

Lista de lucrari publicate de dr. ing. Cosmin Cosma

I. Teza de doctorat

C. Cosma, „Cercetări privind îmbunătățirea fabricației implanturilor medicale din titan, prin topire selectivă cu laser”, Teză de doctorat, Coordonator Prof.dr.ing. Nicolae Balc. Universitatea Tehnică din Cluj-Napoca, 2015.

II. Articole indexate ISI cu factor de impact perioada 2016-2021:

1. A. Ispas, **C. Cosma**, A. Craciun, M. Constantiniuc, L. Lascu, D. Leordean, C. Vilau, Influence of Ti-Ceramic or Ti-Composite crown on stress distribution: Finite element study and additive manufacturing, Journal of Optoelectronics and Advanced Materials, vol. 18, No. 9-10, 2016 (IF 0.6).
2. AV. Burde, S. Cuc, A. Radu, MA. Rusu, **C.S. Cosma**, R.S. Campian, D. Leordean, Microstructural analysis of the interface between some super alloys and composite/ceramic materials, Studia Universitatis Babes-Bolyai, Seria Chemia, vol. 61 (2), 2016 (IF 0.4).
3. **C. Cosma**, N. Balc, M. Moldovan, L. Morovic, P. Gogola, C. Borzan, Post-processing of customized implants made by laser beam melting from pure Titanium, Journal of Optoelectronics and Advanced Materials, vol. 19, No. 11-12, p. 738-747, 2017 (IF 0.6).
4. A. Burde, C. Gasparik, M. Moldovan, S. Baciuc, **C. Cosma**, In vitro evaluation of accuracy of single dies captured by two intraoral digital scanners, Revista Materiale Plastice, vol. 2018 (2), 2018 (IF 1.5).
5. M.A. Moldovan, A.B. Bosca, C.R. Roman, H. Rotaru, C. Prejmerean, D. Prodan, P. Bere, **C. Cosma**, D. Festila, M.C. Ghergie, Bone Reaction to a Newly Developed Fiber-reinforced Composite Material for Craniofacial Implants, Revista Materiale Plastice, vol. 57 (2), 2020 (IF 1.5)
6. G. Armencea, **C. Cosma**, C. Dinu, F. Onisor, M. Lazar, P. Berce, N. Balc, M. Baciuc, S. Bran, Technical queries of a 3D design custom-made implant made from titanium particles for maxillofacial bone reconstruction, Particulate Science and Technology, vol. 38, 676-684, 2020 (IF 1.6).
7. **C. Cosma**, J. Kessler, A. Gebhardt, I. Campbell, N. Balc, Improving the Mechanical Strength of Dental Applications and Lattice Structures SLM Processed, Materials, vol. 13 (4), 905, 2020 (IF 3.0).
8. **C. Cosma**, I. Drstvensek, P. Berce, S. Prunean, S. Legutko, C. Popa, N. Balc, Physical–Mechanical Characteristics and Microstructure of Ti6Al7Nb Lattice Structures Manufactured by Selective Laser Melting, Materials Journal, vol. 13, 2020 (IF 3.0).
9. **C. Cosma**, M. Moldovan, M. Simion, N. Balc, Impact of laser parameters on additively manufactured cobalt-chromium restorations, Journal of Prosthetic Dentistry, 2021 (IF 3.4).

10. D. Ostas, M. Hedesi, C. Roman, M. Ciurea, **C. Cosma**, H. Rotaru, Design Workflow for Mandibular Reconstruction. Opportunities and Limitations of In-house Virtual Surgical Planning, *Journal of Medical and Biological Engineering*, vol. 41, 2021 (IF 1.5).
11. S. Cuc, A. Burde, **C. Cosma**, D. Leordean, M. Rusu, N. Balc, D. Prodan, M. Moldovan, R. Ene, Adhesion between Biocomposites and Different Metallic Structures Additive Manufactured, *Coatings*, vol. 11, 2021 (IF 2.8).

III. Articole indexate ISI Emerging, ISI Proceedings si BDI perioada 2015-2021:

1. **S.C. Cosma**, N. Bâlc, D. Leordean, M. Moldovan, M. Dudescu, C. Borzan, Customized Medical Applications of Selective Laser Melting Manufacturing, *AJME*, vol. 13(1), 2015 (Scopus).
2. **S.C. Cosma**, A. Miron, A. Radu, Zygomatic Implants Manufactured by SLM, *Acta Technica Napocensis*, vol. 58(2), 251-256, 2015 (Web of Science).
3. C. Vilau, N. Balc, D. Leordean, **C. Cosma**, Static analysis to redesign the gripper, using CREO parametric software tools, *Academic Journal of Manufacturing Engineering*, vol. 13, 77-82, 2015 (Scopus).
4. N. Bâlc, **S.C. Cosma**, J. Kessler, V. Mager, Research on improving the outer surface quality of the parts made by SLM, *MTeM Conference, Cluj-Napoca*, 2015 (BDI).
5. I. A. Popan, A. Popan, **C. Cosma**, A. Carean, Analyses of process parameters influence on the drilling process by using carbide drills for steel St52-3, *MATEC Web of Conferences*, vol. 94, 2017 (Web of Science).
6. **C. Cosma**, N. Balc, P. Berce, A. Popan, A. Cosma, A. Burde, Direct manufacturing of customized implants from biometals, by 3D printing, *Academic Journal of Manufacturing Engineering*, vol. 15 (4), 42-49, 2017 (Scopus).
7. M. Rusu, D. Leordean, **C.S. Cosma**, Characterization polyethylene terephthalate nanocomposites mixing with nano-silica and titanium oxide, *MTeM Conf. Cluj-Napoca*, 2017 (Web of Science).
8. C. Moldovan, **C. Cosma**, P. Berce, N. Balc, Theoretical Analysis and Practical Case Studies of SLA, Polyjet and FDM Manufacturing Techniques, *Acta Technica Napocensis*, vol. 61, 2018 (Web of Science).
9. **C. Cosma**, C. Moldovan, I. Campbell, A. Cosma, N. Balc, Theoretical Analysis and Practical Case Studies of Powder-Based Additive Manufacturing, *Acta Technica Napocensis*, vol. 61, 2018 (Web of Science).
10. A. Pacurar, M. Rau, R. Pacurar, E. Gutiu, L. Bacali, **C. Cosma**, Research regarding the design and manufacturing of hand orthosis by using Fused Deposition Modeling technology, *MATEC Web of Conferences*, vol. 299, 2019 (BDI).

11. I. Turcin, A. Abdallah, **C. Cosma**, T. Thiebet, D. Zavec, N. Balc, Sweat glands module with integrated sensors designed for Additive Manufacturing, MATEC Web of Conferences, vol. 299, 2019 (BDI).
12. **C. Cosma**, B. Zaharia, P. Berce, N. Balc, Design for Additive Manufacturing to Produce Complex Metal Parts, Romanian Journal of Technical Sciences, vol. 64, 231–241, 2019 (BDI).
13. C. Birleanu, M. Pustan, **C. Cosma**, V. Merie, O. Dranda, Tribological behaviour of sealing materials, IOP Conference Series: Materials Science and Engineering, vol. 724 (1), 012017, 2020 (Scopus).
14. I. Turcin, A. Abdallah, M. Pauritsch, **C. Cosma**, N. Balc, Integrating Electronic Components into 3D Printed Parts to Develop a Digital Manufacturing Approach, IFIP International Conference on Advances in Production Management Systems, P. 138-145, Springer, Cham, 2020 (Scopus).
15. C. Moldovan, **C. Cosma**, N. Milodin, C. Teusan, P. Berce, N. Balc, Finite Element Analyses of 3D Printed Composite Robot Component, Acta Technica Napocensis, vol. 64, 2021 (Web of Science).

IV. Capitole publicate în cărți:

1. **C. Cosma**, N. Balc, M. Moldovan, P. Berce, Chapter 2 “Medical Applications of Macro-Porous Structures Additive Manufactured”, handbook Advanced Industrial Engineering - New tendencies in material engineering, Ed. Wydawnictwo Fundacji Centrum Nowych Technologii, pag. 47-64, Bielsko-Biala, Poland, 2017, ISBN 978-83-949709-2-9.
2. **C. Cosma**, N. Balc, M. Moldovan, P. Berce, Chapter 3 “Surface Treatments Applied on Titanium Implants”, handbook Advanced Industrial Engineering - New tendencies in material engineering, Ed. Wydawnictwo Fundacji Centrum Nowych Technologii, pag. 65-84, Bielsko-Biala, Poland, 2017, ISBN 978-83-949709-2-9.

V. Lucrări de laborator:

1. **C. Cosma**, N. Balc, Rapid Prototyping by Selective Laser Melting, Universitatea Tehnică din Cluj-Napoca, 2021.
2. **C. Cosma**, N. Balc, Rapid Tooling for Competitive Additive Manufacturing, Universitatea Tehnică din Cluj-Napoca, 2021.
3. **C. Cosma**, M. Mera, N. Balc, Fabricarea prin metode de tip rapid prototyping a unei roți cu dinți drepiți utilizabilă în lanțul cinematic de divizare al mașinii FD-320, Universitatea Tehnică din Cluj-Napoca, 2021.