

Lista selectivă a celor mai importante lucrări și realizări

Cărți și capitole în cărți de specialitate sau volume colective

1. **Breaz, R.E.**, Tera, M, *Tehnici de programare manuală și asistată de calculator a echipamentelor CNC*, Editura Universității “Lucian Blaga” din Sibiu, 2016, ISBN 978-606-12-1294-1, 200 pag., 2016
2. Mătieș, V. – coordonator, *Platforma națională de mecatronică: fundamentul programelor educaționale și de formare continuă în societatea cunoașterii*, Editura UT Press, Cluj Napoca, 2016, ISBN 978-606-737-148-2, co-autor al capitolului *Mecatronică în cadrul Universității “Lucian Blaga” din Sibiu*, 10 pag
3. Morar, L., **Breaz, R.**, Câmpean, E., *Programarea manuală și asistată de calculator a echipamentelor numerice*, Editura Casa Cărții de Știință, ISBN 978-606-17-0508-5, Cluj-Napoca, 402 pag., 2014
4. **Breaz, R.E.**, *Automatizări industriale*, Editura Universității “Lucian Blaga” din Sibiu, 2007, ISBN 978-973-739-535-1, 250 pag., 2007
5. Telea, D., Popp, I.O., **Breaz, R.E.**, *Masini, echipamente si strategii in sisteme flexibile de productie*, Editura Universității “Lucian Blaga” din Sibiu, ISBN 978-973-739-794-2 Sibiu, 598 pag., 2009

A. Articole publicate ca autor sau coautor în reviste cotate ISI, ERIH, SCOPUS sau alte BDI

B1. Articole publicate în reviste cotate ISI cu factor de impact

1. Tera, M, **Breaz, R.-E.**, Racz, S.-G., Gîrjob, C., *Processing strategies for single point incremental forming—a CAM approach*, International Journal of Advanced Manufacturing Technology (2019), <https://doi.org/10.1007/s00170-018-03275-9>, jurnal cotate Clarivate Analytics, **Q2 – zonă galbenă**, (FI **2.633/2019**), WOS:000469002200049
2. Cioca, L.-I., **Breaz, R.-E.**, Racz, S.-G., *Reducing the Risks during the Purchase of Five-Axis CNC Machining Centers Using AHP Method and Fuzzy Systems*, Sustainability (2019), 11(2), 315, <https://doi.org/10.3390/su11020315>, jurnal cotate Clarivate Analytics, **Q2 – zonă galbenă**, (FI **2.576/2019**), *autor corespondent*, WOS:000457129900019
3. S.G. Racz, **R.E. Breaz**, O. Bologa, M. Tera, V.Ș. Oleksik, *Using an adaptive neuro-fuzzy inference system (ANFIS) to calculate the vertical force in single point incremental forming*, International Journal of Computers Communications & Control, (2019), jurnal cotate Clarivate Analytics, Volume: 14, Issue: 1, Pages: 63-77, <https://doi.org/10.15837/ijccc.2019.1.3489>, **Q3 – zona albă** (FI **2.093/2019**), *autor corespondent*, WOS:000458616200005
4. S.G. Racz, **R.E Breaz**, M. Tera, C. Gîrjob, C. Biriș, A.L. Chicea, O. Bologa, *Incremental Forming of Titanium Ti6Al4V Alloy for Cranioplasty Plates—Decision-Making Process and Technological Approaches*, Metals, (2018), 8(8), 626; <https://doi.org/10.3390/met8080626>, jurnal cotate Clarivate Analytics, **Q1 – zonă roșie**, (FI **2.259/2018**), *autor corespondent*, WOS:000443616400062
5. O. Bologa, **R.E. Breaz**, S.G. Racz, *A Fuzzy-based Decision Support Tool for Engineering Curriculum Design*, International Journal of Computers Communications & Control, (2015), Volume: 10 Issue: 6 (December), pp. 803-811, ISSN 1841-9836, jurnal cotate Clarivate Analytics, (FI **0.627/2015**), *autor corespondent*, <http://univagora.ro/jour/index.php/ijccc/article/view/2071/581>, WOS:000364346600004
6. Oleksik, V., Pascu, A., Mara, D., Bologa, O., Racz, G, **Breaz, R.**, *Influence of geometric parameters on strain and thickness reduction in incremental forming process*, STEEL RESEARCH INTERNATIONAL, Volume: 81, Issue: 9, Pages: 930-933, Special Issue: SI, 2010, jurnal cotate Clarivate Analytics, (FI **0.455/2010**), WOS:000208594600230

B2. Articole publicate în reviste cotate ISI cu factor de impact, cu dublă încadrare (article/proceedings paper)

1. Oleksik, V., Bologa, O., **Breaz, R.**, Racz, G., Găvrus, A., *Numerical simulations and experimental researches regards the precision of the incremental forming process*, The 12th Conference on Metal Forming, Krakow - Poland, September 21-24, STEEL RESEARCH INTERNATIONAL, No. 79 Volume 1, pp. 591-594, 2008, (FI **0.344/2008**), WOS:000267944600082

B3. Articole publicate în reviste cotate ISI fără factor de impact

1. Racz, S.-G., **Breaz, R.-E.**, Cioca, L.-I., *Hazards That Can Affect CNC Machine Tools during Operation—An AHP Approach*. Safety 2020, 6, 10. SAFETY, Volume: 6, Issue: 1, Article Number: 10, 2020, <https://doi.org/10.3390/safety6010010>, jurnal indexat Clarivate Analytics (ESCI), **autor corespondent**, WOS:000523715800001
2. Racz, S.-G., **Breaz, R.-E.**, Cioca, L.-I., *Evaluating Safety Systems for Machine Tools with Computer Numerical Control using Analytic Hierarchy Process*, SAFETY, Volume: 5, Issue: 1, Article Number: 14, 2019, <https://doi.org/10.3390/safety5010014>, jurnal indexat Clarivate Analytics (ESCI), **autor corespondent**, WOS:000464179000001
3. Oleksik, V., Bologa, O., **Breaz, R.E.**, Racz, G., *Comparison between the numerical simulations of incremental sheet forming and conventional stretch forming process*, INTERNATIONAL JOURNAL OF MATERIAL FORMING, 2008, Volume: 1, Pages: 1187-1190, Supplement: 1, <https://doi.org/10.1007/s12289-008-0153-6>, jurnal cotat Clarivate Analytics, (**FI din 2012**), WOS:000208613900296

B4. Articole publicate în reviste cotate SCOPUS

1. Brindasu P. D., Stoia B.-A., Bologa O., Oleksik V., Racz G., **Breaz, R.**, *Contributions of slot milling design with replaceable round inserts and simultaneous reconditioning of their edge*, Academic Journal of Manufacturing Engineering, ISSN: 1583-7904, 17/2, 2019, pp. 25-32, https://auif.utcluj.ro/images/PDF_AJME_2019_2/L4.pdf
2. **Breaz R.**, Racz G., Bologa O., Tera M., *Considerations Regarding CAM Techniques for Robot Milling*, Academic Journal of manufacturing Engineering, ISSN: 1583-7904, 15(3), pp. 23-28 http://www.auif.utcluj.ro/images/AJME_15_3/L4
3. Mureșan, G., Morar, L., **Breaz, R.E.**, *Researches Regarding the Assessment of Manufacturing Accuracy of Numerically Controlled Machine-Tools*, Academic Journal of Manufacturing Engineering, ISSN: 1583-7904, Vol 12, Issue 1/2014, ISSN 1583-7904, 2014, pp. 14-19, http://www.eng.upt.ro/auif/Lucrari_PDF_2014_1/2_AJME_Muresan_14-19.pdf
4. Mureșan, G., Morar, L., **Breaz, R.E.**, *The Influence of Tool Trajectories Upon the Accuracy Of The Manufactured Parts*, Academic Journal of Manufacturing Engineering, Vol 12, Issue 1/2014, ISSN: 1583-7904, 2014, pp. 62-67, http://www.eng.upt.ro/auif/Lucrari_PDF_2014_1/10_AJME_Muresan_62-67.pdf
5. **Breaz, R.E.**, Bologa, O., Racz, G., Oleksik, V., *Low-Cost Solution for Manipulating Tasks*, Academic Journal of Manufacturing Engineering, Volume 8, Volume 2/2010, ISSN: 1583-7904, pp. 14-19, 2010, http://www.eng.utt.ro/auif/journal_vol_8_2010_no_2.html

B5. Articole publicate în reviste indexate în alte BDI

1. **Breaz, R. E.**, Racz S.G., Oleksik V., Bologa, O., Brîndașu, P.D., *Realizarea modelului cinematic pentru un centru de prelucrare prin frezare CNC cu cinci axe*, Buletinul AGIR, 2/2019, ISSN-L 1224-7928, 2019, pp. 57-62, (INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED), <http://www.buletinulagir.agir.ro/articol.php?id=3097>
2. Oleksik V., **Breaz, R. E.**, Racz S.G., Bologa, O., Brîndașu, P.D., *Cercetări experimentale privind forțele la deformarea incrementală*, Buletinul AGIR, 2/2019, ISSN-L 1224-7928, 2019, pp. 63-68, (INDEX COPERNICUS, ACADEMIC KEYS, getCITED), <http://www.buletinulagir.agir.ro/articol.php?id=3096>
3. Racz S.G., Oleksik V., **Breaz, R. E.**, Bologa, O., Brîndașu, P.D., *Optimizarea procesului de sertizare a suspensiilor automobilelor utilizând metoda elementului finit*, Buletinul AGIR, 2/2019, ISSN-L 1224-7928, 2019, pp. 69-72, (INDEX COPERNICUS, ACADEMIC KEYS, getCITED), <http://www.buletinulagir.agir.ro/articol.php?id=3097>
4. Mureșan, G., Morar, L., **Breaz, R.E.**, *Contributions Regarding the Use of a CAM Software Solution In Multi-Axes Machining*, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, ISSN 1221 – 5872, Vol. 57, Issue I, March, 2014, Technical University of Cluj-Napoca, pp. 93-98, (INDEX COPERNICUS) <http://atna-mam.utcluj.ro/index.php/Acta/article/view/187/183>
5. Bologa, O., Chicea, A., **Breaz, R.E.**, Racz, G.S., Girjob, C., Biriș, C., *Studiul regimului de conturare al mașinilor unelte de ștanțat cu comandă numerică*, Buletinul AGIR, nr. 4/2010, ISSN-L 1224-7928, 2010 (INDEX COPERNICUS, ACADEMIC KEYS, getCITED), <http://www.buletinulagir.agir.ro/articol.php?id=838>

B. Articole studii publicate în volumele conferințelor internaționale desfășurate în țară sau străinătate (cu ISSN sau ISBN)

C1. Articole studii publicate în volumele conferințelor internaționale desfășurate în țară sau străinătate (cu ISSN sau ISBN) indexate ISI (Clarivate) Proceedings

1. **Breaz R.E.**, Bologa O., Racz S.G., Crenganis M., *Selecting between CNC turning centers using a combined AHP and fuzzy approach*, Proceedings of the 7th International Conference on Information Technology and Quantitative Management (ITQM 2019), Granada, Spain, published in Procedia Computer Science, Volume 162, 2019, pp. 290-297, <https://doi.org/10.1016/j.procs.2019.11.287>, WOS:000514081500037
2. Oleksik V., **Breaz, R. E.**, Racz S.G., Brîndașu, P.D., Bologa, O., *Advanced Techniques used in Numerical Simulation for Deep-drawing Process*, 9th International Conference on Manufacturing Science And Education (MSE 2019): Trends In New Industrial Revolution., Book Series: MATEC Web of Conferences, Volume: 290, Article Number: 03012, <https://doi.org/110.1051/mateconf/201929003012>, WOS:000569367700045
3. O. Bologa, **R.E. Breaz**, S.G. Racz, *Using the Analytic Hierarchy Process (AHP) and fuzzy logic to evaluate the possibility of introducing single point incremental forming on industrial scale*, Proceedings of the 6th International Conference on Information Technology and Quantitative Management (ITQM 2018), Omaha, USA, published in Procedia Computer Science, Volume 139, 2018, pp. 408-416, **autor corespondent** <https://doi.org/10.1016/j.procs.2018.10.262>, WOS:000471259200055
4. **Breaz R.**, Racz G., *Using the modern CNC controllers capabilities for estimating the machining forces during the milling process*, Modern Technologies in Manufacturing (MTeM 2017 - AMaTUC), Cluj-Napoca, 2017, ISBN:978-2-7598-9027-9 / ISSN: 2261-236X, <https://doi.org/10.1051/mateconf/201713704003>, WOS:000426604200051
5. **Breaz R.**, Racz G., Bologa O., *5-axes modular CNC machining center*, 21st Innovative Manufacturing Engineering & Energy International Conference - IMANE&E 2017, Book Series: MATEC Web of Conferences, Volume: 112, Article Number: 06004, <https://doi.org/10.1051/mateconf/201711206004>, WOS:000579349600093
6. **Breaz R.**, Bologa O., Racz G., *Selecting between CNC milling, robot milling and DMLS processes using a combined AHP and fuzzy approach*, Proceedings of the 5th International Conference on Information Technology and Quantitative Management (ITQM 2017), New Delhi, India, published in Procedia Computer Science, ISSN: 1877-0509, pp. 796-803, <https://doi.org/10.1016/j.procs.2017.11.439>, WOS:000426698300106
7. **Breaz R.**, Bologa O., Racz G., *Selecting industrial robots for milling applications using AHP*, Proceedings of the 5th International Conference on Information Technology and Quantitative Management (ITQM 2017), New Delhi, India published in Procedia Computer Science, ISSN: 1877-0509, pp. 346-353, <https://doi.org/10.1016/j.procs.2017.11.379>, WOS:000426698300046
8. **Breaz R.E.**, Tera, M., *Considerations regarding the use of technological equipment for indexed and continuous multi-axes machining*, 8th International Conference on Manufacturing Science and Education (MSE 2017) - Trends In New Industrial Revolution, Sibiu, 2017, <https://doi.org/10.1051/mateconf/201712108003>, WOS:000435283800097
9. **R.E. Breaz**, G.S. Racz, M. Tera, O.C. Bologa, C. Biriș, *Making Mechatronics Study Programme at "Lucian Blaga" University of Sibiu Available for International Students*, INTED2016 Proceedings, 10th International Technology, Education and Development Conference, 7-9 March, 2016, Valencia, Spain, ISBN: 978-84-608-5617-7, ISSN: 2340-1079, <https://doi.org/10.21125/inted.2016.1330>, pp. 1536-1543, WOS:000402738401086
10. M. Tera, **R.E. Breaz**, G.S. Racz, C. Girjob, A.L. Chicea, *Is Engineering a Male Specific Profession and how this Issue is Addressed at Lucian Blaga University Of Sibiu*, INTED 2016 Proceedings, 10th International Technology, Education and Development Conference, 7-9 March, 2016, Valencia, Spain, ISBN: 978-84-608-5617-7, ISSN: 2340-1079, <https://doi.org/10.21125/inted.2016.1397>, pp. 1907-1915, WOS:000402738401136
11. Crenganiș, M., **Breaz, R.**, Racz, G., Bologa, O, *Adaptive neuro-fuzzy inference system for kinematics solutions of redundant robots*, 6th International Conference on Computers Communications and Control (ICCCC), Oradea, 2016, pp. 271-276, (IEEE Explore), <https://doi.org/10.1109/ICCCC.2016.7496773>, WOS:000391251000043

12. Bologa, O., **Breaz, R.E.**, Racz, S.G., Crenganis, M., *Decision-making Tool for Moving from 3-axes to 5-axes CNC Machine-tool*, 4th International Conference on Information Technology and Quantitative Management (ITQM 2016), publicată în *Procedia Computer Science*, Volume 91, 2016, pp. 683–689, **autor corespondent**, <http://dx.doi.org/10.1016/j.procs.2016.07.171>, WOS:000387683300022
13. Bologa, O., **Breaz, R.E.**, Racz, S.G., Crenganis, M., *Using the Analytic Hierarchy Process (AHP) in Evaluating the Decision of Moving to a Manufacturing Process Based Upon Continuous 5 Axes CNC Machine-tools*, lucrare prezentată la 4th International Conference on Information Technology and Quantitative Management (ITQM 2016), publicată în *Procedia Computer Science*, Volume 91, 2016, pp. 184–192, **autor corespondent**, <http://dx.doi.org/10.1016/j.procs.2016.07.056>, WOS:000387683300081
14. A.L. Chicea, **R.E. Breaz**, O. Bologa, M. Tera, *Increasing the Quality of Mechatronics Study Programme at "Lucian Blaga" University of Sibiu*, 7th International Conference on Education and New Learning Technologies, 6-8 July, 2015, Barcelona, Spain, ISBN 978-84-606-8243-1, ISSN 2340-1117, pp. 5062-5068, <http://library.iated.org/view/CHICEA2015INC>, WOS:000376685705018
15. **R.E. Breaz**, O.C. Bologa, S.G. Racz, A.L. Chicea, *Mechatronics – Objectives and Main Challenges of The Study Programme and How Are They Addressed at "Lucian Blaga" University of Sibiu*, 9th International Technology, Education and Development Conference INTED 2015, 2-4 March, 2015, Madrid, Spain, ISBN 978-84-606-5763-7, ISSN 2340-1079, pp. 3349-3358, <http://library.iated.org/view/BREAZ2015MEC>, WOS:000398586303057
16. A.L. Chicea, R.E. Breaz, *Introducing Computer Aided Techniques for Manufacturing Prosthetic Devices into the Curriculum of Manufacturing Engineers*, 9th International Technology, Education and Development Conference INTED 2015, 2-4 March, 2015, Madrid, Spain, ISBN 978-84-606-5763-7, ISSN 2340-1079, pp. 3568-3574, <http://library.iated.org/view/CHICEA2015INT>, WOS:000398586303090
17. Tera, M., Bologa, O., **Breaz, R.E.**, Racz, S.G., *Contributions Regarding Incremental Forming Process of Bimetallic Sheets*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinău, Moldova 29-30 May 2014, Applied Mechanics and Material, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 178-182, [doi: 10.4028/www.scientific.net/AMM.657.178](http://doi.org/10.4028/www.scientific.net/AMM.657.178), WOS:000348898000035
18. Cotigă, C., Racz, S.G., Bologa, O., **Breaz, R.E.**, *Researches Regarding the Usage of Titanium Alloys in Cranial Implants*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinău, Moldova 29-30 May 2014, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 173-177, [doi: 10.4028/www.scientific.net/AMM.657.173](http://doi.org/10.4028/www.scientific.net/AMM.657.173), WOS:000348898000034
19. Crenganis, M., **Breaz, R.E.**, Racz, G., Bologa, O., *Inverse Kinematics for a 7 DOF Robotic Arm Using the Redundancy Circle and ANFIS Models*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinau, Moldova 29-30 May 2014, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 823-828, [doi:10.4028/www.scientific.net/AMM.657.823](http://doi.org/10.4028/www.scientific.net/AMM.657.823), WOS:000348898000161
20. Chicea, A., **Breaz, R.E.**, Gîrjob, C., Biris, C., Bologa, O., *Combining Engineering and Medical Knowledge for Manufacturing Medical Devices Using CAD/CAE/CAM Techniques*, 7th International Conference of Education, Research and Innovation, 17-19 November, 2014, Seville, Spain, ISBN 978-84-617-2484-0, ISSN 2340-1095, pp. 388-397, <https://library.iated.org/view/CHICEA2014COM>, WOS:000367082900056
21. Tirnovean, S., **Breaz, R.E.**, Tera, M., Bologa, O., Racz, S.G., *Teaching CAD/CAE/CAM Techniques for CNC Profiling and Punching Machines at Master Level*, 7th International Conference of Education, Research and Innovation, 17-19 November, 2014, Seville, Spain, ISBN 978-84-617-2484-0, ISSN 2340-1095, pp. 479-486, <https://library.iated.org/view/TIRNOVEAN2014TEA>, WOS:000367082900068
22. **Breaz, R.E.**, Bologa, O., Racz, S.G., *Mechatronics – A Study Program Required By The Industry*, International Technology, Education and Development Conference INTED 2014, 10-12 March 2014, Valencia, Spain, ISBN 978-84-616-8412-0 / ISSN 2340-1079, 2014, pp. 4123-4131, <https://library.iated.org/view/BREAZ2014MEC>, WOS:000366835104020
23. Muresan, G., Morar, L., **Breaz, R.E.**, *Teaching CAM Techniques and CNC Programming in Technical Universities – An Integrated Approach*, International Technology, Education and Development Conference INTED 2014, 10-12 March 2014, Valencia, Spain, ISBN 978-84-616-8412-0 / ISSN 2340-1079, 2014, pp. 4115-4122, <https://library.iated.org/view/MURESAN2014TEA>, WOS:000366835104019

