

Lista lucrarilor

Prof.dr.ing. Marius M. Balas

Lucrari in reviste indexate ISI

1. Valentina E. Bălaș, **Marius M. Bălaș**. *Constant Time to Collision Platoons*, Int. J. of Computers, Communications & Control, ISSN 1841-9836, E-ISSN 1841-9844, Vol. III (2008), Suppl. issue: Proceedings of ICCCC 2008, pp. 33-39, 15-17 Mai 2008 Oradea, Romania, CNCSIS cat. A, **ISI indexed (impact factor: 1,585) Q3**
http://www.journal.univagora.ro/?page=supp_isue2008,
<http://www.journal.univagora.ro/download/icccc08.pdf>.
2. **Marius M. Bălaș**, Valentina E. Bălaș. *World Knowledge for Control Application by Fuzzy-Interpolative Systems*, Int. J. of Computers, Communications & Control, ISSN 1841-9836, E-ISSN 1841-9844, Vol. III (2008), Suppl. issue: Proceedings of ICCCC 2008, pp. 28-32, 15-17 Mai 2008, Oradea, Romania, CNCSIS cat. A, **ISI indexed (impact factor: 1,585) Q3**
http://www.journal.univagora.ro/?page=supp_isue2008
3. **M. Balas**, J. Duplaix, M. Bouchouicha, S.V. Balas. *Structural modeling of the wind's influence over the heat flow of the greenhouses*. Published in *Journal of Intelligent and Fuzzy Systems*, John Wiley & Sons, Special Issue: *Soft Computing and Applications*, Volume 19, Number 1, 2008, pp. 29-40. ISSN 1064-1246. **ISI indexed (impact factor: 1,637) Q3**
4. **M.M. Balas**. *Seven Passive Greenhouse Synergies*. Acta Politehnica Hungarica, Budapest, Vol. 11, No. 4, 2014, pp. 199-210. ISSN: 1785-8860. **ISI indexed (impact factor: 1,286), Q3**
5. Chakraborty Sayan; Dey Nilanjan; Samanta Sourav; Ashour Amira; Barna C.; Balas Marius, Optimization of Non-rigid Demons Registration Using Cuckoo Search Algorithm. COGNITIVE COMPUTATION Volume: 9 Issue: 6 Pages: 817-826 Published: DEC 2017, **ISI indexed (impact factor: 4,287), Q1**
6. Venkataraman Yegnanarayanan, Gayathri Yegnanarayanan, Marius M. Balas. *On Coloring Catalan Number Distance Graphs and Interference Graphs*. Symmetry. Vol. 19, issue 10, pp. 468-470, 2018. ISSN: 2073-8994. **ISI indexed (impact factor: 2,143) Q2**
7. Umar Farooq, Jason Gu, Mohamed El-Hawary, Valentina E. Balas, **Marius M. Balas**, Ghulam Abbas, Muhammad Usman Asad, Jun Luo. *State convergence-based control of a multi-master-single-slave non-linear teleoperation system*. Acta Polytechnica Hungarica, Vol. 15, Issue 4, pp. 7-26. 2018. ISSN: 1785-8860. **ISI indexed (impact factor: 1,286), Q3**
8. Abbas, Ghulam, Nazeer, Muhammad Qumar, Balas, Valentina E., Lin, Tsung-Chih, **Balas, Marius M.**, Asad, Muhammad Usman, Raza, Ali, Shehzad, Muhammad Naeem, Farooq, Umar, Gu, Jason, *Derivative-Free Direct Search Optimization Method for Enhancing Performance of Analytical Design Approach-Based Digital Controller for Switching Regulator*, ENERGIES, Volume: 12, Issue: 11, Article Number: 2183, DOI: 10.3390/en12112183, Published: JUN 1 2019, **ISI indexed (impact factor: 2,707), Q3**
9. Ashraf, Naveed, Izhar, Tahir, Abbas, Ghulam, Balas, Valentina E., **Balas, Marius M.**, Lin, Tsung-Chih, Asad, Muhammad Usman, Farooq, Umar, Gu, Jason, *A Single-Phase Buck and Boost AC-to-AC Converter with Bipolar Voltage Gain: Analysis, Design, and Implementation*, ENERGIES, Volume: 12, Issue: 7, Article Number: 1376, DOI: 10.3390/en12071376 , Published: April 1, 2019, **ISI indexed (impact factor: 2,707), Q3**



10. Farooq, Umar; Gu, Jason; Balas, Valentina E.; Abbas, Ghulam; Asad, Muhammad Usman; **Balas, Marius M.**, *A Hybrid Time Series Forecasting Model for Disturbance Storm Time Index using a Competitive Brain Emotional Neural Network and Neo-Fuzzy Neurons*, ACTA POLYTECHNICA HUNGARICA, Volume: 16, Issue: 4, Pages: 213-229, **2019**, ISI indexed (impact factor: 1,286), Q3
11. Abbas, Ghulam; Gu, Jason; Farooq, Umar; Abid, Muhammad Irfan ; Raza, Ali; Asad, Muhammad Usman; Balas, Valentina E.; **Balas, Marius E.**, *Optimized Digital Controllers for Switching-Mode DC-DC Step-Down Converter*, ELECTRONICS, Volume: 7, Issue: 12, Article Number: 412, DEC **2018**, . ISI indexed (impact factor: 1,764), Q2 in **2018**.
12. Farooq, Umar; Asad, Muhammad Usman; Gu, Jason; Abbas, Ghulam; Balas, Valentina E; **Balas, Marius M.**, Design of a Single-Master/Multi-Slave Nonlinear Teleoperation System through State Convergence with Time Varying Delays, ACTA POLYTECHNICA HUNGARICA, Volume: 15, Issue: 8, Pages: 55-82, **2018**, ISI indexed (impact factor: 1,286), Q3
13. Umair Tahir, Ghulam Abbas, Dan Ovidiu Glavan, Valentina E Balas, Umar Farooq, **Marius M Balas**, Ali Raza, Muhammad Usman Asad, Jason Gu, Design of Three Phase Solid State Transformer Deployed within Multi-Stage Power Switching Converters, Applied Sciences, Vol. 9, Nr. 17, Pagini 3545, 2019, ISI indexed (impact factor: 2,217), Q2

Articole publicate in Proceedings indexate ISI

1. R. E. Precup, S. Preitl, **Marius M. Bălaş**, Valentina E. Bălaş, *Fuzzy Controllers for Tire Slip Control in Anti-lock Braking Systems*. Proceedings of the 2004 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE ,04, Budapest, 25-29 July **2004**, Volume 3, pag. 1317 – 1322, Indexed by INIST-CNRS, Cote INIST: Y 38577(1), 35400013866828.2270, Indexed by IEE INSPEC IEEE CNF, INSPEC Accession Number: 8254425, IEEE Catalog Number 04CH37542, ISBN 0-7803-8353-2, ISSN 1098-7584, INSPEC Indexed, IEEE Xplore, (ARC Cat. A). (Factor impact: 0,25)
2. **Marius M. Bălaş**, Valentina E. Bălaş, *Modeling Passive Greenhouses. The Sun's Influence*, INES **2008**, 12th IEEE International Conference on Intelligent Engineering Systems, February 25-29, Miami, Florida, USA, pp.71-75, IEEE Catalog Number: CFP08IES-CDR, ISBN: 978-1-4244-2083-4, Library of Congress: 2008900450, INSPEC Indexed, IEEE Xplore, ISI Proceedings. (Factor impact: 0,25)
3. **Marius M. Bălaş**, Valentina E. Bălaş, J. Duplaix, *Optimizing the Distance-Gap between Cars by Constant Time to Collision Planning*. 2007 IEEE International Symposium on Industrial Electronics, June 4-7, 2007, Vigo, Spain, pag. 109 Abstract Book, CD Proceedings, pag. 304-309, IEEE Catalog Nr.r: 07TH8928C, ISBN: 1-4244-0755-9 Library of Congress: 2006935487, INSPEC Indexed, IEEE Xplore, ISI Proceedings. (Factor impact: 0,25)
4. **Marius M. Bălaş**, V.E. Bălaş, C. Barna, *The Constant Effort Imposed Distance Braking for Urban Railway Vehicles*. EUROCON 2005 – The International Conference “Computer as a Tool”, Belgrade, Serbia and Montenegro, November 21-24, **2005**, IEEE Catalog Number: 05EX1255C. ISBN: 1-4244-0050-3, pag. 365-368, Indexed by IEE INSPEC IEEE CNF, INSPEC Indexed, IEEE Xplore. (Factor impact: 0,25)
5. Valentina E. Bălaş, **Marius M. Bălaş**. *Traffic Management by Constant Time to Collision*, Ignac Lovrek, Robert J. Howlett and Lakhmi C. Jain (eds.), Book: *Knowledge-Based Intelligent Information and Engineering Systems*, 12th International Conference, KES 2008, Zagreb, Croatia, September 3-5, 2008, Proceedings, Part III, LNCS 5179/2008, pag. 658–663, 2008, © Springer-



