

Nume și prenume conducător de doctorat: Breaz Radu-Eugen

Domeniul de doctorat: Inginerie industrială

A. Cărți și capitole în cărți de specialitate sau volume colective

Intervalul 2021-2025

1. Mătieș, V., Noveanu, S., Dache, L., *Platforma națională de mecatronică Motorul dezvoltării societății sustenabile*, Editura UT Press, Cluj Napoca, 2025, ISBN 978-606-737-775-0, **prim-autor al capitolului Centrul regional de excelență în mecatronică Sibiu - Mecatronica în cadrul Universității “Lucian Blaga” din Sibiu**, 18 pag, doi autori
2. Hooyar Attar, Damon Kent (eds.), *Titanium Alloys for Biomedical Implants and Devices*, MDPI AG, 2021, ISBN 978-3-0365-0002-7 (Hardback), ISBN 978-3-0365-0003-4 (PDF), 194 pag., <https://search.worldcat.org/title/1325920978>, **autor principal al capitolului Incremental Forming of Titanium Ti6Al4V Alloy for Cranioplasty Plates—Decision-Making Process and Technological Approaches**, 30 pag.

În afara intervalului 2021-2025

3. **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
4. 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 *Mecatronica în cadrul Universității “Lucian Blaga” din Sibiu*, 10 pag
5. 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
6. **Breaz, R.E.**, *Automatizări industriale*, Editura Universității “Lucian Blaga” din Sibiu, 2007, ISBN 978-973-739-535-1, 250 pag., 2007
7. **Breaz, R.E.**, Bogdan, L., *Automatizări în sisteme de producție*, Editura Universității “Lucian Blaga” din Sibiu, 2003, ISBN 973-651-719-5, 226 pag., 2003
8. 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

B. 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

Intervalul 2021-2025

1. Vanhulst, M. et al (37 autori)., 2025. *ESAFORM benchmark 2024: Study on the geometric accuracy of a complex shape with single point incremental forming*. International Journal of Material Forming, 18, Springer, Article 72, 2025, **Q2 – zonă galbenă (FI 2.6/2024)**, WOS: 001547414700001, <https://doi.org/10.1007/s12289-025-01928-1>
2. Petru, C.-D.; Morariu, F.; **Breaz, R.-E.**; Crenganiș, M.; Racz, S.-G.; Gîrjob, C.-E.; Bârsan, A.; Biriș, C.-M. *Development of a Small CNC Machining Center for Physical Implementation and a Digital Twin*. Appl. Sci. 2025, 15, 5549, **Q1 – zonă roșie la data publicării (FI 2.3/2024)**, WOS:001495819600001, <https://doi.org/10.3390/app15105549>
3. Popp, G. P.; Racz, S. G.; **Breaz, R. E.**; Oleksik, V. S.; Popp, M. O.; Morar, D. E.; Chicea, A. L.; Popp, I. O. *State of the Art in Incremental Forming: Process Variants, Tooling, Industrial Applications for Complex Part Manufacturing and Sustainability of the Process*, Materials 2024, 17, 5811, **Q1 – zonă roșie, (FI 3.1/2023)**, WOS:001376431400001 <https://doi.org/10.3390/ma17235811>, **autor corespondent**
4. Crenganiș, M.; **Breaz, R.-E.**; Racz, S.-G.; Gîrjob, C.-E.; Biriș, C.-M.; Maroșan, A.; Bârsan, A. *Fuzzy Logic-Based Driving Decision for an Omnidirectional Mobile Robot Using a Simulink Dynamic Model*. Appl. Sci. 2024, 14, 3058. **Q1 – zonă roșie, (FI 2.5/2023)**, WOS:001201112700001, <https://doi.org/10.3390/app14073058>, **autor corespondent**
5. Rusu, G.-P.; **Breaz, R.-E.**; Popp, M.-O.; Oleksik, V.; Racz, S.-G. *Experimental Research on Wolfram Inert Gas AA1050 Aluminum Alloy Tailor Welded Blanks Processed by Single Point Incremental*

