashishtha, Himanshu, and Jayant Jain. "Influence of laser power on precipitate formation and multiple step transformation kinetics in NiTi shape memory alloy weld joints." Journal of Alloys and Compounds 893 (2022): 162307.	**ISI**

4. Jovanović-Medojević, Milica, Aleksandra Dragičević, Ivana Milanović, Lidija Matija, and Slavoljub Živković. "Opto-magnetic imaging spectroscopy in analyzing rotary NiTi endodontic instruments." Journal of the Mechanical Behavior of Biomedical Materials 141 (2023): 105789. 5. Zhao, Haibo, and Kun Wu. "Experimental and numerical investigation of the transient thermal characteristics of twisted nitinol wires in a continuous torsional refrigeration system." Plos one 17, no. 11 (2022): e0277415. 6. Mohammed, S. S., E. Balci, F. Dagdelen, and S. Saydam. "Comparison of Thermodynamic Parameters and Corrosion Behaviors of Ti50Ni25Nb25 and Ti50Ni25Ta25 Shape Memory Alloys." Physics of Metals and Metallography 123, no. 14 (2022): 1427-1435.	
6. Physical and thermophysical properties of a commercial Ni-Ti shape memory alloy strip; Gabriel Florian, Augusta Raluca Gabor, Cristian-Andi Nicolae, **Andrei Rotaru**, Cornelia A. Marinescu, Gabriela Iacobescu, Nicolae Stănică, Sonia Degeratu, Oana Gîngu, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry,*** 138(3), 1841-1851, 2019	**5 citări**
1. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 2. Chekotu, Josiah Cherian, Russell Goodall, David Kinahan, and Dermot Brabazon. "Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process parameters." Materials & Design 218 (2022): 110715. 3. Yun, Min Ju, Yeon Hyang Sim, Dong Yoon Lee, and Seung I. Cha. "Automated shape-transformable self-solar-tracking tessellated crystalline Si solar cells using in-situ shape-memory-alloy actuation." Scientific Reports 12, no. 1 (2022): 1597. 4. Ke, Jun, Lan Chen, Jin Gao, and Zhen-yu Wu. "Improving the dynamic stiffness and vibration characteristics of 3D orthogonal woven by implanting SMA instead of a warp yarn." Composite Structures (2023): 116637. 5. Yun, Min Ju, Yeon Hyang Sim, Dong Yoon Lee, and Seung I. Cha. "Self-shape-transformable 3D tessellated bifacial crystalline Si solar cell module enabling extra energy gain through intervals and an integrated actuator." Sustainable Energy & Fuels 6, no. 1 (2022): 89-97.	**ISI**
7. Ti-based composite materials with enhanced thermal and mechanical properties; Cristina Ileana Pascu, Stefan Gheorghe, **Andrei Rotaru**, Claudiu Nicolicescu, Nicoleta Cioatera, Adrian Sorin Rosca, Daniela Sarbu, Petre Rotaru. ***Ceramics International***, 46 (18, Part B), 29358-29372, 2020	**2 citări**
1. Alazwari, Mashhour A., Essam B. Moustafa, Ahmed B. Khoshaim, and Mohammed A. Taha. "Mechanical and wear evolution of in situ synthesized Ti–Cu alloy matrix hybrid composite reinforced by low-cost activated carbon and silica fume waste ceramic for industrial applications." *Journal of Materials Research and Technology* 22 (2023): 2284-2296. 2. Dwivedi, Shashi Prakash, and Shubham Sharma. "Recovery of Al2O3/Al powder from aluminum dross to utilize as reinforcement along with graphene in the synthesis of aluminum-based composite." *Particulate Science and Technology* (2023): 1-13.	**ISI**
8. Induced-Hydrophilicity and in vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment; Luminita Nicoleta Dumitrescu, Patricia Neacsu, Madalina G. Necula, Anca Bonciu, Valentina Marascu, Anisoara Cimpean, Antoniu Moldovan, **Andrei Rotaru**, Valentina Dinca, Maria Dinescu. ***Molecules,*** 25(3), 582, 2020	**9 citări**
1. S. Singh, N. Shauloff, C.P. Sharma, R. Shimoni, C.J. Arnusch, R. Jelinek. Carbon Dot-Polymer Nanoporous Membrane for Recyclable Sunlight-Sterilized Facemasks. Journal of Colloid and Interface Science. 592, 342-348, 2021. 2. Papež, Nikola, Tatiana Pisarenko, Erik Ščasnovič, Dinara Sobola, Ştefan Ţălu, Rashid Dallaev, Klára Částková, and Petr Sedlák. "A brief introduction and current state of polyvinylidene fluoride as an energy harvester." Coatings 12, no. 10 (2022): 1429. 3. Caciandone, Mara, Adelina-Gabriela Niculescu, Aurelian Radu Roșu, Valentina Grumezescu, Irina Negut, Alina Maria Holban, Ovidiu Oprea et al. "PEG-functionalized magnetite nanoparticles for modulation of microbial biofilms on voice prosthesis." Antibiotics 11, no. 1 (2022): 39. 4. Behera, C., N. Pradhan, P. R. Das, and R. N. P. Choudhary. "Development of self-standing, lightweight and flexible polymer-cobalt ferrite nanocomposites for field sensor." Journal of Polymer Research 29, no. 2 (2022): 65. 5. Hu, Dan, Zhong Zhang, Wenjun Li, Xiaoxiao Qin, Runguang Zhang, Li Yuan, and Xingbin Yang. "Promoting adsorption performance and mechanical strength in composite porous gel film." International Journal of Biological Macromolecules 223 (2022): 1115-1125.	**ISI**

6. Tu, Zhengdong, Feng Han, Zhuang Zhu, Qifan Yu, Changjiang Liu, Yu Bao, Bin Li, and Feng Zhou. "Sustained release of basic fibroblast growth factor in micro/nanofibrous scaffolds promotes annulus fibrosus regeneration." Acta Biomaterialia (2023). 7. Wang, Xinlin, Rudong Zhu, Xiangkui Wang, Fengjiao Liu, Yan Gao, Rongfeng Guan, and Yalei Chen. "Flexible and washable CDs@ Eu-MOFs/PVDF Multifunctional thin films as highly selective sensing for nitrobenzene and 4-Nitrophenol." Inorganic Chemistry Communications (2023): 110423. 8. Chen, Wen-Cheng, Bo-Yuan Huang, Ssu-Meng Huang, Shih-Ming Liu, Kai-Chi Chang, Chia-Ling Ko, and Chih-Lung Lin. "In vitro evaluation of electrospun polyvinylidene fluoride hybrid nanoparticles as direct piezoelectric membranes for guided bone regeneration." Biomaterials Advances 144 (2023): 213228. 9. Vasnev, V. A., G. D. Markova, V. V. Istratov, and O. V. Baranov. "Hydrophilic Modified Siloxane Coatings." Polymer Science, Series B 64, no. 2 (2022): 137-141.	
9. Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N'-donor linkers; Vasile Lozovan, Victor C. Kravtsov, Elena Gorincioi, **Andrei Rotaru**, Eduard B. Coropceanu, Nikita Siminel, Marina S. Fonari. ***Polyhedron,*** 180, 114411, 2020.	**5 citări**
1. G. Lee, J.H. Yoon, K. Kwon, H. Han, J.H. Song, K.S. Lim, W.R. Lee. Dimensional selective syntheses of metal–organic frameworks using mixed organic ligands. Inorganica Chimica Acta. DOI:10.1016/j.ica.2020.119739, Volume 513, 1 December 2020, 119739. 2. Mahsa Armaghan, Ezzat Najafi, Tim-Oliver Knedel, Walter Frank, Christoph Janiak. Synthesis and Single Crystal Structure Characterization of Dinuclear and Polymeric Mixed-ligand Coordination Compounds of Zinc(II) and Cadmium(II) with the Bridging Ligand 1,2-Bis(pyridin-4-ylmethylene)hydrazine. DOI:10.1002/zaac.202000357. Zeitschrift fur Anorganishe und Allgemeine Chemie, 646, 1861–1868 (2020) 3. Chakraborty, Gouri, In-Hyeok Park, Raghavender Medishetty, and Jagadese J. Vittal. "Two-dimensional metal-organic framework materials: Synthesis, structures, properties and applications." Chemical Reviews 121, no. 7 (2021): 3751-3891. 4. Zhao, Jinyu, Jiaxi Yuan, Ziyu Fang, Senhe Huang, Zhenying Chen, Feng Qiu, Chenbao Lu, Jinhui Zhu, and Xiaodong Zhuang. "One-dimensional coordination polymers based on metal–nitrogen linkages." Coordination Chemistry Reviews 471 (2022): 214735. 5. Wekesa, Amon K., George S. Nyamato, Chrispin O. Kowenje, and Stephen O. Ojwach. "Coordination behavior and binding properties of 2, 6-pyridinedimethanol with Cu (II), Zn (II), and Cd (II) cations." Inorganica Chimica Acta 539 (2022): 121042.	**ISI**
10. Edible vegetable oils enriched with carotenoids extracted from by-products of sea buckthorn (*Hippophae rhamnoides ssp.* sinensis): the investigation of some characteristic properties, oxidative stability and the effect on thermal behaviour; Alexandru Radu Corbu, **Andrei Rotaru**, Violeta Nour. ***Journal of Thermal Analysis and Calorimetry***, 142 (2), 735–747, 2020.	**14 citări**
1. PP Valerio, JM Frias, EC Cren. Thermal degradation kinetics of carotenoids: Acrocomia aculeata oil in the context of nutraceutical food and bioprocess technology. Journal of Thermal Analysis and Calorimetry. 2021;143:2983–2994. 2. Tafadzwa Kaseke, Umezuruike Linus Opara, Olaniyi Amos Fawole. Quality and Antioxidant Properties of Cold-Pressed Oil from Blanched and Microwave-Pretreated Pomegranate Seed. Foods. 2021, 10(4), 712. 3. M. Sharma, R. Bahat. Extraction of Carotenoids from Pumpkin Peel and Pulp: Comparison between Innovative Green Extraction Technologies (Ultrasonic and Microwave-Assisted Extractions Using Corn Oil). Foods. 2021; 10(4):787. 4. Chen, Aruhan, Xiaowei Feng, Byambasuren Dorjsuren, Chimedragchaa Chimedtseren, Tsend-Ayush Damda, and Chunhong Zhang. "Traditional food, modern food and nutritional value of Sea buckthorn (Hippophae rhamnoides L.): A review." Journal of Future Foods 3, no. 3 (2023): 191-205. 5. Szabo, Katalin, Bernadette-Emőke Teleky, Floricuta Ranga, Ioana Roman, Hattab Khaoula, Emna Boudaya, Amina Ben Ltaief, Wael Aouani, Mangkorn Thiamrat, and Dan Cristian Vodnar. "Carotenoid recovery from tomato processing by-products through green chemistry." Molecules 27, no. 12 (2022): 3771. 6. Sharma, Minaxi, Shehzad Hussain, Tatsiana Shalima, Riina Aav, and Rajeev Bhat. "Valorization of seabuckthorn pomace to obtain bioactive carotenoids: An innovative approach of using green extraction techniques (ultrasonic and microwave-assisted extractions) synergized with green solvents (edible oils)." Industrial Crops and Products 175 (2022): 114257. 7. Bhimjiyani, Vidhi H., Venu Babu Borugadda, Satyanarayan Naik, and Ajay K. Dalai. "Enrichment of flaxseed (Linum usitatissimum) oil with carotenoids of sea buckthorn pomace via ultrasound-assisted	**ISI**

extraction technique: Enrichment of flaxseed oil with sea buckthorn." Current Research in Food Science 4 (2021): 478-488. 8. Agyare, Anita Nkansah, Chang Hong An, and Qi Liang. "Goji berry (Lycium Barbarum L.) carotenoids enrichment through 'green'extraction method improves oxidative stability and maintains fatty acids of yak ghee with microwave heating and storage." Foods 11, no. 3 (2022): 369. 9. Ramos-Escudero, Fernando, Raquel B. Gomez-Coca, Ana María Muñoz, and María del Carmen Pérez-Camino. "Oil from three aguaje morphotypes (Mauritia flexuosa Lf) extracted by supercritical fluid with CO2: Chemical composition and chromatic properties." Frontiers in Sustainable Food Systems 6 (2022): 39. 10. Sousa, Gabriela, Mariana I. Alves, Marta Neves, Carla Tecelão, and Suzana Ferreira-Dias. "Enrichment of sunflower oil with ultrasound-assisted extracted bioactive compounds from Crithmum maritimum L." Foods 11, no. 3 (2022): 439. 11. Tsai, Shu-Yao, Wen-Jhen Sun, Yao-Chien Wu, and Chun-Ping Lin. "Peanut skin extracts applied on shelf life of button mushrooms and antioxidant effect of sacha inchi oil via isothermal calorimetry." Journal of Thermal Analysis and Calorimetry 148, no. 4 (2023): 1629-1638. 12. Aleksieiev, Andrii, Marcin Masłowski, Magdalena Efenberger-Szmechtyk, and Krzysztof Strzelec. "The Influence of Freeze-Dried Alcohol-Water Extracts from Common Yarrow (Achillea millefolium L.) and German Chamomile (Matricaria chamomilla L.) on the Properties of Elastomer Vulcanizates." International Journal of Molecular Sciences 23, no. 23 (2022): 15048. 13. Kaseke, T., U. L. Opara, and O. A. Fawole. "Quality and Antioxidant Properties of Cold-Pressed Oil from Blanched and Microwave-Pretreated Pomegranate Seed. Foods 2021, 10, 712." Plant Extracts (2021): 53. 14. Linares, Guillermo, and Meliza Lindsay Rojas. "Ultrasound-Assisted Extraction of Natural Pigments From Food Processing By-Products: A Review." Frontiers in Nutrition 9 (2022).	
11. Orthorhombic YBCO-123 ceramic oxide superconductor: structural, resistive and thermal properties; Ana Harabor, Petre Rotaru, Novac Adrian Harabor, Petr Nozar, **Andrei Rotaru**. ***Ceramics International,*** 45 (2) Part B, 2899-2907, 2019	**15 citări**
1. Y. Slimani, M.A. Almessiere, E. Hannachi, A. Manikandan, R. Algarni, A. Baykal, F. Ben Azzouz. Flux pinning properties of YBCO added by WO3 nanoparticles. Journal of Alloys and Compounds. 810 (2019) 151884. 2. E.Y. El-Yakoubi, A. Nafidi, K. Khallouq, A. Aboulkassim, M. Bellioua. Isovalent Substitutions and the Number of Oxygen Atoms by Chains Control of Structure and Superconductivity in High Tc Superconductors. International Journal of Engineering Research & Technology (IJERT), 8 (2019) 486. 3. O. Ozturk, ARA Nefrow, F. Bulut, H. Ada, M.B. Turkoz, G. Yldirim. Effect of Co/Cu partial replacement on fundamental features of Y-123 ceramics. Journal of Materials Science: Materials in Electronics. DOI:10.1007/s10854-020-0281-2; 31:7630–7641 (2020). 4. SE Jasim, MA Jusoh, MA Kamarudin, F Esa, R Nazlan. Effect of Processing Parameters on the Morphology, Particulate, and Superconducting Properties of Electrospun YBCO Nanostructures. Journal of Nano Research. 63, 89-97, 63:89-97 (2020). 5. S. Safran, F. Bulut, A.R.A. Nefrow, H. Ada, O. Ozturk. Characterization of the CoFe2O4/Cu displacement effect in the Y123 superconductor matrix on critical properties. Journal of Materials Science: Materials in Electronics. 31, 20578–20588 (2020). 6. Abdelaziz Labrag, Mustapha Bghour, Ahmed Abou El Hassan, Habiba El Hamidi, Ahmed Taoufik, Said Laasri. The activation energy U (T, B) in high temperature superconductor. European Physical Journal - Applied Physics. 92, 20601 (2020). 7. Hannachi, E., M. I. Sayyed, Aljawhara H. Almuqrin, and K. G. Mahmoud. "Study of the structure and radiation-protective properties of yttrium barium copper oxide ceramic doped with different oxides." Journal of Alloys and Compounds 885 (2021): 161142. 8. Gadzhimagomedov, S. Kh, D. K. Palchaev, Zh Kh Murlieva, M. Kh Rabadanov, M. Yu Presnyakov, E. V. Yastremsky, N. S. Shabanov, R. M. Emirov, and A. E. Rabadanova. "YBCO nanostructured ceramics: Relationship between doping level and temperature coefficient of electrical resistance." Journal of Physics and Chemistry of Solids 168 (2022): 110811. 9. Dahiya, Mamta, Rohit Kumar, Dheeraj Kumar, Dinesh Kumar, and Neeraj Khare. "Enhanced flux pinning properties of NaNbO3 nanorods added YBCO composite superconductor." Journal of Alloys and Compounds 883 (2021): 160840. 10. Shen, Lei, Yuanjie Wang, Jie Cheng, Feng Xu, and Xingyi Zhang. "Origin of micro-scale local hotspots during the microwave processing of the YBCO conductive ceramics." Scripta Materialia 216 (2022): 114762. 11. Lenaz, Davide, Stefano Giovanoni, Francesco Parrino, Danilo Bersani, and Filippo Parisi. "Maturation	**ISI**

