

Autorul tezei de abilitare: Conf. Dr. ing. Răzvan UDROIU

Titlul tezei de abilitare: Cercetări privind fabricatia aditivă si analiza calității produselor industriale polimerice

Domeniul: Inginerie industrială

LISTA DE LUCRĂRI

LUCRĂRI RELEVANTE

1. **Udroiu, R.;** Braga, I.C.; Nedelcu, A. (2019). Evaluating the Quality Surface Performance of Additive Manufacturing Systems: Methodology and a Material Jetting Case Study. *Materials*, 12, 995, FI=2,972; SRI=1,405 (Q2 zona galbena), WOS: 000465025400057; <https://doi.org/10.3390/ma12060995>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000465025400057>
32 citări ISI (fără autocitări)
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/4dbbe6e9-1e89-4342-9b60-70b230c6ac59-41c57277/date-descending/1>
2. **Udroiu, R.;** Braga, I.C. (2020). System Performance and Process Capability in Additive Manufacturing: Quality Control for Polymer Jetting, *Polymers*, 12, 1292, FI=3,426 , SRI=1,957 (Q1 zona roșie) , WOS: 000554639700001; <https://doi.org/10.3390/polym12061292>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000554639700001>
11 citari ISI (fără autocitări)
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/5fa37ea3-947c-40f3-964d-aae7578aee94-41da7305/date-descending/1>
3. **Udroiu, R.** (2022). New Methodology for Evaluating Surface Quality of Experimental Aerodynamic Models Manufactured by Polymer Jetting Additive Manufacturing, *Polymers*, 14, 371, FI=4,967; SRI=2,037 (Q1 zona roșie), WOS: 000754916900001; <https://doi.org/10.3390/polym14030371>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000754916900001>
2 citari ISI (fără autocitări)
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/e2192e8a-ad7d-486e-a818-67b5821d9fb4-42bc2bb6/date-descending/1>
4. **Udroiu, R.;** Nedelcu, A., Deaky, B. (2011). Rapid manufacturing by polyjet technology of customized turbines for Renewable energy generation, *Environmental Engineering and*

Management Journal, 10 (9), 1387, FI 1,435 (Q3), WOS:000296758400023;
<https://doi.org/10.30638/eemj.2011.197>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000296758400023>

7 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/1656e63d-0c4e-45df-9c7b-a5191c709adb-41da9f79/date-descending/1>

5. **Udroiu, R.**, Braga, I.C. (2017). Polyjet technology applications for rapid tooling, Matec Web Conf. Vol. 112, 2017, WOS: 000579349600046

<https://doi.org/10.1051/matecconf/201711203011>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000579349600046>

20 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/fc1c15b8-b0c4-486d-9f5e-3c2e21560be9-41c9ba22/date-descending/1>

6. Sabău, E.; **Udroiu, R. (autor correspondent)**; Bere, P.; Buranský, I.; Miron-Borzan, C.-Ș. A (2020). Novel Polymer Concrete Composite with GFRP Waste: Applications, Morphology, and Porosity Characterization. Appl. Sci., 10, 2060, FI=2,474, SRI=0.992 (Q2 zona galbena) , WOS: 000529252800161; <https://doi.org/10.3390/app10062060>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000529252800161>

6 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/fbf1a464-af9a-481e-b4dc-3b8e463773da-41da8dca/date-descending/1>

7. **Udroiu R.**, Mihail L., (2009). Experimental determination of surface roughness of parts obtained by rapid prototyping, Proceedings of the 8th WSEAS International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '09), Puerto de la Cruz Tenerife, Canary Islands, Spain, December 14-16, 2009, Published by WSEAS Press, ISSN: 1790-5117, ISBN: 978-960-474-139-7, 283, WOS:000276789200050

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000276789200050>

25 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/effeb1ea-7334-4bf2-904a-acead490a998-41c7edc8/date-descending/1>

8. Bere, P.; Neamtu, C.; **Udroiu, R.** (2020). Novel Method for the Manufacture of Complex CFRP Parts Using FDM-based Molds. Polymers, 12, 2220, FI=3,426, SRI=1,957 (Q1 zona roșie), WOS: 000586198100001; <https://doi.org/10.3390/polym12102220>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000586198100001>

11 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/f48bb32c-b4bb-44da-8cbc-440caeb0d404-41da3ef1/date-descending/1>

9. **Udroiu, R.**, (2012). Powder bed additive manufacturing systems and its applications Academic journal of manufacturing engineering, vol.10 issue 4/2012, indexată EBSCO;

<https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15837904&AN=88315008&h=0oJyUXQ7J%2bkm17hibBcMkm8xZpX1%2fdskm8uTNMoPz8Irh1fIWWPiHfAAURfDX8nW9CDx2XAGoQYObrEP8%2bXgZg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrINotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15837904%26AN%3d88315008>

15 citari ISI (fără autocitări)

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/9ec69c4f-2c8f-4a6e-951b-fe0e8808986d-4e578f2d/date-descending/1>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/df14574f-caf9-4120-9f53-35039f27cab4-4e58f7f8/date-descending/1>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/58c50778-3995-411d-abfb-edc0b5ed9a66-4e70958e/date-descending/1>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/summary/656ab682-4427-4cc2-be81-1b57eba5c995-4e70db8c/date-descending/1>

