Lista de lucrări al candidatului Arthur Robert TUNYAGI

a) Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru domeniul disciplinelor postului pentru care candidează, care sunt incluse în format electronic în dosar și care se pot regăsi și în celelalte categorii de lucrări.

1. Tiberius Dicu, Marius Botos, Alexandra Cucoș¸ Serban Grecu¸ Stefan Florica, **Arthur Tunyagi**, *Evaluating radon concentration and temporal correction factors in residential and workplace buildings: A comparison of passive and active methods*, Heliyon, 10, 1, 12, (2024), **[IF=3.4, Q2]**

2. BD Burghele, M Botoș, S Beldean-Galea, A Cucoș, T Catalina, T Dicu, G Dobrei, Ș Florică, A Istrate, A Lupulescu, M Moldovan, D Niță, B Papp, I Pap, K Szacsvai, C Sainz, **A Tunyagi**, A Țenter, *Comprehensive survey on radon mitigation and indoor air quality in energy efficient buildings from Romania*, Science of The Total Environment, 751,141858, (2021), **[IF=10.754, Q1]**

3. A Tunyagi, T Dicu, A Cucos, BD Burghele, G Dobrei, A Lupulescu, M Moldovan, D Nita, B Papp, I Pap, K Szacsvai, A Tenter, MS Beldean-Galea, M Anton, S Grecu, L Cioloca, R Milos, ML Botos, CG Chiorean, T Catalina, MA Istrate, Carlos Sainz Fernández, *An innovative system for monitoring radon and indoor air quality*, Romanian Journal of Physics, 65, 803, (2020), **[IF=1.7, Q3]**

4. Ioan Burda, **Arthur Tunyagi**, *Quartz crystal microbalance based on passive frequency to voltage converter*, Review of Scientific Instruments, 83, 25107, (2012), **[IF=1.602, Q4]**

5. R Sumi, Z Néda, **A Tunyagi**, Sz Boda, Cs Szász, *Nontrivial spontaneous synchronization*, Physical Review E, 79, 56205, (2009), **[IF=2.4, Q2]**

6. AR Tunyagi, M Ulex, K Betzler, *Noncollinear optical frequency doubling in strontium barium niobate*, Physical Review Letters, 90, 243901, (2003), **[IF=7.035, Q1]**

7. [brevet] **Tunyagi Arthur Robert**, Cucos Alexandra Laura, Dicu Tiberius, Botos Marius Lucian, Chiorean Cosmin Gruia, Fernandez Carlos Sainz, *Sistem inteligent si metoda de determinare și control al concentrației de Radon din interiorul clădirilor civile*, RO 134001 B1, 7/2022, OSIM.

8. [brevet] Burda Ioan, **Tunyagi Arthur Robert**, Silaghi Andreea Maria, Simion Simon, Popescu Octavian, *Modul de măsurare a impedanței unui imunosenzor rezonant*, RO 129483 B1, 2/2020, OSIM.

9. [brevet] Burda Ioan, Silaghi Andreea Maria, Popescu Octavian, **Tunyagi Arthur Robert**, Simon Simion, *Multiplicator de sensibilitate pentru un senzor rezonant*, RO 129482 B1, 2/2020, OSIM.

10. [brevet] Klaus Betzler, **Tunyagi Arthur R.**, *Lichtquelle fur radial polarisiertes Licht*, DE 10 2004 013 284 B3, 2005.04.07, G02F 1/37, Deutschen Patent

b) Teza de doctorat.

„Non-Collinear Second Harmonic Generation in Strontium Barium Niobate”. Universitatea Osnabrück, Germania, 2004, Coordonator apl. Prof. dr. Klaus Betzler

c) Brevete de invenție și alte titluri de proprietate industrială.

1. Tunyagi Arthur Robert, Cucos Alexandra Laura, Dicu Tiberius, Botos Marius Lucian, Chiorean Cosmin Gruia, Fernandez Carlos Sainz, *Sistem inteligent și metoda de determinare și control al concentrației de Radon din interiorul clădirilor civile*, RO 134001 B1, 7/2022, OSIM.