Verlag Berlin Heidelberg 2008, ISBN 978-3-540-85566-8, <http://www.springerlink.com/content/54066776m5814356/>, DPLB (Computer Science Bibliography) indexed, ACM, SCOPUS indexed, (ARC Cat. B).

6. Marius M. Bălaş, Valentina E. Bălaş, *Adaptive Rule-Based Reasoning by Qualitative Analysis*, 13 International Conference on Information Processing and Management of Uncertainty, IPMU 2010, Dortmund, Germany, June 28- July 2, Proceedings, Part I, [Communications in Computer and Information Science](http://www.springerlink.com/content/u50w1n1652815147/), 2010, Volume 80, Part 3, Part 11, pag. 553-560, E. Hullermeier, R. Kruse, F. Hoffman (Eds.), Springer-Verlag, Berlin –Heidelberg 2010, ISSN 1865-0929, ISBN-10 3-642-14054-8 Springer Berlin Heidelberg NewYork, (Factor impact: 0,25) <http://www.springerlink.com/content/u50w1n1652815147/>, (ARC Cat. C)
7. Marius M. Balas, Valentina E. Balas, *A Sustainable Alimentation System for Our Future: The Passive Greenhouse*, Proceedings of the European Computing Conference (ECC '09) and the 3rd International Conference on Computational Intelligence (ci'09), Session: Computation Intelligence Application, Tbilisi, Georgia, June 26-28, 2009, pag. 86-90, ISSN 1790-5117, ISBN 978-960-474-088-8. (Factor impact: 0,25)
8. M.M. Balas, V.E. Balas, N. E. Mastorakis, *The Fuzzy-Interpolative Adaptive Controllers*, Recent Advances in Fuzzy Systems, Proceedings of the 10th WSEAS International Conference on Fuzzy Systems (FS '09), Prague, Czech Republic, March 23-25, 2009, pag.18-21, ISBN: 978-960-474-066-6, ISSN: 1790-5109. (Factor impact: 0,25)
9. Marius M. Bălaş, Valentina E. Bălaş, *Monoscopic CCD Cameras as Distance Sensors*, Editors: Calin Enacheșcu, Petru Maior University, Tg. Mures, Romania ; Barna L. Iantovics, Petru Maior University, Romania ; Gheorghe F. Florin, Romanian Academy, Bucharest, Romania, BICS 2008: Proceedings of the 1st International Conference Bio-Inspired Computational Methods Used for Solving Difficult Problems--Development of Intelligent and Complex Systems, American Institute of Physics, Conference Proceedings Volume 1117, 2009, ISBN: 978-0-7354-0654-4, pp. 67-73, <http://proceedings.aip.org/dbt/dbt.jsp?KEY=APCPCS&Volume=1117&Issue=1>, ISI Proceedings. (Factor impact: 0,25)
10. Valentina E. Bălaş, Marius M. Bălaş, *On the Switching Control*, Editors: Calin Enacheșcu, Petru Maior University, Tg. Mures, Romania; Barna L. Iantovics, Petru Maior University, Romania ; Gheorghe F. Florin, Romanian Academy, Bucharest, Romania, BICS 2008: Proceedings of the 1st International Conference Bio-Inspired Computational Methods Used for Solving Difficult Problems--Development of Intelligent and Complex Systems, American Institute of Physics, Conference Proceedings Volume 1117, 2009, ISBN: 978-0-7354-0654-4, pp. 81-88, <http://proceedings.aip.org/dbt/dbt.jsp?KEY=APCPCS&Volume=1117&Issue=1>, ISI Proc.. (Factor impact: 0,25)
11. Valentina E. Bălaş, Marius M. Bălaş, Mircea V. Putin-Racoviță, *Passive Greenhouses and Ecological Reconstruction*, INES 2008, 12th IEEE International Conference on Intelligent Engineering Systems, Feb. 25-29, 2008, Miami, Florida, USA, pp.77-81, IEEE Catalog Number: CFP08IES-CDR, ISBN: 978-1-4244-2083-4, Library of Congress: 2008900450, INSPEC Indexed, IEEE Xplore, ISI Proceedings. (Factor impact: 0,25)
12. Marius M. Bălaş, Valentina E. Bălaş, *Some Observations on Stability of Switching Adaptive Rule Based of Fuzzy Self-Adapted Interpolative Controllers*. ISCIII'07 3rd International Symposium on Computational Intelligence and Intelligent Informatics, Proceedings, March 28-30, 2007, Agadir, Morocco, pag. 63-66, IEEE Catalog Number: 07EX1756, ISBN: 1-4244-1157-2, INSPEC Indexed, IEEE Xplore, ISI Proceedings. (Factor impact: 0,25)