24. **Breaz, R.**, Bologa, O., Tera, M., Racz, G., *Determination of Technological Forces in the Incremental Forming Process*, 17th International Conference on Innovative Manufacturing Engineering, IManE 2013, Iasi, Romania, 23-24 May 2013, Applied Mechanics and Materials Vol. 371 (2013), © (2013) Trans Tech Publications, Switzerland, 2013, ISBN 978-3-03785-786-1, pp. 133-137, [doi:10.4028/www.scientific.net/AMM.371.133](https://doi.org/10.4028/www.scientific.net/AMM.371.133), 2013, WOS:000334556900026
25. Chera, I., Bologa, O., Racz, G., **Breaz, R.**, *Robot-Forming – An Incremental Forming Process using an Industrial Robot by means of DELMIA software package*, 17th International Conference on Innovative Manufacturing Engineering, IManE 2013, Iasi, Romania, 23-24 May 2013, Applied Mechanics and Materials Vol. 371 (2013), © (2013) Trans Tech Publications, Switzerland, 2013, ISBN 978-3-03785-786-1, pp. 416-421, [doi:10.4028/www.scientific.net/AMM.371.416](https://doi.org/10.4028/www.scientific.net/AMM.371.416), 2013, WOS:000334556900081
26. Crenganis, M., **Breaz, R.E.**, Racz, G.S., Bologa, O.C., *Inverse Kinematics of a 7 DOF Manipulator using Adaptive Neuro-Fuzzy Inference Systems*, 12th International Conference on Control, Automation, Robotics and Vision, (ICARCV 2012), Guangzhou, China December 5-7, 2012, ISBN 978-1-4673-1870-9, pp. 1232-1237, 2012, <http://dx.doi.org/10.1109/ICARCV.2012.6485351>, WOS:000317972500212
27. **Breaz, R.E.**, Tirnovcean, S., Biris, C., Bologa, O.C., *Improving the Dynamic Behavior and Working Accuracy of the CNC Laser Cutting Machines*, 12th International Conference on Control, Automation, Robotics and Vision, (ICARCV 2012), Guangzhou, China December 5-7, 2012, ISBN 978-1-4673-1870-9, pp. 1642-1647, 2012, <http://dx.doi.org/10.1109/ICARCV.2012.6485437>, WOS:000317972500285
28. Tera, M., Deac, C., Oleksik, V., Bologa, O., **Breaz, R.**, Biris, C., *Comparative Study by Numerical Analysis on the Formability of Deep-Drawn Tailor-Welded Blanks*, Advanced Materials Research, Trans Tech Publications LTD, Laubstrutstr 24, CH-8717 STAFA-Zurich, Switzerland Volume: 463-464, <http://dx.doi.org/10.4028/www.scientific.net/AMR.463-464.582>, ISSN 1022-6680, ISBN: 978-3-03785-363-4, pp. 582-586, 2012, WOS:000308114100112
29. **Breaz, R.E.**, Bologa, O.C., Tera, M., Deac, C., *Low-cost motion control solution for industrial manufacturing systems*, 9th IEEE International Conference on Industrial Informatics (INDIN), pp. 280 – 285, E-ISBN 978-1-4577-0433-8, Print ISBN: 978-1-4577-0435-2, ISSN1935-4576, Lisabona, 26-29 July, 2011, <http://dx.doi.org/10.1109/INDIN.2011.6034888>, WOS:000298743300044
30. Beck, W., Schupp, P., Bologa, O., **Breaz, R.**, Racz, G., Ionescu, F., *Mathematical Model for Aiding the Decision of Changing the Curriculum for Higher Education in the Industrial Engineering Domain*, ICERI 2010 International Conference of Education, Research and Innovation, 15-17 November, Madrid, Spain, 2010, ISBN 978-84-614-2439-9, pp. 6535-6542, <http://library.iated.org/view/BECK2010MAT>, WOS:000318797406045
31. Schupp, P., Beck, W., Bologa, O., **Breaz, R.**, Racz, G., Ionescu, *Determining the Ratio between the Disciplines for Mechatronics Study Programme*, ICERI 2010 International Conference of Education, Research and Innovation, 15-17 November, Madrid, Spain, 2010, ISBN 978-84-614-2439-9, pp. 6543-6552, <http://library.iated.org/view/SCHUPP2010DET>, WOS:000318797406046
32. **Breaz, R.E.**, Bologa, O.C., Racz, G.S., Oleksik, V.S., Girjob, C., *Simulation approach for improving CNC milling machines accuracy for single axis motion*, ISIE 2010, 2010 IEEE International Symposium on Industrial Electronics, Bari, Italy, 4-7 July 2010, pp. 1760 - 1764, ISBN 978-1-4244-6390-9 2010, <http://dx.doi.org/10.1109/ISIE.2010.5637942>, WOS:000295007802047
33. **Breaz, R.E.**, Bologa, O., Biris, Cristina, Racz, G., Girjob, Claudia, Oleksik, V., *Method for Improving the Contouring Accuracy for CNC Profiling Machines at the Shop Floor Level*, The 7th IEEE International Conference on Industrial Informatics, INDIN 2009, 24-26 iunie 2009, Cardiff, Marea Britanie, pp. 813-818, ISBN 978-1-4244-3760-3, ISSN 1935-4576, IEEE Catalog Number: CFP09INI-CDR, <http://dx.doi.org/10.1109/INDIN.2009.5195907>, WOS:000274890100137
34. Bologa O. Beck, W., Schupp P., **Breaz R.**, Racz G., Ionescu F., *A decision algorithm for optimizing the specialty curricula in machine tools and production systems engineering studies*, 5th Balkan Region Conference on Engineering and Business Education & 2nd International Conference on Engineering and Business Education, Sibiu, Romania, 15 - 17 October, 2009, pp. 330-335, ISBN 978-973-739-848-2, WOS:000273607900069
35. **Breaz, R. E.**, Bologa, O. C., Racz, G. S., Oleksik, V., *Motion Control Systems for Machine Tools – a Mechatronic Approach by Means of Simulation*, IEEE International Symposium on Industrial Electronics, 30 iunie – 2 iulie 2008, Cambridge, Marea Britanie, pp. 2072-2077, ISBN 978-1-4244-