stages of glauconites: A combined electron microprobe, Raman, and thermogravimetric study." Ceramics International 49, no. 9 (2023): 14927-14933. 12. Kumar, Gaurav, Mamta Dahiya, Rohit Kumar, Dinesh Kumar, and Neeraj Khare. "Enhanced critical current density and pinning properties in KNbO3 nanoparticles added YBCO superconductor." Applied Physics A 129, no. 4 (2023): 291. 13. Ozturk, O., A. R. A. Nefrow, F. Bulut, S. Kurnaz, and S. Safran. "Comparison of the Dopant Effect and Sample Preparation Method on Y-123 Superconductors." Journal of Superconductivity and Novel Magnetism 34 (2021): 2821-2832. 14. Gao, Ping. "Optical and Electrochemical Properties of Silver-doped Yttrium Barium Copper Oxide as High-Temperature Superconducting Materials." INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE 16, no. 6 (2021). 15. Toumvong, Wipawadee, Pornnita Chitcharoentaweechoke, and Nuchnapa Tangboriboon. "Bio-dielectric based on superconductors yttrium calcium barium copper oxide (YCaBaCuO) from eggshell as calcium oxide source via sol-gel process." Materials Science-Poland 39, no. 3 (2021): 305-318.	
12. Structural, electrical and relaxor properties of Sc-In solid solution in tetragonal tungsten bronze ceramics; **Andrei Rotaru**, Finlay D. Morrison. ***Ceramics International***, 45 (2) Part B, 2710-2718, 2019	**3 citări**
1. JB Felder, W Wong-Ng, RA Qabbani, RS Roth, BH Toby, JY Chan. Structural Investigation of the "Tripled-Tetragonal-Tungsten-Bronze" Phases Sr2M10-xO27-y (M= Nb, Ta). Polyhedron, DOI:10.1016/j.poly.2019.06.003, 2019. Volume: 170 Pages: 359-363. 2. S Wu, C Sun, X Yang, C Hu, L Liu, L Fang. Effect of strontium substitution on the structure and dielectric properties of unfilled tungsten bronze Ba4-xSrxSmFe0. 5Nb9. 5O30 ceramics. Ceramics International. Volume 46, Issue 7, May 2020, Pages 9240-9248. 3. E. Gil-González, A. Perejón, P.E. Sánchez-Jiménez, D. Roman-Gonzalez, L.A. Perez-Maqueda. Control of experimental conditions in reaction flash sintering of complex stoichiometry ceramics. Ceramics International, Volume 46, Issue 18, Part B, 15 December 2020, Pages 29413-29420.	**ISI**
13. Tartrazine: physical, thermal and biophysical properties of the most widely employed synthetic yellow food-coloring azo dye; M. Leulescu, **A. Rotaru**, I. Pălărie, A. Moanţă, N. Cioateră, M. Popescu, E. Morîntale, V.M. Bubulică MV, G. Florian, A. Hărăbor, P. Rotaru P. ***Journal of Thermal Analysis and Calorimetry***. 2018;134:209–31.	**22 citări**
1. M Wang, M Cui, W Liu, X Liu. Highly dispersed conductive polypyrrole hydrogels as sensitive sensor for simultaneous determination of ascorbic acid, dopamine and uric acid. Journal of Electroanalytical Chemistry, Volume 832, 1 January 2019, Pages 174-181. 2. S. Tiwari, M.K. Deb. Modified silver nanoparticles-enhanced single drop microextraction of tartrazine in food samples coupled with diffuse reflectance Fourier transform infrared spectroscopic analysis. Analytical Methods. Anal. Methods, 2019,11, 3552-3562. 3. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2020) 140:613–623. 4. F. Parisi, G. Lazzara, M. Merli, S. Milioto, F. Princivale, L. Sciascia. Simultaneous Removal and Recovery of Metal Ions and Dyes from Wastewater through Montmorillonite Clay Mineral. Nanomaterials 9(12), 2019, 1699. 5. F. Casanova Monteiro, E. Hass Caetano, P. de Jesus Cubas, A. Vedam Pupin, J. F. Haas Leandro Monteiro, S.T. Fujiwara. Bi2Fe4O9 in pellet form is an alternative in the wastewater treatment process. Journal of Environmental Science and Health Part A. 55 (6), 677-685, 2020. 6. A. Alcantara-Cobos, E. Gutiérrez-Segura, M. Solache-Ríos, A. Amaya-Chávez, D.A. Solís-Casados. Tartrazine removal by ZnO nanoparticles and a zeolite-ZnO nanoparticles composite and the phytotoxicity of ZnO nanoparticles. Microporous and Mesoporous Materials. 302, 1 August 2020, 110212. 7. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 8. Januário, Eduarda Freitas Diogo, Taynara Basso Vidovix, Natália de Camargo Lima Beluci, Rebecca Manesco Paixão, Luiz Henrique Biscaia Ribeiro da Silva, Natália Cândido Homem, Rosangela Bergamasco, and Angélica Marquetotti Salcedo Vieira. "Advanced graphene oxide-based membranes as a potential alternative for dyes removal: a review." Science of The Total Environment 789 (2021): 147957. 9. Alsantali, Reem I., Qandeel Alam Raja, Abdullah YA Alzahrani, Amina Sadiq, Nafeesa Naeem, Ehsan Ullah Mughal, Munirah M. Al-Rooqi, Nizar El Guesmi, Ziad Moussa, and Saleh A. Ahmed. "Miscellaneous azo dyes: A comprehensive review on recent advancements in biological and industrial applications." Dyes and Pigments 199 (2022): 110050.	**ISI**

10. Zheng, Yuhong, Shuduan Mao, Jiangwei Zhu, Li Fu, Najmeh Zare, and Fatemeh Karimi. "Current status of electrochemical detection of sunset yellow based on bibliometrics." Food and Chemical Toxicology 164 (2022): 113019. 11. Rigueto, Cesar Vinicius Toniciolli, Mateus Torres Nazari, Marieli Rosseto, Lillian Avila Massuda, Ingridy Alessandretti, Jeferson Steffanello Piccin, and Aline Dettmer. "Emerging contaminants adsorption by beads from chromium (III) tanned leather waste recovered gelatin." Journal of Molecular Liquids 330 (2021): 115638. 12. Teixeira, Valéria Maria Costa, Roberta França Gomes da Silva, Odinei Hess Gonçalves, Carla Pereira, Lillian Barros, Isabel CFR Ferreira, Evandro Bona, and Fernanda Vitória Leimann. "Chemometric approaches to evaluate the substitution of synthetic food dyes by natural compounds: The case of nanoencapsulated curcumin, spirulina, and hibiscus extracts." LWT 154 (2022): 112786. 13. Pramanik, Ashim, Koushik Mondal, Subrata Biswas, Sudip Kumar Pal, Sujit Kumar Ghosh, Tapan Ganguly, and Pathik Kumbhakar. "Sticky note paper-based plasmonic random laser for artifact-free imaging." Applied Physics B 128, no. 9 (2022): 167. 14. Joshi, Ritu, Insuck Baek, Rahul Joshi, Moon S. Kim, and Byoung-Kwan Cho. "Detection of fabricated eggs using Fourier transform infrared (FT-IR) spectroscopy coupled with multivariate classification techniques." Infrared Physics & Technology 123 (2022): 104163. 15. Marin, Nicoleta Mirela, and Ioana Stanculescu. "Application of amberlite IRA 402 resin adsorption and laccase treatment for acid blue 113 removal from aqueous media." Polymers 13, no. 22 (2021): 3991. 16. Kołodziejczak-Radzimska, Agnieszka, Michał Bielejewski, Joanna Zembrzuska, Filip Ciesielczyk, Teofil Jesionowski, and Long D. Nghiem. "Exploring the functionality of an active ZrF-laccase biocatalyst towards tartrazine decolorization." Environmental Technology & Innovation (2023): 103201. 17. Singh, Harpreet, Anuj Goyal, Sanjeev K. Bhardwaj, Madhu Khatri, and Neha Bhardwaj. "Highly robust UiO-66@ PVDF metal–organic framework beads for tartrazine removal from aqueous solutions." Materials Science and Engineering: B 288 (2023): 116165. 18. Hossain, Md Shamim, Gobindo Kumar Paul, Shafi Mahmud, Md Abu Saleh, Md Salah Uddin, Amit Kumar Dutta, Apurba Kumar Roy et al. "Mixed dye degradation by Bacillus pseudomycoides and Acinetobacter haemolyticus isolated from industrial effluents: A combined affirmation with wetlab and in silico studies." Arabian Journal of Chemistry 15, no. 9 (2022): 104078. 19. Fennouh, Radia, Oumessaâd Benturki, Asma Mokhati, Asma Benturki, Badreddine Belhamdi, and Mohamed Trari. "Preparation and characterization of highly mesoporous activated carbon from Ziziphus Spina-Christi for tartrazine adsorption from a simulated effluent." Biomass Conversion and Biorefinery (2023): 1-17. 20. Hossain, Md Shamim, Gobindo Kumar Paul, Shafi Mahmud, Md Abu Saleh, Md Salah Uddin, Amit Kumar Dutta, Apurba Kumar Roy, Ananda Kumar, Kumar Paul, and Sudhangshu Kumar Biswas. "industrial effluents: A combined affirmation with wetlab and in silico studies." Arabian Journal of Chemistry 15 (2022): 104078. 21. Torras, Núria, Jon Zabalo, Eduardo Abril, Albane Carré, María García-Díaz, and Elena Martínez. "A simple DLP-bioprinting strategy produces cell-laden crypt-villous structures for an advanced 3D gut model." bioRxiv (2022): 2022-02. 22. Gholipour, Arsalan, and Shahrzad Rahmani. "The synthesis of fluorescent carbon quantum dots for tartrazine detection in food: a novel one-step microwave heating approach." Fullerenes, Nanotubes and Carbon Nanostructures (2023): 1-9. 22. Suri, Akansha, and Vinita Khandegar. "Exclusion of Pharmaceutical Compounds by UA Assisted EC Process." Journal of Hazardous, Toxic, and Radioactive Waste 25, no. 2 (2021): 04021004.	
14. Hydroxyapatite–alendronate composite systems for biocompatible materials; Johny Neamtu, Maria-Viorica Bubulica, **Andrei Rotaru**, Catalin Ducu, Oana Elena Balosache, Valentin Costel Manda, Adina Turcu-Stiolica, Claudiu Nicolicescu, Razvan Melinte, Mariana Popescu, Octavian Croitoru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (2), 1567–1582, 2017	**6 citări**
1. J da Silva Buriti, MEV Barreto, KO Santos, MVL Fook. Thermal, morphological, spectroscopic and biological study of chitosan, hydroxyapatite and wollastonite biocomposites. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-018-7498-y. 2018. 2. TJ Levingstone, S Herbaj, NJ Dunne. Calcium Phosphate Nanoparticles for Therapeutic Applications in Bone Regeneration. Nanomaterials, 9, (2019), 1570. 3. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 4. Pylostomou, Athanasia, Oznur Demir-Oguz, and Dagnija Loca. "Calcium phosphate bone cements as local drug delivery systems for bone cancer treatment." Biomaterials Advances (2023): 213367.	**ISI**

5. Zhao, Yi, Yanhui Qiu, Zixuan Fang, Fangfang Pu, Ruixue Sun, Kezheng Chen, and Yuanzheng Tang. "Preparation and characterization of Sr-substituted hydroxyapatite/reduced graphene oxide 3D scaffold as drug carrier for alendronate sodium delivery." Ceramics International 48, no. 24 (2022): 36601-36608. 6. Mostafa, Sahar Ibrahim, Marwa S. Ismail, Hagag A. Mohammed, Manal F. Osman, and Noha A. Elwassefy. "Magnetic hydroxyapatite bisphosphonate-based composites: a bone-targeting nanosystem." Emergent Materials (2022): 1-12.	
15. Thermokinetic study of CODA azoic liquid crystal and thin films deposition by matrix-assisted pulsed laser evaporation; **Andrei Rotaru**, Anca Moanță, Cătălin Constantinescu, Marius Dumitru, Horia Octavian Manolea, Andreea Andrei, Maria Dinescu; ***Journal of Thermal Analysis and Calorimetry,*** 128 (1), 89-105, 2017.	**3 citări**
1. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4 2. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 3. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020).	**ISI**
16. Thermal behaviour of CODA azoic dye liquid crystal and nanostructuring by drop cast and spin coating techniques; **Andrei Rotaru**, Marius Dumitru; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 21-32, 2017.	**8 citări**
1. Nesrin Şener, Mahmut Gür, M. Serdar Çavuş, Merve Zurnaci, İzzet Şener. Synthesis, Characterization, and Theoretical Calculation of New Azo Dyes Derived from [1,5-a]Pyrimidine-5-one Having Solvatochromic Properties. Journal of Heterocyclic Chemistry. DOI: 10.1002/jhet.3497, 2019. 2. A. Milia, M. Bruno, G. Cavallaro, G. Lazzara, S. Milioto. Adsorption isotherms and thermal behavior of hybrids based on quercetin and inorganic fillers. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08257-x, 2019. 3. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4. 4. F. Parisi, G. Lazzara, M. Merli, S. Milioto, F. Princivale, L. Sciascia. Simultaneous Removal and Recovery of Metal Ions and Dyes from Wastewater through Montmorillonite Clay Mineral. Nanomaterials 9(12), 2019, 1699. 5. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 6. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 7. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 8. Korkmaz, Burak, Ahmet Kırsoy, Mustafa Okutan, Yeşim Gürsel, and Bahire Filiz Senkal. "Synthesis and investigation of new cholesteryl carbamate-based liquid crystals." Journal of Materials Science: Materials in Electronics 33, no. 15 (2022): 12224-12238.	**ISI**
17. Thermal and kinetic study of hexagonal boric acid *vs.* triclinic boric acid in air flow; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry,*** 127 (1), 755-763, 2017.	**9 citări**
1. Siavash Aghili, Masoud Panjepour, Mahmood Meratian, Kinetic analysis of formation of boron trioxide from thermal decomposition of boric acid under non-isothermal conditions; Journal of Thermal Analysis and Calorimetry, 131(1), 2443–2455, 2018. 2. C Huber, S Setoodeh Jahromy, C Jordan, M Schreiner, M Harasek, A Werner, F Winter. Boric Acid: A High Potential Candidate for Thermochemical Energy Storage. Energies, 12, 1086. 2019. 3. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 4. Clemens Huber, Saman Setoodeh Jahromy, Felix Birkelbach, Jakob Weber, Christian Jordan, Manfred Schreiner, Michael Harasek, Franz Winter. The multistep decomposition of boric acid. Energy Science and Engineering. DOI:10.1002/ese3.622, (2020). 5. R. Ghelich, M.R. Jahannama, H. Abdizadeh, F.S. Torknik, M.R. Vaezi. Hafnium diboride nonwoven mats with porosity/morphology tuned via different heat treatments. Materials Chemistry and Physics. DOI:10.1016/j.matchemphys.2020.122876. (2020).	**ISI**

6. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 7. Larsson, Elin, Olivier Donzel-Gargand, Jannica Heinrichs, and Staffan Jacobson. "Tribofilm formation of a boric acid fuel additive–Material characterization; challenges and insights." Tribology International 171 (2022): 107541. 8. Schmatz-Engert, Patrick, Felix Herold, Silvio Heinschke, Lea Totzauer, Kathrin Hofmann, Alfons Drochner, Anke Weidenkaff et al. "Oxygen-Functionalized Boron Nitride for the Oxidative Dehydrogenation of Propane–The Case for Supported Liquid Phase Catalysis." ChemCatChem 14, no. 8 (2022): e202200068. 9. Aghili, Siavash, Masoud Panjepour, and Mahmood Meratian. "The kinetics and mechanism of B 2 O 3 formation from the chemically-synthesized HBO 2 under non-isothermal conditions." Reaction Kinetics, Mechanisms and Catalysis (2021): 1-17.	
18. Microstructural and high-temperature impedance spectroscopy study of $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In) relaxor dielectric ceramics with tetragonal tungsten bronze structure; **Andrei Rotaru**, Finlay D. Morrison; ***Ceramics International,*** 42, 11810-11821, 2016	**5 citări**
1. Jalaja, M. A., and Soma Dutta. "Complex Impedance Spectroscopy studies to unravel electrical properties and processes in Al+ 3-modified PLZT." Journal of Materials Science: Materials in Electronics (2022): 1-11. 2. Vandana Kuldeep, Oroosa Subohi, Rajnish Kurchania, Investigations on dielectric, electrical and ferroelectric properties of xBaTiO3-(1 − x) NiFe2O4 multiferroic composite ceramics. Applied Physics A, 125 (2019) 631. 3. E. Gil-González, A. Perejón, P.E. Sánchez-Jiménez, D. Roman-Gonzalez, L.A. Perez-Maqueda. Control of experimental conditions in reaction flash sintering of complex stoichiometry ceramics. Ceramics International, DOI:10.1016/j.ceramint.2020.05.091, (2020). 4. FM Casallas-Caicedo, E Vera Lopez, J Roa-Rojas. Impedance spectroscopy study of electrical response and correlation with structural properties in the La2SrFe2CoO9 triple complex perovskite. Physica B: Condensed Matter. 412865, 2021, DOI: 10.1016/j.physb.2021.412865 5. Bendahhou, Amine, Pascal Marchet, Soufian El Barkany, and Mohamed Abou-Salama. "Structural and impedance spectroscopic study of Zn-substituted Ba5CaTi2Nb8O30 tetragonal tungsten bronze ceramics." Journal of Alloys and Compounds 882 (2021): 160716.	**ISI**
19. Discriminating within the kinetic models for heterogeneous processes of materials by employing a combined procedure under TKS-SP 2.0 software; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry,*** 126 (2), 919-932, 2016	**3 citări**
1. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017. 2. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 3. Silva, Carolina RG, Silvia L. Fialho, Jamile Barbosa, Bárbara CR Araújo, Guilherme Carneiro, Rita CO Sebastião, Wagner N. Mussel, Maria I. Yoshida, and Maria B. de Freitas-Marques. "Compatibility by a nonisothermal kinetic study of azathioprine associated with usual excipients in the product quality review process." Journal of the Brazilian Chemical Society 32 (2021): 638-651.	**ISI**
20. Elastic and anelastic relaxations accompanying relaxor dielectric behaviour of $Ba_6GaNb_9O_{30}$ tetragonal tungsten bronze from resonant ultrasound spectroscopy; **Andrei Rotaru**, Jason A. Schiemer, Michael A. Carpenter; ***Journal of Thermal Analysis and Calorimetry,*** 124, 571-583, 2016	**5 citări**
1. F. Silva Bellucci, F. C. Lobatode Almeida, D. Lincon da Silva Agostini, M. A. Lima Nobre, A. Tabone Paschoalini, A. Eloizo Job. Evolution of thermal properties of natural rubber nanocomposites functionalized by nickel–zinc ferrite and potassium strontium niobate nanopowders. Journal of Thermal Analysis and Calorimetry. 126, 3, 1397–1406, 2016. 2. Sun, X. F., Li, P. F., Liao, W. Q., Wang, Z., Gao, J., Ye, H. Y., & Zhang, Y. (2017). Notable Broad Dielectric Relaxation and Highly Efficient Red Photoluminescence in a Perovskite-Type Compound:(N-Methylpyrrolidinium) MnCl3. *Inorganic Chemistry*. 3. G Linyu, FJ Romero, V Franco, JM Martín-Olalla, MC Gallardo, EKH Salje, Y Zhou, O. Aktas. Correlations between elastic, calorimetric, and polar properties of ferroelectric PbSc0. 5Ta0. 5O3 (PST). Appl. Phys. Lett. 115(16), (2019), 161904. 4. Aktas, O., M. Kangama, G. Linyu, X. Ding, M. A. Carpenter, and E. K. H. Salje. "Probing the dynamic	**ISI**