- 13.** Valentina E. Bălaș, **Marius M. Bălaș**, *Switching Adaptive Correctors for Fuzzy Fusion Self-Adapted Interpolative Controllers*. ISCIII'07 3rd International Symposium on Computational Intelligence and Intelligent Informatics, Proceedings, March 28-30, 2007, Agadir, Morocco, pag. 67-72, IEEE Catalog Number: 07EX1756, ISBN: 1-4244-1157-2, **INSPEC Indexed, IEEE Xplore, ISI Proceedings**. (Factor impact: 0,25)
- 14.** **Marius M. Bălaș**, Valentina E. Bălaș, *A Simple Model of the Air Conditioning Installation of a Compartmented Railway Coach*, ICCC 2007, Proceedings, 5th IEEE International Conference on Computational Cybernetics, Gammart, Tunisia, October 19-21, 2007, pp. 271-274, IEEE Catalog Number: 07EX1750C, ISBN: 1-4244-1146-7, Library of Congress: 2007922966, **INSPEC Indexed, ISI Indexed**. (Factor impact: 0,25)
- 15.** **Marius M. Bălaș**, **Valentina E. Bălaș**, *World Knowledge for Control Applications*. INES 2007 Proceedings, 29 June-1 July, 2007, Budapest, Hungary, 11th International Conference on Intelligent Engineering Systems, pag. 225-228, IEEE Catalog Number: 07EX1751, ISBN: 1-4244-1147-5, Library of Congress: 2007922965, **INSPEC Indexed, IEEE Xplore, ISI Proceedings**. (Factor impact: 0,25)
- 16.** **Marius M. Bălaș**, **Valentina E. Bălaș**, **J. Duplaix**, *On the Switching Controllers' Issue*, 2nd IEEE International Workshop on Soft Computing Applications, 21-23 August 2007, Gyula-Hungary, Oradea-Romania, pp. 103-108, IEEE Catalog Number: CFP0728D, ISBN 978-1-4244-1607-3, Library of Congreso 2007905895, Digital Object Identifier 10.1109/SOFA.2007.4318313, Indexed by IEE INSPEC IEEE CNF, **INSPEC Indexed, IEEE Xplore, ISI Proceedings, (ARC Cat. C)**. (Factor impact: 0,25)