- 1666-0, IEEE Catalog Number: CFP08ISI-CDR, Library of Congress: 2007936380, <http://dx.doi.org/10.1109/ISIE.2008.4677233>, WOS:000266702101019
36. **Breaz, R.E.**, Bologa, O., Oleksik. V., Racz, G., *Computer Simulation for the Study of CNC Feed Drives Dynamic Behavior and Accuracy*, The IEEE Region 8 EUROCON 2007, International Conference on “Computer as a tool”, pp. 2094-2098, Warsaw, Poland, September 9-12, 2007, <http://dx.doi.org/10.1109/EURCON.2007.4400575>, WOS:000257261901116
 37. Oleksik, V., Bologa, O., Racz, G., **Breaz, R.** *Numerical Simulations and Experimental Researches for Determining the Forces of Incremental Sheet Forming Process*, Proceedings of the 10th ESAFORM Conference on Material Forming, 18-20 April 2007, Zaragoza, Spain, pp. 245-251, 2007, <http://dx.doi.org/10.1063/1.2729519>, WOS:000246505200041
 38. **Breaz, R.E.**, Oleksik. V., Bologa, O., *Mechatronic contouring system for unconventional sheet metal forming processes*, IECON 2006, Proceedings of the 32nd Annual Conference on IEEE Industrial Electronics, November 2006, Paris, France, 2006, 4026-4029, 2006, <http://dx.doi.org/10.1109/IECON.2006.347370>, WOS:000245905004078

C2. Articole studii publicate în volumele conferințelor internaționale desfășurate în țară sau străinătate (cu ISSN sau ISBN) indexate în alte BDI

1. R. E. Breaz, S. G. Racz, C. E. Girjob, M. Tera and C Biriș, *Using open source software CNC controllers and modular multi-axis mechanical structure as integrated teaching environment for CAD/CAM/CAE training*, IOP Conference Series: Materials Science and Engineering, Volume 968, 6th International Conference on Advanced Manufacturing Engineering and Technologies 9-11 September 2020, Galati, Romania, <http://dx.doi.org/10.1088/1757-899X/968/1/012024>, (SCOPUS)
2. **R.E Breaz**, M. Tera, V.A. Ciubotariu, V. Cohal, C. Maier, G. Plăiașu, *Single point incremental forming - comparison between technological equipment by an overall processing time point of view*, 27th International Conference on Manufacturing Systems, ICMA S 2018, București, Nov. 15-6, 2018, publicată în revista Proceedings in Manufacturing Systems, 13(3), pp. 121-126, 2018 (Ulrich's Database, Index Copernicus, Research Bible), http://icmas.eu/Journal_archive_files/Vol_13-Issue3_2018_PDF/121-126_Breaz.pdf
3. **Breaz R.E**, Racz, S.G.Tera M., Crenganiș, M., *The implementation of a modular open architecture PC-based CNC system used as a research and education equipment*, 26th International Conference on Manufacturing Systems, ICMA S 2017, București, publicată în revista Proceedings in Manufacturing Systems, Volume 12, Issue 2, ISSN 2067-9238, 2017, pp. 53-58, (Index Copernicus, Ulrichs Web, ProQuest), http://www.icmas.eu/Journal_archive_files/Vol_12-Issue2_2017_PDF/53-58_BREAZ_2017.pdf
4. Tera M., **Breaz R.**, *Considerations regarding the incremental forming process in manufacturing*, 26th International Conference on Manufacturing Systems, ICMA S 2017, publicată în revista Proceedings in Manufacturing Systems, Volume 12, Issue 2, ISSN 2067-9238, 2017, pp. 85-90, (Index Copernicus, Ulrichs Web, ProQuest) http://www.icmas.eu/Journal_archive_files/Vol_12-Issue2_2017_PDF/85-90_TERA.pdf
5. **Breaz, R.E**, Racz, S.G., Bologa, O., Tera, M., *Model of a CNC Feed Drive for On-Site Tuning of the Controllers for Single Axis Motion*, International Conference OPTIROB 2016, Jupiter, Romania, June 29- July 2, 2016, publicată în Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 841, pp 133-138, <https://doi.org/10.4028/www.scientific.net/AMM.841.133>, 2016 Trans Tech Publications, Switzerland (ProQuest, EBSCO, CSA, Index Copernicus)
6. Crenganis, M., **Breaz, R.E.**, Racz, S.G., Bologa, O., *Zigler-Nicols PID Tuning Method for Position Control of a Mobile Robot*, International Conference OPTIROB 2016, Jupiter, Romania, June 29- July 2, 2016, publicată în Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 841, pp 221-226, <https://doi.org/10.4028/www.scientific.net/AMM.841.221>, 2016 Trans Tech Publications, Switzerland (ProQuest, EBSCO, CSA, Index Copernicus)
7. M. Tera, **R.E. Breaz**, O. Bologa, S.G. Racz, *Developing a Knowledge Base about the Technological Forces within the Asymmetric Incremental Forming Process*, International Conference ESAFORM 2015, Graz, Austria, published in Key Engineering Materials, vol. 651, pp. 1115-1121, (Scopus), <https://doi.org/10.4028/www.scientific.net/KEM.651-653.1115>, 2015
8. O. Bologa, **R.E. Breaz**, A.L. Chicea, S.G. Racz, *Using Serial Industrial Robots in CNC Milling Processes*, ICMS 2015, Iași, Buletinul Institutului Politehnic din Iași, Secția Construcții de Mașini, Tomul LXI (LXV), Fasc. 3, ISSN 1011-2855, pp. 21-28, (Index Copernicus, Ulrich's Database), 2015

9. **R.E. Breaz**, O. Bologna, *Researches Regarding the Use of Fuzzy Controllers within CNC Feed Drives*, International Conference OPTIROB 2015, Jupiter, Romania Applied Mechanics and Materials, vol. 772, pp. 229-234, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), <https://doi.org/10.4028/www.scientific.net/AMM.772.229>, 2015
10. A.L. Chicea, **R.E. Breaz**, O. Bologna, *Building 3D Geometric and Kinematic Models of Five-Axis Machine-Tools for Manufacturing Prosthetic Devices*, International Conference IMANE 2015, published in Applied Mechanics and Materials, vol. 809-810, pp. 1004-1009, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest) <https://doi.org/10.4028/www.scientific.net/AMM.809-810.1004>
11. O. Bologna, **R.E. Breaz**, S.G. Racz, *Method for estimating the manual nesting process efficiency for profiling machines, based upon image processing techniques*, International Conference MTEM 2015, Cluj-Napoca, published in Applied Mechanics and Materials, Vol. 808, pp. 86-91, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), Nov. 2015, <https://doi.org/10.4028/www.scientific.net/AMM.808-86>
12. Crenganis, M., **Breaz, R.E.**, Racz, G., Bologna, O., *Kinematic Solutions of a 7 DOF Robotic Arm Using Redundancy Circle and Fuzzy Models*, ISSN 1660-9336, International Conference OPTIROB 2014, Mangalia, Romania, 26-29 June 2014, published in Applied Mechanics and Materials, Vol 555, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), pp. 320-326, <https://doi.org/10.4028/www.scientific.net/AMM.555.320>
13. Chera, I., Bologna, O., Racz, G, **Breaz, R.E.**, *Experimental Researches Regarding Strain Measurement of Incrementally Formed Sheet Metal Parts Done Using an Industrial Robot*, International Conference OPTIROB 2014, Mangalia, Romania, 26-29 June 2014, published in Applied Mechanics and Materials, ISSN 1660-9336, Vol 555, pp. 300-305, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), <https://doi.org/10.4028/www.scientific.net/AMM.555.300>
14. Biriş, C., **Breaz, R.E.**, Gîrjob, C., Chicea, A., *Researches Regarding Optimising the Contouring Precision of CNC Laser Cutting Machines*, International Conference OPTIROB 2014, Mangalia, Romania, 26-29 June 2014, Applied Mechanics and Materials, Vol 555, pp. 580-585, (Scopus, Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), <https://doi.org/10.4028/www.scientific.net/AMM.555.580>
15. Cotigă, C., Bologna, O., Racz, S.G., **Breaz, R.E.**, *Method for Manufacturing Custom-Shaped Prosthetic Parts from Titanium Alloys by Incremental Forming Using Industrial Robots*, International Conference OPTIROB 2014, Mangalia, Romania, 26-29 June 2014, Applied Mechanics and Materials, Vol 555, pp. 575-579, (Scopus, Index Copernicus, CSA, INSPEC, EBSCO, ProQuest) <https://doi.org/10.4028/www.scientific.net/AMM.555.575>
16. Tera, M., Bologna, O., **Breaz, R.E.**, Racz, S.G., *Theoretical and Experimental Researches Regarding Multilayer Materials Used for Incremental Forming*, International Conference OPTIROB 2014, Mangalia, Romania, 26-29 June 2014, Applied Mechanics and Materials, Vol 555, pp. 413-418, (Scopus, Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), <https://doi.org/10.4028/www.scientific.net/AMM.555.413>
17. Chicea, A.L., **Breaz, R.E.**, Bologna, O., Racz, *Using Serial Industrial Robots and CAM Techniques for Manufacturing Prosthetic Devices*, ICAMAT 2014, published in Applied Mechanics and Materials, Vol 762, pp. 313-318, (Index Copernicus, CSA, INSPEC, EBSCO, ProQuest), <https://doi.org/10.4028/www.scientific.net/AMM.762.313>
18. Tera, M, **Breaz, R.E.**, Bologna, O., Racz, G., *Using a CNC Milling Machine for Incremental Forming*, 23th International Conference on Manufacturing Systems, ICMaS 2014, Bucureşti, publicată în Proceedings in Manufacturing Systems, Volume 9, Issue 2, 2014, ISSN 2067-9238, pp. 99-104, (Ulrich's Database, Index Copernicus, Research Bible), http://www.icmas.eu/Journal_archive_files/Vol_9-Issue2_2014_PDF/99-104_Tera.pdf
19. **Breaz, R.**, Bologna, O., Tera, M., Racz, G., *Computer Assisted Techniques for the Incremental Forming Technology*, 18th IEEE International Conference on Emerging Technologies & Factory Automation, September 10-13, Cagliari, Italy (Scopus, IEEE Explore), <https://doi.org/10.1109/ETFA.2013.6648014>
20. **Breaz, R.**, Biriş, C., Bologna, O, Tîrnovean, S., *Studying the Behavior of CNC Laser Cutting Machines in the Contouring Regime*, 22th International Conference on Manufacturing Systems, ICMaS 2013, Bucureşti Proceedings in Manufacturing Systems, Volume 8, Issue 3, ISSN 2067-9238, 2013, pp. 165-170, (Ulrich's Database, Index Copernicus, Research Bible), http://www.icmas.eu/Volume8_Issue3_2013.htm#pp.165-170

21. Chera, I., Bologa, O., Racz, G., **Breaz, R.**, *Trajectory Control for an Incremental Forming Process Using an Industrial Robot in DELMIA*, International Conference MTeM 2013, Cluj-Napoca, published in Academic Journal of Manufacturing Engineering, Vol 11, Issue 1/2013, ISSN 1583-7904, 2013, pp. 32-37, (Scopus, Ulrich's Database, Index Copernicus), http://www.eng.upt.ro/auif/Lucrari_PDF_2013_1/Chera.pdf
22. Bologa, O., Racz, G., **Breaz, R.**, Crenganiş, M., *Comparative study regarding the generation of circular profiles through cutting*, The VIth Edition of the International Conference THE ACADEMIC DAYS of the Academy of Technical Sciences of Romania, published in Welding and Material Testing, year XXII, Nr. 2/2013, ISSN 1453-0392, 2013, pp. 19-23, (CSA, Weldasearch, IIS Data), http://www.bid-isim.ro/bid_arhiva/bid2013/bologa_2-2013.pdf
23. Chera, I., Bologa, O., Racz, G., **Breaz, R.** and Crenganiş, M., *FEM Researches Regarding Incremental Forming Process*, Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume XXII (XII), Nr. 2013/1, ISSN 1583-0691, 2013, pp. 53-38, (Ulrich's Database, Index Copernicus, ICAAP), <https://imt.uoradea.ro/auo.fmte/files-2013-v1/Chera%20Ionut%201.pdf>
24. **Breaz, R.**, Bologa, O., Tera, M., Racz, G., *CAM Approaches for the Incremental Forming Process*, International Conference MTeM 2013, Cluj-Napoca, published in Academic Journal of Manufacturing Engineering, Vol 11, Issue 3/2013, ISSN 1583-7904, 2013, pp.100-103, (Ulrich's Database, Index Copernicus), http://www.eng.upt.ro/auif/Lucrari_PDF_2013_3/21-%20Breaz%20R..pdf
25. Crenganiş, M., **Breaz, R.**, Racz, G., Bologa, O., *The Kinematic Solution of a Redundant Robotic Arm Using Matlab Simmechanics and ANFIS Models*, ICMS 2013 Iaşi, publicată în Buletinul Institutului Politehnic din Iaşi, Secţia Construcţiei de Maşini, Tomul LIX (LXIII), Fascicula 3, ISSN 1011-2855, 2013, pp. 33-40, (Ulrich's Database, Index Copernicus)
26. Chera, I., Bologa, O., Racz, G., **Breaz, R.**, *Researches Regarding an Incremental Forming Process by Means of an Industrial Robot*, ICMS 2013 Iaşi, publicată în Buletinul Institutului Politehnic din Iaşi, Secţia Construcţiei de Maşini, Tomul LIX (LXIII), Fascicula 3, ISSN 1011-2855, 2013, pp. 41-46, (Ulrich's Database, Index Copernicus)
27. **Breaz, R.**, Tera, M., Bologa, O., Racz, G., *Evaluating the Accuracy of the Parts Processed by Means of Incremental Forming Using CAD/CAM Techniques*, ICMS 2013 Iaşi, publicată în Buletinul Institutului Politehnic din Iaşi, Secţia Construcţiei de Maşini, Tomul LIX (LXIII), Fascicula 3, ISSN 1011-2855, 2013, pp. 47-52, (Ulrich's Database, Index Copernicus)
28. **Breaz, R.**, Bologa, O., Tera, M., Racz, G., *Researches Regarding the Use of Complex Trajectories and Two Stages Processing in Single Point Incremental Forming of Two Layers Sheet*, The 14th Conference on Metal Forming, Krakow - Poland, September 16-19, 2012, published on Journal "Steel Research International", Special Edition, Publishing Company: Wiley-VCH Verlag GmbH & Co. KGaA, ISBN 978-3-514-00797-0, ISSN 1611-3683, pp. 427-430, 2012 (Scopus)
29. **Breaz, R.**, Racz, G., Bologa, O., Oleksik, V., *Motion Control of Medium Size CNC Machine-Tools - A Hands-on Approach*, The 7th IEEE Conference on Industrial Electronics and Applications (ICIEA 2012), Singapore, July 18-20 2012, ISBN 978-1-4577-2118-2, pp. 2112 – 2117, 2012, (Scopus, IEEE Explore), <https://doi.org/10.1109/ICIEA.2012.6361079>
30. Crenganiş, M., **Breaz, R.**, Racz, G., Bologa, O., *The Inverse Kinematics Solutions of a 7 DOF Robotic Arm Using Fuzzy Logic*, the 7th IEEE Conference on Industrial Electronics and Applications (ICIEA 2012), Singapore, July 18-20 2012, ISBN 978-1-4577-2118-2, pp. 518 – 523, 2012, (Scopus, IEEE Explore), <https://doi.org/10.1109/ICIEA.2012.6360783>
31. Tîrnovean, S., **Breaz, R.E.**, Biris, C., Bologa, O.C., *Simulation tools for studying the behavior of CNC laser cutting machines in different working regimes*, 16th International Conference on System Theory, Control and Computing (ICSTCC 2012), Sinaia, Romania, October 12-14, 2012, Print ISBN: 978-1-4673-4534-7, pp. 1-6, 2012, (IEEE Explore), <https://ieeexplore.ieee.org/document/6379314>
32. Cioca, L.I., **Breaz, R.E.**, *Decision Support System for Manufacturing Processes Reengineering Based Upon Fuzzy Logic Techniques*, 14th IFAC Symposium on Information Control Problems in Manufacturing, Bucureşti, May 23-25, 2012, pp. 1111-1116, ISBN 978-3-902661-98-2, ISSN 1474-667, 2012 (Scopus), <https://doi.org/10.3182/20120523-3-RO-2023.00322>
33. Tera M., Bologa, O., **Breaz R.**, Chera, I., Tîrnovean, S., *Study of Incremental Deep-drawing of Bimetallic Sheets*, 21th International Conference on Manufacturing Systems, ICMaS 2012, Bucureşti, publicată în Proceedings in Manufacturing Systems, Volume 7, Issue 4, 2012, ISSN 2067-9238, pp. 235-240, (Ulrich's Database, Index Copernicus, Research Bible), http://www.icmas.eu/Journal_archive_files/Vol7-Issue4-2012-DOC/235-240_Tera_Final.pdf

34. Crenganiș, M., Bologa, O., **Breaz, R.**, Racz, G., *The Inverse Kinematics Solutions of a 7 DOF Robotic Arm Using Fuzzy Logic*, ICMS 2011, Iași, publicată în Bulletin of the Polytechnic Institute of Iași, Vol. LVII(LXI), Fascicle 4 - Machine Constructions, pp. 74-82, ISSN 1011-2855, Iași, 2011 (Index Copernicus)
35. Blaga, A., Oleksik, V., Bologa, O., **Breaz, R.**, *Experimental Studies and FEM Analysis Regarding the Influence of Geometric Parameters on Strain, Thickness Reduction and Forces in Incremental Forming Process*, Analele Universității "Eftimie Murgu" Reșița, Fascicula de Inginerie, Anul XVIII (2011), Nr. 3, ISSN 1453 – 7397, pp. 43-54 (EBSCO, ProQuest, Index Copernicus)
36. Blaga, A., Bologa, O., Oleksik, V., **Breaz, R.**, *Influence of Tool Path on Main Strains, Thickness Reduction and Forces in Single Point Incremental Forming Process*, 20th International Conference on Manufacturing Systems, ICMS 2011, București, published in Proceedings in Manufacturing Systems, Volume 6, Issue 4, 2011, ISSN 2067-9238, pp. 191-196, (Ulrich's Database, Index Copernicus, Research Bible), http://www.icmas.eu/Journal_archive_files/Vol_6_Issue_4_2011_PDF/191-196_Bologa.pdf
37. Tera, M., **Breaz, R.E.**, Oleksik, V., Bologa, O., Racz, G., *Simulations Regarding a CNC Milling Machine Feed Drive used in Forming Processes*, ICMS 2011, Iași, published in Bulletin of the Polytechnic Institute of Iași, Vol. LVII(LXI), Fascicle 4 - Machine Constructions, pp. 242-249, ISSN 1011-2855, Iași, 2011 (Index Copernicus)
38. **Breaz, R.E.**, Bologa, O., Racz, G., Oleksik, V., Gîrjob, C., *Low-cost solutions for manipulation tasks in manufacturing systems: balancing costs and performances*, Proceedings of the 5th International Federation of automatic Control (IFAC) Conference on Management and Control of Production and Logistics MCPL, Coimbra, Portugal, September 8-10, 2010, ISSN 1474-667, 2010 (Scopus), <https://doi.org/10.3182/20100908-3-PT-3007.00078>
39. Biriș, C., Marinescu, V., Bologa, O., **Breaz, R.E.**, Deac, C., Tera, M., *Improving the Manufacturing Accuracy of the Profiling Machines*, Proceedings of the 5th International Federation of Automatic Control (IFAC) Conference on Management and Control of Production and Logistics MCPL, Coimbra, Portugal, September 8-10, 2010, ISSN 1474-667, 2010 (Scopus), <https://doi.org/10.3182/20100908-3-PT-3007.00077>
40. Mihăilă, I.M., **Breaz, R.E.**, *Assembly Lines using Pneumatically- driven Manipulators*, Fascicle of Management and Technological Engineering, VOLUME IX (XIX), 2010, ISSN 1583–0691, (Ulrichs Web), <https://imt.uoradea.ro/auo.fmte/files-2010-v1/MECATRONICA/Mihaila%20Mircea%20L.pdf>
41. Oleksik, V., Bologa, O., Racz, G., **Breaz, R.** Deac, C., *Study regarding the influence of geometrical parameters during the incremental forming process*, The 9th International Conference on Technology of Plasticity – 2008, Gyeongju, Korea, September 7-11, ISBN 978-89-5708-152-5, Advanced Technology of Plasticity, pp. 963-968, 2008