2. Burda Ioan, Silaghi Andreea Maria, Popescu Octavian, **Tunyagi Arthur Robert**, Simon Simion, *Multiplicator de sensibilitate pentru un senzor rezonant*, RO 129482 B1, 2/2020, OSIM

3. Burda Ioan, **Tunyagi Arthur Robert**, Silaghi Andreea Maria, Simion Simon, Popescu Octavian, *Modul de măsurare a impedanței unui imunosenzor rezonant*, RO 129483 B1, 2/2020, OSIM.

4. Klaus Betzler, **Tunyagi Arthur R.**, *Lichtquelle fur radial polarisiertes Licht*, DE 10 2004 013 284 B3, 2005.04.07, G02F 1/37, Deutschen Patent

d) Cărți și capitole în cărți.

1. Simon Alpár, **Tunyagi Arthur Robert**, Elektronika Laboratóriumi praktikum, 3 Analóg elektronika gyakorlatok, Presa Universitara Clujeana, 2023, ISBN:978-606-37-2011-6.

2. Simon Alpár, **Tunyagi Arthur Robert**, Elektronika laboratóriumi praktikum, 2 Digitális elektronika gyakorlatok és feladatok, Presa Universitara Clujeana, 2022, ISBN:978-606-37-1688-1.

3. Simon Alpár, **Tunyagi Arthur Robert**, Elektronika laboratóriumi praktikum, 1 Elméleti és kísérleti alapok, Presa Universitara Clujeana, 2021, ISBN: 978-606-37-1255-5.

4. Libál András, Zölde Attila, **Tunyagi Arthur**, Electronic Lab Companion, Editura Albastra, 2014, ISBN:978-973-650-304-7.

e) Articole/studii în extenso, publicate în reviste cotate ISI.

1. Alpár Simon, Mike Anita-Diana, **Arthur Robert Tunyagi**, *Study of color mixing by amplitude modulation driving technique of an RGB LED*, Romanian Reports in Physics, 77,907, (2024), **[IF=2.100, Q3]**

2. Tiberius Dicu, Marius Botos, Alexandra Cucos¸ Serban Grecu¸ Stefan Florica, **Arthur Tunyagi**, *Evaluating radon concentration and temporal correction factors in residential and workplace buildings*: A comparison of passive and active methods, Heliyon, 10,e37144, (2024), **[IF=3.400, Q2]**

3. Arthur Robert Tunyagi, Kinga Bodó, Alpár Simon, *Investigation of the magnetic field created by axially symmetric permanent magnet arrangements*, Romanian Reports in Physics, 75, 910, (2023), **[IF=2.100, Q3]**

4. BD Burghele, M Botoș, S Beldean-Galea, A Cucoș, T Catalina, T Dicu, G Dobrei, Ș Florică, A Istrate, A Lupulescu, M Moldovan, D Niță, B Papp, I Pap, K Szacsvai, C Sainz, **A Tunyagi**, A Țenter, *Comprehensive survey on radon mitigation and indoor air quality in energy efficient buildings from Romania*, Science of The Total Environment, 751, 141858,(2021), **[IF=10.754, Q1]**

5. Mihail Simion Beldean-Galea, Tiberius Dicu, Alexandra Cucoș, Bety-Denissa Burghele, Tiberiu Catalina, Marius Botoș, Ancuța Țenter, Kinga Szacsvai, Alexandru Lupulescu, Istvan Pap, Gabriel Dobrei, Mircea Moldovan, **Arthur Tunyagi**, Ștefan Florică, Vlad Pănescu, Carlos Sainz, *Evaluation of indoor air pollutants in 100 retrofit residential buildings from Romania during cold season*, Journal of Cleaner Production, 277, 124098, (2020), **[IF=9.297, Q1]**

6. A Tunyagi, T Dicu, A Cucos, BD Burghele, G Dobrei, A Lupulescu, M Moldovan, D Niță, B Papp, I Pap, K Szacsvai, A Tenter, MS Beldean-Galea, M Anton, S Grecu, L Ciolacă, R Milos, ML Botos, CG Chiorean, T Catalina, MA Istrate, Carlos Sainz Fernández, *An innovative system for monitoring radon and indoor air quality*, Romanian Journal of Physics, 65,803, (2020), **[IF=1.888, Q3]**