10. Braga, I.C.; **Udroiu, R. (autor corespondent)**; Nedelcu, A. (2022). Novel Method for Failure Modes Detection in UV-Cured Clear Coated Polymer for Automotive Interior Mechatronic Devices. Polymers, 14, 3811, FI=4.967; SRI=2,037 (Q1 zona roșie), WOS:000856724500001;

<https://doi.org/10.3390/polym14183811>

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000856724500001>

TEZA DE DOCTORAT

Conceptia si fabricatia pieselor de forma complexa, sustinuta in cadrul Facultății de Inginerie Tehnologică a Universității Transilvania din Brașov, diploma seria C, nr. 0004774, confirmată de CNATDCU, prin Ordinul Ministrului Educației și Cercetării nr. 5663 din 15.12.2003, confera titlul stiintific de Doctor in domeniul Inginerie industrială, cu distinctia Cum Laude (conducator de doctorat: Profesor Dr. Eng. Nicolae-Valentin IVAN).

BREVETE

Dima, G, Balcu Gh, **Udroiu R.** (2019), Suport motor turbopropulsor, Nr. RO129076 B1
<http://pub.osim.ro/publication-server/pdf-document?PN=RO129076%20RO%20129076&iDocId=11922&iepatch=.pdf>

CĂRȚI / CAPITOLE DE CĂRȚI

1. **Udroiu, R.**, Nedelcu, A., (2011). capitol "Chapter 1: Optimization of Additive Manufacturing Processes Focused on 3D Printing", in cartea "Rapid prototyping technology –principles and functional requirements", Editura InTech, Croatia, ISBN:978-953-307-970-7, 2011, 29 pag.
<https://www.intechopen.com/chapters/20714> , DOI: 10.5772/21433
2. **Udroiu, R.**. (2016). capitol "Introductory Chapter: Integration of Computer-Aided Technologies" in cartea "Computer-aided Technologies. Applications in Engineering and Medicine", Editura IntechOpen Limited, London, U.K. ISBN:978-953-51-2788-8, 2016, 14 pag.
<https://www.intechopen.com/chapters/53083> , DOI: 10.5772/66202
3. **Udroiu, R.**, Bere, P., (2018). capitol "Introductory Chapter: Product Lifecycle Management (PLM) and Human Lifecycle Management (HUM)" in cartea "Product Lifecycle Management. Terminology and Applications", Editura Intech Open Limited, London, U.K. ISBN:978-1-78984-543-3, 2018, 14 pag.
<https://www.intechopen.com/chapters/64122> , DOI: 10.5772/intechopen.81686
4. Deaconu AM, **Udroiu R**, Nanau CS, (2022). capitol "Algorithms for Delivery of Data by Drones in an Isolated Area Divided into Squares" în cartea "Unmanned Aerial Vehicle (UAV) Enabled Wireless Communications and Networking", Editura MDPI, ISBN: 978-3-0365-4663-6, 2022, 19 pag.
<https://www.mdpi.com/books/pdfview/book/5760>
5. **Udroiu, R.**. (2022). capitol "New Methodology for Evaluating Surface Quality of Experimental Aerodynamic Models Manufactured by Polymer Jetting Additive Manufacturing" in cartea "Process–Structure– Properties in Polymer Additive Manufacturing II" Editura:MDPI ISBN 978-3-0365-4483-0, 2022, 19 pag., <https://www.mdpi.com/books/pdfview/book/5681>
6. Bere, P.; Neamtu, C.; **Udroiu, R.** (2021). capitol "Novel Method for the Manufacture of Complex CFRP Parts Using FDM-based Molds" in cartea "Process–Structure–Properties in Polymer Additive Manufacturing", Editura:MDPI, ISBN 978-3-0365-1371-3, 2021, 20 pag.
<https://www.mdpi.com/books/book/4179>
7. **Udroiu, R.**; Braga, I.C., (2021). capitol "System Performance and Process Capability in Additive Manufacturing: Quality Control for Polymer Jetting" in cartea "Process–Structure–Properties in Polymer Additive Manufacturing" Editura: MDPI, ISBN 978-3-0365-1371-3, 2021, 21 pag.
<https://www.mdpi.com/books/book/4179>
8. **Udroiu, R.**, Materiale compozite. Tehnologii și aplicații în aviație, (2006). Editura: Universității Transilvania Brașov, ISBN:973-635-646-9, NrAutori:1, 318 pag.

9. Ivan, N.V., Păunescu, T., **Udroiu, R.**, Ivan MC, Găvrus, C., Pescaru, R. (2010). Tehnologia construcțiilor de masini, vol.I, Teorie și abordări inovative, Editura Universității Transilvania ISBN:978-973-598-759-6, 2010, 455 pag.
10. Ivan, N. V., Berce, P., Drăgoi, M.,V., Oancea, Ivan, M.C., Gh., Bâlc, N., Lancea, C., **Udroiu, R.**, Vasiloni, M., Mihali, M., Ivan, C., (2004). Sisteme CAD/CAM/CAPP. Teorie și practică, Editura Tehnică, București, ISBN:973-31-1530-4, 2004, 404 pag.
11. Postelnicu A., Deliu Gh., **Udroiu R.**, (2001). Teoria, performanțele și construcția elicopterelor, Editura: Albastră, Grupul MicroINFORMATICA, ISBN:973-650-008-X, 2001, 401 pag.
12. **Udroiu, R.**, Bere, P., (2018). Product Lifecycle Management. Terminology and Applications Editura IntechOpen Limited, London, U.K. ISBN:978-1-78984-543-3, 2018, 121 pag.,
<https://www.intechopen.com/books/7489> , DOI: 10.5772/intechopen.75972
13. **Udroiu, R.**, (2016). Computer-aided Technologies. Applications in Engineering and Medicine. Editura IntechOpen Limited, London, U.K. ISBN:978-953-51-2788-8, 2016, 160 pag.
<https://www.intechopen.com/books/5379> , DOI: 10.5772/62618
14. **Udroiu, R.** (2022). Sisteme CAD/CAM. Aplicații în SolidWorks, Editura: Universității Transilvania din Brașov, ISBN: 978-606-19-1505-7, 2022, 200 pag.
15. **Udroiu, R.** (2022). Sisteme CAD/CAPP/CAM. Aplicații în CATIA V5, Editura: Universității Transilvania din Brașov, ISBN: 978-606-19-1506-4, 2022, 170 pag.
16. Ivan, N., V., Drăgoi, M.,V., Păunescu T., Oancea, Gh., Lancea, C., Ivan, M., C., Lupulescu, N., Nedelcu, A., **Udroiu, R.**, (2002). Sisteme CAPP. Sisteme CAD/CAM și optimizări tehnologice. Aplicații în construcția de mașini, Editura: Universității Transilvania din Brașov, ISBN:973-9474-38-1, 2002, 277 pag.
17. Nedelcu A, **Udroiu R.**, (2013). Automatizarea sistemelor de producție, Editura:LUX LIBRIS ISBN:978-973-131-240-8, 2013, 337 pag.
18. Drăgoi, M., V, **Udroiu, R.**, Vasiloni, A., M., (2003). Modelare 3D în AutoCAD 2002. Aplicații practice, Editura:Albastră, Grupul Microinformatica, Cluj-Napoca, ISBN:973-650-111-6, 2003, 150 pag.
19. Postelnicu, A., **Udroiu, R.** (2000). Elicoptere – îndrumar de laborator, Editura: Universității Transilvania din Brașov, 2000, 150 pag.

ARTICOLE ÎN REVISTE

REVISTE ISI/CLARIVATE ANALYTICS

1. **Udroiu, R.** (2022). New Methodology for Evaluating Surface Quality of Experimental Aerodynamic Models Manufactured by Polymer Jetting Additive Manufacturing, *Polymers*, 14, 371, FI=4.967; SRI=2,037 (Q1 zona roșie), WOS: 000754916900001;
<https://doi.org/10.3390/polym14030371>

- <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000754916900001>
2. **Udroiu, R.**; Braga, I.C. (2020). System Performance and Process Capability in Additive Manufacturing: Quality Control for Polymer Jetting, *Polymers*, 12, 1292, FI=3,426 , SRI=1,957 (Q1 zona roșie) , WOS: 000554639700001;
<https://doi.org/10.3390/polym1206129>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000554639700001>
 3. **Udroiu, R.**; Braga, I.C.; Nedelcu, A. (2019). Evaluating the Quality Surface Performance of Additive Manufacturing Systems: Methodology and a Material Jetting Case Study. *Materials*, 12, 995, FI=2,972; SRI=1,405 (Q2 zona galbena) , WOS: 000465025400057;
<https://doi.org/10.3390/ma12060995>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000465025400057>
 4. **Udroiu, R.**; Nedelcu, A., Deaky, B. (2011). Rapid manufacturing by polyjet technology of customized turbines for Renewable energy generation, *Environmental Engineering and Management Journal*, 10 (9), 1387, FI 1,435 (Q3), WOS:000296758400023;
<https://doi.org/10.30638/eemj.2011.197>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000296758400023>
 5. **Udroiu, R.**; Deaconu, A.M.; Nanau, C.-Ș. (2021). Data Delivery in a Disaster or Quarantined Area Divided into Triangles Using DTN-Based Algorithms for Unmanned Aerial Vehicles. *Sensors*, 21, 3572, FI=3.576 (Q1 zona roșie) , WOS: 000660665200001;
<https://doi.org/10.3390/s21113572>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000660665200001>
 6. Sabău, E.; **Udroiu, R. (autor correspondent)**; Bere, P.; Buranský, I.; Miron-Borzan, C.-Ș. A (2020). Novel Polymer Concrete Composite with GFRP Waste: Applications, Morphology, and Porosity Characterization. *Appl. Sci.*, 10, 2060, FI=2,474, SRI=0.992 (Q2 zona galbena), WOS: 000529252800161;
<https://doi.org/10.3390/app10062060>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000529252800161>
 7. Bere, P.; Neamtu, C.; **Udroiu, R.** (2020). Novel Method for the Manufacture of Complex CFRP Parts Using FDM-based Molds. *Polymers*, 12, 2220, FI=3,426, SRI=1,957 (Q1 zona roșie) , WOS: 000586198100001;
<https://doi.org/10.3390/polym12102220>

- <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000586198100001>
8. Zaharia, S.M.; Pop, M.A.; **Udroiu, R.** (2020). Reliability and Lifetime Assessment of Glider Wing's Composite Spar through Accelerated Fatigue Life Testing. *Materials*, 13, 2310, FI=3,057, SRI=1,173 (Q2 zona galbena), WOS: 000539277000102;
<https://doi.org/10.3390/ma13102310>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000539277000102>
 9. Deaconu, A.M.; **Udroiu, R. (autor correspondent)**; Nanau, C.-Ș. (2021). Algorithms for Delivery of Data by Drones in an Isolated Area Divided into Squares. *Sensors*, 21, 5472, FI 3.576 (Q1 zona roșie), WOS: 000690125700001;
<https://doi.org/10.3390/s21165472>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000690125700001>
 10. Braga, I.C.; **Udroiu, R. (autor correspondent)**; Nedelcu, A. (2022). Novel Method for Failure Modes Detection in UV-Cured Clear Coated Polymer for Automotive Interior Mechatronic Devices. *Polymers*, 14, 3811, FI=4.967, SRI=2,037 (Q1 zona roșie), WOS:000856724500001;
<https://doi.org/10.3390/polym14183811>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000856724500001>

REVISTE BAZE DE DATE INTERNAȚIONALE

1. **Udroiu, R.**, (2013). Rapid product development of e-ticketing products for urban public transport, *Academic journal of manufacturing engineering*, vol.11 issue 3/2013, indexată EBSCO
<https://essentials.ebsco.com/search/eds/details/rapid-product-development-of-e-ticketing-products-for-urban-public-transport?query=Udroiu%2C%20R.&db=edb&an=97897201>
2. **Udroiu, R.**, (2012). Powder bed additive manufacturing systems and its applications, *Academic journal of manufacturing engineering*, vol.10 issue 4/2012, indexată EBSCO
<https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15837904&AN=88315008&h=0oJyUXQ7J%2bkm17hibBcMkm8xZpX1%2fdskm8uTNMoPz8lRh1fIWWPIHfAAURfDX8nW9CDx2XAGoQYObR8%2bXgZg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrINotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15837904%26AN%3d88315008>

3. **Udroiu, R.**, (2012). Applications of polymer jettting technology for functional testing of the innovative products, Academic journal of manufacturing engineering, vol.10 issue 3/2012, indexată EBSCO
<https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15837904&AN=88304194&h=aQ3odghTklAlOXnsn7DiEQWYS7ATFx2l4pORu%2f7kV9JD82aMzXK00ziAEk5VyU3pSestUVadMwq5YKFgt7ZveQ%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrINotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15837904%26AN%3d88304194>
4. **Udroiu, R.**, (2010). Applications of additive manufacturing technologies for aerodynamic tests, Academic journal of manufacturing engineering, vol.8 issue 3/2010, ISSN 15837904, Indexata Scopus; <https://www-scopus-com.am.e-nformation.ro/record/display.uri?eid=2-s2.0-79960229027&origin=resultslist&sort=plf-f>
5. **Udroiu, R.**, Ivan NV. (2010). Rapid Prototyping and Rapid Manufacturing Applications at Transilvania University of Braşov, Bulletin of the Transilvania University of Brasov - Series I: Engineering Sciences, indexata PROQUEST, EBSCO;
<https://www.proquest.com/docview/870328747/148EE7649E434E06PQ/1?accountid=136549>
6. Morariu C, Zaharia S, **Udroiu, R.**, (2012). The study of the bootstrap estimate accuracy in the case of exponential distribution, Academic journal of manufacturing engineering, vol.10 issue 2/2012, indexată EBSCO
<https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15837904&AN=88304169&h=0l3lZEqB1xNwFiUEoBn4WWS7cZMR66XkCCwJHqMGHdfMywg7zFC58YtZL%2fcaDJeJYapuKQuTqtmPWK5m%2b95OWg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrINotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15837904%26AN%3d88304169>

ARTICOLE PUBLICATE IN VOLUME ALE CONFERINTELOR INTERNAŢIONALE

CONFERINŢE ISI/CLARIVATE ANALYTICS

1. **Udroiu, R.**, Braga, I.C, (2017). Polyjet technology applications for rapid tooling, Matec Web Conf. Vol. 112, WOS: 000579349600046;
<https://doi.org/10.1051/matecconf/201711203011>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000579349600046>
2. **Udroiu, R.**, (2017). Research regarding reverse engineering for aircraft components, Matec Web Conf. Vol. 94, WOS:000393034000012;
<https://doi.org/10.1051/matecconf/20179401012>

- <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000393034000012>
3. **Udroiu, R.**, Nedelcu A. Stroia I., (2011). Application of rapid product development to pelton turbine, 15th International Conference Modern Technologies, Quality and Innovation - New face of TMCR, ModTech 2011 vol.II 25-27 May 2011, Vadul lui Voda-Chisinau, Republic of Moldova, WOS:000392260500280;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000392260500280>
 4. **Udroiu R.**, Mihail L., (2009). Experimental determination of surface roughness of parts obtained by rapid prototyping, Proceedings of the 8th WSEAS International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '09), Puerto de la Cruz Tenerife, Canary Islands, Spain, December 14-16, 2009, Published by WSEAS Press, ISSN: 1790-5117, ISBN: 978-960-474-139-7, 283, WOS:000276789200050;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000276789200050>
 5. **Udroiu, R.**, Dogaru, F., (2009). Rapid Manufacturing of Parts for Wind Tunnel Testing using Polyjet Technology. Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium, ISBN 978-3-901509-70-4, ISSN 1726-9679, 581, Vienna, Austria, 2009, WOS:000282335600291;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000282335600291>
 6. **Udroiu, R.**, Deaky, B., (2011). Optimization of additive manufacturing by 3d printing for fit and functional testing, Proceedings of the 5th international conference on manufacturing science and education (MSE 2011), Vol I, ISSN 1843-2522, 95, June 2-5, 2011, Sibiu, Romania, WOS:000393733400024;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000393733400024>
 7. Braga, I.C; **Udroiu, R.**; Nedelcu, A. (2019). Improving the laser engraving quality of padpainted and spray-painted mechatronic devices, MATEC Web Conf., Vol. 299, 06004, WOS: 000568128200064;
<https://doi.org/10.1051/mateconf/201929906004>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000568128200064>
 8. Braga, I.C; Nedelcu, A.; **Udroiu, R.** (2018). Studies on robotic testing equipment used in mechatronic devices manufacturing processes to improve the root cause analysis, MATEC Web Conf. Vol. 178, WOS:000570197900068;
<https://doi.org/10.1051/mateconf/201817805010>

- <https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000570197900068>
9. Braga, I.C, Nedelcu, A., **Udroiu, R.**, (2017). Studies of the laser etching on painted plastic parts to prevent the risks of engraving failures at mechatronic devices, Matec Web Conf. Vol. 137, WOS:000426604200036;
Link articol: <https://doi.org/10.1051/matecconf/201713703002>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000426604200036>
 10. Braga, I.C, Nedelcu, A., **Udroiu, R.**, (2017). Risk reduction in dimension inspection of the plastic injection-molded parts from mechatronic devices by using optical 3D measuring techniques, Matec Web Conf. Vol. 94, WOS:000393034000044;
<https://doi.org/10.1051/matecconf/20179404001>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000393034000044>
 11. Braga, I.C, Nedelcu, A; **Udroiu, R.**, (2017). Use of microscopy techniques in failure analysis of the plastic injection molded parts to prevent the risks of serial defects in the assembly processes, MATEC Web Conf. Vol. 112, 2017, WOS: 000579349600059;
<https://doi.org/10.1051/matecconf/201711204009>
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000579349600059>
 12. Deaky, B., **Udroiu, R.**, Lupulescu N., Bâlc N., (2011). Cylindrical Gear Rapid Manufacturing Study (Part I), 15th International Conference Modern Technologies, Quality and Innovation - New face of TMCR, ModTech 2011 vol.II 25-27 May 2011, Vadul lui Voda-Chisinau, Republic of Moldova, WOS:000392260500076;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000392260500076>
 13. Dogaru, F., **Udroiu, R.**, (2009). Instrumented Impact Testing of CFRP Composite Laminated Plates. 0637-0639, Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium, 2009, ISBN 978-3-901509-70-4, ISSN 1726-9679, pp 319, Editor Branko Katalinic, Published by DAAAM International, Vienna, Austria 2009, WOS:000282335600319;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000282335600319>
 14. Mihail, LA., **Udroiu, R.** (2009). Dynamic mill deflection researches for the high speed machining with large tool overhang , Advances in manufacturing engineering, quality and production systems, vol. II, Book Series: Mathematics and Computers in Science and Engineering, 383, ISSN:978-960, 2009, WOS:000295540700023

<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000295540700023>

15. Manolescu A., Oancea Gh., Pescaru R., **Udroiu R.** and Bădan I., (2011). Redesigning and manufacturing of damaged gears using innovative technologies, Proceedings of the 5th international conference on manufacturing science and education (MSE 2011), Vol I, ISSN 1843-2522, 317, June 2-5, 2011, Sibiu, Romania, WOS:000393733400078;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000393733400078>
16. **Udroiu, R.**, (2008). Integrated design and manufacturing system for blades mould. Annals of DAAAM for 2008 & Proceedings of the 19th International DAAAM Symposium, ISBN 978-3-901509-68-1, ISSN 1726-9679, 581, Vienna, Austria, 22-25th October 2008, WOS:000262860100708;
<https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000262860100708>

CONFERINȚE BAZE DE DATE INTERNAȚIONALE

1. Braga, I.C, **Udroiu, R.**, Nedelcu, A. (2021). Estimating the warranty returns and proving root causes using statistical analysis of archived parameters measurements for an automotive mechatronic device, IOP Conference Series: Materials Science and Engineering. DOI 10.1088/1757-899X/1009/1/012009. Indexata Scopus
<https://www-scopus-com.am.e-nformation.ro/record/display.uri?eid=2-s2.0-85099956336&origin=resultslist&sort=plf-f>
2. Braga, I.C, Rusu, D., **Udroiu, R.**, Nedelcu, (2016). A. Fast Response on Layers at Quality Issues as Part of Quality Management System in Automotive Manufacturing, Proceedings of the MakeLearn and TIIM Joint International Conference 2016,, ToKnowPress. Indexata in RePEk
<https://ideas.repec.org/h/tkp/mk1p16/225-232.html>
3. **Udroiu, R.**, Serban, D.A., Belgiu G. (2010). Optimisation of rapid prototyping process for electrical vehicle manufacturing, Proceedings of the 3rd International Conference on Additive Technologies ICAT 2010,Nova Gorica, Slovenia, September, 22th – 24th, 2010,Publisher DAAAM International Vienna, ISBN 978-3-901509-75-9, ISSN 1992-5093, Indexata Scopus
<https://www-scopus-com.am.e-nformation.ro/record/display.uri?eid=2-s2.0-84904438038&origin=resultslist&sort=plf-f>
4. Serban, D.A., **Udroiu, R.**, Belgiu G. (2010). Product creation development from innovative simulation methods to product life management system, Proceedings of the 3rd International Conference on Additive Technologies ICAT 2010,Nova Gorica, Slovenia, September, 22th – 24th, 2010,Publisher DAAAM International Vienna, ISBN 978-3-901509-75-9, ISSN 1992-5093, Indexata Scopus

- <https://www-scopus-com.am.e-nformation.ro/record/display.uri?eid=2-s2.0-84904410844&origin=resultslist&sort=plf-f>
5. Braga C, Nedelcu A, **Udroiu R**, (2016). Improving the Organizational Performance in Automotive Manufacturing by Using Fast Response on Layers at Quality Issues, Applied Mechanics and Materials, 2016, indexată Scientific.net,
<https://doi.org/10.4028/www.scientific.net/AMM.834.211>
<https://www.scientific.net/AMM.834.211>
 6. Angi N, **Udroiu R**, (2015). Design of a LSA aircraft using advanced software, Scientific Research & Education in the Air Force - AFASES 2015, ISSN 2247-3173, indexată EBSCO
<https://essentials.ebsco.com/search/eds/details/design-of-a-lsa-aircraft-using-advanced-software?query=Design%20of%20a%20LSA%20aircraft%20using%20advanced%20software&requestCount=0&db=owf&an=103260785>
 7. **Udroiu R**, Blaj M., (2016). Conceptual design of a VTOL remotely piloted aircraft for emergency missions, Scientific Research & Education in the Air Force - AFASES 2016, ISSN 2247-3173, indexată EBSCO, DOI: 10.19062/2247-3173.2016.18.1.27
<https://essentials.ebsco.com/search/eds/details/conceptual-design-of-a-vtol-remotely-piloted-aircraft-for-emergency-missions?query=Conceptual%20design%20of%20a%20VTOL%20remotely%20piloted%20aircraft%20for%20emergency%20missions&requestCount=0&db=owf&an=117020342>

ALTE LUCRĂRI / REALIZĂRI RELEVANTE

Articole în reviste neindexate

1. **Udroiu, R.**, (2014), Additive manufacturing technologies used for superalloys processing, Tehnologia Inovativa - Revista Constructia De Masini; Nr. 3-4, ISSN 2248-0420, categoria CNCSIS B+;
https://www.ictcm.ro/wp-content/uploads/2021/03/Electronic-form-TI-3_4_2014.pdf
2. **Udroiu, R.**, Ivan, N., (2008). Rapid-X using 3DPrinters, Academic Journal of Manufacturing Engineering Supplement, nr. 2, Editura Politehnica, Timișoara, 2008, ISSN 1583-7904, pag. 198-204, CNCSIS tip B;
3. Pescaru-Folosea R., Ivan, N., V., **Udroiu, R.**, C., Loaga L., (2008). Reverse engineering in manufacturing engineering, Academic Journal of Manufacturing Engineering, vol. 6, nr. 4, Editura Politehnica, Timișoara, 2008, ISSN 1583-7904, pag. 102-108, CNCSIS tip B;
4. Ivan, N., V., Ivan, M., **Udroiu, R.**, C., Chicoș, L., Lancea, C., T., (2007). Process planning a key stage in innovative manufacturing, Academic Journal of Manufacturing Engineering, vol. 5, nr. 1, Editura Politehnica, Timișoara, 2007, ISSN 1583-7904, pag. 43-49, CNCSIS tip B;

5. **Udroiu, R.**, Ivan, N., V., Chicoș, L., (2006). Innovative technological process for helicopter blade manufacturing, *Academic Journal of Manufacturing Engineering*, vol. 4, nr. 4, Editura Politehnica, Timișoara, 2006, ISSN 1583-7904, pag. 62-66, CNCSIS tip B;
6. **Udroiu, R.**, (2004). Integrated CAD/CAM system the core of concurrent engineering, In *Bulletin of the Transilvania University of Brașov*, vol. 11 (46), Transilvania University Press, Brașov, 2004, ISSN 1223-9631, pag. 161-168, CNCSIS tip B;
7. Ivan, M., C., **Udroiu, R.**, Ivan, C., Ivan, N., V., (2006). Concept of constructive-technological entity a facility for CAD/CAM integration, *Academic Journal of Manufacturing Engineering*, vol. 4, nr. 2, Editura Politehnica, Timișoara, ISSN 1583-7904, pag. 49-54, CNCSIS tip B;
8. Chicoș, L., Ivan, N., **Udroiu, R.**, (2006). Innovative development of products, *Academic Journal of Manufacturing Engineering*, vol. 4, nr. 3, Editura Politehnica, Timișoara, ISSN 1583-7904, pag. 18-23, CNCSIS tip B;
9. **Udroiu, R.**, (2005). Concurrent systems engineering, *Academic Journal of Manufacturing Engineering*, vol. 3, nr. 1, Editura Politehnica, Timișoara, ISSN 1583-7904, pag. 69-74, CNCSIS tip B;
10. **Udroiu, R.**, (2004). Machining strategies of constructive-technological features. *StrategEnt software*, *Academic Journal of Manufacturing Engineering*, vol. 2 nr.3, Editura Politehnica, Timișoara, ISSN 1583-7904, pag.55-61, CNCSIS tip B.

Articole în volumele unor conferințe internaționale

1. **Udroiu, R.** (2011). Rapid tooling by Three Dimensional Printing (3DP), 3rd WSEAS international conference on manufacturing engineering, quality and production systems MEQAPS '11, April 11-13, 2011, Brasov, Romania, Published by WSEAS Press;
2. Deaky, B., Lupulescu, N., **Udroiu, R.**, Moldovean, Gh., Serban I. (2011). Cylindrical Gear Rapid Manufacturing Study (Part II), 3rd WSEAS International Conference on Manufacturing Engineering, Quality And Production Systems MEQAPS 11 (MEQAPS11) ISBN:978 -96 0-474 - 294.
3. **Udroiu, R.**, Comsa, Gh., (2009). The role of rapid prototyping in the furniture industry, *Proceedings of the 7th International Conference "Wood Science and engineering in the third millenium – ICWSE 2009"*, ISSN 1843-2689, pp 696-701, Editor M. Ispas, Published by Transilvania University of Brasov, International Union of Forest Research & European Federation of Furniture Industry, 4-6 iunie 2009;
4. Comsa G., **Udroiu, R.**, (2009). The study of curved chair employing Cosmos Express finite element method, *Proceedings of the 7th International Conference "Wood Science and engineering in the third millenium – ICWSE 2009"* ISSN:18432689, pag.702.

5. **Udroiu, R.**, (2007). Computer aided design of tooling for aerospace composite parts, Annals of MTeM for 2007 & Proceedings of the 8th international conference "Modern Technologies in Manufacturing", organized by Technical University of Cluj-Napoca in collaboration with Technical University of Kosice from Slovakia and University of Rijeka from Croatia, Cluj Napoca, 4-5th October, 2007, ISBN 973-9087-83-3, pag. 449-452;
6. **Udroiu, R.**, (2005). Software system for 3D parametrical modelling of helicopter blade, Conferinta științifică internațională "Tehnologii moderne, calitate, restructurare TMCR 2005", Universitatea Tehnică din Moldova, Editura U.T.M., 19-21 mai, 2005, Chișinău, Moldova, ISBN 9975-9875-7-5, pag. 409-412;
7. **Udroiu, R.**, (2005). Determination of virtual cutting tools in roughing milling process, Proceedings of the 4th International Conference on Advanced Manufacturing Technologies - ICAMaT 2005, Publishing House of Romanian Academy, Bucharest, 3 - 4 November, 2005, ISBN 973-27-1254-6, pag. 177-180;
8. **Udroiu, R.**, (2005). The software system VTOOL, Proceedings of the 4th International Conference on Advanced Manufacturing Technologies - ICAMaT 2005, Publishing House of Romanian Academy Bucharest, 3 - 4 November, 2005, ISBN 973-27-1254-6, pag. 181-184;
9. Lancea, C., **Udroiu, R.**, (2005). Determination the CNC path when milling complex shape pockets with horizontal bottom side, Conferinta științifică internațională "Tehnologii moderne, calitate, restructurare TMCR 2005", Universitatea Tehnică din Moldova, Editura U.T.M., 19-21 mai, 2005, Chișinău, Moldova, ISBN 9975-9875-7-5, pag. 413-416;
10. **Udroiu, R.**, Lancea, C., (2004). Determination of virtual cutting tools in finishing milling process, Proceedings of the Second International Conference "Challenges in Higher Education and Research in the 21st Century", vol. 2, Heron Press Ltd., Edited By Nikolay Kolev & Lubomir Dimitrov cu sprijinul companiei McGraw-Hill (U.S.A.), organized by the Technical University of Sofia, June 2-5, 2004, Sozopol, Bulgaria, ISBN 954-580-158-1, pag.222-224;
11. **Udroiu, R.**, Lancea, C., (2004). The Cutting Force Dispersion According to Milling Speed, Proceedings of the Second International Conference "Challenges in Higher Education and Research in the 21st Century", vol. 2, Heron Press Ltd., Edited By Nikolay Kolev & Lubomir Dimitrov cu sprijinul companiei McGraw-Hill (U.S.A.), organized by the Technical University of Sofia, June 2-5, 2004, Sozopol, Bulgaria, ISBN 954-580-158-1, pag.219-221;
12. Lancea, C., **Udroiu, R.**, (2004). Cutting parameters calculus in milling machining process. Case study, First international conference "Mechanics and Machine Elements", Technical University of Sofia, Bulgaria, 4-6 November 2004, Tome II, ISBN 954-580-173-5, pag.193-199;
13. Lancea, C., **Udroiu, R.**, (2004). A computer simulation program for NC miling of 3D parts, First international conference "Mechanics and Machine Elements", Technical University of Sofia, Bulgaria, 4-6 November 2004, ISBN 954-580-173-5, pag.200-204;

14. **Udroiu, R.**, (2003). Aspects concerning of the machining strategies in milling process, Proceedings of the 3rd International Conference Research and development in mechanical industry RaDMI 2003, 14 - 18 September 2003, Herceg Novi, Serbia and Montenegro, 2003, ISBN 86-83803-06-6, pag.559-564;
15. **Udroiu, R.**, (2003). Determination of the machining strategies in integrated design of the moulds, Proceedings of the 3rd International Conference Research and development in mechanical industry RaDMI 2003, 14-18 September 2003, Herceg Novi, Serbia and Montenegro, 2003, ISBN 86-83803-06-6, pag.565-568;
16. **Udroiu, R.**, (2003). Conception par entités de matrices de polymérisation, Conferin a științifică internațională "Tehnologii moderne, calitate, restructurare TMCR 2003", vol. 3, Universitatea Tehnică din Moldova, 29 mai – 1 iunie, 2003, Chișinău, Moldova, ISBN 9975-9748-0-5, pag. 507-510ș
17. **Udroiu, R.**, (2003). Système software pour la conception par entités de matrices de polymérisation, Conferin a științifică internațională "Tehnologii moderne, calitate, restructurare TMCR 2003", vol. 3, Universitatea Tehnică din Moldova, 29 mai - 1 iunie, 2003, Chișinău, Moldova, ISBN 9975-9748-0-5, pag. 511-514 ;
18. **Udroiu, R.**, Martinescu, I., (2004). Concurrent definition of mechanical flight control system, The 1st International Conference on Computing and Solutions in Manufacturing Engineering "COSME '04", Transilvania University of Brașov, Brașov-Sinaia, Romania, 16-18 sept., 2004, ISBN 973-635-372-9, pag. 892-897;
19. **Udroiu, R.**, (2004). Virtual jig assembly for aircraft manufacturing, The 1st International Conference on Computing and Solutions in Manufacturing Engineering "COSME '04", Transilvania University of Brașov, Brașov-Sinaia, Romania, 16-18 sept., 2004, ISBN 973-635-372-9, pag. 898-901;
20. Rîmnicăeanu, V., **Udroiu, R.**, (2003). Modelarea și asamblarea parametrizată a structurii unui autogir, Al VIII-lea Simpozion National cu participare internațională de Geometrie Descriptivă, Grafică Tehnică și Design 2003, vol. 2, Universitatea Transilvania din Brașov, 5-7 iunie, 2003, ISBN 973-635-195-5, pag. 263-266;
21. **Udroiu, R.**, Ivan N, (2002). Conceptul de entitate constructiv-tehnologică element integrator în ingineria pieselor de formă complexă, Proceedings of the C2I International Conference of Integrated Engineering, Timișoara, Editura Politehnica, România, ISBN:973-8247-92-6 ș
22. **Udroiu, R.**, Ivan N, (2002). Aplicarea conceptului de inginerie simultană la pala de elicopter revista Volum: Proceedings of the C2I International Conference of Integrated Engineering, Timișoara, Editura Politehnica, România, ISBN:973-8247-92-6 ;
23. Postelnicu A., **Udroiu, R.**(1999). Controlul activ al vibrațiilor palelor de elicopter, Volum:A XXVIII-a Sesiune de comunicări științifice cu participare internațională, Secțiunea Aeronave și motoare de aviație, Editura Academiei Tehnice Militare, București;

24. Martinescu I, **Udroiu, R.** (1998). Proiectarea parametrizată asistată de calculator a ștantelor și matritelor, A-VI-a Conferință națională cu participare internațională de tehnologii și utilaje pentru prelucrarea materialelor prin deformare plastică, Universitatea Dunărea de Jos, Galați, Editată de Ministerul Educației Naționale și Academia Română;
25. **Udroiu, R.**, Martinescu I, (1998). The aspects looking at computer parametric design of the airfoils, Conferință internațională TURBO '98, vol.1, Institutul National de Cercetare Dezvoltare Turbomotoare COMOTI, București, ISBN:973-9402-20-8;
26. Postelnicu A., Martinescu I, **Udroiu, R.**,(1997). Proiectarea parametrizată asistată de calculator a tijelor de comandă ale elicopterelor, A XXVII-a Sesiune de comunicări științifice cu participare internațională, Secțiunea 4 Aeronave și motoare de aviație, Editura Academiei Tehnice Militare, București ;
27. Postelnicu A., Martinescu I, **Udroiu, R.** (1997). Calculul static al lanțului comenzilor de zbor la elicopterul IAR 330. Partea II, A XXVII-a Sesiune de comunicări științifice cu participare internațională, Secțiunea 4 Aeronave și motoare de aviație, Editura Academiei Tehnice Militare, București;
28. **Udroiu, R.**, Ivan N, (1997). Geometrical processor for modelling on three dimensions of the helicopter blades ,International Computer Science Conference "MicroCAD '97", Miskolci Egyetem, 26-27 February 1997;
29. Martinescu I, Barna, T., **Udroiu, R.** (1996). Aspecte privind proiectarea asistată de calculator a ștantelor și matritelor, În buletinul sesiunii Conferinței internaționale de comunicări științifice TMCM 96, vol. 2 Universitatea tehnică "Gh. Asachi", Iași.

30.03.2023

Conf. dr. eng. Răzvan Udroiu