- 17.** **Marius M. Bălaș**, **Mircea Ciugudean**, *CMOS-Integrated Temperature Relay Based on Widlar Mirror*. Chapter in *Proceedings of the 5th International Workshop on Soft Computing Applications SOFA'12*, Szeged, Hungary, Aug. 22-24. Series: *Advances in Intelligent and Soft Computing*, edited by V.E. Balas, J. Fodor, A. Varkonyi-Koczy, J. Dombi and L.C. Jain, Springer, **2013**, pp. 319-330. ISBN 978-3-642-33941-7. **ISI indexed (impact fact.: 0,25)**
- 18.** **M.M. Balas**, M. Socaci, O. Olaru. *A FPGA Floating Point Interpolator*. Chapter in *Proceedings of the 5th International Workshop on Soft Computing Applications SOFA'12*, Szeged, Hungary, August 22-24. Series: *Advances in Intelligent and Soft Computing*, edited by V.E. Balas, J. Fodor, A. Varkonyi-Koczy, J. Dombi and L.C. Jain, Springer, **2013**, pp. 331-336. ISBN 978-3-642-33941-7. **ISI indexed (impact factor: 0,25)**
- 19.** **M.M. Balas**, N.A. Chira, S.A. Matisan and F.M. Suciu. *Using License Plates Recognition for Automate Cruise Control*. Chapter in *Proc. of the 5th International Workshop on Soft Computing Applications SOFA'12*, Szeged, Hungary, August 22-24. Series: *Advances in Intelligent and Soft Computing*, edited by V.E. Balas, J. Fodor, A. Varkonyi-Koczy, J. Dombi and L.C. Jain, Springer, **2013**, pp. 605-609. ISBN 978-3-642-33941-7. **ISI indexed (impact factor: 0,25)**
- 20.** Marius M. Balas, Martin Buchholz, Sanda Balas. *Expert Control for the Coupled Tanks Greenhouse*. In: Balas V., Jain L., Kovačević B. (eds.) *Soft Computing Applications. Advances in Intelligent Systems and Computing*, Springer Cham, 2016, vol. 357, pp. 939-947. https://doi.org/10.1007/978-3-319-18416-6_74. **ISI indexed (impact factor: 0,25)**
- 21.** Marius M. Balas, Robert A. Boran. *Basic Expert System*. International Workshop Soft Computing Applications SOFA 24-26 Aug. 2016. In: Balas V., Jain L., Balas M. (eds.) *Advances in Intelligent Systems and Computing book series* (AISC, volume 633), Springer Cham, 2018, vol. 1, pp. 10-17. ISSN 2194-5357. https://doi.org/10.1007/978-3-319-62521-8_2. **ISI indexed (impact factor: 0,25)**