response of ferroelectric and ferroelastic materials by simultaneous detection of elastic and piezoelectric properties." Journal of Alloys and Compounds 903 (2022): 163857. 5. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483.	
21. Effect of local A-site strain on dipole stability in $A_6GaNb_9O_{30}$ (A = Ba, Sr, Ca) tetragonal tungsten bronze relaxor dielectrics. Andrew J. Miller, **Andrei Rotaru**, Donna C. Arnold, Finlay D. Morrison; ***Dalton Transactions***, 44, 10738-10745, 2015	**15 citări**
1. Velayutham, T. S., Salim, N. I. F., Gan, W. C., & Majid, W. A. Effect of cerium addition on the microstructure, electrical and relaxor behavior of Sr0.5Ba0.5Nb2O6 ceramics. Journal of Alloys and Compounds, 666, 334-340, 2016. 2. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 3. Hajlaoui, T., Josse, M., Harnagea, C., & Pignolet, A. Tetragonal tungsten bronze Ba2 EuFeNb 4 O 15–based composite thin films multiferroic at room temperature. *Materials Research Bulletin*, *86*, 30-37, 2017. 4. Huang, Z., Teramura, K., Asakura, H., Hosokawa, S., & Tanaka, T. (2017). Flux method fabrication of potassium rare-earth tantalates for CO 2 photoreduction using H2O as an electron donor. Catalysis Today, DOI: 10.1016/j.cattod.2017.03.043, 2017. 5. Hassen, A. B., Rhouma, F. I. H., Dhahri, J., Abdelmoula, N., Taibi, K., Belmabrouk, H., & Zaidi, M. (2017). Relaxor ceramic with a high relative permittivity and low dielectric loss in Cr doped Ca0. 67La0. 22TiO3. *Journal of Alloys and Compounds*, *726*, 378-387. 6. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 7. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483. 8. Y. C. Ao, Y. Shi, C. Z. Zhao, Y. Huang, J. Q. Shi, K. R. Zhou, Q. J. Zhou, Z. P. Li, T. Wei. Effects of B-Site Substitution on Up-Conversion Luminescence and Ferroelectric Properties in Er3+-Doped Strontium Barium Niobate. J. Electron, Mater., DOI:10.1007/s11664-018-6751-2. 2018. 9. Z. Raddaoui, S. El Kossi, J. Dhahri, N. Abdelmoula, K. Taibi. Study of diffuse phase transition and relaxor ferroelectric behavior of $Ba_{0.97}Bi_{0.02}Ti_{0.9}Zr_{0.05}Nb_{0.04}O_3$ ceramic. 9, 2412-2425. 2019. 10. C Li, YH Huang, JS Hong, XQ Liu, J Li, YJ Wu. Magnetoelectric effect in Sm-substituted tungsten bronze structure Ba4(SmxLa1-x)2Fe2Nb8O30 ceramics. Journal of Alloys and Compounds. 786; 126-133. 2019 11. YN Li, D Zhao, RJ Zhang, FF Li, LY Shi, QX Yao, XY Han, XQCui. A new diphosphate Ba2LiGa(P2O7)(2): synthesis, crystal structure and Eu3+-activated fluorescence performance. DALTON TRANSACTIONS Volume: 48 Issue: 36 Pages: 13780-13788 Published: SEP 28 2019 12. S Xu, Z Deng, S Shen, L Wei, Z Yangman. Structural and electrical effects of Ag substitution in tungsten bronze Sr2AgxNa1− xNb5O15 ceramics. Ceramics International. DOI: 10.1016/j.ceramint.2020.02.199, 2020. 13. J. Massoudi, M. Smari, K. Nouri, E. Dhahri, K. Khirouni, S. Bertaina, L. Bessais, El Kebir Hlil, Magnetic and spectroscopic properties of Ni-Zn- Al ferrite spinel: from the nanoscale to microscale. RSC Advances, 10, 34556, 2020. 14. Fernandez, Abel, Megha Acharya, Han-Gyeol Lee, Jesse Schimpf, Yizhe Jiang, Djamila Lou, Zishen Tian, and Lane W. Martin. "Thin-film Ferroelectrics." Advanced Materials 34, no. 30 (2022): 2108841. 15. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." Journal of Alloys and Compounds 929 (2022): 167314.	**ISI**
22. Vogel-Fulcher analysis of relaxor dielectrics with the tetragonal tungsten bronze structure $Ba_6MNb_9O_{30}$ (M = Ga, Sc, In); **Andrei Rotaru**, Finlay D. Morrison; ***Journal of Thermal Analysis and Calorimetry,*** 120, 2, 1249-1259, 2015	**16 citări**

1. WB Feng, XL Zhu, XQ Liu, XM Chen. "Crystal structure, ferroelectricity and polar order in a Ba4R2Zr4Nb6O30 (R= La, Nd, Sm) tetragonal tungsten bronze new system." *Journal of Materials Chemistry C* 5.16 (2017): 4009-4016. 2. J. Gardner, F.D. Morrison. Manipulation of polar order in the "empty" tetragonal tungsten bronzes: Ba4-xSrxDy0.67□1.33Nb10O30, x = 0, 0.25, 0.5, 1, 2, 3. Applied Physics Letters, 109, 7, 072901, 2016. 3. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 4. Duran, A., Ostos, C., Arnache, O., Siqueiros, J. M., & García-Guaderrama, M. (2017). Multiferroic properties of the $Y_2BiFe_5O_{12}$ garnet. *Journal of Applied Physics*, *122*(13), 134101. 5. CM Kavanagh, P Lightfoot, FD Morrison. Superexchange-mediated negative thermal expansion in Nd-doped $BiFeO_3$. *J. Mater. Chem. C, 2018,6, 3260-3270* 6. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 7. Wang Chen, Ting Ting Gao, Xiao Li Zhu, and Xiang Ming Chen. Structural and dielectric characteristics of Ba3Ln3Ti5Nb5O30 (Ln = La, Nd, Sm) filled tungsten bronze ceramics. Journal of Applied Physics 123, 124106 (2018); doi: 10.1063/1.4989454. 8. D Bochenek, P Niemiec, R Skulski, M Adamczyk, D Brzezińska. Electrophysical properties of the multicomponent PBZT-type ceramics doped by Sn^{4+}. DOI: 10.1007/s10832-018-0142-1. (2018) 9. Feng, Wenbin, Sidi Long, Yi Wan, and Dunpu Zhang. "Effect of B-site Zr and Hf substitution on ferroelectric polar order for tetragonal tungsten bronze ceramic." Journal of Asian Ceramic Societies 10, no. 2 (2022): 396-404. 10. Z Guo, S Wu, C Hu, L Liu, L Fang. Preparation and Dielectric Properties of Ba4-xSm2Fe2-xNb8+xO30 Tungsten Bronze Ceramics with an Adjustable Structure that Changes from Filled to Unfilled. Materials Research Bulletin. DOI: 10.1016/j.materresbull.2019.02.003, 2019. 11. BR Surapaneni, P Viswarupachary, DM Potukuchi. Structure, morphology, infra-red and dielectric investigations in Er+ 3 doped nano phased lithium-barium-strontium-sodium niobates. Materials Research Express, DOI:10.1088/2053-1591/ab0e5c, 2019. 12. BX Wang, H Zheng, Y Ren, M Krogstad, JF Mitchell, D Phelan. Single Crystal Growth of Relaxor Ferroelectric Ba2PrFeNb4O15 by the Optical Floating Zone Method. Cryst. Growth Des. (2019) DOI: 10.1021/acs.cgd.9b01147. 13. Elena Buixaderas, Martin Kempa, Šarūnas Svirskas, Christelle Kadlec, Viktor Bovtun, Maxim Savinov, Marek Paściak, and Jan Dec, Dynamics of mesoscopic polarization in the uniaxial tetragonal tungsten bronze (SrxBa1−x)Nb2O6, PHYSICAL REVIEW B, 100 (2019) 184113. 14. S.A. Riquelme, Koduri Ramam, Dielectric and piezoelectric properties of lead free BZT-BCT/PVDF flexible composites for electronic applications. Materials Research Express. 2019. DOI: 10.1088/2053-1591/ab522c. 15. Jianhang Shi, Mark E. Johnson, Mingwan Zhang, Pu-Xian Gao. Antiferromagnetic and dielectric behaviour in polycrystalline GdFe0.5Cr0.5O3 thin film. APL Mater. 8, 031106 (2020); https://doi.org/10.1063/1.5142177 16. de Beauvoir, Thomas Hérisson, Tom Delage, and Michaël Josse. "Ferroelectric to relaxor crossover in Li solid solutions derived from Ba2Nd□ 2FeNb4O15." Ceramics International 47, no. 8 (2021): 10658-10664.	**ISI**
23. Thermal behaviour and thin film deposition by MAPLE technique of functional polymeric materials with potential use in optoelectronics; Catalin Constantinescu, **Andrei Rotaru**, Anca Nedelcea, Maria Dinescu; ***Materials Science in Semiconductor Processing,*** 30, 242-249, 2015	**11 citări**
1. Lv, P., Zhao, Y., Liu, F., Li, G., Dai, X., Ji, X., Qiu, X. (2016). Fabrication of Polyaniline/Polyimide Composite Fibers with Electrically Conductive Properties. Applied Surface Science, (2016), 367, 335-341, 2016. 2. LI, Lei; ZHANG, Zunju. Biosynthesis of Gold Nanoparticles Using Green Alga Pithophora oedogoniawith Their Electrochemical Performance for Determining Carbendazim in Soil. International Journal of Electrochemical Science, 11: 4550-4559, 2016. 3. Dina S. Ahmed, Gamal A. El-Hiti, Hanan Ibraheem, Mohammad Hayal Alotaibi, Mustafa Abdallh, Ahmed A. Ahmed, Mustafa Ismael, Emad Yousif. Enhancement of Photostabilization of Poly(vinyl chloride) Doped with Sulfadiazine Tin Complexes. Journal of Vinyl & Additive Technology. 2019. DOI: 10.1002/vnl.21752. 4. Dinari, M., & Asadi, P. Thermal, mechanical and optical transport properties of nanocomposite materials based on triethoxysilane-terminated polyimide and TiO 2 nanoparticles. *RSC Advances*, *5*(75), 60745-	**ISI**

60753, 2015. 5. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504 6. Darwish, Abdalla M., et al. "Polymer nano-composite films with inorganic upconversion phosphor and electro-optic additives made by concurrent triple-beam matrix assisted and direct pulsed laser deposition." *Composites Part B: Engineering* 109 (2017): 82-90. 7. Dinari, M., Nabiyan, A., Ensafi, A. A., & Jafari-Asl, M. (2015). Polybenzimidazole and polybenzimidazole/MoS 2 hybrids as an active nitrogen sites: hydrogen generation application. *RSC Advances*, *5*(122), 100996-101005. 8. F.M. Ali, F. Maiz. Structural, optical and AFM characterization of PVA:La^{3+} polymer films. Physica B: Condensed Matter. 530(1), 19–23, (2018) 9. G. Santhosh, B.S. Madhukar, G.P. Nayaka, B. Siddaramaiah, Luminescent down-shifting aluminosilicate nanocomposites: an efficient UVA shielding material for photovoltaics. Journal of Materials Science: Materials in Electronics. DOI: 10.1007/s10854-018-8658-3 (2018) 10. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 11. S Palsaniya, HB Nemade, AK Dasmahapatra. Heterostructured Layer Growth of Polyaniline by Vacuum Thermal Evaporation and Fabrication of Thin-Film Capacitors. The Journal of Physical Chemistry C. (2019), 123, 45, 27959-27968.	
24. Thermal behavior and antimicrobial assay of some new zinc(II) 2-aminobenzoate complex compounds with bioactive ligands; Annamaria Krajnikova, **Andrei Rotaru**, Katarina Gyoryova, Horia Octavian Manolea, Katarina Homzova, Jana Kovarova, Daniela Hudecova; ***Journal of Thermal Analysis and Calorimetry,*** 120, 1, 73-78, 2015	**7 citări**
1. Homzová, K., Győryová, K., Hudecová, D., Koman, M., Melník, M., & Kovářová, J. Synthesis, thermal, spectral, and biological properties of zinc (II) 4-aminobenzoate complexes. Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6184-9, 2017. 2. Soliman, Madiha H., Gehad G. Mohamed, and Galal H. Elgemeie. "Novel synthesis of 2-imino-2H-chromene-3-carboximide metal complexes." Journal of Thermal Analysis and Calorimetry 123, 1, 583-594, 2016. 3. Acar, N., Atakol, O., Sopacı, Ş. B., Duman, D. C., Svoboda, I., & Öz, S. The investigations of thermal behavior, kinetic analysis, and biological activity of trinuclear complexes prepared ONNO-type Schiff bases with nitrito and nitrato μ-bridges. *Journal of Thermal Analysis and Calorimetry*, 1-19. 4. P. Košicka, K. Gyoryova, L.Smolko, R. Gyepes, D. Hudecova. Synthesis, crystal structures, spectral, thermal and antimicrobial properties of new Zn(II) 5-iodo- and 5-bromosalicylates. *Journal of Molecular Structure*, 1155; 232-238, 2018. 5. Romana Smolkova, Lukas Smolko, Katarina Gyoryova, Katarina Homzova, Peter Tomcik, Daniela Hudecova, Lenka Findorakova. New zinc (II) 3-aminobenzoates with bioactive ligands: synthesis, thermal, spectral and antimicrobial properties. Thermochimica Acta. DOI:10.1016/j.tca.2018.09.004 (2018). 6. A. Atakol, I. Svoboda, H. Dal, O. Atakol, H. Nazir. New Energetic Silver(I) Complexes With Nnn Type Pyrazolylpyridine Ligands And Oxidizing Anions. Journal of Molecular Structure. DOI: 10.1016/j.molstruc.2020.128001. (2020). 7. Gürpınar, K., Tuncer, Y. G., Sopacı, Ş. B., Akay, M. A., Nazır, H., Svoboda, I., ... & İnal, E. K. (2021). Some Nitrogen Rich Energetic Material Synthesis by Nucleophilic Substitution Reaction from Polynitro Aromatic Compounds. Acta Chimica Slovenica, 68(4), 930-944.	**ISI**
25. Towards novel multiferroic & magnetoelectric materials: dipole stability in tetragonal tungsten bronzes. **Andrei Rotaru**, Andrew J. Miller, Donna C. Arnold, Finlay D. Morrison; ***Philosophical Transactions of the Royal Society A***, 372, 20120451, 2014	**16 citări**
1. Hu, C., Sun, Z., Zhu, Q., Lu, F., Li, C., Liu, L., & Fang, L. Relaxor behaviour and ferroelectric properties of a new Ba4SmFe0.5Nb9.5O30 tungsten bronze ceramic. Ceramics International, 42(13), 14999-15004, 2016. 2. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba4Pr2Fe2Nb8O30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016. 3. Gardner, J., Yu, F., Tang, C., Kockelmann, W., Zhou, W., & Morrison, F. D. (2016). Relaxor-to-ferroelectric crossover and disruption of polar order in 'empty'tetragonal tungsten bronzes. Chemistry of Materials, 28 (13), pp 4616–4627, 2016. 4. Hu C; Sun Z; Zhu Q; Fang L; L Laijun; Dielectric and ferroelectric properties of unfilled tungsten bronze KBa3RNb10O30 ceramics. JOURNAL OF MATERIALS SCIENCE-MATERIALS IN	**ISI**