7. Ioan Burda, Andreea Silaghi, **Arthur Tunyagi**, Simion Simon, Octavian Popescu, *Note: Sensitivity multiplication module for quartz crystal microbalance applications*, Review of Scientific Instruments, 85, 26116, (2014), **[IF=1.614, Q4]**

8. Sz Boda, Sz Ujvári, **A Tunyagi**, Z Neda, *Kuramoto-type phase transition with metronomes*, European Journal of Physics, 34, 1451, (2013), **[IF=0.619, Q4]**

9. Sz Boda, Zoltan Neda, Botond Tyukodi, **Arthur Tunyagi**, *The rhythm of coupled metronomes*, European Physical Journal B, 86,9-11, (2013), **[IF=1.463, Q4]**

10. B Tyukodi, Zs Sárközi, Z Néda, **A Tunyagi**, E Györke, The Boltzmann constant from a snifter, European journal of physics, 33, 455, (2012), **[IF=0.644, Q4]**

11. Zsuzsa Sorközi, Erna Káptalan, Zoltán Néda, Szilárd Boda, **Arthur Tunyagi**, *Optimization Induced Collective Behavior in a System of Flashing Oscillators*, International Journal of Bifurcation and Chaos, 22, 1230002 (2012), **[IF=0.921, Q2]**

12. Ponta Oana, Jakab Endre, Burda Ioan, **Tunyagi Arthur Robert**, Silaghi Andrea-Maria, Sion Simion, *AFM investigation of morphological changes to staphylococcus aureus surface induced by AgNO3 and Oxacillin addition*, Studia Universitatis Babes-Bolyai, Chemia, 57, 41, 48, (2012). **[IF=0.089, Q4]**

13. Ioan Burda, **Arthur Tunyagi**, *Quartz crystal microbalance based on passive frequency to voltage converter*, Review of Scientific Instruments, 83,25107, (2012), **[IF=1.602, Q4]**

14. I Deac, A Vlădescu, I Balasz, **A Tunyagi**, R Tetean, *Low Temperature Magnetic Properties of* $Pr_{0.7}(Ca,Sr)_{(0.3)}CoO_3$ *Oxides*, Acta Physica Polonica A, 120,306-310,(2011), **[IF=0.444, Q4]**

15. IG Deac, A Vlădescu, I Balász, **A Tunyagi**, R Tetean, *Electrical and magnetic properties of transition metal oxides* $Ln_{1-x}A_xMO_3$ *(Ln= Pr, Nd; A= Ca, Sr; M= Mn, Co)*, Journal of Optoelectronics and Advanced Materials, 12, 1818-1824, (2010), **[IF=0.412, Q4]**

16. IG Deac, A Vlădescu, I Balasz, **A Tunyagi**, R Tetean, *Electrical and magnetic behavior of transition metal oxides $Ln_{0.7}A_{0.3}TMO_3$, Ln= La, Pr; A = Ca, Sr AND TM = Mn, Co*, International Journal of Modern Physics B, 24, 762-769, (2010), **[IF=0.402, Q3]**

17. R Sumi, Z Néda, **A Tunyagi**, Sz Boda, Cs Szász, *Nontrivial spontaneous synchronization*, Physical Review E, 79, 56205, (2009), **[IF=2.4, Q2]**

18. M Ercsey-Ravasz, Zs Sárközi, Z Néda, **A Tunyagi**, I Burda, Collective behavior of electronic fireflies, European Physical Journal B, 65, 271-277, (2008), **[IF=1.568, Q4]**

19. Vasile Rednic, Lidia Rednic, Marin Coldea, Viorel Pop, Manfred Neumann, Roxana Păcurariu, **Arthur R. Tunyagi**, *X-ray photoelectron spectroscopy and magnetism of $Mn_{1-x}Al_xNi_3$ alloys*, Cent. Eur. J. Phys, 6(3),434-439, (2008) [**IF=0.448, Q4]**

20. Isnard O, Givord D, Dorolti E, Pop V, Nistor L, **Tunyagi A**, Chicinas I, *Magnetic and structural behaviour of $(Nd,Dy)_2Fe_{14}B/\alpha$-Fe nanocomposites obtained by mechanical milling and annealing*, Journal of Optoelectronics and Advanced Materials, 10, 7, 1819-1822, (2008), **[IF=0.577, Q3]**

21. C David, **A Tunyagi**, K Betzler, M Wöhlecke, *Compositional dependence of optical and vibrational properties of strontium barium niobate ($Sr_x Ba_{1-x} Nb_2O_6$)*, Physica Status Solidi (B), 244, 2127-2137, (2007), **[IF=1.071, Q4]**

22. T Volk, D Isakov, N Ivanov, L Ivleva, K Betzler, **A Tunyagi**, M Wöhlecke, *Study of ferroelectric domain switching by domain wall induced light scattering*, Journal of Applied Physics, 97, 74102, (2005), **[IF=2.498, Q2]**

23. T Volk, D Isakov, N Ivanov, L Ivleva, K Betzler, **A Tunyagi**, M Wöhlecke, *Study of ferroelectric switching by domain-wall induced light scattering*, Journal of Experimental and Theoretical Physics Letters/ JETP LETTERS, 80,258-262, (2004), **[IF=1.455, Q4]**

24. C. David; **A. Tunyagi**; M. Ulex; M. Wöhlecke; K. Betzler; K. Lengyel; L. Kovács, *Structure of the OH− stretching vibrational band in $Sr_xBa_{1-x}Nb_2O_6$*, Journal of Applied Physics, 95, 5522-5526, (2004), **[IF=2.255,Q2]**

25. C David, T Granzow, **A Tunyagi**, M Wöhlecke, Th Woike, K Betzler, M Ulex, M Imlau, R Pankrath, *Composition dependence of the phase transition temperature in $Sr_xBa_{1-x}Nb_2O_6$*, Physica Status Solidi (A), 201, R49-R52, (2004), **[IF=0.86, Q3]**

26. Ch Bäumer, C David, **A Tunyagi**, K Betzler, H Hesse, E Krätzig, M Wöhlecke, *Composition dependence of the ultraviolet absorption edge in lithium tantalate*, Journal of applied physics, 93, 3102-3104, (2003), **[IF=2.171, Q2]**

27. AR Tunyagi, M Ulex, K Betzler, *Noncollinear optical frequency doubling in strontium barium niobate*, Physical Review Letters, 90, 243901, (2003), **[IF=7.035, Q1]**

f) Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate.

1. A. R. Tunyagi; V. Pop, *Data Acquisition And Control For Horizontal Weiss Balance With An Embedded System*, AIP Conference Proceeding, Sixth International Conference of the Balkan Physical Union, Istanbul (Turkey), 899, 804, (2007), DOI: 10.1063/1.2733545

2. Iosif G. Deac, Romulus Tetean, Istvan Balasz, Daniel Andreica, Adrian Vladescu, Roxana Dudric, **Arthur R. Tunyagi**, Emil Burzo, *Magnetic transitions in the perovskites* $Pr_{1-x}Sr_xCoO_3$, J. Phys.: Conf. Ser. 200 052003, (2010), DOI 10.1088/1742-6596/200/5/052003.

3. G. Maté, E. Á. Horváth, E. Káptalan, **A. Tunyagi**, Z. Néda and T. Roska, *Periodicity enhancement of two-mode stochastic oscillators in a CNN type architecture*, 2010 12th International Workshop on Cellular Nanoscale Networks and their Applications (CNNA 2010), Berkeley, CA, USA, (2010), pp. 1-5, doi: 10.1109/CNNA.2010.5430275.

4. E. Káptalan, Z. Sárközi, **A. Tunyagi**, S. Boda and Z. Néda, *Synchronization of flashing electronic oscillators,* Proceedings of the Joint INDS'11 & ISTET'11, Klagenfurt am Wörthersee, Austria, (2011), pp. 1-6, doi: 10.1109/INDS.2011.6024789.

g) Alte lucrări și contribuții științifice sau, după caz, din domeniul creației artistice.

1. Péter Robert, Simon Alpár, **Tunyagi Arthur Robert**, *Comparative study on the speed of sound measurement in metals based on collision time*, Studia Physica, 68, 1-2, 67-81, (2023).

2. Simon Alpár, **Tunyagi Arthur Robert**, Bereci Tamás, *Programozott elektronika középiskolásoknak: Hőterjedés vizsgálata fémrudakban (V)*, Firka, 3, 10-15, (2023).

3. Bodo Kinga, **Tunyagi Arthur Robert**, Simon Alpár, *Experimental device for the study of permanent magnet arrangements*, Studia Physica, 68, 1-2, 13-24, (2023).

4. Simon Alpár, **Tunyagi Arthur Robert**, *Érdekességek a mágnesek világából*, Firka, 31-2, 1-6, (2022), https://emt.ro/kiadvanyok/firka.

5. Kovács Adél, Simon Alpár, **Tunyagi Arthur Robert**, *Programozott elektronika középiskolásoknak. Okosszoba Arduinoval (II)*, Firka, 30-1, 27-29, (2021).

6. Kovács Adél, Simon Alpár, **Tunyagi Arthur Robert**, *Programozott elektronika középiskolásoknak: Okosszoba Arduinóval*, Firka, 4, 32-35, (2020).

7. Csillag Lehel, **Tunyagi Arthur Robert**, Lazar Zsolt-Iosif, Simon Alpár, *How short is a semi-infinite ladder? An experimental approach*, Studia Physica, LXIV, 1-2, 11-26, (2019).

8. Kapusi Zalán, **Tunyagi Arthur Robert**, Simon Alpár, Low-cost, load cell and microcontroller based bending stiffness tester, Studia Physica,LXIV, 1-2 , 41-53, (2019).

9. Simon Alpár, **Tunyagi Arthur Robert**, Programozott elektronika középiskolásoknak: Arduino, számítógép a tenyérben (I), Firka, 2,15-17, (2019).

10. Simon Alpár, **Tunyagi Arthur Robert**, *Programozott elektronika középiskolásoknak: Arduino, számítógép a tenyérben (II)*, Firka, 3, 31-35, (2019).

11. Dobrei Gabriel-Cristian, Malos Cristian-Valeriu, Rosian Gheorghe, **Tunyagi Arthur Robert**, Tenter Ancuta Cristina, Comparison between technologies and costs related to sustainable utility networks in peripheral rural, ECOTERRA - Journal of Environmental Research and Protection, 1, 10-17, (2018).

12. Simon Alpár, **Tunyagi Arthur Robert**, Fülöp Zalán, Kapusi Zalán, Kandrai Konrad, *Súrlódási együttható meghatározása ellenállásmérés alapján*, Magyar Fizika Szemle, 6, 197-202, (2018).

13. Florică Ștefan, Dicu Tiberius, Burghele Bety-Denissa, Moldovan Mircea Claudiu, Hening Kinga, Tenter Ancuta Cristina, **Tunyagi Arthur Robert**, Sferle Teofana-Linda, Dobrei Gabriel-Cristian, Sainz Carlos, Cucos Dinu Alexandra Laura, Indoor Radon Related With The Geology In Romanian Urban Agglomerations (Cluj-Napoca), Studia UBB - Ambientum, 62, 29-36, (2017).

14. Tunyagi Arthur Robert, Dicu Tiberius, Hening Kinga, Papp Botond, Sainz Carlos, Cucos Dinu Alexandra Laura, *System for Continuous Monitoring of Indoor Air Quality and Remote Data Transmission under SMART_RAD_EN Project*, Studia UBB - Ambientum, 62, 71-79, (2017). (http://www.studia.ubbcluj.ro/arhiva/abstract_en.php?editie=AMBIENTUM&nr=2&an=2017&id_art=15535)