22. Marius M. Balas, Adelin Sofrag. *Multi Framing HDR for MRI Brain Images*. International Workshop Soft Computing Applications SOFA 24-26 Aug. 2016. In: Balas V., Jain L., Balas M. (eds.) *Advances in Intelligent Systems and Computing book series* (AISC, volume 633), Springer Cham, 2018, vol. 1, pp. 290-297. ISSN 2194-5357. https://doi.org/10.1007/978-3-319-62521-8_23. ISI indexed (impact factor: 0,25)
23. Marius M. Balas, Emanuela V. Muller, Ramona Lile. *Fuzzy-Expert System for Investments in Winemaking*. International Workshop Soft Computing Applications SOFA 24-26 Aug. 2016. In: Balas V., Jain L., Balas M. (eds.) *Advances in Intelligent Systems and Computing book series* (AISC, volume 634), Springer Cham, 2018, vol. 2, pp. 278-285. ISSN 2194-5357. https://doi.org/10.1007/978-3-319-62524-9_22. ISI indexed (impact factor: 0,25)

Articole indexate in alte baze de date

1. Valentina E. Bălaș, **Marius M. Bălaș**, *Observing Control Systems by Phase Trajectories of the Error*. WSEAS Transactions on Systems, Issue 7, Volume 5, July **2006**, ISSN 1109-2777, pag. 1717-1722, <http://www.worldses.org/journals/systems/systems-july2006.doc>, SCOPUS Indexed.
2. **Marius M. Bălaș**, Valentina E. Bălaș, S. V. Muscă, C. Muscă, *Ecological Reconstruction Using Energetic Passive Greenhouses*. RSEE, 6th International Conference on Renewable Sources and Environmental Electro-Technologies, 8 - 10 June **2006**, Oradea , Romania, Computer Science And Control Systems Session pag. 7-10, Analele Universitatii din Oradea/ Fascicula ELEKTROTEHNICA, Sectiunea: Stiinta Calculatoarelor si Sisteme de Control, ISSN 1841-7213, BDI.
3. **Marius M. Bălaș**, M. Ciugudean, Valentina E. Bălaș, *Adaptive Fuzzy Interpolative Controllers and Applications*. Revista de Inventica, Nr. 48, Vol IX, An XV, **2005**, Romanian Journal for Creativity in Engineering and Technology – Research and Education Reports, Special Issue, Guest Editors: Horia-Nicolai Teodorescu, Seizaburo Arita, Zvetlana Cojocaru, Romanian Inventors Society, Iasi, ISSN 1210-3084, pag. 13-23, Revista CNCSIS categ. D., <http://www.inventica.org.ro/revista/reviste/r48/Abstract%2048.pdf>
4. **Marius M. Bălaș**, Valentina E. Bălaș, T. L., Dragomir, *A preamble on the identification of the operating regimes of the controllers by the help of the phase trajectory* . Electronic BUSEFAL ISSN 0296-3698. Busefal #87, LAMII / CESALP – Universite de Savoie, Annecy, France, Iunie **2002** Format electronic. http://www.listic.univ-savoie.fr/modules.php?name=Busefal&func=AfficherVolume&no_volume=87
15. **Marius M. Bălaș**, Valentina E. Bălaș, C. Alexandrescu, *Some Remarks on the Fuzzy - PID Controllers*. Buletinul Științific al Universității "Politehnica" din Timișoara, Proceedings of the Symposium on Electronics and Telecommunications "Etc.'98", Vol II, Timișoara, sept. 17-18 **1998**, pag. 277-282, ISSN 1224-6034, Revista CNCSIS categ. B+.
16. **M. Balas**, V. Balas, L. Foulloy, S. Galichet. *A model of the sliding Wheel During Braking*. BOGIE 2001: The 5-th International Conference on Railway Bogies and Running Gears, Budapest University of Technology and Economics, Department of Railway Vehicles, Sept. **2001**, Budapest, Hungary, SCOPUS indexed.
17. V. Bălaș, **M. Bălaș**. *The Real-Time Evaluation of the Adhesion by Internal Model*. The 8th Mini Conference on Vehicle System Dynamics, Identification and Anomalies, 11-13 November, **2002**, Budapest, Hungary, ISBN 963 420 8177, pag. 247-254, SCOPUS indexed.
18. **M. Bălaș**, V. Bălaș, L. S. Bocii, I. Radu. I. Koles. *The Real Time Evaluation of the Weariness of the Disc Brake*. The 8 Th Mini Conference on Vehicle System Dynamics, Identification and

Anomalies, 11-13 November, **2002**, Budapest, Hungary, pag. 241-246, ISBN 963 420 8177, **SCOPUS indexed**.

- 19.** M. Balas, V. Balas, C. Barna, J. Duplaix, Gh. Gherman, R. E. Precup. *The Real Time Estimation of the Weariness of the Wheels' Tread for Railway Vehicles*. Proceedings of the 6th International Conference on Railway Bogies and Running Gears, Budapest, Hungary, 13-16 sept. **2004**, edited by Prof. Istvan Zobory, Department of Railway Vehicles BME, Budapest, Hungary, ISBN 963-421-5750, pag. 387-392. **SCOPUS indexed**.
- 20.** M. Bălaş, V. Bălaş. *The Family of Fuzzy Self Adaptive Interpolative Controllers*. International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems, IPMU2004, Special Session „Control”, July 4 – 9, **2004**, Perugia, Italy, Vol. III, pp. 2119-2124, (**ARC Cat. C**), **Google Scholar**.
- 21.** L.T.Koczy, M. Balas, M. Ciugudean, V. Balas, J. Botzheim. *On the Interpolative Side of the Fuzzy Sets*. IEEE – SOFA 2005 Proceedings, IEEE International Workshop on Soft Computing Applications, SOFA, 27-30 August, **2005**, Szeged–Hungary & Arad-Romania, pag. 17-23, ISBN 963 219 001 7, (**ARC Cat. C**), **Google Scholar**
- 22.** M.M. Balas, V.E. Balas. *Optimising the Distance-Gap Between Cars by Fuzzy-Interpolative Control with Time to Collision Planning*. ICM **2006**, IEEE Conference on Mechatronics, Budapest, Hungary, July 3-5, 2006, pag. 215-218, IEEE Catalog Number of printed proceedings06EX1432, ISBN 1-4244-9712-6, Indexed by IEE INSPEC IEEE CNF, INSPEC Accession Number: 9157024, Digital Object Identifier 10.1109/ICMEH.2006.252527, **INSPEC Indexed**, **IEEE Xplore**.
- 23.** M.M. Balas, V.E. Balas. *Another Possible Way towards the Intelligent Nano-Systems: the Fuzzy-Interpolative*. The 11th IPMU International Conf., July 2-7, **2006**, Paris, France, pp. 2135-2141, Editions EDK, Paris, 2006, ISBN: 2-84254-112-X, (**ARC Cat. C**)
- 24.** V.E. Balas, M.M. Balas. *Driver Assisting by Inverse Time to Collision*. WAC 2006, July 24-27, **2006**, Budapest, Hungary, Indexed by IEE INSPEC IEEE CNF, IEEE Catalog Number: 06EX1486, ISBN 1-889335, **INSPEC Indexed**
- 25.** V.E. Balas, M.M. Balas. *Assisting the Drivers by Means of the Constant Time to Collision Criterion*, 12th International Conference IPMU 08, Information Processing and Management of Uncertainty in Knowledge-Based Systems, June 22-27, **2008**, Malaga, Spain, pp. 946-951, L. Magdalena, M. Ojeda-Aciego, J.L. Verdegay (eds), ISBN: 978-84-612-3061-7, Dep. Legal: MA-500-2008, (**ARC Cat. C**)
- 26.** M.M. Balas, V.E. Balas. *Smart Control for Passive Greenhouses*, 12th International Conference IPMU 08, Information Processing and Management of Uncertainty in Knowledge-Based Systems, June 22-27, 2008, Malaga, Spain, pp. 826-831, L. Magdalena, M. Ojeda-Aciego, J.L. Verdegay (eds), ISBN: 978-84-612-3061-7, Dep. Legal: MA-500-2008, (**ARC Cat. C**)
- 27.** V.E. Balas, Marius M. Balas, *The traffic Control by Constant Time to Collision Platoons*, 11th Mini Conference on Vehicle System Dynamics, Identification and Anomalies, VSDIA, 11-12 November **2008**, Budapest University of Technology and Economics, Hungary, pag. 559-566, ISBN 978 963 313 011 7, **BDI**
- 28.** M.M. Balas, V.E. Balas, *The Switching Controllers' Effect and its Rejection in the Case of the Airplanes*, 11th Mini Conference on Vehicle System Dynamics, Identification and Anomalies, VSDIA, 11-12 November **2008**, Budapest University of Technology and Economics, Hungary, pag. 559-566, ISBN 978 963 313 011 7, **BDI**
- 29.** Marius M. Balas, Jelena Nikolic, Ramona Lile, Mihaela Popa, Roxana Beiu. *Integrated Rooftop Greenhouses and Green Skyline Cities*. International Multidisciplinary Scientific



- GeoConference: SGEM: Surveying Geology & mining Ecology Management. Sofia. Vol. 18, issue 6.4, 2018, pp. 435-443. DOI: 10.5593/sgem 2018V/6.4/ S09. 055. **BDI**
- 30.** Valentina E. Bălaș, Marius M. Bălaș. *Considerații asupra modelelor interne*. Scientific and Technical Bulletin, Series: Electrotechnics, Electronics, Automatic Control and Computer Science. Aurel Vlaicu University of Arad. Vol. 1, issue 1, 11 Martie 2015, pp. 19-34. **BDI**
- 31.** Marius Bălaș. *Switching Control by Phase Trajectory*. Scientific and Technical Bulletin, Series: Electrotechnics, Electronics, Automatic Control and Computer Science. Aurel Vlaicu University of Arad. Vol. 2, issue 1, 24 Feb. 2015, pp. 81-93. **BDI**
- 32.** Marius Bălaș, Jean Duplaix. *Switching Control by Phase Trajectory*. Scientific and Technical Bulletin, Series: Electrotechnics, Electronics, Automatic Control and Computer Science. Aurel Vlaicu University of Arad. Vol. 4, issue 1, 24 Feb. 2015, pp. 7-18. **BDI**
- 33.** M. Bălaș, V. Bălaș. *Applying the Constant Time To Collision Criterion In Swarm Systems*. Scientific and Technical Bulletin, Series: Electrotechnics, Electronics, Automatic Control and Computer Science. Aurel Vlaicu University of Arad. Vol. 5, issue 4, 25 Feb. 2015, pp. 15-26. **BDI**
- 34.** Valentina E. Bălaș, Marius M. Bălaș. *Switching Control by Phase Trajectory*. Scientific and Technical Bulletin, Series: Electrotechnics, Electronics, Automatic Control and Computer Science. Aurel Vlaicu University of Arad. Vol. 5, issue 4, 25 Feb. 2015, pp. 81-93. **BDI**
- 35.** Dana Balas-Timar, Valentina E Balas, Marius M Balas, Vijay Rao. *Fuzzy Scoring of Behavioral Interviews Based on Storytelling Approach*. The 6th World Conference on Soft Computing-WConSC, 2016. **BDI**
- 36.** Vinod Madan, Marius Balas, Enrico Staderini. *Novel original digital signal processing techniques of nuclear spectra: a review*. Information Technology and Computational Physics. Special Issue, 2016. **BDI**
- 37.** Rakesh Kumar Sidharthan, Ramkumar Kannan, Seshadhri Srinivasan, Marius Mircea Balas. *A Novel Keep Zero as Zero Polar Correlation Technique for Mobile Robot Localization using LIDAR*. Advances in Electrical and Computer Engineering. Vol. 16, issue 4, 1 Ian. 2016, pp. 15-22. ISSN: 1582-7445. **BDI**

Brevete de inventie internationale

- 1.** A. Barz, **M. Bălaș**, G. Dumitrescu. *Echipament electric de alimentare la tensiunea de 220V/50Hz a iluminatului fluorescent din vagoanele de călători, de la bateria de acumulatori*. Brevet OSIM nr. 91984. Internațional: *AC power supply for special railway wagon with pulse generator and thyristors which supply transformer with output filter*. Patent number RO101695-A.
- M. Bălaș**, A. Aromânesei, C. Pleșu. *Invertor pt. iluminatul fluorescent al vag. de călători, cu stabilizarea iluminării*. Brevet OSIM nr. 105756. Internațional: *Inverter for fluorescent lamp in railway car/ has oscillating circuit whose pulses are amplified by transistor and transmitted to lamp via pulse transformer*. Patent Number: RO105756-B1.

Brevete de inventie nationale

- 1.** I. Puie, I. Rubinstein, **M. Bălaș**, V. Crișan, L. Botaș. *Dispozitiv de supraveghere selectivă a rețelelor trifazate cu nul izolat*. Brevet OSIM nr. 91329.



- 2. M. Bălaș**, C. Nicolescu, I. Rubinstein, A. Barz, G. Dumitrescu. *Dispozitiv de optimizare a funcționării iluminatului în vagoane de călători*. Brevet OSIM nr. 97546.
- 3. I. Puie, M. Bălaș**, A. Barz, G. Dumitrescu. *Echipament de alimentare de la linia de înaltă tensiune a trenului*. Brevet OSIM nr. 98962.
- 4. I. Puie, M. Bălaș**. *Metodă directă de măsură și control în timp real a gradului de tasare a amestecurilor de formare*. Brevet OSIM nr. 100838.
- 5. D. Piscoi, M. Bălaș**, C. Nicolescu, I. Copaci. *Metodă de măsurare a vitezei vagonului izbitor în cazul probelor de tamponare*. Brevet OSIM nr. 101267.

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