ELECTRONICS 26 (1) 515-520 (2015). 5. Hu, C., Zhu, Q., Sun, Z., Guo, Z., Liu, L., & Fang, L. (2017). Dielectric properties of unfilled tetragonal tungsten bronze Ba4PrFe0.5Nb9.5O30 ceramics. *Journal of Wuhan University of Technology-Mater. Sci. Ed.*, *32*(4), 904-909. 6. Afqir, M., Tachafine, A., Fasquelle, D., Elaatmani, M., Carru, J. C., Zegzouti, A., & Daoud, M. (2017). Dielectric properties of SrBi 1.8 RE 0.2 Nb 2 O 9 (RE= Yb, Tm, Tb, Gd, Eu, Sm and Ce) ceramics. *Solid State Sciences*. 7. Zhuo Wang, Yu-Jia Xiao, Tian Wang, Qiao-Li Wu. Enhanced dielectric properties of tungsten bronze Ba6FeNb9O30 prepared by microwave hydrothermal method. Journal of Alloys and Compounds. DOI:10.1016/j.jallcom.2017.12.324 (2018). 8. Z Guo, Q Zhu, S Wu, C Hu, L Liu, L Fang. Effect of annealing atmosphere on the structure and dielectric properties of unfilled tungsten bronze ceramics Ba4PrFe0.5Nb9.5O30. Ceramics International. DOI:10.1016/j.ceramint.2018.01.196 (2018). 9. Zhuo Wang, Yu Jia, Xiao Tian, Wang Qiao, Li Wu, Enhanced single-phased multiferroic properties of Ca-doped filled tetragonal tungsten bronze Ba4Sm2Fe2Nb8O30 ceramics. Journal of Materials Science: Materials in Electronics. DOI:10.1007/s10854-018-8718-8, 2018. 10. C Li, YH Huang, JS Hong, XQ Liu, J Li, YJ Wu. Magnetoelectric effect in Sm-substituted tungsten bronze structure Ba4(SmxLa1-x)2Fe2Nb8O30 ceramics. Journal of Alloys and Compounds. 786; 126-133. 2019 11. Bunin, M. A., O. A. Bunina, and K. S. Chumachenko. "The surface piezoresponse of tetragonal tungsten bronze oxides with different ordering of cations in A-sublattice." In Journal of Physics: Conference Series, vol. 1967, no. 1, p. 012016. IOP Publishing, 2021. 12. ZJ Yang, XQ Liu, XL Zhu, XM Chen. Crossover from normal to relaxor ferroelectric in Sr0.25Ba0.75(Nb1−xTax)2O6 ceramics with tungsten bronze structure. Appl. Phys. Lett. 117, 122902 (2020). DOI:10.1063/5.0020853. 13. NK Jaladi, KS Rao, H Workineh, JA Kiran, S Nagaman. Synthesis, Structural and Dielectric Studies on SrBi2-xGdxNb2O9 Lead Free Ceramics. Journal of Advanced Ceramics. 10.21203/rs.3.rs-91046/v1. 14. Liu, Hongbo, and Brahim Dkhil. "Origin of the crossover from ferroelectric to relaxor in tetragonal tungsten bronzes." Journal of Alloys and Compounds 929 (2022): 167314. 15. Nagamani, S., J. Nitchal Kiran, B. Siva Basivi Reddy, B. Nageswara Rao, J. Anindhya Kiran, and K. Sambasiva Rao. "Dielectric relaxation in layer-structured SrBi2− x Gd x Nb2O9 (x= 0.0, 0.4, 0.6, and 0.8) lead-free ceramics." Journal of Materials Science: Materials in Electronics 33, no. 16 (2022): 12997-13011. 16. Guo, Xiaoying, Xiao Zheng, Zuheng Jin, Changzheng Hu, Laijun Liu, and Liang Fang. "Changing the crystal phase structure and dielectric properties of Sr4− xBaxSmFe0. 5Nb9. 5O30 ceramics by adjusting the vacancy." Journal of Alloys and Compounds 924 (2022): 166550.	
26. Thermal analysis and kinetic study of Petroşani bituminous coal from Romania in comparison with a sample of Ural bituminous coal; **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry*,** 110, 3, 1283-1291, 2012	**21 citări**
1. Zhang, Hong-Xi. "Determination of Aromatic Structures of Bituminous Coal Using Sequential Oxidation." Industrial & Engineering Chemistry Research 55.10: 2798-2805, 2016. 2. Hetmańczyk, Łukasz, and Joanna Hetmańczyk. "Phase transition, thermal dissociation and dynamics of NH 3 ligands in [Cd (NH 3) 4](ReO 4) 2." Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 164: 24-32, 2016. 3. Wang, H., Zhang, J., Wang, G., Xu, R., Zhang, P., Liu, S., & Song, T. Characteristics and kinetic analysis of co-combustion of brown coal and anthracite. Journal of Thermal Analysis and Calorimetry,Volume 126, 2, 447–454, 2016. 4. Hetmańczyk, Łukasz, and Joanna Hetmańczyk. "Phase transition and dynamics of NH 3 ligands in [Zn (NH 3) 4](ReO 4) 2." Vibrational Spectroscopy, 86, 40-49, 2016. 5. Jiang, X., Chen, D., Ma, Z., & Yan, J. (2017). Models for the combustion of single solid fuel particles in fluidized beds: A review. *Renewable and Sustainable Energy Reviews*, *68*, 410-431. 6. Fan, DM ; Zhu, ZP; Na, YJ; Lu, QG. ”Thermogravimetric analysis of gasification reactivity of coal chars with steam and CO2 at moderate temperatures”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 599-607, (2013); 7. Akbarzadeh, Hossein; Chalaturnyk, Richard J. Structural changes in coal at elevated temperature pertinent to underground coal gasification: A review. INTERNATIONAL JOURNAL OF COAL GEOLOGY. 131, 126-146, (2014) 8. Hetmanczyk, L; Hetmanczyk; Comparison of vibrational dynamics, thermal behaviour, and phase transition in [Ni(NH3)4](ReO4)2 and [Ni(NH3)6](ReO4)2, JOURNAL OF THERMAL ANALYSIS AND	**ISI**

CALORIMETRY 119 (2) 1415-1428 (2015). 9. Zhong, X., Li, L., Chen, Y., Dou, G., & Xin, H. Changes in thermal kinetics characteristics during low-temperature oxidation of low-ranking coals under lean-oxygen conditions. Energy & Fuels, (2017). 10. Naktiyok, J., Bayrakçeken, H., Özer, A. K., & Gülaboğlu, M. Ş. Investigation of combustion kinetics of Umutbaca-lignite by thermal analysis technique. *Journal of Thermal Analysis and Calorimetry*, DOI: 10.1007/s10973-017-6149-z (2017). 11. Epshtein, S. A., Kossovich, E. L., Kaminskii, V. A., Durov, N. M., Dobryakova, N. N. Solid fossil fuels thermal decomposition features in air and argon. Fuel, 199, 145-156. (2017) 12. Makomaski G, Zielinski J, Thermal properties of group components of the pitch–PET compositions, DOI: 10.1007/s10973-017-6310-8, (2017). 13. Deng, J., Li, Q., Xiao, Y., & Wen, H. (2017). The effect of oxygen concentration on the non-isothermal combustion of coal. Thermochimica Acta. DOI: 10.1016/j.tca.2017.04.009. 2017. 14. Yu, L., Zhang, T., Su, H., Jing, H., Liu, R., & Zhang, Q. (2017). Influence of heat treatment on dynamic and physical properties of anthracite coal. Géotechnique Letters, 1-7 (2017). 15. J. Naktiyok. The determination of the self-heating temperature of coal by means of TGA analysis. Energy & Fuels, DOI: 10.1021/acs.energyfuels.7b02296, 2018 16. Qing-Wei Li, Yang Xiao, Cai-Ping Wang, Jun Deng, Chi-Min Shu. Thermokinetic characteristics of coal spontaneous combustion based on thermogravimetric analysis. Fuel. 250, 235-244, 2019. 17. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 18. LF Ren, QW Li, J Deng, X Yang, L Ma, WF Wang. Inhibiting effect of CO2 on the oxidative combustion thermodynamics of coal. RSC Advances, 2019, 9, 41126-41134. 19. D.V. Voronin, E. Ivanov, P. Gushchin, R. Fakhrullin, V. Vinokurov. Clay Composites for Thermal Energy Storage: A Review. Molecules, 25(7), 1504; (2020). DOI:10.3390/molecules25071504. 20. Zhou, Liang, Ruxiang Qin, Guanglong Dai, Mingyun Tang, and Jinwei Qiu. "Effect of Weakly Acidic and Weakly Alkaline Water Immersion on the Crystal Structure and Oxidative Thermodynamic Properties of Long-Flame Coal." Combustion Science and Technology (2022): 1-18. 21. Liu, Ning, Lulu Sun, Haishan Wang, Qiming Huang, Quanlin Shi, and Meiru Yao. "Effects of Liquid Nitrogen Freezing on Secondary Oxidation and Spontaneous Combustion of Coal." Available at SSRN 4110682.	
27. Origin and stability of dipolar response in a family of tetragonal tungsten bronze relaxors; **Andrei Rotaru**, Donna C. Arnold, *Aziz* Daoud-Aladine, Finlay D. Morrison; ***Physical Review B***, 83, 18, 184302, 2011	**34 citări**
1. Zhu, XL; Li, K; Rafiq, MA; Liu, XQ; Chen, XM. ”Relaxor nature in lead-free Sr5LaTi3Nb7O30 tetragonal tungsten bronze ceramics”, JOURNAL OF APPLIED PHYSICS, 114, 124102, (2013); 2. Zhang, ST; Yuan, GL; Chen, J; Gu, ZB; Yang, B; Yin, J; Cao, WW. ”Structural Evolving Sequence and Porous Ba6Zr2Nb8O30 Ferroelectric Ceramics with Ultrahigh Breakdown Field and Zero Strain”, JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 96, 555-560, (2013); 3. Yao, YB; Mak, CL. ” Effects of Ca-dopant on the pyroelectric, piezoelectric and dielectric properties of (Sr0.6Ba0.4)(4)Na2Nb10O30 ceramics” JOURNAL OF ALLOYS AND COMPOUNDS”, 544, 87-93, (2012). 4. Shvartsman, VV; Lupascu, DC. ” Lead-Free Relaxor Ferroelectrics” JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 95, 1-26, (2012); 5. Hu, C; Hou, L; Fang, L; Liu, L. ”Preparation and dielectric properties of unfilled tungsten bronze ferroelectrics Ba4RETiNb9O30”, JOURNAL OF ALLOYS AND COMPOUNDS, 581, 547-552, (2013); 6. Lin, Kun; Rong, Yangchun; Wu, Hui; Huang, Qingzhen; You, Li; Ren, Yang; Fan, Longlong; Chen, Jun; Xing, Xianran. Ordered Structure and Thermal Expansion in Tungsten Bronze Pb2K0.5Li0.5Nb5O15. INORGANIC CHEMISTRY. 53 (17), 9174-9180, (2014). 7. Gardner, Jonathan; Morrison, Finlay D. A-site size effect in a family of unfilled ferroelectric tetragonal tungsten bronzes: Ba4R0.67Nb10O30 (R = La, Nd, Sm, Gd, Dy and Y). DALTON TRANSACTIONS. 43 (30), 11687-11695, (2014). 8. Albino, M.; Veber, P.; Pechev, S.; Labrugere, C.; Velazquez, M.; Maglione, M.; Josse, M. Growth and Characterization of Ba(2)LnFeNb(4)O(15) (Ln = Pr, Nd, Sm, Eu) Relaxor Single Crystals. CRYSTAL GROWTH & DESIGN. 14 (2), 500-512, (2014). 9. Zhu, Xiao Li; Li, Kun; Chen, Xiang Ming. Ferroelectric Transition and Low-Temperature Dielectric Relaxations in Filled Tungsten Bronzes. JOURNAL OF THE AMERICAN CERAMIC SOCIETY. 97 (2), 329-338, (2014). 10. Yang, B; Yang, P; Wei, LL; Wang, ZM; Yang, ZY; Chao, XL; Yang, ZP; Structural modulation and	**ISI**

electrical properties in ferroelectric niobates (Ca0.28Ba0.72)(2.5-0.5x)KxNb5O15 (0.0 <= x <= 0.6) ceramics. CERAMICS INTERNATIONAL 41 (10) 13988-13997 (2015).
11. Jun, BE; Jeong, JH; Choi, BC; Hwang, YH; Relaxation and phase-transition characteristics of relaxor ferroelectric potassium lithium niobate. JOURNAL OF THE KOREAN PHYSICAL SOCIETY 66 (11) 1736-1743 (2015).
12. Kim, J-Y; Kim; Y-I; Local structure and dielectric behavior of tetragonal tungsten bronzes beta-SrTa2O6 and beta '-SrTa2O6. JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 123 (1437) 419-422 (2015).
13. J. Gardner, F.D. Morrison. Manipulation of polar order in the "empty" tetragonal tungsten bronzes: Ba4-xSrxDy0.67□1.33Nb10O30, x = 0, 0.25, 0.5, 1, 2, 3. Applied Physics Letters, 109, 7, 072901, 2016.
14. Gao, T. T., Chen, W., Zhu, X. N., Zhu, X. L., & Chen, X. M. Dielectric and ferroelectric characteristics of Ba 4 Pr 2 Fe 2 Nb 8 O 30 tungsten bronze ceramics. Materials Chemistry and Physics, 181, 47-53, 2016.
15. Hu, C., Sun, Z., Zhu, Q., Lu, F., Li, C., Liu, L., & Fang, L. Relaxor behavior and ferroelectric properties of a new Ba 4 SmFe 0.5 Nb 9.5 O 30 tungsten bronze ceramic. Ceramics International, 42(13), 14999-15004, 2016.
16. Neqali, A., Belboukhari, A., Bensaid, H., El Bouari, A., Bih, L., Alimoussa, A., Habouti, S., Mezzane, D. Diffuse phase transition and impedance spectroscopy analysis of Ba2. 15− x Na0. 7+ x Nb5− x W x O15 (x= 0.25) ferroelectric ceramic. Applied Physics A, 122(625), 1-8, 2016.
17. Gardner, J., Yu, F., Tang, C., Kockelmann, W., Zhou, W., & Morrison, F. D. (2016). Relaxor-to-ferroelectric crossover and disruption of polar order in 'empty'tetragonal tungsten bronzes. Chemistry of Materials, 28 (13), pp 4616–4627, 2016.
18. WB Feng, XL Zhu, XQ Liu, XM Chen. "Crystal structure, ferroelectricity and polar order in a Ba4R2Zr4Nb6O30 (R= La, Nd, Sm) tetragonal tungsten bronze new system." *Journal of Materials Chemistry C* 5.16 (2017): 4009-4016.
19. Aftabuzzaman, M., Helal, M. A., Paszkowski, R., Dec, J., Kleemann, W., & Kojima, S. (2017). Electric field and aging effects of uniaxial ferroelectrics SrxBa1− xNb2O6 probed by Brillouin scattering. *Scientific Reports*, (2017); 7: 11615.
20. CM Kavanagh, P Lightfoot, FD Morrison. Superexchange-mediated negative thermal expansion in Nd-doped $BiFeO_3$. *J. Mater. Chem. C, 2018,6, 3260-3270*
21. Zhuo Wang, Yu-Jia Xiao, Tian Wang, Qiao-Li Wu. Enhanced dielectric properties of tungsten bronze Ba6FeNb9O30 prepared by microwave hydrothermal method. Journal of Alloys and Compounds. DOI:10.1016/j.jallcom.2017.12.324 (2018).
22. Wang Chen, Ting Ting Gao, Xiao Li Zhu, and Xiang Ming Chen. Structural and dielectric characteristics of Ba3Ln3Ti5Nb5O30 (Ln = La, Nd, Sm) filled tungsten bronze ceramics. Journal of Applied Physics 123, 124106 (2018); doi: 10.1063/1.4989454.
23. Kun Li, Xiao Li Zhu, Xiao Qiang Liu, Xiao Ma, Mao Sen Fu, Jan Kroupa, Stanislav Kamba & Xiang Ming Chen, Electric-field-induced phase transition and pinched P–E hysteresis loops in Pb-free ferroelectrics with a tungsten bronze structure. NPG Asia Materials. DOI:10.1038/s41427-018-0013-x (2018).
24. C Hu, Z Guo, S Wu, Z Sun, C Li, L Liu, L Fang. High-temperature dielectric relaxation mechanism in Ba4SmFe0. 5Nb9. 5O30 tungsten bronze ceramics. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.109. (2018)
25. Laura J. Vera Stimpson, Jessica M. Powell, Gavin B. G. Stenning, Marek Jura, and Donna C. Arnold. Spin-glass behaviour in KxRu4-yNiyO8 hollandite materials. Phys. Rev. B 98, 174429, 2018.
26. L. Liu, Y. Wang, Y. Wang, R. Lv. Low-temperature dielectric anomalies in KSr2Nb5O15 ceramics with tetragonal tungsten bronze structure: The effect of microstructure. Journal of Alloys and Compounds 815 (2020) 152397.
27. BX Wang, H Zheng, Y Ren, M Krogstad, JF Mitchell, D Phelan. Single Crystal Growth of Relaxor Ferroelectric Ba2PrFeNb4O15 by the Optical Floating Zone Method. Cryst. Growth Des. (2019) DOI: 10.1021/acs.cgd.9b01147.
28. L Cao, Y Yuan, B Tang, E Li, S Zhang. Excellent thermal stability, high efficiency and high power density of (Sr0. 7Ba0. 3) 5LaNb7Ti3O30–based tungsten bronze ceramics. Journal of the European Ceramic Society. DOI:10.1016/j.jeurceramsoc.2020.01.022, (2020).
29. S Chu, K Lin, T Yang, C Yu, Y Cao, Y Zhang, Y Sun, Z Li, X Jiang, Z Lin, Q Li, J Chen, K Kato, H Wu, Q Huang, X Xing. Large Nonlinear Optical Effect in Tungsten Bronze Structures via Li/Na Cross-Substitutions. Chemical Communications, DOI:10.1039/D0CC03479G. (2020).
30. Y Qian, J Wang, SU Asif, J Xie, W Hu. Origins of dielectric relaxations in AgNb7O18 ceramic. Ceramics International, DOI:10.1016/j.ceramint.2020.06.078. (2020).
31. Cao, Lei, Ying Yuan, Xiangjun Meng, Enzhu Li, and Bin Tang. "Ferroelectric-relaxor crossover and

energy storage properties in Sr2NaNb5O15-based tungsten bronze ceramics." ACS Applied Materials & Interfaces 14, no. 7 (2022): 9318-9329. 32. Krayzman, Victor, Alexeï Bosak, Helen Y. Playford, Bruce Ravel, and Igor Levin. "Incommensurate Modulation and Competing Ferroelectric/Antiferroelectric Modes in Tetragonal Tungsten Bronzes." Chemistry of Materials 34, no. 22 (2022): 9989-10002. 33. Es-soufi, Hicham, M. I. Sayyed, Aljawhara H. Almuqrin, Raman Rajesh, Alan Rogerio Ferreira Lima, Hssain Bih, and Lahcen Bih. "Crystallographic, Structural, and Electrical Properties of W6+ Substituted with Mo6+ in Crystalline Phases such as TTB Structure." Crystals 13, no. 3 (2023): 483. 34. He, Qiuwei, Siegbert Schmid, Xue Chen, Biaolin Peng, ChunChun Li, Changzheng Hu, Laijun Liu, and Manuel Hinterstein. "Structure and relaxor ferroelectric behavior of the novel tungsten bronze type ceramic Sr5BiTi3Nb7O30." Journal of Applied Physics 131, no. 16 (2022): 164102.	
28. DSC study on hyaluronan hydration and dehydration; Jiri Kucerik, Alena Prusova, **Andrei Rotaru**, Karol Flimel, Jiri Janacek, Pelegrino Conte; ***Thermochimica Acta*,** 523, 1-2, 245-249, 2011	**20 citări**
1. Vecchio, S; Materazzi, S; Wo, LW; Curtis, SD. "Thermoanalytical study of imidazole-substituted coordination compounds: Cu(II)- and Zn(II)-complexes of bis(1-methylimidazol-2-yl)ketone", THERMOCHIMICA ACTA , 568, 31-37; 2013; 2. Mlcoch, T ; Kucerik, J, "Hydration and drying of various polysaccharides studied using DSC", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 1177-1185 (2013); 3. Panagopoulou, A; Molina, JV; Kyritsis, A; Pradas, MM; Lluch, AV; Ferrer, GG; Pissis, P. " Glass Transition and Water Dynamics in Hyaluronic Acid Hydrogels", FOOD BIOPHYSICS, 8, 192-202, (2013); 4. Liu, LM; Wang, BH; Gao, Y; Bai, TC. " Chitosan fibers enhanced gellan gum hydrogels with superior mechanical properties and water-holding capacity", CARBOHYDRATE POLYMERS, 97, 152-158, (2013); 5. Prusova, A; Vergeldt, FJ; Kucerik, J. " Influence of water content and drying on the physical structure of native hyaluronan", CARBOHYDRATE POLYMERS, 95, 515-521, (2013); 6. Kucerik, J; Prusova, A; Smejkalova, Velebny, V. " Response to "A note on An alternative DSC approach to study hydration of hyaluronan"", CARBOHYDRATE POLYMERS, 98, 1561-1564, (2013); 7. Cavallaro, G; Lazzara, G; Milioto, S; " Sustainable nanocomposites based on halloysite nanotubes and pectin/polyethylene glycol blend", POLYMER DEGRADATION AND STABILITY, Online first, DOI: 10.1016.polymdegradstab.2013.09.012, (2013). 8. Kucerik, J; Schwarz, J; Jager, A; Bertmer, M; Schaumann, GE. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014). 9. Mondek J; Pekar M; CARBOHYDRATE POLYMERS 129 168–174 (2015). 10. Raja IS; Fathima NN; INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES 72 437-444 (2015). 11. DelGiorno, K. E., Carlson, M., Osgood, R., Provenzano, P. P., Brockenbough, J. S., Thompson, C. B., ... & Hingorani, S. R. Interstitial pressure and vascular collapse in pancreas cancer: fluids and solids, measurement and meaning. Cancer cell, 26(1), 16, (2014). 12. Wang N., Wang YY., Chen XB., Bai TC. The physical-chemistry properties of poly(vinyl alcohol)/chitosan composite hydrogels. Scientia Sinica chimica. 44. 1591-1598. (2014). 13. Bertolino, V., Cavallaro, G., Lazzara, G., Merli, M., Milioto, S., Parisi, F., & Sciascia, L. Effect of the biopolymer charge and the nanoclay morphology on nanocomposite materials. Industrial & Engineering Chemistry Research, 55(27), 7373-7380, 2016. 14. Huerta-Angeles, G., Brandejsová, M., Kulhánek, J., Pavlík, V., Šmejkalová, D., Vágnerová, H., & Velebný, V. Linolenic acid grafted hyaluronan: Process development, structural characterization, biological assessing, and stability studies. Carbohydrate polymers, 152, 815-824, 2016. 15. Ma, Y., Bai, T., & Wang, F. The physical and chemical properties of the polyvinylalcohol/polyvinylpyrrolidone/hydroxyapatite composite hydrogel. Materials Science and Engineering: C, 59, 948-957, 16. - 18. 10. 2013. 16. Vecchio Ciprioti, S., Catauro, M., Bollino, F., & Tuffi, R. Thermal behavior and dehydration kinetic study of SiO2/PEG hybrid gel glasses. Polymer Engineering & Science. 2017. 17. Wei Guo, Lishan Zhao, Xin Gao, Zexian Cao, Qiang Wang. Accurate quantification of hydration number for polyethylene glycol molecules*. Chinese Phys. B; 27 055101; 2018. 18. Makvandi, Pooyan, Francesca Della Sala, Mario di Gennaro, Nicola Solimando, Maurizio Pagliuca, and Assunta Borzacchiello. "A Hyaluronic Acid-Based Formulation with Simultaneous Local Drug Delivery and Antioxidant Ability for Active Viscosupplementation." ACS omega 7, no. 12 (2022): 10039-	**ISI**

10048. 19. Balaji, A., S. Kannan, R. Purushothaman, S. Mohanakannan, A. Haja Maideen, J. Swaminathan, B. Karthikeyan, and P. Premkumar. "Banana fiber and particle-reinforced epoxy biocomposites: mechanical, water absorption, and thermal properties investigation." Biomass Conversion and Biorefinery (2022): 1-11. 20. Prabhu, P., B. Karthikeyan, R. Ravi Raja Malar Vannan, and A. Balaji. "Mechanical, thermal and morphological analysis of hybrid natural and glass fiber-reinforced hybrid resin nanocomposites." Biomass Conversion and Biorefinery (2022): 1-15.	
29. Matrix assisted pulsed laser evaporation of zinc benzoate for ZnO thin films and non-isothermal decomposition kinetics; **Andrei Rotaru**, Catalin Constantinescu, Anca Mândruleanu, Petre Rotaru, Antoniu Moldovan, Katarina Győryová, Maria Dinescu, Vladimir Balek; ***Thermochimica Acta*,** 498, 1-2, 81-91, 2010	**26 citări**
1. Sunil, AC; Langner, EHG; Marais, C; Bezuidenhoudt, BCB. ” Thermo-analytical determination of intermediates in the copper catalysed rearrangement of o-toluic acid to meta-cresol”, CATALYSIS SCIENCE & TECHNOLOGY, 3, 2227-2233, (2013); 2. Alan, I; Kriza, A; Badea, M; Stanica, N; Olar, R. ” Synthesis and characterisation of Co(II), Ni(II), Zn(II) and Cd(II) complexes with 5-bromo-N,N '-bis-(salicylidene)-o-tolidine”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 483-490, (2013); 3. Sapkal, RT; Shinde, SS; Sapkal, DM; Babar, AR; Shinde, VV; Jalkute, CB; Moholkar, AV; Rajpure, KY; Sonawane, KD; Patil, PS;Bhosale, CH. ” Photoelectrocatalytic activity of spray deposited ZnO thin films against E. coli Davis”, MATERIALS RESEARCH INNOVATIONS, 16, 417-424, (2012); 4. Bijini, BR; Prasanna, S; Deepa, M; Nair, CMK; Babu, KR. ”Crystal structure, spectral, thermal and dielectric studies of a new zinc benzoate single crystal”, SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, 97, 1002-1006, (2012); 5. Flores-Carrasco, G., Carrillo-López, J., Martínez-Martínez, R., Espinosa-Torres, N. D., Muñoz, L., Milosevic, O., & Rabanal, M. E. (2016). Optical and morpho-structural properties of ZnO nanostructured particles synthesized at low temperature via air-assisted USP method. Applied Physics A, 122(173), 1-10, 2016. 6. Flores-Carrasco, G., Muñoz-Fernandez, L., Alcántara-Iniesta, S., Soto-Cruz, B. S., Milosevic, O., & Rabanal, M. E. (2017). Structural and functional properties of ZnO thin films grown on Si substrates by air assisted USP method from non-aqueous solutions at low-temperature. *Advanced Powder Technology*. 7. Khairy, M., Amin, N. H., & Kamal, R. Optical and kinetics of thermal decomposition of PMMA/ZnO nanocomposites. *Journal of Thermal Analysis and Calorimetry*, 1-14., 2017. 8. Dazhi Chen, Yuxuan Liu, Yong J. Yuan. Investigation of Formaldehyde Adsorption on ZnO (0001) Surface by Density Functional Theory. Russian Journal of Physical Chemistry A 94(2):423-428; (2020). DOI: 10.1134/S0036024420020089	**ISI**
30. Computational thermal and kinetic analysis. Complete standard procedure to evaluate the kinetic triplet form non-isothermal data; **Andrei Rotaru**, Mihai Goșa; ***Journal of Thermal Analysis and Calorimetry*,** 97, 2, 421-426, 2009	**25 citări**
1. Espinola, JGD; Martins, EPS; Aguiar, FP; Silva, HRM; Fonseca, MG; Arakaki, LNH; Teotnio, EES. ”Thermal decomposition study of bismuth (III) trichloride complex with 1,10-phenanthroline as the ligand”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 106, 601-606, (2011); 2. Jelic, D; Tomic-Tucakovic, B; Mentus, S. ”A kinetic study of copper(II) oxide powder reduction with hydrogen, based on thermogravimetry”, THERMOCHIMICA ACTA, 521, 211-217, (2011); 3. Vyazovkin, S. ”Thermal Analysis”, ANALYTICAL CHEMISTRY, 82, 4936-4949, (2010); 4. Cavallaro, G; De Lisi, R; Lazzara, G; Milioto, S. ”Polyethylene glycol/clay nanotubes composites Thermal properties and structure”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112, 383-389, (2013); 5. Dogan, F; Topallar, H; Kaya, I; Yurekli, M; ” The effect of the oxidant used during polymerization on the solid-state decomposition kinetics of poly(4-methyl catechol)”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1515-1522, (2013); 6. Siewert, C; Demyan, MS; Kucerik, J. ” Interrelations between soil respiration and its thermal stability”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 110, 413-419, (2012); 7. Tomic-Tucakovic, B; Majstorovic, D; Jelic, D; Mentus, S. ” Thermogravimetric study of the kinetics of Co3O4 reduction by hydrogen”, THERMOCHIMICA ACTA, 541, 15-24, (2012); 8. Kucerik, Jiri; Schwarz, Jette; Jaeger, Alexander; Bertmer, Marko; Schaumann, Gabriele E. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014).	**ISI**

9. Mavhengere, P., Vittee, T., Wagner, N. J., & Kauchali, S. An algorithm for determining kinetic parameters for the dissociation of complex solid fuels. Journal of the Southern African Institute of Mining and Metallurgy, 116(1), 55-63. (2016). 10. Burnham, A. K. (2015). Use and misuse of logistic equations for modeling chemical kinetics. Journal of Thermal Analysis and Calorimetry, 1-10. 11. Mentus, S. V., Pašti, I. A., & Gavrilov, N. M.Thermogravimetric way to test the oxidation resistance of Pt/C catalysts for fuel cells. BULGARIAN CHEMICAL COMMUNICATIONS, 45, 64-68. (2013). 12. Mavhengere, P., Vittee, T., Wagner, N. J., Kauchali, S. An algorithm for determining kinetic parameters for the dissociation of complex solid fuels. Journal of the Southern African Institute of Mining and Metallurgy, 116, 1, 55-63, 2016. 13. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017. 14. A Alonso, M Lázaro, P Lázaro, D Lázaro, D Alvear. LLDPE kinetic properties estimation combining thermogravimetry and differential scanning calorimetry as optimization targets. Journal of Thermal Analysis and Calorimetry. DOI: 10.1007/s10973-019-08199-4, 2019. 15. REN Ning, WANG Fang, ZHANG Jianjun, ZHENG Xinfang, Progress in Thermal Analysis Kinetics. Acta Physico-Chimica Sinica, DOI:10.3866/PKU.WHXB201905062, 2019. 16. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 17. NS Vrandečić, M Erceg, B Andričić, I Blanco, FA Bottino. Characterization of poly (ethylene oxide) modified with different phenyl hepta isobutyl polyhedral oligomeric silsesquioxanes. Journal of Thermal Analysis and Calorimetry. 2021. DOI:10.1007/s10973-020-10076-4. 18. Irma Kremer, Tihomir Tomić, Zvonimir Katančić, Zlata Hrnjak-Murgić, Matko Erceg & Daniel R. Schneider. Catalytic decomposition and kinetic study of mixed plastic waste. Clean Technologies and Environmental Policy (2020) DOI:10.1007/s10098-020-01930-y 19. Carolina R. G. Silva, Silvia L. Fialho, Jamile Barbosa, Bárbara C. R. Araújo, Guilherme Carneiro, Rita C. O. Sebastião, Wagner N. Mussel, Maria I. Yoshida, Maria B. de Freitas-Marques. Compatibility by a Nonisothermal Kinetic Study of Azathioprine Associated with Usual Excipients in the Product Quality Review Process. Journal of the Brazilian Chemical Society. 32(3), 638-651, 2021. 20. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis of mechanically non-recyclable waste plastics mixture: Kinetics and pyrolysis in laboratory-scale reactor." Journal of environmental management 296 (2021): 113145. 21. Hussain, Ijaz, Saheed A. Ganiyu, Hassan Alasiri, and Khalid Alhooshani. "A state-of-the-art review on waste plastics-derived aviation fuel: Unveiling the heterogeneous catalytic systems and techno-economy feasibility of catalytic pyrolysis." Energy Conversion and Management 274 (2022): 116433. 22. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis and kinetic study of real-world waste plastics: multi-layered and mixed resin types of plastics." Clean Technologies and Environmental Policy (2022): 1-17. 23. Tian, Liying, Ruotong Li, Yilan Sun, Jianfeng Zou, Shengyong Liu, Peng Ma, Hongge Tao et al. "Insight into derivative Weibull mixture model in describing simulated distributed activation energy model and distillers dried grains with solubles pyrolysis processes." Waste Management 153 (2022): 219-228. 24. Freitas-Marques, Maria Betânia de, Talita Santos do Valle, Bárbara Caroline Rodrigues de Araujo, Rita de Cássia de Oliveira Sebastião, Wagner da Nova Mussel, Maria Irene Yoshida, and Christian Fernandes. "Thermal energy and tableting effects in benznidazole product: the impacts of industrial processing." Drug Development and Industrial Pharmacy just-accepted (2023): 1-26. 25. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." Journal of thermal analysis and calorimetry 148, no. 4 (2023): 1599-1611.	
31. CdS thin films obtained by thermal treatment of cadmium (II) complex precursor deposited by MAPLE technique; **Andrei Rotaru**, Anna Mietlarek-Kropidłowska, Catalin Constantinescu, Nicu Scărișoreanu, Marius Dumitru, Michal Strankowski, Petre Rotaru, Valentin Ion, Cristina Vasiliu, Barbara Becker, Maria Dinescu; ***Applied Surface Science***, 255, 15, 6786-6789, 2009	**9 citări**
1. Rodina, TA; Loseva, OV; Ivanov, AV; Gerasimenko, AV; Sergienko, VI; Zaeva, AS; Korneeva, EV.	**ISI**

”Formation of the ionic gold(III) complex [Au-3{S2CN(CH2)(4)O}(6)][Au2Cl8][AuCl4] in chemisorption systems [M{S2CN(CH2)(4)O}(2)] (n) -[AuCl4](-)/2 M HCl (M = Cd, Zn): Supramolecular structure and thermal behavior”, RUSSIAN JOURNAL OF COORDINATION CHEMISTRY, 39, 694-703, (2013); 2. Arunraja, L; Thirumoorthy, P; Dhatchinamurthy, L. ”Theoretical Survey on Cadmium Sulfide Thin Films for Solar Cell Applications”, ASIAN JOURNAL OF CHEMISTRY, 25, S270-S272, (2013); CALORIMETRY, 100, 1107-1114, (2010); 3. Mayo, DC; Omari, P; Airuoyo, IJ; Pan, Z; Schriver, KE; Avanesyan, SM; Park, HK; Mu, RR; Haglund Jr, RF. ” Resonant infrared matrix-assisted pulsed laser evaporation of TiO2 nanoparticle films”, Applied Physics A – Materials Science and Processing, 110, 923-928, (2013); 4. Pladzyk, A; Ponikiewski, L; Stanulewicz, N; Hnatejko, Z. ”Zn(II) and Cd(II) coordination polymers with tri-tert-butoxysilanethiol and bipyridines. Synthesis, crystal structure and spectroscopy”, Optical Materials, Online first, http://dx.doi.org/10.1016/j.optmat.2013.10.034, (2013); 5. Mietlarek-Kropidlowska, Anna; Chojnacki, Jaroslaw; Strankowski, Michal; Fahmi, Amir; Gazda, Maria; Becker, Barbara. Cadmium complex possessing simultaneously silanethiolato- and dithiocarbamato-ligands. A novel single-source precursor of cadmium sulfide. Journal of Thermal Analysis and Calorimetry. 118 (2), 993-1001, (2014). 6. He, Gang; Shynkaruk, Olena; Lui, Melanie W, Rivard E. Small Inorganic Rings in the 21st Century: From Fleeting Intermediates to Novel Isolable Entities. CHEMICAL REVIEWS. 114 (16), 7815-7880, (2014). 7. Zaeva, A. S.; Ivanov, A. V.; Gerasimenko, A. V. Adduct formation of cadmium(II) N,N-cyclo-hexamethylenedithiocarbamate, [Cd-2{S2CN(CH2)(6)}(4)], with morpholine: Synthesis, molecular structure, and thermal behavior of a crystalline adduct cis-[Cd{NH(CH2)(4)O}(2){S2CN(CH2)(6)}(2)]. RUSSIAN JOURNAL OF COORDINATION CHEMISTRY. 40 (1), 34-42, (2014). 8. G. Bakiyaraj, J.B.M. Krishna, G.S. Taki, K. Selvaraju, R. Dhanasekaran. 45 keV N^{5+} ions induced spikes on CdS thin films: Morphological, structural and optical properties. Applied Surface Science. DOI:10.1016/j.apsusc.2018.02.208, (2018) 9. Agnieszka Pladzyk, Daria Kowalkowska-Zedler, Anna Ciborska, Andreas Schnepf, Anna Dołega. Complexes of silanethiolate ligands: Synthesis, structure, properties andapplication. Coordination Chemistry Reviews, 437, 213761, 2021.	
32. Thermal decomposition kinetics of some aromatic azomonoethers. Part IV. Non-isothermal kinetics of 2-allyl-4-((4-(4-methylbenzyloxy)phenyl)diazenyl)phenol in air flow; **Andrei Rotaru**, Anca Moanță, Gina Popa, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 485-491, 2009	**16 citări**
1. Huang, MX; Zhou, CR; Han, XW. ”Investigation of thermal decomposition kinetics of taurine”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 589-593, (2013); 2. Huang, MX; Lv, SC; Zhou, CR. ”Thermal decomposition kinetics of glycine in nitrogen atmosphere”, THERMOCHIMICA ACTA, 552, 60-64, (2013); 3. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition kinetics of glyphosate”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012); 4. Cusu, JP; Musuc, AM; Oancea, D. ”Thermal stabilities of some benzaldehyde 2,4-dinitrophenylhydrazones”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 123-129, (2012); 5. Kucerik, J; David, J; Weiter, M; Vala, M; Vynuchal, J; Ouzzane, I; Salyk, O. ”Stability and physical structure tests of piperidyl and morpholinyl derivatives of diphenyl-diketo-pyrrolopyrroles (DPP)”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 108, 467-473, (2012); 6. Kucerik, Jiri; Schwarz, Jette; Jaeger, Alexander; Bertmer, Marko; Schaumann, Gabriele E. Character of transitions causing the physicochemical aging of a sapric histosol. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 118 (2), 1169-1182, (2014). 7. Li W-L; Zhou C-; Zhang L; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 121 (2) 797-806 (2015). 8. Yang, L., Liu, Y., Ma, C., Wu, Y., Liu, W., Zhang, C., Wang, F., Li, L. Kinetics of non-isothermal decomposition and flame retardancy of goatskin fiber treated with melamine-based flame retardant. Fibers and Polymers, 17(7), 1018-1024, 2016. 9. Zhang, Chang-Wei, Cheng-Zhang Wang, Ran Tao. “Thermal Decomposition Kinetics of Ginkgo biloba Leaves Polyprenol in Nitrogen Atmosphere.” International Journal of Chemical Kinetics 48, 11, 671-678, 2016. 10. Changwei ZHANG, Chengzhang WANG, Ran TAO, THERMAL STABILITY AND THERMAL DECOMPOSITION KINETICS OF GINKGO BILOBA LEAVES WASTE RESIDUE, Thermal Science,	**ISI**

2017, DOI:10.2298/TSCI170117154Z 11. Al-Maydama, Hussein M.; Al Kahali, Mohamed S.; Abduljabbar, Adlia A.; Aaad, Abdulbasset M. The Photocatalytic, Thermal Degradation Kinetics and Lifetime Prediction of Some Commercial Reactive Dyes. Iran. J. Chem. Chem. Eng. Vol. 36, No. 4, 2017 12. Linkun Jiang, Pengfei Zhang, Lingyun Dong, Kai Liu. Thermal degradation kinetic study of creatinol phosphate and model selection. Journal of Thermal Analysis and Calorimetry. 10.1007/s10973-019-08337-y (2019) 13. Genieva, S., L. Gonsalvesh, V. Georgieva, M. Tavlieva, and L. Vlaev. "Kinetic analysis and pyrolysis mechanism of raw and impregnated almond shells." Thermochimica Acta 698 (2021): 178877. 14. Antar, Kaïs, and Mohamed Jemal. "Recovery of calcium sulfide from Tunisian phosphogypsum and olive mill wastewaters: a thermogravimetric and kinetic study." Journal of Thermal Analysis and Calorimetry 147, no. 5 (2022): 3931-3946. 15. Lan, Chenchen, Ran Liu, Shuhui Zhang, Qing Lyu, Yanjia Gao, and Guangshi Yan. "Influence mechanism of CaO on gasification characteristics and kinetic behaviors of carbon-CO2 reaction." Fuel 311 (2022): 122583. 16. Yanwu, Yu, Ma Hui, Guo Jiahu, Meng Jingwei, Jing Suming, Cheng Guimin, and Wei Zihui. "Thermal Analysis of a New Heat-Resistant Energetic Material." Science of Advanced Materials 14, no. 1 (2022): 147-154.	
33. Thermal characteristics of Ni-Ti SMA (shape memory alloy) actuators; Sonia Degeratu, Petre Rotaru, Gheorghe Manolea, Horia Octavian Manolea, **Andrei Rotaru**; ***Journal of Thermal Analysis and Calorimetry*****,** 97, 2, 695-700, 2009	**12 citări**
1. Torra, V; Auguet, C; Isalgue, A; Carreras, G; Lovey, FC. ”Metastable effects on martensitic transformation in SMA Part IX. Static aging for morphing by temperature and stress”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112, 777-780, (2013); 2. Huang, J; Chen, X; Zhong, LR. ”Analysis and Testing of MR Shear Transmission Driven by SMA Spring”, ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, 307207, (2013); 3. Nespoli, A; Villa, E; Besseghini, S. ”Thermo-mechanical properties of snake-like NiTi wires and their use in miniature devices”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 39-47, (2012); 4. Nespoli, A; Besseghini, S. ”A complete 87hermos-mechanical study of a NiTiCu shape memory alloy wire”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 103, 821-826, (2011); 5. Dagdelen, Fethi; Ercan, Ercan. The surface oxidation 87hermos87r of Ni-45.16%Ti shape memory alloys at different temperatures. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 115 (1), 561-565, (2014); 6. C. Ades, S. Dilibal, E. Engeberg. Shape memory alloy tube actuators inherently enable internal fluidic cooling for a robotic finger under force control. Smart Materials and Structures. DOI: 10.1088/1361-665X/ab931f (2020). 7. Ajit Behera, Dipen Kumar Rajak, Reza Kolahchi, Maria-Luminiţa Scutaru, Catalin I. Pruncu. Current Global Scenario of Sputtered Deposited NiTi Smart Systems. Journal of Materials Research and Technology. DOI:10.1016/j.jmrt.2020.10.032 (2020) 8. Esra Balci, Fethi Dagdelen, Fethi Dagdelen, Ibrahim Nazem Qader, Mediha Kök. Effects of substituting Nb with V on thermal analysis and biocompatibility assessment of quaternary NiTiNbV SMA. European Physical Journal Plus 136(2), 145, 2021. 9. T Wang, R Tian, X Yang, Z Zhang, X Zhang. A Novel Dynamic Absorber with Variable Frequency and Damping. Shock and Vibration, 8833089, 2021, DOI:10.1155/2021/8833089. 10. Almadani, Ibrahim Khalil, Ibrahim Sufian Osman, and Nasir Ghazi Hariri. "In-Depth Assessment and Optimized Actuation Method of a Novel Solar-Driven Thermomechanical Actuator via Shape Memory Alloy." Energies 15, no. 10 (2022): 3807. 11. Shreekrishna, Suhas, Radhika Nachimuthu, and Viswajith S. Nair. "A review on shape memory alloys and their prominence in automotive technology." Journal of Intelligent Material Systems and Structures 34, no. 5 (2023): 499-524. 12. Wang, Tian, Ruilan Tian, Xinwei Yang, Ziwen Zhang, and Xiaolong Zhang. "A novel dynamic absorber with variable frequency and damping." Shock and Vibration 2021 (2021): 1-10.	**ISI**
34. Thermal analysis of azoic dyes; Part I. Non-isothermal decomposition kinetics of [4-(4-chlorobenzyloxy)-3-methylphenyl](*p*-tolyl)diazene in dynamic air atmosphere; **Andrei Rotaru,** George Brătulescu, Petre Rotaru; ***Thermochimica Acta*****,** 489, 1-2, 63-69, 2009	**7 citări**
1. Cavallaro, G; De Lisi, R; Lazzara, G; Milioto, S, ”Polyethylene glycol/clay nanotubes composites Thermal properties and structure”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 112,	**ISI**

383-389, (2013); 2. Albano, C; Catano, L; Perera, R; Karam, A; Gonzalez, G. ”Thermodegradative and morphological 88ehaviour of composites of HDPE with surface-treated hydroxyapatite”, Polymer Bulletin, 64, 67-79, (2010); 3. Yancey B; Vyazovkin S; PHYSICAL CHEMISTRY CHEMICAL PHYSICS 17 (15) 10209-10217 (2015). 4. Makaremi, M., Pasbakhsh, P., Cavallaro, G., Lazzara, G., Aw, Y. K., Lee, S. M., & Milioto, S. (2017). Effect of morphology and size of halloysite nanotubes on functional pectin bionanocomposites for food packaging applications. *ACS Applied Materials & Interfaces*. 5. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 6. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 7. Liu, Shang-Hao, Rui-Lei Guo, Fei-Hong Li, and Chin-Lung Chiang. "Thermal analysis and pyrolysis products analysis of 4, 4′-azobis (4-cyanovaleric acid) by using thermal analysis methods and combination technology." *Journal of Thermal Analysis and Calorimetry* (2022): 1-8.	
35. Thermal decomposition kinetics of some aromatic azomonoethers. Part III. Non-isothermal study of 4-[(4-chlorobenzyl)oxy]-4′-chloro-azobenzene in dynamic air atmosphere; **Andrei Rotaru**, Anca Moanță, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry,*** 95, 1, 161-166, 2009	**10 citări**
1. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition kinetics of glyphosate”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012); 2. Kucerik, J; David, J; Weiter, M; Vala, M; Vynuchal, J; Ouzzane, I; Salyk, O. ”Stability and physical structure tests of piperidyl and morpholinyl derivatives of diphenyl-diketo-pyrrolopyrroles (DPP)”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 108, 467-473, (2012); 3. Li, D; Wang, M; Yang, CQ; Wang, J; Ren, GD. ”Solid State Characterizations and Analysis of Stability in Azelnidipine Polymorphs”, CHEMICAL & PHARMACEUTICAL BULLETIN, 60, 995-1002, (2012); 4. Daoudi, MI; Triki, A; Redjaimia, A. ”DSC study of the kinetic parameters of the metastable phases formation during non-isothermal annealing of an Al-Si-Mg alloy”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 104, 627-633, (2011); 5. Zhang, QH; Li, HQ; Liu, HT. ”Study on Polymerization Kinetics of Methylene Diphenyl Diisocyanate”, ACTA CHIMICA SINICA, 69, 605-609, (2011); 6. Gokakakar, SD; Salker, AV. ”Thermal studies of cobalt, iron and tin metalloporphyrins”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 101, 809-813, (2010); 7. S. J. Porobic, A. D. Krstic, D.J. Jovanovic, J.M. Ladarevic, D.B. Kantic, D.Z.Mijin, M. Marincovic-Cincovic. Synthesis and thermal properties of arylazo pyridone dyes. Dyes and Pigments, 2019, DOI: 10.1016/j.dyepig.2019.107602 8. M. Leulescu, G. Iacobescu, M. Bojan, P. Rotaru. Ponceau 4R azoic red dye. Thermal behavior, optical anisotropy and terahertz spectroscopy study. Journal of Thermal Analysis and Calorimetry. 138 (2019) 2091–2101. 9. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 10. Katnić, Đurica, Milena Marinović-Cincović, Slavica J. Porobić, Ivica Vujčić, Aleksandra Šaponjić, Biljana Sikirić, and Dragana Živojinović. "Characterization and kinetics of thermal decomposition behavior of plum and fig pomace biomass." Journal of Cleaner Production 352 (2022): 131637.	**ISI**
36. Multifunctional thin films of lactoferrin for biochemical use deposited by MAPLE technique; Catalin Constantinescu, Alexandra Palla-Papavlu, **Andrei Rotaru**, Paula Florian, Florica Chelu, Madalina Icriverzi, Anca Nedelcea, Valentina Dincă, Anca Roşeanu, Maria Dinescu; ***Applied Surface Science,*** 255, 10, 5491-5495, 2009	**8 citări**
1. Nozaki, R; Nakayama, S; Senna, M. ”Smooth silk fibroin nanofilm deposited by 1064-nm pulsed laser beam from an opaque target”, THIN SOLID FILMS, 542, 214-218, (2013); 2. Riggs, BC; Dias, AD; Schiele, NR; Cristescu, R; Huang, Y; Corr, DT; Chrisey, DB. ”Matrix-assisted pulsed laser methods for biofabrication”, MRS BULLETIN, 36, 1043-1050, (2011); 3. Jelinek, M; Remsa, J; Kocourek, T; Kubesova, B; Schurek, J; Myslik, V. ”MAPLE activities and applications in gas sensors”, APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 105, 643-649, (2011); 4. Yang, Wei; Xu, Chenqi; Liu, Fuguo; Yuan, Fang; Gao, Yanxiang. Native and Thermally Modified	**ISI**

Protein-Polyphenol Coassemblies: Lactoferrin-Based Nanoparticles and Submicrometer Particles as Protective Vehicles for (-)-Epigallocatechin-3-gallate. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 62 (44) 10816-10827, (2014). 5. Derong Yin, Yonglong Hong, Luyuan Chen, Satoshi Komasa, Yuanyuan Yang, Honghao Zhang, Sifan Yan, Hiroshi Nishizaki, Tetsuji Kusumoto, Wen Sui, Takayoshi Kawazoe, Joji Okazaki. Lactoferrin Coating Improves the Antibacterial and Osteogenic Properties of Alkali-Treated Titanium with Nanonetwork Structures. Journal of Nanomaterials. DOI:10.1155/2020/2516975. 2020. 6. Yang, Songlin, and Jin Zhang. "Enhanced room-temperature magnetoresistance of hybrid graphene nanosheets produced by a laser-assisted process." Journal of Materials Science 57, no. 10 (2022): 5885-5893. 7. Wuppaladhodi, Vishnuvardhana, Songlin Yang, Hossein Pouri, and Jin Zhang. "Laser-assisted process for the deposition of nanostructured anti-microbial coatings on hydrogels." Optics & Laser Technology 164 (2023): 109485. 8. Wuppaladhodi, Vishnuvardhana, Songlin Yang, Hossein Pouri, and Jin Zhang. "Enhanced mechanical properties of silicone hydrogels coated with metallic nanoparticles by using the laser-assisted process." Journal of Applied Physics 133, no. 16 (2023).	
37. Computational thermal and kinetic analysis. Software for non-isothermal kinetics by standard procedure; **Andrei Rotaru**, Mihai Goşa, Petre Rotaru; ***Journal of Thermal Analysis and Calorimetry*, 94**, 2 367-371, 2008	**21 citări**
1. Refat, MS, "Synthesis, spectroscopic characterization, thermal, and photostability studies of 2-(2 '-hydroxy-5 '-phenyl)-5-aminobenzotriazole complexes", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 1095-1103, (2010); 2. Refat, MS; Mohamed, GG; de Farias, RF; Powell, AK; El-Garib, MS; El-Korashy, SA; Hussien, MA. "Spectroscopic, thermal and kinetic studies of coordination compounds of Zn(II), Cd(II) and Hg(II) with norfloxacin", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 102, 225-232, (2010); 3. Refat, MS. "Synthesis, characterization, thermal and antimicrobial studies of diabetic drug models: Complexes of vanadyl(II) sulfate with ascorbic acid (vitamin C), riboflavin (vitamin B2) and nicotinamide (vitamin B3)", JOURNAL OF MOLECULAR STRUCTURE, 969, 163-171, (2010); 4. Matko Erceg, Irena Krešić, Nataša Stipanelov Vrandečić, Miće Jakić, Different approaches to the kinetic analysis of thermal degradation of poly(ethylene oxide); Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-017-6349-6, 2017. 5. Almalki, A. S., & Refat, M. S. (2017). Synthesis and Photostability of 2-(4-isobutoxyphenyl)-6-Hydrazino-1, 8-Naphthalimide as Fluorescence Dye and Its Selenium Nanoscale Complex Doped in Polymethyl Methacrylate Polymeric Sheet Exposed to UV-Vis Radiation. *Journal of Computational and Theoretical Nanoscience*, *14*(9), 4616-4623. 6. FAI Al-Khodir. Synthesis, Spectroscopic Interpretations, and Antioxidant Efficiency of Two Vital Selenium Complexes. Acta Physica Polonica A, 132(4): 1265-1271.2017 7. SA Sadeek, SM Abd El-Hamid, AA Mohamed, Wael A. Zordok , Hassan A. El-Sayed. Spectroscopic characterization, thermogravimetry, density functional theory and biological studies of some mixed-ligand complexes of meloxicam and 2,2′-bipyridine with some transition metals. Applied Organometallic Chemistry. DOI: 10.1002/aoc.4889 (2019). 8. A Alonso, M Lázaro, P Lázaro, D Lázaro, D Alvear. LLDPE kinetic properties estimation combining thermogravimetry and differential scanning calorimetry as optimization targets. Journal of Thermal Analysis and Calorimetry. DOI: 10.1007/s10973-019-08199-4, 2019. 9. G. Cavallaro, A.A. Gallitto, L. Lisuzzo, G. Lazzara. Comparative study of historical woods from XIX century by thermogravimetry coupled with FTIR spectroscopy. Cellulose. 26(16), (2019), 8853–8865. 10. SMA El-Hamid, SA Sadeek, WA Zordok, WH El-Shwiniy. Synthesis, spectroscopic studies, DFT calculations, cytotoxicity and antimicrobial activity of some metal complexes with ofloxacin and 2, 2 0-bipyridine. J. Mol. Struct., 1176 (2019) 422-433. 11. S.A. Sadeek , A.A. Mohamed, H.A. El-Sayed, M.S. El-Attar Spectroscopic characterization, thermogravimetric and antimicrobial studies of some new metal complexes derived from4-(4-Isopropyl phenyl)-2-oxo-6-phenyl 1,2-dihyropyridine-3-carbonitrile (L). Applied Organometallic Chemistry. 2019. DOI: 10.1002/aoc.5334 12. M.A.Gamil, S.A. Sadeek, W.A.Zordok, W.A.Elshwiniy. Spectroscopic, DFT modeling and biological study of some new mixed ligand metal complexes derived from gatifloxacin and pregabalin. Journal of Molecular Structure. DOI:10.1016/j.molstruc.2020.127941, 2020. 13. NS Vrandečić, M Erceg, B Andričić, I Blanco, FA Bottino. Characterization of poly (ethylene oxide) modified with different phenyl hepta isobutyl polyhedral oligomeric silsesquioxanes. Journal of Thermal	**ISI**

Analysis and Calorimetry. 2021. DOI:10.1007/s10973-020-10076-4. 14. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Zlata Hrnjak-Murgić, Matko Erceg, and Daniel R. Schneider. "Catalytic decomposition and kinetic study of mixed plastic waste." Clean Technologies and Environmental Policy 23 (2021): 811-827. 15. Walaa H. El-Shwiniy, Asmaa G. Ibrahim, Sadeek A. Sadeek, Wael A. Zordok. Synthesis, structural elucidation, molecular modeling and antimicrobial studies of 6-(2-hydroxyphenylimine)-2-thioxotetrahydropyrimidin-4(1H)-one (L) Schiff base metal complexes. Applied Organometallic Chemistry. DOI:10.1002/aoc.6174, 2021. 16. Carolina R. G. Silva, Silvia L. Fialho, Jamile Barbosa, Bárbara C. R. Araújo, Guilherme Carneiro, Rita C. O. Sebastião, Wagner N. Mussel, Maria I. Yoshida, Maria B. de Freitas-Marques. Compatibility by a Nonisothermal Kinetic Study of Azathioprine Associated with Usual Excipients in the Product Quality Review Process. Journal of the Brazilian Chemical Society. 32(3), 638-651, 2021. 17. Walaa H. El-Shwiniy, Mohamed G. Abd Elwahed, Reham M. Saeed, Wael A. Zordok, Sameh I. El-Desoky. Structural elucidation, molecular modeling, and biological and antioxidant studies of phenanthroline/nicotinamide metals complexes. Applied Organometallic Chemistry. DOI:10.1002/aoc.6231. (2021) 18. Kremer, Irma, Tihomir Tomić, Zvonimir Katančić, Matko Erceg, Saša Papuga, Jelena Parlov Vuković, and Daniel Rolph Schneider. "Catalytic pyrolysis of mechanically non-recyclable waste plastics mixture: Kinetics and pyrolysis in laboratory-scale reactor." Journal of environmental management 296 (2021): 113145. 19. Fadl, A. M., S. A. Sadeek, Laila Magdy, M. I. Abdou, and W. H. El-Shiwiniy. "Multi-functional epoxy composite coating incorporating mixed Cu (II) and Zr (IV) complexes of metformin and 2, 2\-bipyridine as intensive network cross-linkers exhibiting anti-corrosion, self-healing and chemical-resistance performances for steel petroleum platforms." Arabian Journal of Chemistry 14, no. 10 (2021): 103367. 20. Fadl, A. M., M. I. Abdou, W. A. Zordok, and S. A. Sadeek. "Intrinsic anti-corrosion, self-healing and mechanical resistance behaviors of epoxy composite coating intercalated with novel mixed Ni (II), Pd (II), and Cd (II) complex cross-linking accelerators for steel petroleum tanks." Journal of Materials Research and Technology 15 (2021): 2242-2275. 21. El-Shwiniy, Walaa H., Manar A. Gamil, Sadeek A. Sadeek, and Wael A. Zordok. "Study molecular modeling and the effect of some biological metals on the efficiency of norfloxacin in presence of 3-(bromoacetyl) coumarin." Applied Organometallic Chemistry 35, no. 12 (2021): e6448.	
38. Thermal decomposition kinetics of some aromatic azomonoethers. Part II. Non-isothermal study of three liquid crystals in dynamic air atmosphere; **Andrei Rotaru***, Anna Kropidłowska, Anca Moanţă, Petre Rotaru, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 233-238, 2008	**17 citări**
1. Chen, FX; Zhou, CR; Li, GP. ”Study on thermal decomposition and the non-isothermal decomposition kinetics of glyphosate”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 109, 1457-1462, (2012); 2. Huang, MX; Zhou, CR; Han, XW. ”Investigation of thermal decomposition kinetics of taurine”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 113, 589-593, (2013); 3. Huang, MX; Lv, SC; Zhou, CR. ”Thermal decomposition kinetics of glycine in nitrogen atmosphere”, THERMOCHIMICA ACTA, 552, 60-64, (2013); 4. Zhang, QH; Li, HQ; Liu, HT. ”Study on Polymerization Kinetics of Methylene Diphenyl Diisocyanate”, ACTA CHIMICA SINICA, 69, 605-609, (2011); 5. Materazzi, S; Vecchio, S. ”Evolved Gas Analysis by Infrared Spectroscopy”, APPLIED SPECTROSCOPY REVIEWS, 45, 241-273, (2010); 6. Chen, JR; Cheng, SY; Yuan, MH; Kossoy, AA; Shu, CM. ”Hierarchical kinetic simulation for autocatalytic decomposition of cumene hydroperoxide at low temperatures”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 96, 751-758, (2009). 7. Li W-L; Zhou C-; Zhang L; JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY 121 (2) 797-806 (2015). 8. Li W-L; Zhou C-; Zhang L; JOURNAL OF APPLIED POLYMER SCIENCE 132 (40) 42374 (2015). 9. Zhang, G. Z., H. C. Zheng, and X. Xiang. "Thermal decomposition and kinetics studies on the 2, 2-dinitropropyl acrylate–styrene copolymer and 2, 2-dinitropropyl acrylate–vinyl acetate copolymer." Journal of thermal analysis and calorimetry 111: 1039-1044. (2013) 10. de Jesus, J. Y., de Carvalho Dantas, E. S., Serafini, M. R., dos Passos Menezes, P., Cardoso, J. C., Albuquerque-Jr, R. L. C., de Souza Araújo, A. A. Development and physicochemical properties of extract of Morinda citrifolia Linn/pectin-based membranes. Journal of Thermal Analysis and Calorimet. 123; 2003-20012, 2016.	**ISI**

11. Changwei ZHANG, Chengzhang WANG, Ran TAO, THERMAL STABILITY AND THERMAL DECOMPOSITION KINETICS OF GINKGO BILOBA LEAVES WASTE RESIDUE, Thermal Science, 2017, DOI:10.2298/TSCI170117154Z 12. J.-L. Tu, J.-J. Yuan. Thermal Decomposition Behavior of Hydroxytyrosol (HT) in Nitrogen Atmosphere Based on TG-FTIR Methods. Molecules. 23(2), 404, (2018). 13. Jiao-jiao Yuan, Jun-ling Tu, Yong-jun Xu, Frank G.F. Qin, Bing Li, Cheng-zhang Wang. Thermal stability and products chemical analysis of olive leaf extract after enzymolysis based on TG–FTIR and Py–GC–MS. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-018-7083-4, (2018). 14. Marian Leulescu, I. Palarie, A. Moanta, N. Cioatera, M. Popescu, E. Morintale, M.C. Varut, P. Rotaru. Brown HT: physical, thermal and biophysical properties of the food azo dye. J. Therm. Anal. Calorim. 2018; DOI: 10.1007/s10973-018-7766-x 15. Linkun Jiang, Pengfei Zhang, Lingyun Dong, Kai Liu. Thermal degradation kinetic study of creatinol phosphate and model selection. Journal of Thermal Analysis and Calorimetry. 10.1007/s10973-019-08337-y (2019) 16. Antar, Kaïs, and Mohamed Jemal. "Recovery of calcium sulfide from Tunisian phosphogypsum and olive mill wastewaters: a thermogravimetric and kinetic study." Journal of Thermal Analysis and Calorimetry 147, no. 5 (2022): 3931-3946. 17. Worzakowska, Marta, Małgorzata Sztanke, and Krzysztof Sztanke. "Pyrolysis and oxidative decomposition mechanism of trifluoromethylated fused triazinones." Journal of Analytical and Applied Pyrolysis 157 (2021): 105226.	
39. Thermal characterization of humic acids and other components of raw coal; **Andrei Rotaru**, Irina Nicolaescu, Petre Rotaru, Constantin Neaga; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 297-300, 2008	**25 citări**
1. Cihlář, Z., Vojtová, L., Michlovská, L., & Kučerík, J. Preparation and hydration characteristics of carbodiimide crosslinked lignite humic acids. Geoderma, 274, 10-17. (2016). 2. Bertolino, V., Cavallaro, G., Lazzara, G., Merli, M., Milioto, S., Parisi, F., & Sciascia, L. Effect of the biopolymer charge and the nanoclay morphology on nanocomposite materials. Industrial & Engineering Chemistry Research, 55(27), 7373-7380, 2016. 3. Liu, L., Sawut, A., Abliz, S., Nurulla, I., Dolat, B., & Yimit, M. Ultraviolet-induced polymerization of superabsorbent composites based on sodium humate and its urea release behavior. RSC Advances, 6(103), 101123-101132, 2016. 4. Cavallaro, G., Lazzara, G., Milioto, S., & Parisi, F. Halloysite nanotubes with fluorinated cavity: an innovative consolidant for paper treatment. Clay Minerals, 51(3), 445-455, 2016. 5. Cavallaro, G ; Donato, DI; Lazzara, G; Milioto, S. ”Determining the selective impregnation of waterlogged archaeological woods with poly(ethylene) glycols mixtures by differential scanning calorimetry”, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 111, 1449-1455, (2013); 6. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." Journal of thermal analysis and calorimetry 148, no. 4 (2023): 1599-1611. 7. Pospisilova, L; Formanek, P; Kucerik, J; Liptaj, T; Losak, T; Martensson, A. ”Land use effects on carbon quality and soil biological properties in Eutric Cambisol”, ACTA AGRICULTURAE SCANDINAVICA SECTION B-SOIL AND PLANT SCIENCE, 61, 661-669, (2011); 8. Francioso, O; Montecchio, D; Gioacchini, P; Cavani, L; Ciavatta, C; Trubetskoj, O; Trubetskaya, O. ”Structural differences of Chernozem soil humic acids SEC-PAGE fractions revealed by thermal (TG-DTA) and spectroscopic (DRIFT) analyses”, GEODERMA, 152, 264-268, (2009); 9. Cavallaro, Giuseppe; Lazzara, Giuseppe; Milioto, Stefana; Parisi, Filippo. Halloysite nanotubes as sustainable nanofiller for paper consolidation and protection. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. 117 (3), 1293-1298, (2014). 10. Arcudi, Francesca; Cavallaro, Giuseppe; Lazzara, Giuseppe; Massaro, Marina; Milioto, Stefana; Noto, Renato; Riela, Serena. JOURNAL OF PHYSICAL CHEMISTRY C. 118 (37), 15095-15101, (2014). 11. Klucakova, Martina; Novackova, Kristyna. JOURNAL OF SOILS AND SEDIMENTS. 14 (2), 360-367, (2014). 12. Kosobucki, P., & Buszewski, B. (2014). Natural Organic Matter in Ecosystems-a Review. *Nova Biotechnologica et Chimica*, *13*(2), 109-129. 13. Cavallaro, G., Lazzara, G., Milioto, S., Parisi, F., & Ruisi, F. Nanocomposites based on esterified colophony and halloysite clay nanotubes as consolidants for waterlogged archaeological woods. Cellulose, DOI: 10.1007/s10570-017-1369-8 (2017).	**ISI**

14. J Kucerík, D Tokarski, MS Demyan, I Merbach, C Siewert. Linking soil organic matter thermal stability with contents of clay, bound water, organic carbon and nitrogen. Geoderma. (2018), 316: 38–46. 15. M Huculak-Mączka, J Hoffmann, K Hoffmann. Evaluation of the possibilities of using humic acids obtained from lignite in the production of commercial fertilizers. - Journal of Soils and Sediments, DOI:10.1007/s11368-017-1907-x,(2018). 16. L Lisuzzo, G Cavallaro, F Parisi, S Milioto, G Lazzara; Colloidal stability of halloysite clay nanotubes; Ceramics International, DOI: 10.1016/j.ceramint.2018.07.289; 2018. 17. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 18. Khutsishvili, S.S., Tikhonov, N.I., Pavlov, D.V. et al., Gold- and silver-containing bionanocomposites based on humic substances extracted from coals. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY DOI:10.1007/s10973-019-08059-1, 2019. 19. J Deng, JJ Song, JY Zhao, YN Zhang, YX Zhang, Chi-Min Shu. Gases and thermal behavior during high-temperature oxidation of weathered coal. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08103-0, 2019. 20. A. Milia, M. Bruno, G. Cavallaro, G. Lazzara, S. Milioto. Adsorption isotherms and thermal behavior of hybrids based on quercetin and inorganic fillers. Journal of Thermal Analysis and Calorimetry. DOI:10.1007/s10973-019-08257-x, 2019. 21. Jan David, Helena Doležalová Weissmannová, Zacharias Steinmetz, Lucie Kabelíková, Michael Scott Demyan, JanaŠimečková, DavidTokarski, ChristianSiewert, Gabriele E.Schaumann, JiříKučerík. Introducing a soil universal model method (SUMM) and its application for qualitative and quantitative determination of poly(ethylene), poly(styrene), poly(vinyl chloride) and poly(ethylene terephthalate) microplastics in a model soil. Chemosphere. Volume 225, June 2019, Pages 810-819. 22. FATMA KARA, DUYGU ADIGÜZEL, UFUK ATMACA, MURAT ÇELİK, JALE NAKTİYOK. Characterization and kinetics analysis of the thermal decomposition of the humic substance from hazelnut husk. Turkish Jounrnal of Chemistry (2020) 44: 1483-1494. 23. Matjie, Ratale, John Bunt, Wilden Stokes, Hanno Bijzet, Katlego Mphahlele, Romanus Uwaoma, and Christien Strydom. "Interactions between kaolinite, organic matter, and potassium compounds at elevated temperatures during pyrolysis of caking coal and its density-separated fractions." Energy & Fuels 35, no. 16 (2021): 13268-13280. 24. Volkov, Dmitry S., Olga B. Rogova, and Mikhail A. Proskurnin. "Temperature dependences of IR spectra of humic substances of brown coal." Agronomy 11, no. 9 (2021): 1822. 25. Garcia-Mina, Jose M., Javier Aranaz, David De Hita, Maite Olaetxea Indaburu, Oscar Urrutia, Marta Fuentes, Roberto Baigorri et al. "The molecular conformation, but not disaggregation, of humic acid in water solution plays a crucial role in promoting plant development in the natural environment." Frontiers in Plant Science 14 (2023): 1468.	
40. Thermal analysis and thin films deposition by matrix assisted pulsed laser evaporation of a 4CN type azomonoether; **Andrei Rotaru**, Catalin Constantinescu, Petre Rotaru, Anca Moanţă, Marius Dumitru, Margareta Socaciu, Maria Dinescu, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 92, 1, 279-284, 2008	**6 citări**
1. Riggs, BC; Dias, AD; Schiele, NR; Cristescu, R; Huang, Y; Corr, DT; Chrisey, DB. ”Matrix-assisted pulsed laser methods for biofabrication”, MRS BULLETIN, 36, 1043-1050, (2011); 2. Chen, CC; Wang, TC; Chen, LY; Dai, JH; Shu, CM. ”Loss prevention in the petrochemical and chemical-process high-tech industries in Taiwan”, JOURNAL OF LOSS PREVENTION IN THE PROCESS INDUSTRIES, 23, 531-538, (2010); 3. Luciana Sciascia, Selene Casella, Giuseppe Cavallaro, Giuseppe Lazzara, Stefana Milioto, Francesco Princivalle, Filippo Parisi. Olive mill wastewaters decontamination based on organo-nano-clay composites. Ceramics International. DOI: 10.1016/j.ceramint.2018.08.155. (2018). 4. N.H.S. Ahmed, G.R. Saad, H.A. Ahmed, M. Hagar. New wide-stability four-ring azo/ester/Schiff base liquid crystals: synthesis, mesomorphic, photophysical, and DFT approaches. RSC Advances 10(16):9643-9656, (2020). 5. F. Parisi. Adsorption and Separation of Crystal Violet, Cerium (III) and Lead (II) by Means of a Multi-Step Strategy Based on K10-Montmorillonite. Minerals. 10(5), 466, (2020). 6. Doležalová-Weissmannová, Helena, Stanislav Malý, Martin Brtnický, Jiří Holátko, Michael Scott Demyan, Christian Siewert, David Tokarski, Eliška Kameníková, and Jiří Kučerík. "Practical applications of thermogravimetry in soil science: Part 5. Linking the microbial soil characteristics of grassland and arable soils to thermogravimetry data." *Journal of thermal analysis and calorimetry* 148, no. 4 (2023):	**ISI**

1599-1611.	
41. Heteroleptic Cd(II) complex, potential precursor for semiconducting CdS layers. Thermal stability and non-isothermal decomposition; Anna Kropidłowska, **Andrei Rotaru**, Michal Strankowski, Barbara Becker, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 91, 3, 903-909, 2008	**13 citări**
1. Hou, XY; Chen, SP; Gao, SL. "Synthesis, Crystal Structure and Nonisothermal Kinetics of Complex Co(tda)(5-mphen)(H2O)", CHEMICAL RESEARCH IN CHINESE UNIVERSITIES, 25, 383-387, (2009); 2. Mianowski, A. "CONSEQUENCES OF HOLBA-SESTAK EQUATION", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 96, 507-513, (2009); 3. Sanchez-Jimenez, PE; Criado, JM; Perez-Maqueda, LA. "Kissinger kinetic analysis of data obtained under different heating schedules", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 94, 427-432, (2008); 4. Kropidlowska, A; Chojnacki, J; Becker, B. "Tetra-n-butylammonium iodido-(pyrrolidine-1-carbodithioato-kappa S-2,S')(tris-tert-butoxysilanethiolato-kappa S)cadmate(II)", ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, 64, M832-U936, (2008); 5. Kropidlowska, A; Chojnacki, J; Fahmi, A; Becker, B. "In search of molecular precursors for cadmium sulfide-new complexes with a sulfur-rich kernel: cadmium(II) tri-tert-butoxysilanethiolates with additional diethyldithiocarbamato ligand", DALTON TRANSACTIONS, 47, 6825-6831, (2008); 5. Pladzyk, A; Olszewska, J; Baranowska, K; Dziurzynska, AM. "Cobalt(II) silanethiolato complexes with dimethylpyridines: crystal structures and spectroscopic studies", TRANSITION METAL CHEMISTRY, 35, 821-827, (2010) 7. Benavidez, E; Santini, L; Brandaleze, E. "Decomposition kinetic of carbonaceous materials used in a mold flux design", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 103, 485-493, (2011); 8. Pladzyk, A; Ponikiewski, L; Stanulewicz, N; Hnatejko, Z. "Zn(II) and Cd(II) coordination polymers with tri-tert-butoxysilanethiol and bipyridines. Synthesis, crystal structure and spectroscopy", Optical Materials, 36, 554-561 (2013). 9. Mietlarek-Kropidlowska, Anna; Chojnacki, Jaroslaw; Strankowski, Michal; Fahmi, Amir; Gazda, Maria; Becker, Barbara. Cadmium complex possessing simultaneously silanethiolato- and dithiocarbamato-ligands. A novel single-source precursor of cadmium sulfide. Journal of Thermal Analysis and Calorimetry. 118 (2), 993-1001, (2014). 10. Ristovic, M. Sumar; Minic, D. M.; Blagojevic, V.; Andelkovic, K. Kinetics of Multi-Step Processes of Thermal Degradation of Co(II) Complex With N-Benzyloxycarbonylglycinato Ligand. Deconvolution of DTG Curves. Science of Sintering. 46 (1), 37-53, (2014). 11. A. Plota, A. Masek. Lifetime Prediction Methods for Degradable Polymeric Materials—A Short Review. Materials 2020, 13(20), 4507; https://doi.org/10.3390/ma13204507 12. Agnieszka Pladzyk, Daria Kowalkowska-Zedler, Anna Ciborska, Andreas Schnepf, Anna Dołega. Complexes of silanethiolate ligands: Synthesis, structure, properties andapplication. Coordination Chemistry Reviews, 437, 213761, 2021. 13. Wang, Yang, Guowei Feng, Nan Lin, Huiqing Lan, Qiang Li, Dichang Yao, and Jing Tang. "A Review of Degradation and Life Prediction of Polyethylene." Applied Sciences 13, no. 5 (2023): 3045.	**ISI**
42. Thermal stability of some new complexes bearing ligands with polymerisable groups; Mihaela Badea, Rodica Olar, Dana Marinescu, Eugen Segal, **Andrei Rotaru;** ***Journal of Thermal Analysis and Calorimetry*****,** 88, 2, 317-321, 2007	**1 citări**
1. Nie, F. M., Li, Z., Lu, F., & Chen, J. (2009). Crystal structure of (picolinato-N, O)[tris (2-benzimdazolyl-N, N′, N ″-methyl) amine] copper (II) perchlorate–methanol–water (1: 1: 2),[Cu (C24H21N7)(C6H4NO2)] ClO4· CH3OH· 2H2O. *Zeitschrift für Kristallographie-New Crystal Structures*, *224*(2), 272-274.	**ISI**
43. Thermal decomposition kinetics of some aromatic azomonoethers; Part I.Decomposition of 4-[(4-chlorobenzyl)oxy]-4'-nitro-azobenzene; **Andrei Rotaru**, Anca Moanţă, Ion Sălăgeanu, Petru Budrugeac, Eugen Segal; ***Journal of Thermal Analysis and Calorimetry*****,** 87, 2, 345-355, 2007	**6 citări**
1. Perez, JM; Teixeira, SR; Rincon JM; Romero, M. "Understanding the Crystallization Mechanism of a Wollastonite Base Glass Using Isoconversional, IKP Methods and Master Plots", JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 95, 3441-3447, (2012); 2. Perez, JM; Rincon, JM; Romero, M. "Study of mullite formation in porcelain stoneware applying isoconversional and IKP methods", CERAMICS INTERNATIONAL, 36, 2329-2335, (2010); 3. Yu, SJ; Wang, SX; Tan, ZC; Liao, CQ; Li, YS. "Synthesis, characterization and TG-DTA study of diethyl 5-(4-hydroxyethoxyphenylazo)isophthalate", JOURNAL OF THERMAL ANALYSIS AND	**ISI**

CALORIMETRY, 97, 993-997, (2009); 4. Dou, BL; Dupont, V; Williams, PT; Chen, HS; Ding, YL. "Thermogravimetric kinetics of crude glycerol", BIORESOURCE TECHNOLOGY, 100, 2613-2620, (2009); 5. Logvinenko, V; Mikhailov, K; Yukhin, Y. "The kinetics of thermal decomposition of bismuth oxohydroxolaurate", JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 88, 47-49, (2007); 6. M. Kazem-Rostami. Factors influencing the thermal stability of azo and bisazo compounds. J. Therm. Anal. Calorim. (2019) DOI:10.1007/s10973-019-08884-4	
Total Număr de citări ISI ale unor autori din străinătate a fost folosită baza de date ISI Web of Knowledge (Clarivate Analytics) pentru a obţine citările ISI [notaţia: ISI].	**243**
Total Număr de lucrări ISI ai unor autori din străinătate a fost folosită baza de date ISI Web of Knowledge (Clarivate Analytics) pentru a obţine citările ISI [notaţia: ISI].	**165**

d) deţinerea atestatului de abilitare.

Atestat de Abilitare în Domeniul: **Chimie**

Atestat de abilitare	***Numă minim cerut***	***Număr îndeplinit Andrei Rotaru***	***Îndeplinire criteriu Andrei Rotaru***
Atestat de abilitare în domeniul: *Chimie* Titlul tezei de abilitare: *"**Thermal and physical-chemical properties of functional compounds and materials**". "**Proprietăţi termice şi fizico-chimice ale compuşilor şi materialelor funcţonale**".* Autorul: Andrei ROTARU **Universitatea din Craiova**, Craiova, România Ordinul Ministrului Educaţiei privind acordarea atestatului de abilitare: Nr. 5668/02.12.2021 Data emiterii ordinului: 02.12.2021	1	1	Da (îndeplinit)

Toate standardele şi criteriile cerute de către Facultatea de Inginerie a Universităţii Babeş-Bolyai au fost îndeplinite.

Conf. Univ. Dr. Andrei ROTARU **12.06.2023**

C) Fişa de îndeplinire a condiţiei de deţinere a calităţii de director al cel puţin unui grant sau proiect de cercetare obţinut prin competiţie sau de membru în minimum trei astfel de granturi de către Andrei Rotaru

	Numă minim cerut	*Număr îndeplinit Andrei Rotaru*	*Îndeplinire criteriu Andrei Rotaru*
Director al cel puțin unui grant sau proiect de cercetare obținut prin competiție	1	2	Da (îndeplinit)
sau			
Membru al cel puțin unui grant sau proiect de cercetare obținut prin competiție	3	9	Da (îndeplinit)

Nr.	**Lista proiectelor/granturilor/contractelor de cercetare-dezvoltare obţinute prin competiţie**		
	Număr grant/contract, Titlu, Locație.	***Participarea***	***Perioada***
1.	CZ.02.2.69/0.0/0.0/18_053/0016962, Government of Czech Republic, International mobility of researchers at the Brno University of Technology_MeMoV II, Brno University of Technology, Brno, Republica Cehă.	Membru Grant de Cercetare	Februarie 2023-Iunie 2023
2	20.80009.5007.28, Agenţia Naţională pentru Cercetare şi Dezvoltare a Republicii Moldova, Elaborarea noilor materiale funcţionale şi tehnologii eficiente pentru agricultură, medicină, tehnică şi sistemul educaţional în baza complecşilor metalelor "*s*" si "*d*" cu liganzi polidentaţi, Universitatea Pedagogică de Stat "Ion Creangă" din Chişinău/Universitatea de Stat din Tiraspol, Republica Moldova.	Membru Grant de Cercetare	Ianuarie 2020-Decembrie 2022
3.	PN-III-P2-2.1-PTE-2019-0198, UEFISCDI, Realizarea unei sonde electrochimice multi-canal pentru a monitoriza evoluţia sedimentelor (SEMSED), Universitatea din Craiova, Craiova, România.	Membru Grant de Cercetare	Septembrie 2020-Septembrie 2022
4.	PN-II-RU-TE-2014-4-1550, UEFISCDI, Depunerea de filme subtiri hibride tip molecula oaspete fotofunctionala intercalata in matrice gazda de hidroxizi dublu stratificati, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	Octombrie 2015-Octombrie 2017
5.	"Resonant ultrasound spectroscopy (RUS) characterization of dielectric and ferroelectric tetragonal tungsten bronzes", "Elastic properties of A-site deficient $Ba_4Bi_{0.67}Nb_{10}O_{30}$ ferroelectric material investigated by Resonant Ultrasound Spectroscopy (RUS)", University of Cambridge, Cambridge, Marea Britanie.	Responsabil Grant de Cercetare	Martie 2015 (1 lună); Septembrie 2015 (1 lună)
6.	POSDRU/159/1.5/S/133255, Project ID 133255 (2014), POSDRU, Obţinerea şi funcţionalizarea unor oxizi ceramici de tip tungsten bronz tetragonal, pentru aplicaţii ca materiale dielectrice, feroelectrice şi multiferoice avansate, Universitatea	Director Grant de cercetare	Aprilie 2014-Octombrie 2015

	din Craiova, Craiova, România.		
7.	PN-II-RU-TE-2011-3-0301, UEFISCDI, Noi materiale hibride metal-organice si polimerice in strat subtire pentru dezvoltarea de senzori, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	2011-2014
8.	HYLAYHY, UEFISCDI, Filme nanocomposite hibride (inorgnice-organice) pe baza de hidroxizi dublu stratificati (LDH) cu suprafete hidrofobice si/sau cu rol de acoperiri protective, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	2012-2014
9.	Roberto Rocca Education Program Fellowship, Argentina/ România/ Marea Britanie, University of St Andrews, St Andrews, Marea Britanie.	Director Grant de Cercetare	2008-2010
10.	070011159, EastChem – cercetare doctorală, University of St Andrews, St Andrews, Marea Britanie.	Membru Stagiu doctoral	Noiembrie 2007-Noiembrie 2010
11.	EE3072, Synchrotron Studies of Monoclinic Tungsten Bronzes Diamond Light Source, Didcot Oxon, Marea Britanie	Membru Stagiu de cercetare	20-21 Decembrie 2010
12.	RB920364, Temperature Dependent Phase Transitions in Ferroelectric Tetragonal Tungsten Bronzes - HRPD – ISIS, Didcot Oxon, Marea Britanie.	Membru Stagiu de cercetare	3-6 August 2009
13.	5-21-1005, The Role of Vacancies in Materials with the Tetragonal Bronze Structure - D2b - ILL, Grenoble, Franţa.	Membru Stagiu de cercetare	28-31 August 2009
14.	5-23-595, Structural Investigations of Novel Multiferroic Materials with the Tetragonal TTB structure - D2b - ILL, Grenoble, Franţa.	Membru Stagiu de cercetare	9-12 Aprilie 2009
15.	06-D11-104/2006–OXTRANS, UEFISCDI, Materiale oxidice nanostructurate cu proprietăţi de transportor de medicamente, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	2006-2007
16.	71-040/2007 – MATPEROL Materiale perovskitice multifuncţionale cu aplicaţii în domeniul electronicii şi optoelectronicii, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	2007
17.	71-043/2007 – ECOPAM Materiale avansate derivate din compuşi de tip hidrotalcit şi clinoptilolit pentru îndepărtarea poluanţilor din ape reziduale şi fracţii petroliere lichide prin metode prietenoase mediului, Institutul de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei şi Radiaţiei, Măgurele, România.	Membru Grant de Cercetare	2007

Toate standardele şi criteriile cerute de către Universitatea Babeş-Bolyai au fost îndeplinite.

Conf. Univ. Dr. Andrei ROTARU 12.06.2023

D) Fişa de îndeplinire a cerinţei de deținere a atestatului de abilitare sau a calității de conducător de doctorat (exclusiv pentru funcția de profesor universitar) de către Andrei Rotaru

Atestat de abilitare în Domeniul: **Chimie**

Atestat de abilitare sau calitate de conducător de doctorat	***Numă minim cerut***	***Număr îndeplinit Andrei Rotaru***	***Îndeplinire criteriu Andrei Rotaru***
Atestat de abilitare în domeniul: ***Chimie*** Titlul tezei de abilitare: *"**Thermal and physical-chemical properties of functional compounds and materials**". "**Proprietăţi termice şi fizico-chimice ale compuşilor şi materialelor funcţonale**".* Autorul: Andrei ROTARU **Universitatea din Craiova**, Craiova, România Ordinul Ministrului Educaţiei privind acordarea atestatului de abilitare: Nr. 5668/02.12.2021 Data emiterii ordinului: 02.12.2021	1	1	Da (îndeplinit)

Toate standardele şi criteriile cerute de către Universitatea Babeş-Bolyai referitoare la obţinerea atestatului de abilitare în domeniul postului (Chimie) au fost îndeplinite.

Conf. Univ. Dr. Andrei ROTARU **12.06.2023**