- Forming Process. Materials 2023, 16, 6408. **Q1 – zonă roșie, (FI 3.1/2023)**, WOS:001081829900001, <https://doi.org/10.3390/ma16196408>, **autor corespondent**
6. Lazăr, S.; Dobrotă, D.; Breaz, R.-E.; Racz, S.-G. *Eco-Design of Polymer Matrix Composite Parts: A Review*. Polymers 2023, 15, 3634. **Q1 – zonă roșie, (FI 4.7/2023)**, WOS:001061188300001, <https://doi.org/10.3390/polym15173634>, **autor corespondent**
 7. Racz, S.-G., Crenganiș, M., **Breaz, R.-E.**, Maroșan, A., Bârsan, A., Gîrjob, C.-E., Biriș, C.-M., Tera, M., *Mobile Robots—AHP-Based Actuation Solution Selection and Comparison between Mecanum Wheel Drive and Differential Drive with Regard to Dynamic Loads*, Machines (2022), 10, 886, **Q2 – zonă galbenă, (FI 2.899/2022)**, WOS:000874293700001, <https://doi.org/10.3390/machines10100886>, **autor corespondent**
 8. Racz, S.-G., Crenganiș, M., **Breaz, R.-E.**, Bârsan, A., Gîrjob, C.-E., Biriș, C.-M., Tera, M., *Integrating Trajectory Planning with Kinematic Analysis and Joint Torques Estimation for an Industrial Robot Used in Incremental Forming Operations*, Machines 2022, 10, 531, **Q2 – zonă galbenă, (FI 2.899/2022)**, WOS:000833724900001 <https://doi.org/10.3390/machines10070531>, **autor corespondent**

În afara intervalului 2021-2025

9. 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 cotat Clarivate Analytics, **Q2 – zonă galbenă, (FI 2.633/2019)**, WOS:000469002200049
10. 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 cotat Clarivate Analytics, **Q2 – zonă galbenă, (FI 2.576/2019)**, **autor corespondent**, WOS:000457129900019
11. 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 cotat 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
12. 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 cotat Clarivate Analytics, **Q1 – zonă roșie, (FI 2.259/2018)**, **autor corespondent**, WOS:000443616400062
13. 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 cotat Clarivate Analytics, **(FI 0.627/2015)**, **autor corespondent**, <http://univagora.ro/jour/index.php/ijccc/article/view/2071/581>, WOS:000364346600004
14. 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 cotat 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)

În afara intervalului 2021-2025

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 Intervalul 2021-2025

1. Crenganis, M.; Barsan, A.; **Breaz, R.**; Gîrjob, C.; Popp, M. *DIGITAL TWIN VIRTUAL APPROACH OF ROBOT BASED INCREMENTAL SHEET-METAL FORMING PROCESS*, ACTA TECHNICA

- NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, 67(2), 2024, pp. 231-238, WOS:001398967500012
2. Preda, C.; Bleotu, R. M.; **Breaz, R. E.** RESEARCH ON THE INFLUENCE OF THE VENTILATION SLOTS AND THE THERMAL STUDY OF THE BRAKE DISC, ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, 67(1s), 2024, pp. 289-298, WOS:001328942700035
 3. Cioca, L.I., Breaz, R.E., Racz, S.G., Selecting the Safest CNC Machining Workshop Using AHP and TOPSIS Approaches, SAFETY, Volume: 7, Issue: 2, 2021, <https://10.3390/safety7020027>, jurnal indexat Clarivate Analytics (ESCI), autor corespondent, WOS:000665386300001

În afara intervalului 2021-2025

4. 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
5. 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
6. 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

Intervalul 2021-2025

1. Claudiu-Damian Petru, Mihai Crenganiș, **Radu-Eugen Breaz**, Sever-Gabriel Racz, Claudia-Emilia Gîrjob, Paula Drașovean, *Development of a Digital Twin for the ABB IRB 1200 robot in sheet metal forming processes*, Procedia Computer Science, Volume 242, 2024, pp. 228-235, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2024.08.253>
2. Claudiu-Damian Petru, **Radu-Eugen Breaz**, Sever-Gabriel Racz, Mihai Crenganiș, Claudia-Emilia Gîrjob, Paula Drașovean, *Decision support methodology for the selection of industrial robots using BWM and TOPSIS methods*, Procedia Computer Science, Volume 242, 2024, pp. 43-50, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2024.08.227>