C. Granturi/proiecte câștigate prin competiție

D1. Granturi/proiecte câștigate prin competiție în calitate de director

1. *Cercetări privind realizarea unor sisteme mecatronice inteligente cu control al mișcării destinate sistemelor flexibile de fabricație și montaj / (2004 – 130 mil. lei și continuare 2005 – 130 mil. lei), cod CNCISIS 11, tema 1, beneficiar: Consiliul Național al Cercetării Științifice din Învățământul Superior (C.N.C.S.I.S.)*
2. *Realizarea unui sistem modularizat reconfigurable de comandă numerică prin calculator personal pentru mașini unelte și utilaje de prelucrare / (2002 – 55 mil. lei și continuare 2003 – 36 mil. lei) program cod. 380, tema 92, beneficiar: Consiliul Național al Cercetării Științifice din Învățământul Superior (C.N.C.S.I.S.)*
3. *Cercetări privind realizarea unor sisteme de control ale mișcării multiaxiale comandate prin calculator / (2000 – 21 mil. lei și continuare 2001 – 15 mil. lei), programul tema B3, beneficiar Agenția Națională pentru Știință, Tehnologie și Inovare (A.N.S.T.I.)*

D1. Granturi/proiecte câștigate prin competiție în calitate de membru în echipa de cercetare

Internaționale

1. *Promoting and Supporting Implementation of Biogas-Polygeneration: A systematic Approach Towards Sustainable Energy Consumption in Romania*, FP 6 Specific Support Action – ProBioPol, Call identifier: FP6-2005-TREN-4, No. 038387, Coordonator: AGIMUS GmbH – Germania, Partener: AGIR – Filiala Sibiu

Naționale

1. *Tehnologii de fabricare inteligente pentru producția avansată a pieselor din industriile de automobile și aeronautică*, Proiect PN-III-P1-1.2-PCCDI-2017-0446 /nr. 82PCCDI/2018-2020
2. *Sisteme agabaritice de control al mișcării plane și spațiale utilizabile în industria autovehiculelor (AGAMIS)*, PNCDI II - Programul 4 – Parteneriate în domenii prioritare 72-206/2008, (2008-2011), beneficiar: Centrul Național de Management Programe
3. *Tehnologie integrată de evaluare și compensare a erorilor sistemelor de prelucrare (TINCOMP)*, PNCDI II - Programul 4 – Parteneriate în domenii prioritare 71-011/2007, (2007-2010), beneficiar: Centrul Național de Management Programe
4. *Dezvoltarea infrastructurii de cercetare a unui laborator pentru testarea materialelor avansate utilizate în producția de caroserii auto (TESTMAT)*, PNCDI II - Programul 2 – Capacități 124 CPI/200, 2007-2008, beneficiar: Autoritatea Națională pentru Cercetare Științifică
5. *Materiale, tehnologii și echipamente pentru profilări plane și spațiale (MATEPROF)*, CEEEX Nr. 130/2006, A.M.C.S.I.T. – Universitatea „Politehnica” din București, (2006-2008), beneficiar: Agenția Managerială de Cercetare Științifică, Inovare și Transfer Tehnologic
6. *Tehnologii avansate de încălzire rapidă în infraroșu a matrițelor pentru prelucrare la cald*, CEEEX Nr. 217/2006, A.M.C.S.I.T. – Universitatea „Politehnica” din București, (2006-2008), Beneficiar: Agenția Managerială de Cercetare Științifică, Inovare și Transfer Tehnologic
7. *Metode de modelare, simulare și producție virtuală bazată pe tehnologia informației și comunicării dedicată noii generații de sisteme de prelucrare reconfigurabile*, CEEEX Nr. 22/2005 – INFOSOC București, (2005-2007), beneficiar: INFOSOC
8. *Sisteme inteligente de prelucrare prin deformare plastică la rece în construcție modulară (SINTDEF)*, CEEEX, A.M.C.S.I.T. – Universitatea „Politehnica” din București, Nr. 24/2005 (2005-2007), beneficiar: Agenția Managerială de Cercetare Științifică, Inovare și Transfer Tehnologic
9. *Modernizarea mașinilor de rectificat și ascuțit din fabricația și exploatarea partenerilor industriali prin echiparea cu sisteme de comandă numerică*, Nr. 1841 / 2003, 2003-2005, Agenția Managerială pentru Cercetare Științifică Inovare și Transfer Tehnologic, AMCSIT Politehnica București

D. Brevete obținute în întreaga activitate

Sistem modular flexibil de fixare a semifabricatelor pentru procedeul de deformare incrementală / Autori: RACZ Sever-Gabriel, **BREAZ Radu-Eugen**, OLEKSIK Valentin Ștefan, PASCU Adrian Marius, POPP Ilie Octavian, GÎRJOB Claudia Emilia, TERA Melania, CHICEA Anca Lucia, BIRIȘ Cristina Maria, CRENGANIȘ Mihai

E. Recunoașterea realizărilor științifice și profesionale:

a. Indici Hirsh

Google Scholar	H-index 11
Clarivate Analytics – Web of Science	H-index 5
SCOPUS	H-index 9

Număr total de citări în Web of Science: (fără autocitări): 81

b. Editor, Membru comitet editorial, Recenzor reviste cotate ISI și BDI

Recenzor pentru jurnale indexate Clarivate Analytics (ISI), cu factor de impact și AIS ≥ 0.5 (<https://publons.com/researcher/1723825/radu-eugen-breaz/>)

1. IFAC Automatica, **IF 5.541 / Q1, AIS 2.350**
2. IEEE Transactions on Automation Science and Engineering, **IF 5.224 / Q1, AIS 1.184**
3. IEEE Access **IF 4.098 / Q1, AIS 0.642**
4. Sensors, **IF 3.275 / Q1, AIS 0.530**
5. Materials, **IF 3.057/ Q2, AIS 0.543**

Recenzor pentru jurnale indexate Clarivate Analytics (ISI), cu factor de impact, (<https://publons.com/researcher/1723825/radu-eugen-breaz/>)

1. Metals, **IF 2.259 / Q1**
2. Sustainability **IF 2.576 / Q2**
3. Science Progress, **IF 1.906 / Q2**
4. Indian Journal of Engineering & Materials Sciences (IJEMS) **IF 0.543 / Q4**

Recenzor pentru jurnale indexate Clarivate Analytics (ISI), fără factor de impact (ESCI), (<https://publons.com/researcher/1723825/radu-eugen-breaz/>)

1. Machines (<https://www.mdpi.com/journal/machines/>)
2. Safety (<https://www.mdpi.com/journal/safety>)
3. Journal of Manufacturing and Materials Processing (<https://www.mdpi.com/journal/jmmp>)

Recenzor la conferințe indexate Clarivate Analytics (ISI) Proceedings, desfășurate în străinătate

1. 2nd IFAC Conference on Cyber-Physical & Human-Systems (CPHS'18)
2. IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2017)
3. IEEE International Conference on Advanced Intelligent Mechatronics (AIM 2016), Alberta, Canada
4. 8th IFAC Conference on Manufacturing Modelling, Management and Control (MIM 2016), Troyes, Franța
5. IFAC Symposium on Information Control in Manufacturing (INCOM 2015), Ottawa, Canada
6. IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2015), Busan, Coreea de Sud
7. IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Besancon, France, 2014
8. 11th IFAC Workshop on Intelligent Manufacturing Systems, Sao Paulo, Brazil, 2013

Data:

21.04.2022

Semnătura: