Co-funded by the Erasmus+ Programme of the European Union

BRIGHT

Erasmus+ strategic partnership for Higher Education

BOOSTING THE SCIENTIFIC EXCELLENCE AND INNOVATION CAPACITY OF 3D PRINTING METHODS IN PANDEMIC PERIOD

O5 - BRIGHT PUBLICATIONS

(ARTICLES & BOOKS)

Project Title	**Boosting the scientific excellence and innovation capacity of 3D printing methods in pandemic period 2020-1-RO01-KA226-HE-095517**
Output	**BRIGHT publications (articles & books)**
Date	**2023**

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1. Scientific articles published in ISI journals

1. Păcurar Răzvan, Petru Berce, Anna Petrilak, Ovidiu Nemeş, Cristina Ştefana Miron Borzan, Marta Harničárová, and Ancuţa Păcurar. 2021. "Selective Laser Sintering of PA 2200 for Hip Implant Applications: Finite Element Analysis, Process Optimization, Morphological and Mechanical Characterization" Materials 14, no. 15: 4240. https://doi.org/10.3390/ma14154240 ; Impact factor: 3.748 (Q1)
2. Păcurar Răzvan, Petru Berce, Ovidiu Nemeş, Diana-Irinel Băilă, Dan Sergiu Stan, Alexandru Oarcea, Florin Popişter, Cristina Miron Borzan, Sven Maricic, Stanislaw Legutko, and Ancuţa Păcurar. 2021. "Cast Iron Parts Obtained in Ceramic Molds Produced by Binder Jetting 3D Printing—Morphological and Mechanical Characterization" Materials 14, no. 16: 4502. https://doi.org/10.3390/ma14164502 ; Impact factor: 3.748 (Q1)
3. Băilă Diana-Irinel, Cătălin Vițelaru, Roxana Trușcă, Lidia Ruxandra Constantin, Ancuța Păcurar, Constantina Anca Parau, and Răzvan Păcurar. 2021. "Thin Films Deposition of Ta2O5 and ZnO by E-Gun Technology on Co-Cr Alloy Manufactured by Direct Metal Laser Sintering" Materials 14, no. 13: 3666. https://doi.org/10.3390/ma14133666 ; Impact factor: 3.748 (Q1)
4. Popișter Florin, Daniela Popescu, Ancuţa Păcurar, and Răzvan Păcurar. 2021. "Mathematical Approach in Complex Surfaces Toolpaths" Mathematics 9, no. 12: 1360. https://doi.org/10.3390/math9121360 ; Impact factor: 2.592 (Q1)
5. Filip Górski, Olga Komorowska, Przemysław Zawadzki, Wiesław Kuczko, Magdalena Żukowska, Remigiusz Łabudzki and Razvan Pacurar, Automation of design of modular upper limb prostheses, Facta Universitatis, Series: Mechanical Engineering, 2023 (accepted for publication), DOI: 10.22190/FUME230228072G; Impact factor: 4.622 (Q1). http://casopisi.junis.ni.ac.rs/index.php/FUMechEng
6. Ancuţa Păcurar, Andreea Tomşea, Cristian Vilău, Eugen Guţiu, Răzvan Păcurar, Designing and manufacturing of an ankle orthosis using 3d printing technology, Acta Technica Napocensis-Series: Applied Mathematics, Mechanics and Engineering, Vol. 64, Issue 4, 2021, WOS:000731519800006, ISI Impact factor: 0.07 (Q4), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1667/1346
7. Sven Maricic, Iva Mrsa, Răzvan Păcurar, Zoran Mrsa, „The 3D Printed Astronautical Probe Simulation Analyzing the Free-fall, Acta Technica Napocensis-Series: Applied

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Mathematics, Mechanics and Engineering, Vol. 65, Issue 2, 2022, WOS:000838236300006, ISI Impact factor: 0.07 (Q4), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1802/1450

2. Scientific articles published in ISI proceedings

1. Răzvan Păcurar, Bogdan Danci, Ancuţa Păcurar, Research on optimal scaling of parts made from stainless steel material by Selective Laser Melting, 2021 9th International Conference on Modern Power Systems (MPS), IEEE Xplore, 16-17 June 2021, Cluj-Napoca, Romania, 2021, DOI: 10.1109/MPS52805.2021.9492672; https://ieeexplore.ieee.org/document/9492672
2. Nikola Vitkovic, Miroslav Trajanovic, Miodrag Manic, Nikola Korunovic, Ljiljana Radovic, Răzvan Păcurar, Procedure for the Creation of Complex Free-Form Human Bones Surfaces for Manufacturing of Personalized Implants, IFIP Advances in Information and Communication Technology, Vol. 640, IFIP, pp. 14 – 24, 2022, DOI: 10.1007/978-3-030-94399-8_2; https://link.springer.com/chapter/10.1007/978-3-030-94399-8_2

3. Scientific articles published in proceedings of scientific international conferences (SCOPUS)

1. Răzvan Păcurar, Sergiu Pascu, Ancuţa Păcurar, Dan Sergiu Stan, Emil Teuţan, Diana Irinel Băilă, Arik Sadeh, „Designing of an original extruding system for 3D printing of parts made of plastic material in powder-state form", IOP Conference Series: Materials Science and Engineering, Vol. 1009 (2021), 012043, https://iopscience.iop.org/article/10.1088/1757-899X/1009/1/012043
2. Diana Irinel Băilă, Răzvan Păcurar, Ancuţa Păcurar, Thin-Film Protective Coatings on Samples Manufactured by Direct Metal Laser Sintering Technology Used in Dentistry, Lecture Notes in Mechanical Engineering, Manufacturing 2022, pp. 59–68; https://link.springer.com/chapter/10.1007/978-3-030-99769-4_5
3. Diana Irinel Băilă, Răzvan Păcurar, Ancuţa Păcurar, Sintered Compacts of Co-Cr Powders Doped with HAp and ZrO2 Used in Implantology, Lecture Notes in Mechanical Engineering, Springer, 2022, pp. 69–78; https://link.springer.com/chapter/10.1007/978-3-030-99769-4_6

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

4. Nikola Vitković, Miroslav Trajanović, Jovan Aranđelović, Răzvan Păcurar, Cristina Borzan, Contact Surface Model Parameterization of the Extra-Articular Distal Humerus Plate, Lecture Notes in Mechanical Engineering, Manufacturing 2022, pp. 79–92; https://link.springer.com/chapter/10.1007/978-3-030-99769-4_7

5. Mark Kovacs, Răzvan Pacurar, Sorin Grozav, Numan Durakbasa, Osman Bodur, Jan Rehor, Tomas Marik, Research on Mechanical Characteristics of parts made of 316L Stainless Steel (material) by using Selective Laser Melting Technology, The International Symposium for Production Research ISPR 2022: Towards Industry 5.0, Springer, pp.176-187, https://link.springer.com/chapter/10.1007/978-3-031-24457-5_15 ;

6. Nikola Vitković, Miroslav Trajanović, Miloš Stojković, Răzvan Păcurar, Sergiu-Dan Stan, Filip Górski, The Reverse Engineering of Human Organs Based on the Application of Method of Anatomical Features, Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2023, https://nbc2023.lmifb.lv/ (in course of publication).

4. Published books

1. Sven Maričić, Răzvan Păcurar, Milos Simonovic, Peter Kostal, Remigiusz Łabudzki, Branislav Rabara, Mate Babic, Computer Aided Engineering – Additive Manufacturing Approach, (e-book), Risoprint Publishing House, Cluj-Napoca, 2023, ISBN: ISBN: 978-973-53-3027-9, https://www.risoprint.ro/detaliicarte.php?id=2452

2. Răzvan Păcurar, Cristina Borzan, Eugen Guţiu, Cătălin Moldovan, Cristian Vilău, Sorin Comşa, Cosmin Cosma, Petru Berce, Nicolae Bâlc, Miloš Simonovic, Aleksandar Miltenovic, Milan Banic, Nikola Vitkovic, Remigiuzs Labudski, Filip Gorski, Magdalena Zukowska, Filip Sarbinovski, Sven Maricic, Mate Babic, Branislav Rabara, Peter Kostal, Erika Hruskova, BRIGHT e-toolkit manual for digital learning in producing medical parts by 3D printing methods in the context of the pandemic (e-toolkit), Rispoprint Publishing House, Cluj-Napoca, 2023, ISBN: 978-973-53-3028-6, https://www.risoprint.ro/detaliicarte.php?id=2455

3. Răzvan Păcurar, Nicolae Bâlc, NON-CONVENTIONAL TECHNOLOGIES - Project Guidebook, Rispoprint Publishing House, Cluj-Napoca, 2023, ISBN: 978-973-53-2707-1.

4. Filip Gorski, Michal Rychlik, Răzvan Păcurar, „Advances in Manufacturing III, vol. 5 – Biomedical Engineering: Research and Technology Innovations, Industry 4.0”, Lectures Notes

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

in Mechanical Engineering, Springer, 2022, ISBN 978-3-030-99768-7; https://link.springer.com/book/10.1007/978-3-030-99769-4

5. Răzvan Păcurar, „Trends and Opportunities of Rapid Prototyping Technologies", Open-access book, IN-Tech Publishing House, Rijeka, Croatia, 2022, DOI: 10.5772/intechopen.102781, https://www.intechopen.com/books/11171

6. Răzvan Păcurar, Filip Gorski, Special Issue "Smart Materials, Intelligent Structures and Innovative Applications of 3D Printing and Bio-Printing Methods", MDPI Materials journal, ISSN 1996-1944, (in course of publishing in 2023), https://www.mdpi.com/journal/materials/special_issues/XA56C5IU0T

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