În afara intervalului 2021-2025

3. 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
4. **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
5. 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
6. 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
7. **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

În afara intervalului 2021-2025

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>

C. 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 Intervalul 2021-2025

1. Bârsan A., Racz S. G., **Breaz R. E.**, Crenganiș M., *Dynamic analysis of a robot-based incremental sheet forming using Matlab-Simulink Simscape (TM) environment*, Materials Today: Proceedings, 62(5), 2022 pp. 2538-2542, <https://doi.org/10.1016/j.matpr.2022.03.134>, WOS:000830020400002

În afara intervalului 2021-2025

2. **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
3. 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/10.1051/mateconf/201929003012>, WOS:000569367700045
4. 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
5. **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
6. **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

7. **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
8. **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
9. **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
10. **R.E. Breaz**, G.S. Racz, M. Tera, O.C. Bologa, C. Biriş, *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
11. 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
12. Crenganiş, 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
13. 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
14. 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
15. 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
16. **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
17. 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
18. 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), Chisinau, 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

19. 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), Chisinau, 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](https://doi.org/10.4028/www.scientific.net/AMM.657.173), WOS:000348898000034
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42. **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>
43. 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>
44. 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>
45. 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

D. 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 CNC SIS 11, tema 1, beneficiar: Consiliul Național al Cercetării Științifice din Învățământul Superior (C.N.C.S.I.S.)
2. *Realizarea unui sistem modularizat reconfigurabil 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. *1/AXA1/1.1.1.A/18.05.2018, Cod SMIS 2014+:121359; ID:P_34_469*, „Dezvoltarea departamentului de cercetare al societății COMPA SA și obținerea unor rezultate inovatoare în domeniul industriei auto”/ „Development of the research department of COMPA SA and obtaining innovative results in the field of automotive industry”, Beneficiar proiect/Project Beneficiary: COMPA SA, Sibiu – Proiect co-finanțat din Fondul European de Dezvoltare Regională prin Programul Operational Competitivitate 2014-2020/ Co-financed project from the European Regional Development Fund under the Competitiveness Operational Programme 2014-2020.
3. *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

4. *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
5. *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
6. *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
7. *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
8. *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
9. *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
10. *Modernizarea mașinilor de rectificat și ascutit 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

E. Recunoașterea realizărilor științifice și profesionale:

a. Indici Hirsh

Google Scholar	H-index 14
Clarivate Analytics WoS	H-index 8
SCOPUS	H-index 11

Număr total de citări în Web of Science: (fără autocitări): 186

Număr total de citări în Scopus (fără autocitări): 343

- *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
[\(https://publons.com/researcher/1723825/radu-eugen-breaz/\)](https://publons.com/researcher/1723825/radu-eugen-breaz/)

1. IFAC Automatica (Q1), AIS 2.422
2. IEEE-ASME Transactions on Mechatronics (Q1), AIS 1.639
3. IEEE Transactions on Automation Science and Engineering (Q1), AIS 1.545
4. Journal of Field Robotics (Q2), AIS 1.479
5. Polymers (Q1), AIS 0.700
6. IEEE Access (Q2), AIS 0.670
7. Sensors, (Q1), AIS 0.618
8. Journal of Manufacturing and Materials Processing (Q2), AIS 0.561
9. Materials, (Q2), AIS 0.523

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

1. Ironmaking & Steelmaking (Q2)
2. Mechanics Based Design of Structures and Machines (Q2)
3. Metals, (Q2)
4. Sustainability (Q2)
5. Science Progress, (Q2)
6. Machines (Q2)
7. Journal of Manufacturing and Materials Processing (Q2)
8. Indian Journal of Engineering & Materials Sciences (Q3)

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

1. Safety (<https://www.mdpi.com/journal/safety>)
2. Journal of Engineering (<https://ietresearch.onlinelibrary.wiley.com/journal/20513305>)

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

F. Altele

Brevet național:

Sistem modular flexibil de fixare a semifabricatelor pentru procedeul de deformare incrementală/Flexible modular system for fixing workpieces for the incremental forming process (Patent RO 134103 A0 - 28.01.2022)

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Semnătura: