

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea: Inginerie Industrială și Robotică

Departamentul: Tehnologia Construcțiilor de Mașini

Nume Prenume: Băilă Diana Irinel

Gradul didactic: Conferențiar universitar

L I S T Ă L U C R Ă R I

(întocmită pentru dosarul de obținere a Atestatului de Abilitare, Mai 2024)

10 PUBLICATII RELEVANTE PENTRU REALIZARILE PROFESIONALE

1. Oana Cătălina Mocioiu *, Irina Atkinson, Ludmila Aricov, Veronica Bratan, Ana-Maria Mocioiu, Ioan Albert Tudor, **Diana Irinel Băilă**, Hydrophobic and Transparent Tantalum Pentoxide - Based Coatings for Photovoltaic (PV) Solar Panels, Coatings 14 (3), 273 (Q2 - IF2022=3.4), 2024 WOS:001191737800001

Articol premiat UEFISCDI 2022

2. Pacurar R, Sanfilippo F, Okter M.B., **Baila D.I.**, Zaharia C, Nicoara A.I., Radu I.C., Savu T, Gorski F., Kuczko W, Wichniarek R., Comsa D.S., Zelenay M., Wozniak P., Use of high-performance polymeric materials in customized low-cost robotic grippers for biomechatronic applications: experimental and analytical research, Frontiers in Materials, 2024, vol. 11, nb. Article 1304339 (Q3, IF 2024 = 3.2). WOS:001156120400001
3. Gorski, F., Grohs, A., Kuczko, W., Zukowska, M., Wichniarek, R., Siwec, S., **Băilă. D.I.**, Zelenay, M., Păcurar, R., Sanfilippo, F. Development and studies of VR- assisted hand yherapy using a customized biomechatronic 3D printed orthosis, Electronics, vol. 13, iss. 1, 79, 2024 (Q2, IF 2024 = 2.9), DOI: [10.3390/electronics13010079](https://doi.org/10.3390/electronics13010079). WOS:001139324000001
4. **Băilă, Diana**; Păcurar, R.; Savu, T.; Zaharia, C.; Trușcă, R.; Nemeș, O.; Górski, F.; Păcurar, A.; Pleșa, 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, 5580. (Q1/Q2, IF 2021 = 3,4) WOS:000845530200001 (autor corespondent)

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5. Gorski, F., Labudzki, R., Zukowska, M., Sanfilippo, F., Ottestad, M., Zelenay, M., **Baila, D.I.**, Pacurar, R. Experimental evaluation of extended reality technologies in the development of individualized three-dimensionally printed upper limb prostheses. APPLIED SCIENCES-BASEL (2023), 13 (14), 8035. (Q2, IF 2022 = 2.7) WOS:001037958000001
6. **BAILA, Diana Irinel**; Sanfilippo, Filippo; Savu, Tom; Zaharia, Catalin; Górski, Filip; Radu, Ionut Cristian; Parau, Constantina Anca; Zelenay, Martin; Razvan, Pacurar, 3D Printing of Personalised Stents using New Advanced Photopolymerizable Resins and Ti-6Al-4V Alloy, Rapid Prototyping Journal (Q2 – IF2022=3.9), 2024. WOS:001186294400001

7. Gorski, F., Rybarczyk, D., Wichniarek, R., Wierzbicka, N., Kuczko, W., Zukowska, M., Regulski, R., Pacurar, R., Comsa, D.S., **Băilă, D.I.**, Zelenay, M., Sanfilippo, F. Development and Testing of an Individualized Sensorised 3D Printed Upper Limb Bicycle Prosthesis for Adult Patients, APPLIED SCIENCES-BASEL (2023), 13 (23), 12918. (Q2, IF 2022 = 2.7) DOI: [10.3390/app132312918](https://doi.org/10.3390/app132312918) WOS:001116054200001
8. **BĂILĂ Diana**, Cătălin Vițelaru, Roxana Trușcă, Lidia Ruxandra Constantin, Ancuța Păcurar, Constantina Anca Parau and Răzvan Păcurar, Thin Films Deposition of Ta2O5 and ZnO by E-Gun Technology on Co-Cr Alloy Manufactured by Direct Metal Laser Sintering, MATERIALS (2021), 14(13), 3666; (Q1, IF 2021 = 3,748) WOS:000671401000001 (autor corespondent)
Articol premiat UEFISCDI 2021
9. Răzvan Păcurar, Petru Berce, Ovidiu Nemeș, **BĂILĂ Diana**, Dan Sergiu Stan, Alexandru Oarcea, Florin Popișter, Cristina Miron Borzan, Sven Maricic, Stanislaw Legutko and Ancuța Păcurar, "Cast Iron Parts Obtained in Ceramic Molds Produced by Binder Jetting 3D Printing—Morphological and Mechanical Characterization", MATERIALS (2021), 14(16), 4502; (Q1, IF 2021 = 3,748) WOS: 000690632100001 (autor corespondent)
Articol premiat UEFISCDI 2021
10. Mocioiu AM, **BĂILĂ Diana**, Codrea CI, Mocioiu OC, "A Simple Method to Obtain Protective Film against Acid Rain", INORGANICS (2022), 10(4), articol nb 44, eISSN: 2304-6740, DOI:10.3390/inorganics10040044 (Q2, IF 2021 = 3.149) WOS:000787931000001
Articol premiat UEFISCDI 2021

A. Teza de doctorat

Teza de doctorat în domeniul Inginerie Industrială: „Cercetări teoretice și experimentale privind asimilarea de noi materiale biocompatibile prelucrabile prin tehnologiile RP (Rapid Prototyping)”, coordonator: Prof. Dr. Ing. Habil. Berce Petru, Universitatea Tehnică din Cluj-Napoca, Facultatea de Construcții de Mașini, 2009.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

Ca – Cărți / cursuri (manuale) pentru uzul studenților, publicate în edituri recunoscute.

Ca1. Napoleon ANDREI, **Diana BĂILĂ**, «Procédés de Fabrication II», Editura POLITEHNICA PRESS, București, ISBN 978-606-515-270-0, 129 pagini, 2011.

Ca2. **Diana BĂILĂ**, «Procédés de fabrication additive», Editura Printech, București, (cod CNCIS 54), ISBN 978-606-23-0619-9, 152 pagini, 2016.

Cb - Cărți de specialitate publicate în edituri recunoscute

Cb1. **Diana BĂILĂ**, «Tehnologii și Echipamente de Fabricare Aditivă cu Laser (ALM) a pulberilor metalice», Editura Printech, București, (cod CNCIS 54), ISBN 978-606-23-0792-9, 154 pagini, 2017.

Cb2. **Diana BĂILĂ**, «Biomateriale utilizate în Additive Manufacturing», Editura Printech, București, (cod CNCIS 54), ISBN 978-606-23-0615-1, 312 pagini, 2016.

III ALTE MATERIALE PUBLICATE (I, D) I - Culegeri și Îndrumare publicate

I1 **Diana BĂILĂ**, Napoleon ANDREI, «Procédés de Fabrication I – travaux dirigées», Editura Printech, București, (cod CNCIS 54), ISBN 9786062305482, 52 pagini, 2016.

12 Sergiu Tonoiu, **Diana BĂILĂ**, «Tehnologia fabricării produselor», Aplicații, Editura BREN, București, (cod CNCIS 96), ISBN 978-606-61-0-231-1, 87 pagini, 2017.

13. **Diana BĂILĂ**, Napoleon ANDREI, «Procédés de Fabrication II – travaux dirigées», Ed. Interprint Cluj-Napoca, 49 pagini, 2011.

IV. ARTICOLE/STUDII IN EXTENSO PUBLICATE (R, V)

Ris- Reviste de specialitate de circulație internațională recunoscute (cotate / indexate ISI Thomson Reuters, sau indexate in alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta). Se mentioneaza la fiecare lucrare includerea in Baza ISI [Accession Number, WOS=..., ultimul Factor Impact, ISSN] si/sau denumirea altei (altor) BDI.

Ris1. Mocioiu O.C., Atkinson I., Aricov L, Bratan V., Mocioiu A.M., Tudor I.A., **BĂILĂ Diana**, Hydrophobic and Transparent Tantalum Pentoxide - Based Coatings for Photovoltaic (PV) Solar Panels, Coatings 14 (3), 273 (Q2 - IF2022=3.4), 2024 WOS:001191737800001

Articol premiat UEFISCDI 2022

Ris2. Pacurar R, Sanfilippo F, Okter M.B., **BĂILĂ Diana**, Zaharia C, Nicoara A.I., Radu I.C., Savu T, Gorski F., Kuczko W, Wichniarek R., Comsa D.S., Zelenay M., Wozniak P., Use of high-performance polymeric materials in customized low-cost robotic grippers for biomechatronic applications: experimental and analytical research, Frontiers in Materials, 2024, vol. 11, nb. Article 1304339 (Q3, IF 2024 = 3.2). WOS:001156120400001

Ris3. Gorski, F., Grohs, A., Kuczko, W., Zukowska, M., Wichniarek, R., Siwiec, S., **BĂILĂ Diana**, Zelenay, M., Păcurar, R., Sanfilippo, F. Development and studies of VR- assisted hand yherapy using a customized biomechatronic 3D printed orthosis, Electronics, vol. 13, iss. 1, 79, 2024 (Q2, IF 2024 = 2.9), DOI: [10.3390/electronics13010079](https://doi.org/10.3390/electronics13010079). WOS:001139324000001

Ris4. **Băilă, Diana**; Păcurar, R.; Savu, T.; Zaharia, C.; Trușcă, R.; Nemeș, O.; Górski, F.; Păcurar, A.; Pleșa, 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, 5580. (Q1/Q2, IF 2021 = 3,4) WOS:000845530200001 (autor corespondent)

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Ris5. Gorski, F., Labudzki, R., Zukowska, M., Sanfilippo, F., Ottestad, M., Zelenay, M., **BĂILĂ Diana**, Pacurar, R. Experimental evaluation of extended reality technologies in the development of individualized three-dimensionally printed upper limb prostheses. APPLIED SCIENCES-BASEL (2023), 13 (14), 8035. (Q2, IF 2022 = 2.7) WOS:001037958000001

Ris6. **BĂILĂ Diana**; Sanfilippo, Filippo; Savu, Tom; Zaharia, Catalin; Górski, Filip; Radu, Ionut Cristian; Parau, Constantina Anca; Zelenay, Martin; Razvan, Pacurar, 3D Printing of Personalised Stents using New Advanced Photopolymerizable Resins and Ti-6Al-4V Alloy, Rapid Prototyping Journal (Q2 – IF2022=3.9), 2024. WOS:001186294400001

Ris7. Gorski, F., Rybarczyk, D., Wichniarek, R., Wierzbicka, N., Kuczko, W., Zukowska, M., Regulski, R., Pacurar, R., Comsa, D.S., **BĂILĂ Diana**., Zelenay, M., Sanfilippo, F. Development and Testing of an Individualized Sensorised 3D Printed Upper Limb Bicycle Prosthesis for Adult Patients, APPLIED SCIENCES-BASEL (2023), 13 (23), 12918. (Q2, IF 2022 = 2.7) DOI: [10.3390/app132312918](https://doi.org/10.3390/app132312918) WOS:001116054200001

Ris8. **BĂILĂ Diana**, Cătălin Vițelaru, Roxana Trușcă, Lidia Ruxandra Constantin, Ancuța Păcurar, Constantina Anca Parau and Răzvan Păcurar, Thin Films Deposition of Ta₂O₅ and ZnO by E-Gun Technology on Co-Cr Alloy Manufactured by Direct Metal Laser Sintering, MATERIALS (2021), 14(13), 3666;(Q1, IF 2021 = 3,748) WOS:000671401000001 (autor corespondent)

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Ris9. Răzvan Păcurar, Petru Berce, Ovidiu Nemeș, **BĂILĂ Diana**, Dan Sergiu Stan, Alexandru Oarcea, Florin Popișter, Cristina Miron Borzan, Sven Maricic, Stanislav Legutko and Ancuța Păcurar, "Cast Iron Parts Obtained in Ceramic Molds Produced by Binder Jetting 3D Printing—Morphological and Mechanical Characterization", *MATERIALS* (2021), 14(16), 4502; (Q1, IF 2021 = 3,748) WOS: 000690632100001 (autor corespondent)

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Ris10. Mocioiu AM, **BĂILĂ Diana**, Codrea CI, Mocioiu OC, "A Simple Method to Obtain Protective Film against Acid Rain", *INORGANICS* (2022), 10(4), articol nb 44, eISSN: 2304-6740, DOI:10.3390/inorganics10040044 (Q2, IF 2021 = 3.149) WOS:000787931000001

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Ris11. **BĂILĂ Diana**, Mocioiu Oana, Zaharia Cătălin, Trușcă Roxana, Surdu Adrian, Bunea Mihaela, "Bioactivity of Co-Cr alloy samples sintered by DMLS process and coated with hydroxyapatite obtained by sol-gel method", *Rev. Roum. Chim.*, ISSN: 0035-3930, (IF 2015=0.250), vol.60(9), 2015, pp.921-930. WOS:000366442600010 (autor corespondent)

Ris12. **BĂILĂ Diana**, Mocioiu Oana, Zaharia Cătălin, Trușcă Roxana, Surdu Adrian, Bunea Mihaela, "In vitro behavior of sintered compacts of Co-Cr doped with hydroxyapatite for biomedical implants", *Journal of Optoelectronics and Advanced Materials*, print ISSN 1454-4164, online ISSN 1841-7132, (IF 2015=0.383), vol.17, No.7-8, 2015, pp.1210-1218. WOS:000359967600047 (autor corespondent)

Ris13. **BĂILĂ Diana**, Tonoiu Sergiu, "Hydrides precipitation in titanium alloy Ti6Al4V used for airframe manufacturing", *Bulletin of the Polish Academy of Sciences -Technical Sciences*, ISSN/ eISSN 0239-7528/ 2300-1917, (IF 2018=1.277), vol. 67, no. 3, 2019, pp. 643-649. WOS:000473332000021 (autor corespondent)

Ris14. **BĂILĂ Diana**, Zaharia Cătălin, Mocioiu Oana, „Contact angle measurements at the interface of Co-Cr alloy sintered by DMLS and coated with hydroxyapatite”, *Vjesnik Tehnical Gazette Croatia*, print ISSN 1330 3651, online ISSN 1848-6339, (IF 2018 = 0.644), vol. 27, no.2, 2020, pp. 583-588. WOS:000527241900032 (autor corespondent)

Ris15. **BĂILĂ Diana**, Doicin Cristian, Cotruț Cosmin, Ulmeanu Mihaela, Ghionea Ionuț, Tarbă Cristian, "Sintering the beaks of the elevator manufactured by Direct Metal Laser Sintering (DMLS) process from Co-Cr alloy", *Journal Metalurgija Croatia*, ISSN 0543-5846, vol. 55(4), 2016, pp.663 666. WOS:000376167100022 (autor corespondent)

Ris16. **BĂILĂ Diana**, Mocioiu Oana, Trușcă Roxana, Surdu Adrian, Zaharia Cătălin, Bunea Mihaela, "Biodegradation and mechanical behavior of sintered compacts of Co-Cr alloy powder doped with ZrO₂ used in dentistry", *Vjesnik Tehnical Gazette Croatia*, print ISSN 1330-3651, online ISSN 1848 6339, (IF 2016=0.723), vol. 23, no. 4, 2016, pp.1047-1057. WOS:000382353400016 (autor corespondent)

Ris17. Ulmeanu Mihaela, Doicin Cristian, **BĂILĂ Diana**, Rennie Allan, Neagu Cornel, Laha Shondipon, "Comparative evaluation of optimum additive manufacturing technology to fabricate bespoke medical prototypes of composite materials", *Jurnalul de Materiale Plastice*, print ISSN 0025-5289, online ISSN 2668 8220, (IF 2015=0.903), vol.52, No.3, 2015, pp.416-422. WOS:000362382300032

Ris18. O.C. Mocioiu, I. Atkinson, J. Cusu-Pandele, V. Bratan, S. Petrescu, **BĂILĂ Diana**, A.M. Mocioiu, „Structural and physico-chemical characterization of Zn-doped SiO₂ glasses obtained by sol-gel route”, *Revue Roumaine de Chimie*, ISSN: 0035-3930, (IF2018=0.395), Vol.63, Iss. 5-6, pp. 419-424, 2018. WOS: 000452555100006

Vis19. **BĂILĂ Diana**, "Sintered compacts of titanium-hydroxyapatite used in medicine", *International Conference on Materials Science and Mechanical Engineering (ICMSME 2013) Kuala Lumpur, Malaysia, Applied Mechanics and Materials*, Indexed by Elsevier: ISI (ISTP, CPCI, Web of Science), ISBN: 978-3-03785-949-0, ISSN: 1660-9336, vol. 467, pp. 192-197, 2013. WOS:000336639900037

Vis20. **BĂILĂ Diana**, "Researches concerning the phenomena at the interface for the sintered compacts of titan-hydroxyapatite", *2nd International Conference on Material Science and Engineering Technology (ICMSET 2013) London. England, Advanced Materials Research*, Indexed by Elsevier: ISI (ISTP, CPCI,

- Web of Science), ISBN: 978-3-03785-963-6, ISSN: 1022-6680, vol. 856, pp. 164-168, 2013. WOS:000336337600030
- Vis21. **BĂILĂ Diana**, „*Biomaterials processing by technologies (Rapid Prototyping) used in the implants manufacturing*”, ISI Proceedings DAAAM 2012 Zadar Croatia, ISBN: 978-3-901509-91-9, vol. 23(1), pp.285-288, 2012. WOS:000392423800066
- Vis22. **BĂILĂ Diana**, Lazăr Livia, „*Economically development of 3D Printing technologies in Romania*”, Proceedings of the 29th International Business Information Management Association Conference International IBIMA Viena, Austria, 3-4 mai 2017, ISBN: 978-0-9860419-7-6, pp. 3735-3738, 2017. WOS:000410252702121
- Vis23. Lazăr Livia, **BĂILĂ Diana**, „*Control of Documents- Documented Procedure applied in a service organization*”, Proceedings of the 19th International Business Information Management Association Conference International IBIMA Barcelona, Spania 2012, ISI Proceedings ISBN: 978-0-9821489-8-3, pp. 1529-1534, 2012. WOS:000317549701032
- Vis24. **BĂILĂ Diana**, Tonoiu Sergiu, „*The SLA technology and economical development in Romanian dentistry*” to the International Business Information Management Conference (31th IBIMA) Milano, Italy, 25-26 April 2018, ISBN: 978-0-9998551-0-2, pp.6683-6687, 2018. WOS:000444067203094
- Vis25. **BĂILĂ Diana**, Tonoiu Sergiu, „*Thin films deposition on 304L stainless steel using e-gun technology for medical applications*”, International Conference ModTech Iași, jun. 2019, ISSN: 2286-4369, Vol. 591, Iss.1, article number 012001, 2019. WOS:000562929900001
- Vis26. Lazăr Livia, **BĂILĂ Diana**, Gheorghe Marian, „*Workshop Production Control Documented Procedure Applied in a Medium Sized Company*”, to the International Business Information Management Conference (20th IBIMA) Kuala Lumpur, Malaysia, ISI Proceedings ISBN: 978-0-9821489-9-0, pp.185-190, 2013. WOS:000339301200019
- Vis27. Lazăr Livia, **BĂILĂ Diana**, Gheorghe Marian, „*Complaints Handling*” document procedure applied in Reflex Fatade srl”, to the International Business Information Management Conference (20th IBIMA) Kuala Lumpur, Malaysia, ISI Proceedings ISBN: 978-0-9821489-9-0, pp. 181-184, 2013. WOS:000339301200018
- Vis28. **BĂILĂ Diana**, Lazăr Livia, „*Economical Evolution of Additive Laser Manufacturing (ALM) Technologies in Romanian Dental Industry*”, to the International Business Information Management Conference (30th IBIMA) Madrid, Spain 8-9 November 2017, ISBN: 978-0-9860419-9-0, pp. 635-638, 2017. WOS:000443640500060
- Vis29. Lazăr Livia, **BĂILĂ Diana**, „*Management review documented procedure applied in a higher education institution*”, International Conference ERMI 2012 Shenzhen 4-5 December 2012, China, ISBN: 978-1-61275-037-8, vol.2, pp.242-245, 2012. WOS:000322346200044
- Vis30. **BĂILĂ Diana**, „*Medical implants realized from the sintered compacts of titan-hydroxyapatite*”, 24th International Conference DAAAM 2013 Zadar Croatia, ISI Proceedings, ISBN 978-3-901509-94-0, Procedia Engineering, vol.69, pg.594-596, 2013. WOS:000335859300079
- Vis31. Lazăr Livia, Ionescu Nicolae, **BĂILĂ Diana**, Bucur Diana-Mihaela, „*Maintaining the Costs of Quality under Control in an Organization*”, 30th International Business-Information-Management-Association IBIMA Conference Madrid, Spania, ISI Proceedings ISBN: 978-0-9860419-9-0, pp.759-762, 2017. WOS: 000443640500074
- Vis32. **Băilă Diana**, Păcurar Răzvan, Păcurar Ancuța, „*Moisture absorption behavior of CP5 composite materials used in industry*”, International Conference ICBASET Turcia 2022, EPSTEM 2022 The Eurasia Proceedings of Science, Technology, Engineering & Mathematics (EPSTEM), ISSN: 2602-3199, vol.18, pg. 55-63 INDEXATA SCOPUS:
- Vis33. **Băilă Diana**, Tonoiu Sergiu, „*Properties of photo-curable polyurethane resins used in SLA manufacturing*”, ICAMAT Bucuresti 2022, IOP Conf. Ser.: Mater. Sci. Eng. 1268 012006 DOI: 10.1088/1757-899X/1268/1/012006, Indexata Semantic Scholar, IOP Conference

Vis34. **Băilă Diana**, Păcurar Răzvan, Păcurar Ancuța, „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

Doi:10.5593/sgem2022/6.1/s24.05 PROQUEST SCOPUS

Vis35. **Băilă Diana**, Păcurar Răzvan, Păcurar Ancuța, “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

DOI: 10.5593/sgem2022/6.1/s24.03 PROQUEST, SCOPUS

Vis36. **Băilă DI**, Păcurar R, Păcurar A, "Thin-film protective coatings on samples manufactured by Direct Metal Laser Sintering technology used in dentistry", 7th International Scientific-Technical Conference Manufacturing 2022 - Poznan, Polonia, Springer, Lecture Notes in Mechanical Engineering, pp.59-68, 2022, ISSN 21954356, ISBN 978-303099768-7, DOI: 10.1007/978-3-030-99769-4_5 Indexata SCOPUS

Vis37. **Băilă DI**, Păcurar R, Păcurar A, "Sintered compacts of Co-Cr powders doped with HAp and ZrO₂ used in implantology", 7th International Scientific-Technical Conference Manufacturing 2022 - Poznan, Polonia, Springer, Lecture Notes in Mechanical Engineering, pp.59-68, 2022, ISBN 978-303099768-7, ISSN 21954356, DOI: 10.1007/978-3-030-99769-4_6 Indexata SCOPUS

Vis38. Mocioiu A.M., **Băilă D.I.**, Mocioiu O.C., “Chemical and mechanical tests on the SiO₂-ZnO materials for protective coatings of industrial use”, 11th International Conference of Advanced Manufacturing Technology ICAMAT 29th october, 2020, Bucharest, Romania, nb. 012009

Indexata IOP Conference, SCOPUS

Vis39. Mocioiu O.C., **Băilă D.I.**, Atkinson I., Brătan V., Mocioiu A.M., „Manufacturing of SiO₂-ZnO materials with optical properties”, 11th International Conference of Advanced Manufacturing Technology ICAMAT 29th october, 2020, Bucharest, Romania, nb. 012009

Indexata IOP Conference, SCOPUS

Vis40. Păcurar R., Pascu S., Păcurar A., Stan D.S., Teușan E., **Băilă D.I.**, Sadeh A., „Designing of an original extruding system for 3D printing of parts made of plastic material in powder-state form”, 5-th International Conference CoSME'20 Brașov 2020, IOP Conference Series: Materials Science and Engineering, vol 1009(1), nb 012043, ISSN 17578981, DOI 10.1088/1757-899X/1009/1/012043

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Vis41. **BĂILĂ Diana**, Gheorghe Marian, “Experimental researches of Fe-Cr alloys and Cu-Zn alloys used for microsurgical instruments manufacturing”, Applied Mechanics and Materials (International Conference CMME Riga, Letonia 2014), ISSN:1662-7482, Vol.729, pp.9-14, 2015. doi: 10.4028/www.scientific.net/AMM.729.9 INDEXATA EBSCO, Scientific.net

Vis42. **BĂILĂ Diana**, “Experimental Researches of Co-Cr alloys powders manufactured by sintering process DMLS and Ni-Cr alloys used in Dentistry”, Advanced Materials Research, (International Conference ICMPM Barcelona 2014), ISSN: 1662-8985, Vol.1119, pp. 433-437, 2015. doi:10.4028/www.scientific.net/AMR1119/433 INDEXATA Scientific.net

Vis43. **BĂILĂ Diana**, “Corrosion Behavior in Artificial Saliva of Personalized Dental Crowns of Co-Cr Alloys Manufactured by DMLS process”, Applied Mechanics and Materials, (International Conference ICMEP Paris 2015), ISBN-13: 978-3-03835-631-8, ISSN: 1662-7482, Vol. 799-800, pp. 515-519, 2015. doi:10.4028/www.scientific.net/AMM.799-800.515 INDEXATA Scientific.net

Vis44. **BĂILĂ Diana**, Mocioiu Oana, Gheorghe Marian, “Characteristic of Dental Microsurgery Instruments for a database system”, Applied Mechanics and Materials, (International Conference ICAMaT 2014 București), ISBN-13: 978-3-03835-443-7, ISSN/eISSN: 1660-9336/ 1662-7482, Vol. 760, pp. 51-56, 2015. doi:10.4028/www.scientific.net/AMM.760.51 INDEXATA Scientific.net

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Director de proiect pentru 3 proiecte, respectiv Responsabil de proiect pentru un proiect:

1 Grant de cooperare universitara Erasmus+ - „European network for additive manufacturing in industrial design for ukrainian context”, Acronim AMAZE, Contract Nb. 2023-1-RO01-KA220-HED-000155412, Buget Proiect: **120000 Euro** (Buget UPB=**28808 Euro**), Perioada 12 luni – Grant castigat prin competitie.

Coordonator proiect din partea UNSTPB

https://www.erasmusplus.ro/library/Superior/2023/Rezultate_selectie_KA220-HED_2023.pdf

<http://www.amaze2023.eu>

1 Grant EEA- Norway cu titlul: „European network for 3D printing of biomimetic mechatronic systems” Acronim EMERALD - Contract No. 21-COP-0019/ F-SEE-026/06.2021. Buget Proiect: **198810 Euro** (Buget UPB=**39659 Euro**), perioada 19.5 luni – Grant câștigat prin competiție

Responsabil proiect din partea UPB

<https://www.eea4edu.ro/rez-coop/>

1 Grant cu mediul socio-economic în valoare de 25 000 lei (justificat cu documente care să ateste încasarea sumei)

Director proiect – Proiect de cercetare cu terți (câștigat prin concurs) nr. T-IM-21.17.01 – “Tehnologii de fabricare aditivă a prototipurilor de tip matrită”, curs de schimb la 25.09.2017 1EUR = 4,5965 Lei Buget 25000 Lei, Contract number 817/11.07.2017

<http://www.musa.ro/licitatie.htm>

1 Grant câștigat prin competiție

Director proiect - Grant intern GEX-UPB 2016 – „Cercetări experimentale privind utilizarea de noi materiale biocompatibile destinate implanturilor și restaurărilor dentare personalizate fabricate prin sinterizare DMLS”, Contract number 29/26.09.2016. Buget 22000 Lei, curs de schimb la 1.11.2016 1EUR = 4.5056 Lei

http://www.imst.pub.ro/Upload/Cercetare/IMST_Rezultate_finale_granturi.pdf

Responsabil Proiect Educational Mobilitate ERASMUS+ cu Universitatea din Agder, Norvegia (2021-2027)

Responsabil Proiect Educational Mobilitate ERASMUS+ cu EDIBON International S.A. Madrid, Spania (2023-2024)

Participare ca membru in 6 proiecte:

Pn 1 - Contract de prestări servicii de pregătire profesională și tutoriat pentru proiectul Implementing Employment Services (IES), Proiect INTERREG IV C, Cod 0405R1, beneficiar Consiliul Județean Ilfov, 2011

Pn 2 – Expert pe termen lung - Contract - Promoting entrepreneurial culture in the Southeast region – PAR SE, Contract nr. POSDRU/26/3.1/G/39186, 2009-2010.



Pi 3 – Contract de cercetare - Working environment design, health, safety, comfort and professional regulation of risk, nr. IP – 28268 – 08, 2009;

Pn.4 – Contract Type A theme nr.A.9, CNCSIS code 852, *Experimental research on the use of rapid prototyping technologies in manufacturing implantology*, Manager Proiect: Prof.dr.ing. Petru Berce, UTCN, 2005-2008;

Pn.5 - Contract CEEEX-41/2005: *Innovative Manufacturing Network*. Director: Prof. Petru Berce, Buget:14,2 mil./durata 3 ani/ UTCN terminat în September 30, 2008 (2005-2008);

Pn.6 - Contract CNCSIS- *Integrated platform for production of innovative research and training: Future Factory*, Buget: 4.928 mil. RON, Director: Prof. Petru Berce, UTCN, aprobat în 2006.

Depunere Brevet de Inventie - Mechatronic human lower limb orthosis,

Mechatroniczna orteza konczyny dolnej do rehabilitacji, nb. POTWIERDZENIE/881088/P.446940, Urzad Patentowy Rzeczypospolitej Polskiej, Warszawa, 30-11-2023, Poland (Politehnika Poznanska)

Stagii internationale de cercetare

- Stagi de cercetare «Cercetarea precipitării de hidruri în aliajul de titan Ti6%Al4%V prin difracție de raze X»/ «Étude de la précipitation d'hydrure dans l'alliage de titane TA6V par diffraction des rayons X» Ecole Nationale d'Ingénieurs Tarbes, Franța, 1997;
- Stagi de cercetare «Încercări mecanice și analize ale comportamentelor materialelor compozite»/ «Essais mécaniques et analyses du comportements de matériaux composites», Université de Technologie de Compiègne, Franța, 1998;
- Stagi de cercetare «Incintă termostatăă reglată în temperatură și umiditate funcționare, reglare, stabilitatea temperaturii și umidității în timp»/ «Enceinte thermostatée régulée en température et humidité: fonctionnement, réglages, stabilité de température et humidité au cours du temps», Institut Supérieur de Génie Mécanique et Physique Metz, Franța, 1999;
- Stagi de cercetare «Proprietățile de transport ale oxidului de ceriu dopat în gadolinium»/ «Propriétés de transport de l'oxyde de cérium dopé en gadolinium», Ecole Centrale Paris, Franța, 2001.
- Profesor invitat la Universitatea Tehnică a Moldovei, Facultatea de Arhitectură și Urbanism, Chișinău, Republica Moldova, consultanță de specialitate în domeniul «Tehnologii de fabricare aditivă utilizate în arhitectură», 30.11.2016-02.12.2016.
- Atestat de participare «Fabricare Aditivă: Noi provocări tehnologice și perspective industriale», Ecole Polytechnique Paris, 2017.
- Profesor invitat la Summer School – University of Agder cu prezentarea “Smart (Intelligent) Materials” used in Additive Manufacturing, Norway, in 2022 and 2023, in cadrul proiectului international EEA&Norway Grants, EMERALD.

Data: 6.06.2024

Candidat, Conf. Dr. Ing. BĂILĂ Diana-Irinel

Semnătura 