

## Publishing of articles and books

### 1. Scientific jointly articles published / submitted to ISI journals

1. Górski F, Łabudzki R, Żukowska M, Sanfilippo F, Ottestad M, Zelenay M, Băilă D-I, Pacurar R. Experimental Evaluation of Extended Reality Technologies in the Development of Individualized Three-Dimensionally Printed Upper Limb Prostheses. Applied Sciences. 2023; 13(14):8035. <https://doi.org/10.3390/app13148035>; Impact factor: 2.7 (Q2) – joint article published
2. Górski, F., Rybarczyk, D., Wichniarek, R., Wierzbicka, N., Kuczko, W., Żukowska, M., Regulski, R., Păcurar, R., Comsa, D.S., Băilă, D.I., Zelenay, M., Sanfilippo, F., Development and testing of individualized sensorized 3D printed upper limb bicycle prosthesis for adult patient Applied Sciences; 13(23), 12918; 2023, <https://doi.org/10.3390/app132312918> ,Impact factor: 2.7 (Q2)
3. Păcurar, R., Sanfilippo, F., Økter, M., Băilă, D.I., Zaharia, C., Nicoară, A.I., Radu, I.C., Tom, S., Górski, F., Kuczko, W., Wichniarek, R., Comşa, D.S., Zelenay, M., Woźniak, P., Use of high-performance polymeric materials in customized low-cost robotic grippers for biomechatronic applications: experimental and analytical research, Frontiers in Materials, September 2023; Q3 – joint article submitted / under review
4. Górski, F., Grohs, A., Kuczko, W., Żukowska, M., Wichniarek, R., Siwec, S., Băilă, D.I., Zelenay, M., Păcurar, R., Sanfilippo, F., Development and studies of VR-assisted hand therapy using a customized bio-mechatronic 3D printed orthosis. Electronics, September 2023; Impact factor: 2.9 (Q2) – accepted for publication

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## 2. Additional scientific articles published / submitted to ISI journals by the EMERALD consortium

1. Băilă D-I, Păcurar R, Savu T, Zaharia C, Truşcă R, Nemeş O, Górski F, Păcurar A, Pleşa A, Sabău E. Mechanical and Wetting Properties of Ta2O5 and ZnO Coatings on Alloy Substrate of Cardiovascular Stents Manufactured by Casting and DMLS. *Materials*. 2022; 15(16):5580. Impact factor: 3.748 (Q1), <https://doi.org/10.3390/ma15165580>
2. Stojković JR, Turudija R, Vitković N, Górski F, Păcurar A, Pleşa A, Ianoşi-Andreeva-Dimitrova A, Păcurar R. An Experimental Study on the Impact of Layer Height and Annealing Parameters on the Tensile Strength and Dimensional Accuracy of FDM 3D Printed Parts. *Materials*. 2023; 16(13):4574. ; Impact factor: 3.4. (Q2) <https://doi.org/10.3390/ma16134574>
3. Vitković N, Stojković JR, Korunović N, Teuţan E, Pleşa A, Ianoşi-Andreeva-Dimitrova A, Górski F, Păcurar R. Extra-Articular Distal Humerus Plate 3D Model Creation by Using the Method of Anatomical Features. *Materials*. 2023; 16(15):5409. Impact factor: 3.4 (Q2) <https://doi.org/10.3390/ma16155409>
4. Păcurar, R., Comşa, D.S., Sabău, E., Teuţan, E., Zelenay, M., Băilă, D.I., Kuckzo, W., Filip Górski, F., Research On The Design And Manufacturing Of An Upper-Limb Prosthesis By Fused Deposition Modelling, *Acta Technica Napocensis*, September 2023; Q4 – accepted for publication
5. Păcurar, R., Comşa, D.S., Sabău, E., Guţiu, E., Ianoşi-Andreeva-Dimitrova, A., Pleşa, A., Zelenay, M., Băilă, D.I., Żukowska, M., Górski, F., Research On The Design And Manufacturing Of a Wrist-Hand Orthosis By Fused Deposition Modelling, *Acta Technica Napocensis*, September 2023; Q4 – under review – accepted for publication
6. Băilă D.I., Sanfilippo F., Savu T. Zaharia C., Górski, F., Radu, I.C., Pârâu, C.A., Zelenay, M., Păcurar R. 3D Printing of Personalized Stents: Advanced Rapid Prototyping journal. October 2023; (Q2) – accepted for publication.

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

1. Băilă, D.I., Păcurar, R., Păcurar, A., Mechanical properties and microstructural analyzes of epoxy resins reinforced with satin tissue, International Conference SGEM Bulgaria 2022 , ISSN 1314-2704, International Multidisciplinary Scientific GeoConference SGEM, ISBN 978-619-7603-48-4, vol 22, iss.6.1., 2022, <https://doi.org/10.5593/sgem2022/6.1/s24.03>
2. Băilă, D.I., Păcurar, R., Păcurar, A., Mechanical behaviors of polyester resins reinforced with unifilo fiberglass, International Conference SGEM Bulgaria, ISSN 1314-2704, ISBN 978-619-7603-48-4, Vol. 22, Iss. 6.1, 2022, <https://doi.org/10.5593/sgem2022/6.1/s24.05>
3. Băilă, D.I., Păcurar, R., Păcurar, A., Moisture absorption behavior of CP5 composite materials used in industry, International Conference ICBASSET Turcia 2022, EPSTEM 2022 The Eurasia Proceedings of Science, Technology, Engineering & Mathematics (EPSTEM), ISSN: 2602-3199, vol.18, pg. 55-63, <https://doi.org/10.55549/epstem.1192332>
4. Băilă, D.I., Păcurar, R., Păcurar, A., 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](https://link.springer.com/chapter/10.1007/978-3-030-99769-4_5)
5. Băilă, D.I., Păcurar, R., Păcurar, A., Sintered Compacts of Co-Cr Powders Doped with HAp and ZrO<sub>2</sub> 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](https://link.springer.com/chapter/10.1007/978-3-030-99769-4_6)
6. Vitković, N, Trajanović, M., Aranđelović, J., Păcurar, R., Borzan, C., 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](https://link.springer.com/chapter/10.1007/978-3-030-99769-4_7)

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7. Razvan Pacurar, Gabriela Friciu, Emilia Sabau, Cristian Vilau, Eugen Gutiu, Ovidiu Nemes, Nikola Vitkovic, Remigiusz Łabudzki and Ancuta Pacurar, Research on Design and Manufacturing of Pelvic Bone Structure by Fused Deposition Modeling Method, submitted for Manufacturing 2024 conference, Poznan, 14-16.05.2024
8. Razvan Pacurar, Diana Ioana Maria Negrea, Emilia Sabau, Dan Sorin Comsa, Cristina Borzan, Nikola Vitkovic, Justyna Rybarczyk and Ancuta Pacurar, Research on the Mechanical Characteristics of 3D-Printed PEEK Material-Based Lattice Structures Used for Vertebral Implants, submitted for Manufacturing 2024 conference, Poznan, 14-16.05.2024
9. Razvan Pacurar, Consuella Gania, Emilia Sabau, Dan Sorin Comsa, Nikola Vitkovic, Sven Maricic, Stanislaw Legutko and Ancuta Pacurar, Research on Design and Manufacturing of PEKK-Based Mandibular Implants Made by Fused Deposition Modeling, submitted for Manufacturing 2024 conference, Poznan, 14-16.05.2024

#### 4. Published books

1. Răzvan PACURAR, Filip GÓRSKI, Filippo SANFILIPPO, Diana BĂILĂ, Branislav Rabara, Martin Bjaadal ØKTER, Dan-Sorin COMȘA, Emilia SABĂU, Magdalena ŻUKOWSKA, Dominik RYBARCZYK, Natalia WIERZBICKA, Radosław WICHNIAREK, Wiesław KUCZKO, Roman REGULSKI, *EMERALD e-toolkit for teaching purposes, basic knowledge about realizing biomimetic mechatronic systems*, Risoprint publishing house, Cluj-Napoca, 2023, ISBN 978-973-53-3048-4
2. Răzvan PĂCURAR, Filip GÓRSKI, Filippo SANFILIPPO, Diana BĂILĂ, Martin ZELENAY, Dan-Sorin COMȘA, Emilia SABĂU, Remigiusz ŁABUDZKI, Michal GALLIA, Tom SAVU, Nicolae IONESCU, Mihaela ULMEANU, Bogdan JUGRAVU, Vlad ENACHE, Cătălin ZAHARIA, Ionuț-Cristian RADU, Magdalena ŻUKOWSKA, Justyna RYBARCZYK, Dominik RYBARCZYK, Roman REGULSKI, Natalia WIERZBICKA, Radosław WICHNIAREK, Wiesław KUCZKO, *EMERALD e-book for developing of biomimetic mechatronic systems*, Risoprint publishing house, Cluj-Napoca, 2023, ISBN 978-973-53-304 7-7.

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3. Filip Gorski, Michal Rychlik, Răzvan Păcurar, „Advances in Manufacturing III, vol. 5 – Biomedical Engineering: Research and Technology Innovations, Industry 4.0”, Lectures Notes in Mechanical Engineering, Springer, 2022, ISBN 978-3-030-99768-7; <https://link.springer.com/book/10.1007/978-3-030-99769-4>

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