UNIVERSITATEA NAȚIONALĂ DE ȘTIINȚĂ ȘI TEHNOLOGIE POLITEHNICA BUCUREȘTI
FACULTATEA ȘTIINȚA ȘI INGINERIA MATERIALELOR
Departamentul Știința Materialelor Metalice, Metalurgie Fizică

LISTA DE LUCRĂRI

Prof. **BATALU Nicolae-Dan**

I. TEZA DE DOCTORAT (T)

T1. *Cercetări privind echilibrele fazice, structura și proprietățile unor aliaje de titan cu memoria formei, aplicabile în ingineria medicală, Universitatea Politehnica din București*, diploma cu seria D, nr. 0002622, din 06.05.2005, emisă conform Ordinului de Ministru nr. 3956/25.04.2005

II. CĂRȚI PUBLICATE (Ca, Cb)

Ca. Cărţi sau cursuri (manuale) pentru uzul studenților, publicate în edituri recunoscute

Ca1. N. Popescu, **Dan Batalu**. *Introducere în știința materialelor. Elemente de teoria științei materialelor (I)*. Politehnica Press, București, 2009, 127 p, ISBN: 978-606-515-066-9.
Ca2. N. Popescu, **Dan Batalu**. *Introducere în știința materialelor. Materiale ceramice, carbonice, polimerice și compozite (II)*. Politehnica Press, București, 2011, 149 p, ISBN: 978-606-515-271-7.
Ca3. **Dan Batalu**. *Proiectare asistată de calculator cu AutoCAD. Aplicații în proiectarea implanturilor medicale*. Politehnica Press, București, 2014, 259 p, ISBN: 978-606-515-561-9.

Cb. Cărţi de specialitate publicate în edituri recunoscute (autor, coautor, editor)

Cb2. **Dan Batalu.** *Proiectare avansată 3D cu Inventor Professional.* Politehnica Press, București, 2021, 195 p, ISBN: 978-606-515-985-3.
Cb3. **Dan Batalu.** *Analiza cu element finit în Inventor Nastran.* Politehnica Press, București, 2022, 177 p, ISBN: 978-606-515-996-9.

III. ALTE MATERIALE PUBLICATE (I, D)

I. Culegeri şi îndrumare publicate (separate în edituri cu ISBN şi în tipografii locale/de instituţii sau de uz intern).

I1. **Dan Batalu**. *Ghid de proiectare a implanturilor medicale*. Politehnica Press, București, 2015, 119 p, ISBN: 978-606515-601-2.

D. Alte lucrări publicate: capitole publicate în volume colective, capitole teoretice redactate, sisteme de laborator funcţionale etc.

D1. **Capitol de carte: Dan Batalu**, G. Aldica, P. Badica **(3)**. **Cap. 4.** *Materiale cu destinație specială. Nanocompozite supraconductoare de MgB_2 cu adaosuri pe bază de pământuri rare obținute prin metoda "Spark Plasma Sintering"*. **Publicat în**: N. Ghiban, M. Cojocaru (Ed.), Tratat de Știința și Ingineria Materialelor Metalice (Vol. VI), Proiectare - calitatea produselor - materiale speciale - inginerie economică metalurgică, **AGIR**, București, 2014, p. 1041-1064 (24 p), ISBN 978-973-720-533-9.
D2. **Capitol de carte:** F. Miculescu, A. Maidaniuc, G.E. Stan, M. Miculescu, S.I. Voicu, A. Cîmpean, V. Mitran, **Dan Batalu (8)**. **Cap. 7.** *Tuning hydroxyapatite particles' characteristics for solid freeform fabrication of bone scaffolds*. **Publicat în:** A. Tiwari, M.R. Alenezi, S.C.

Jun (Eds.), Advanced composite materials, **Scrivener Publishing & Wiley**, New Jersey, 2016, p. 321-397 (77 p.), ISBN 978-1-119-24253-6.

D3. **Capitol de carte:** P. Badica, G. Aldica, A.M. Ionescu, M. Burdușel, **D. Batalu (5)**. **Cap. 4.** *The influence of different additives on MgB_2 superconductor obtained by ex-situ Spark Plasma Sintering: pinning force aspects, 75-116 (42 p).* **Publicat în:** Nishikawa H, Iwata N, Endo T, Takamura Y, Lee G-H, Mele P (Eds.). Correlated Functional Oxides. Nanocomposites and Heterostructures, **Springer**, 2016, 232 p, ISBN: 978-3-319-43777-4.

D4. **Capitol de carte:** Amélie Tribot, **Dan Batalu**, Clément Brasselet, Cédric Delattre, Lu Wei, Jonathan Lao, Petre Badica, Philippe Michaud, Hélène de Baynast **(9)**. **Cap. 20.** *Green polymer filaments for 3D printing, 463-516 (54 p).* **Publicat în:** Tariq Altalhi, Inamuddin (Ed.). Green sustainable process for chemical and environmental engineering and science, **Elsevier**, 2022, 570 p, ISBN: 978-0-323-99643-3.

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE

Ris. Reviste de specialitate de circulaţie internaţională recunoscute (cotate/indexate *în Baza de date ISI*, sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță). *Se menționează la fiecare lucrare includerea în Baza ISI [Accession Number, WOS, ultimul Factor Impact, ISSN] și/sau denumirea altei BDI.*

Ris 1.	**D. Batalu**, G. Cosmeleata, A. Aloman **(3)**. *Critical analysis of the Ti-Al phase diagrams*. UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 68 (4), 2006, p. 77-90, [WOS:000440182900008, FI 2006/2022 = 0/0,5 (Q4), ISSN 1454-2331].
Ris 2.	**D. Batalu**, H. Guoqiu, A. Aloman, L. Xioashan, Z. Zhihua **(5)**. *Determination of some mechanical properties of TiNi (50.6 at. % Ni) shape memory alloy using dynamic mechanical analysis and tensile tests.* Journal of Optoelectronics and Advanced Materials. Vol. 8, nr. 2, 2006, p. 694 – 698, [WOS:000237001000062, FI **2006**/2022 = **1,106**/0,5 (Q4), ISSN 1454-4164].
Ris 3.	**D. Batalu**, H. Guoqiu **(2)**. *Improvement of the corrosion resistance of equiatomic NiTi shape memory alloy for medical implants by the electropolishing method*. UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 71 (1), 2009, p. 91-100, [WOS: 000440202400010, FI 2006/2022 = 0/0,5 (Q4), ISSN 1454-2331].
Ris 4.	G. Jicmon, G. Cosmeleata, **D. Batalu (3)**. *Investigation of some electrical properties of NiTi wires presenting the shape memory effect*. UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 71 (4), 2009, p. 131-138, [WOS: 000440209600014, FI 2006/2022 = 0/0,5 (Q4), ISSN 1454-2331].
Ris 5.	C. NASTASE, A. DUMITRU, F. NASTASE, A. MOROZAN, S. VULPE, **D. Batalu (6)**. *Comparative study of deep-coating and plasma processing PMMA thin films.* Journal of Optoelectronics and Advanced Materials. Vol. 12, nr. 4, 2010, p. 944 – 947, [WOS:000278330500032, FI 2010/**2022** = 0,412/**0,5** (Q4), ISSN 1454-4164].
Ris 6.	F. Miculescu, I. Antoniac, L.T. Ciocan, M. Miculescu, M. Branzei, A. Ernuteanu, **D. Batalu**, A. Berbecaru **(8)**. Complex analysis on heat treated human compact bones, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73 (4), 2011, p. 203-212, [WOS:000440229700022, FI 2006/2022 = 0/0,5 (Q4), ISSN 1454-2331].
Ris 7.	G. Aldica, **D. Batalu**, S. Popa, I. Ivan, P. Nita, Y. Sakka, O. Vasylkiv, L. Miu, I. Pasuk, P. Badica **(10)**. *Spark plasma sintering of MgB_2 in the two-temperature route.* Physica C, vol. 477, 2012, p. 43-50, [WOS:000303113200008**,** FI 2012/**2022** = 0,718/**1,7** (Q3), ISSN 0921-4534].
Ris 8.	A.C. Nechifor, V. Panait, L. Naftanaila, **D. Batalu**, S.I. Voicu **(5)**. *Symmetrically polysulfone membranes obtained by solvent evaporation using carbon nanotubes as additives. Synthesis, characterization and applications.* Digest Journal of Nanomaterials and Biostructures, vol. 8, no. 2, 2013, p. 875-884 [WOS:000322737500042, FI **2013**/2022 = **1,123**/0,9 (Q4), ISSN 1842-3582].

Ris 9.	**D. Batalu**, G. Aldica, S. Popa, L. Miu, M. Enculescu, R.F. Negrea, I. Pasuk, P. Badica **(8)**. *High magnetic field enhancement of the critical current density by Ge, GeO_2 and $Ge_2C_6H_{10}O_7$ additions to MgB_2.* Scripta Materialia, vol. 82, 2014, p. 61-64, [WOS:000336702500016, FI 2014/**2022** = 3,224/**6** (Q1), ISSN 1359-6462].
Ris 10.	G. Aldica, S. Popa, M. Enculescu, **D. Batalu**, L. Miu, M. Ferbinteanu, P. Badica **(7)**. *Addition of Ho_2O_3 of different types to MgB_2 in the ex-situ Spark Plasma Sintering: Simultaneous control of the critical current density at low and high magnetic fields*. Materials Chemistry and Physics, vol. 146, no. 3, 2014, p. 313-323, [WOS:000336694300017, FI 2014/**2022** = 2,259/**4,6** (Q2), ISSN 0254-0584].
Ris 11.	**D. Batalu**, A.M. Stanciuc, L. Moldovan, G. Aldica, P. Badica **(5)**. *Evaluation of pristine and Eu_2O_3-added MgB_2 ceramics for medical applications: hardness, corrosion resistance, cytotoxicity and antibacterial activity*. Materials Science and Engineering: C, vol. 42, 2014, p. 350-361, [WOS:000340687400045, FI 2014/**2022** = 3,088/**7,9** (Q1), ISSN 0928-4931].
Ris 12.	**D. Batalu**, G. Aldica, M. Burdusel, S. Popa, M. Enculescu, I. Pasuk, D. Miu, P. Badica **(8)**. *Ge-Added MgB_2 Superconductor Obtained by Ex Situ Spark Plasma Sintering.* Journal of Superconductivity and Novel Magnetism, vol. 28, nr. 2, 2015, p. 531-534, [WOS:000349350100048, FI 2015/**2022** = 1,1/**1,8** (Q4), ISSN 1557-1939].
Ris 13.	**D. Batalu**, G. Aldica, S. Popa, A. Kuncser, V. Mihalache, P. Badica **(6)**. *GeO_2-added MgB_2 superconductor obtained by Spark Plasma Sintering.* Solid State Sciences, vol. 48, 2015, p. 23–30, [WOS:000363347800006, FI 2015/**2022** = 2,041/**3,5** (Q2), ISSN 1293-2558].
Ris 14.	**D. Batalu**, G. Aldica, P. Badica **(3)**. *$Ge_2C_6H_{10}O_7$-added MgB_2 Superconductor Obtained by Ex-Situ Spark Plasma Sintering*. IEEE Transactions on Applied Superconductivity, vol. 26, no. 3, 2016, #7100104: p. 1-4, [WOS:000372783600001, FI 2016/**2022** = 1,235/**1,8** (Q3), ISSN 1051-8223].
Ris 15.	Semenescu A., Radu F.I., Mates I., Badica P., **Batalu N.D.** (5). *Finite element analysis of a modified short hip endoprosthesis*. Romanian Journal of Military Medicine, vol. 119, nr. 2, p. 27-31, 2016, [WOS:000372783600001, FI 2016/2022 = 0/**0,3** (Q4), ISSN 1051-8223].
Ris 16.	**D. Batalu**, A. Paun, M. Ferbinteanu, G. Aldica, A.M. Vlaicu, V.S. Teodorescu, P. Badica (**7**). *Thermal analysis of repa-germanium (Ge-132).* Thermochimica Acta, vol. 644, 2016, p. 20-27, [WOS:000389116100004, FI 2016/**2022** = 2,236/**3,5** (Q2), ISSN 0040-6031].
Ris 17.	G. Aldica, C. Matei, A. Paun, **D. Batalu**, M. Ferbinteanu, P. Badica **(6)**. *Thermal analysis on $Ge_2C_6H_{10}O_7$-doped MgB_2.* Journal of Thermal Analysis and Calorimetry, vol. 127, issue 1, 2017, pp. 173-179, [WOS:000392337000019, FI 2017/2022 = 2,209/4,4 (Q1), 1388-6150].
Ris 18.	Burdușel M, Ionescu AM, Grigoroșcuță M, **Batalu D**, Enculescu M, Popa S, Mihalache V, Aldica G, Badica P **(9)**. *Powder-in-tube tapes of MgB_2 in Fe-sheath processed by ex-situ spark plasma sintering*. UPB Scientific Bulletin Series B, Chemistry and Materials Science, vol. 79, nr. 2, p. 155-172, 2017, [WOS:000405523600015, FI 2017/**2022**=0/**0,5** (Q4), ISSN 1454-2331].
Ris 19.	Monica Ilis, **Dan Batalu**, Iuliana Pasuk, Viorel Circu **(4)**. *Cyclometalated Palladium (II) metallomesogens with Schiff bases and N-benzoyl thiourea derivatives as co-ligands*. Journal of Molecular Liquids, vol. 233, issue 1, 2017, pp. 45-51, [WOS:000401202500007, FI 2017/**2022** = 3,648/**6** (Q1), ISSN 0167-7322].
Ris 20.	Solodky I, Bogomol I, Loboda P, Batalu D, Vlaicu AM, Badica P (6). Floating zone partial re-melting of B_4C infiltrated with molten Si. Ceramics International, vol. 43, nr. 17, 2017, p. 14718-14725, [WOS:000413175300022, FI 2017/2022 = 2,758/5,2 (Q1), 0272-8842].
Ris 21.	Miculescu F., Mocanu A.C., Dascalu C.A., Maidaniuc A., **Batalu D.**, Berbecaru A., Voicu S.I., Miculescu M., Thakur V.K., Ciocan L.T. **(10)**. *Facile synthesis and characterization of hydroxyapatite particles for high value nanocomposites and biomaterials*. VACUUM, vol. 146, 2017, pp. 614-622, [WOS:000416184600080, FI 2017/**2022** = 2,067/**4** (Q2), ISSN 0042-207X].

Ris 22.	Miculescu F, Maidaniuc A, Miculescu M, **Batalu ND**, Ciocoiu RC, Voicu SI, Stan GE, Thakur VK (**8**). *Synthesis and Characterization of Jellified Composites from Bovine Bone-Derived Hydroxyapatite and Starch as Precursors for Robocasting*. ACS OMEGA, 2018, vol. 3, nr. 1, p. 1338-1349, [WOS:000427933200143, FI 2018/**2022** = 2,584/**4,1** (Q2), ISSN 2470-1343].
Ris 23.	**Dan Batalu**, T. Nakamura, M. Enculescu, S. Popa, I. Pasuk, G. Aldica, Alina M. Ionescu, P. Badica (**8**). *A Comparative Study of Ge-Based Organometallic Additions to MgB_2*. IEEE Transactions on Applied Superconductivity, vol. 28, nr. 4, 2018, #7100104, p. 1-4, [WOS: 000426643300001, FI 2018/**2022** = 1,583/**1,8** (Q3), ISSN 1051-8223].
Ris 24.	P. Badica, **D. Batalu**, M. Burdusel, M.A. Grigoroscuta, G.V. Aldica, M. Enculescu, R.A. Gabor, Z.Y. Wang, R.X. Huang, P.F. Li (**10**). *Compressive properties of pristine and SiC-Te-added MgB_2 powders, green compacts and spark-plasma-sintered bulks*, CERAMICS INTERNATIONAL, 2018, vol. 44, nr. 9, p. 10181-10191, [WOS:000431470200021, FI 2018/**2022** = 3,057/**5,2** (Q1), ISSN 0272-8842].
Ris 25.	**BATALU D**. et al (**5**). *NiTi coated with oxide and polymer films in the in vivo healing processes*, JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, vol. 8, nr. 1, p. 914-922, 2019, [WOS: 000467081300099, FI 2019/**2022** = 5,289/**6,4** (Q1), ISSN 2238-7854].
Ris 26.	Gozzelino L, Gerbaldo R, Ghigo G, Laviano F, Torsello D, Bonino V, Trucatto M, **Batalu D**, Grigoroscuta MA, Burdusel M, Aldica GV, Badica P (**12**). *Passive magnetic shielding by machinable MgB_2 bulks: measurements and numerical simulations*. SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol. 32, nr. 3, #034004, 2019, [WOS: 000458129500002, FI 2019/**2022** = 3,067/**3,6** (Q2), ISSN 0953-2048].
Ris 27.	Xiang Z, Wang X, Song YM, Yu LZ, Cui EB, Den BW, Batalu D, Lu W (8). *Effect of cooling rates on the microstructure and magnetic properties of MnAl permanent magnetic alloys*. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol. 475, p. 479-483, 2019, [WOS:000458152000069, FI 2019/2022 = 2,717/**2,7** (Q3), ISSN 0304-8853].
Ris 28.	LI X., […], **BATALU D.** (**5**) *Microstructure and Magnetic Properties of Mn55Bi45 Powders Obtained by Different Ball Milling Processes*, METALS, vol. 9, nr. 4, #441, 2019, [WOS:000467637000058, FI 2019/**2022** = 2,117/**2,9** (Q2), ISSN 2075-4701].
Ris 29.	FRONE Adriana Nicoleta, **BATALU DAN**, CHIULAN IOANA, OPREA Madalina, GABOR Raluca Augusta, NICOLAE Cristian Andi, RADITOIU Valentin, TRUSCA Roxana-Doina, PANAITESCU Denis Mihaela (**9**). *Morpho-Structural, Thermal and Mechanical Properties of PLA/PHB/Cellulose Biodegradable Nanocomposites Obtained by Compression Molding, Extrusion, and 3D Printing*, NANOMATERIALS, vol. 10, nr. 1, #51, 2020, [WOS:000516825600051, FI 2019/**2022**: 4,324/**5,3** (Q1), eISSN 2079-4991].
Ris 30.	**BATALU ND**, ALDICA GV, BURDUSEL M, GRIGOROSCUTA MA, PASUK I, KUNCSER A, IONESCU AM, P. BADICA (**8**). *Enhanced critical current density at high magnetic fields in MgB_2 with Ga/In acetylacetonate processed by spark plasma sintering*, JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY – JMR&T, vol. 9, nr. 3, p. 3724-3733, [WOS: 000557894400004, FI 2019/**2022** = 5,289/**6,4** (Q1), ISSN 2238-7854].
Ris 31.	BADICA P, ALDICA GV, GRIGOROSCUTA MA, BURDUSEL M, PASUK I, **BATALU ND**, BERGER K, KOBLISCHKA VA, KOBLISCHKA MR (**9**). *Reproducibility of small $Ge_2C_6H_{10}O_7$-added MgB_2 bulks fabricated by ex situ Spark Plasma Sintering used in compound bulk magnets with a trapped magnetic field above 5 T*, SCIENTIFIC REPORTS, vol. 10, nr. 1, #10538, 2020, [WOS:000548359400011, FI 2020/**2022**: 4,38/**4,6** (Q2), ISSN 2045-2322].
Ris 32.	MIU L, IONESCU AM, MIU D, BURDUȘEL M, BADICA Petre, **BATALU ND**, CRIȘAN A. (**7**) *Second magnetization peak, rhombic-to-square Bragg vortex glass transition, and intersecting magnetic hysteresis curves in overdoped $BaFe_2(As_{1-x}P_x)(2)$ single crystals*, SCIENTIFIC REPORTS, vol. 10, nr. 1, #17274, 2020,

	[WOS:000582679600008, FI 2020/2022: 4,38/**4,6** (Q2), ISSN 2045-2322].
Ris 33.	XIANG Zhen, HUANG C, SONG YM, DENG BW, ZHANG X, ZHU XJ, **BATALU DAN**, TUTUNARU O, LU Wei (**9**). *Rational construction of hierarchical accordion-like Ni@porous carbon nanocomposites derived from metal-organic frameworks with enhanced microwave absorption*, CARBON, vol. 167, pp. 364-377, 2020, [WOS:000565276400002, FI 2020/**2022**: 9,594/**10,9** (Q1), ISSN 0008-6223].
Ris 34.	Wang TL, Lin C, **Batalu D**, Hu JZ, Lu W **(5)**. *Tunable Microstructure and Morphology of the Self-Assembly Hydroxyapatite Coatings on ZK60 Magnesium Alloy Substrates Using Hydrothermal Methods*, Coatings, vol. 11, nr. 1, #8, 2021, [WOS:000610006100001, FI 2021/**2022** = 3,236/**3,4** (Q2), ISSN 2079-6412].
Ris 35.	I. Gheorghe, I. Avram, **D. Batalu** et al. (**24**). *In vitro evaluation of MgB_2 powders as novel tools to fight fungal biodeterioration of heritage buildings and objects*. Frontiers in Materials, vol. 7, 2021, #601059, [WOS:000615911800001, FI **2021**/2022: **3,985**/3,2 (Q3), ISSN 2296-8016].
Ris 36.	P. Badica, A. Alexandru-Dinu, M. Grigoroscuta, C. Locovei, A. Kuncser, C. Bartha, G. Aldica, M. Negru, **D. Batalu**, N. Cruceru, I. Savulescu **(11)**. *Kaolin clay pottery discovered in the Roman city of Romula (Olt County, Romania)*. Journal of Archaeological Science – Reports, vol. 36, 2021, #102899, [WOS:000639285000005, FI 2021/**2022** = -/**1,6** (Q1), ISSN 2352-409X).
Ris 37.	P. Badica, **N.D. Batalu**, M.C Chifiriuc et al. (**19**). *MgB_2 powders and bioevaluation of their interaction with planktonic microbes, biofilms, and tumor cells*. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY – JMR&T, vol. 12, p. 2168-2184, 2021, [WOS:000557894400004, FI 2021/**2022** = 6,267/**6,4** (Q1), ISSN 2238-7854].
Ris 38.	P. Badica, **N.D. Batalu**, M. Burdusel et al. (**18**). *Antibacterial composite coatings of MgB_2 powders embedded in PVP matrix*. SCIENTIFIC REPORTS, vol. 10, nr. 1, #17274, 2021, [WOS:000656453000036, FI **2021**/2022: **4,997**/4,6 (Q2), ISSN 2045-2322].
Ris 39.	S.K. Padhi, N. Baglieri, **N.D. Batalu** et al. (**14**). *Antimicrobial Activity of MgB_2 Powders Produced via Reactive Liquid Infiltration Method*. Molecules, vol. 26, nr. 16, #4966, 2021, [WOS:000689976100001, FI **2021**/2022 = **4,927**/4,6 (Q2), ISSN 1420-3049].
Ris 40.	P. Badica, **N.D. Batalu**, M.C. Chifiriuc et al. (**14**). *Sintered and 3D-Printed Bulks of MgB_2-Based Materials with Antimicrobial Properties*. Molecules, vol. 26, nr. 19, #6045, 2021, [WOS:000709840900001, FI **2021**/2022 = **4,927**/4,6 (Q2), ISSN 1420-3049].
Ris 41.	T. Wang, C. Lin, D. Batalu, L. Zhang, J. Hu, W. Lu (**6**). *In vitro study of the PLLA-$Mg_{65}Zn_{30}Ca_5$ composites as potential biodegradable materials for bone implants*. Journal of Magnesium and Alloys, vol. 9, nr. 6, 2021, p. 2009-2018, [WOS:000753691400002, FI 2021/**2022** = 11,862/**17,6** (Q1), ISSN 2213-9567].
Ris 42.	A. Melinescu, E. Volceanov, M. Eftimei, **D. Batalu**, A. Volceanov, L.G. Popescu (**6**). *Hardenability of Electroless Chemical Ni-P-Tio_2 Nanocomposite Coatings on Low Carbon Steel Substrates*. Revista Romana de Materiale – Romanian Journal of Materials, vol. 52, nr. 2, p. 99-107, 2022, [WOS:000829023400001, FI 2022 = 0,7 (Q4), ISSN 1583-3186].
Ris 43.	I. Chiulan, S.I. Voicu**, D. Batalu** (**3**). *The Use of Graphene and Its Derivatives for the Development of Polymer Matrix Composites by Stereolithographic 3D Printing*. Applied Science – Basel, vol. 12, nr. 7, #3521, 2022, [WOS:000781250100001, FI 2022 = 2,7 (Q2), ISSN 2076-3417].
Ris 44.	T.A. Badea, **D. Batalu***, N. Constantin, A. Paraschiv, D. Patroi, L.C. Ceatra (**6**). *Assessment of Hot Corrosion in Molten Na_2SO_4 and V_2O_5 of Inconel 625 Fabricated by Selective Laser Melting versus Conventional Technology*. Materials, vol. 15, nr. 12, #4082, 2022, [WOS:000816400800001, FI 2022 = 3,4 (Q2), ISSN 1996-1944].
Ris 45	Badica P, **Batalu D*** (**2**). *Beyond superconductivity towards novel biomedical, energy, ecology, and heritage applications of MgB_2*. Green Chemistry Letters and Reviews, vol. 15, nr. 3, p. 646-657, 2022, [WOS:000864507900001, FI 2022 = 6,6 (Q1), ISSN 1751-

	8253].
Ris 46.	Badica P; **Batalu ND***; Balint E; Tudor N; Barbuceanu F; Peteoaca A; Micsa C; Eremia AD; Trancau OI; Burdusel M; Grigoroscuta MA; Aldica GV; Radu D; Porosnicu I; Tiseanu I (**15**). *MgB_2-based biodegradable materials for orthopedic implants*. Journal of Materials Research and Technology – JMR&T, vol. 20, p. 1399-1413, 2022, [WOS: 000849184900008, FI 2022 = 6,4 (Q1), ISSN 2238-7854].
Ris 47.	Badica P; Alexandru-Dinu A; Grigoroscuta MA; Burdusel M; Aldica GV; Sandu V; Bartha C; Polosan S; Galatanu A; Kuncser V; Enculescu M; Locovei C; Porosnicu I; Tiseanu I; Ferbinteanu M; Savulescu I; Negru M; **Batalu ND** (**18**). *Mud and burnt Roman bricks from Romula*. Scientific Reports, vol. 12, nr. 1, #15864, [WOS:000911222400001, FI 2022 = 4,6 (Q2), ISSN 2045-2322].
Ris 48.	F. Pan, Y. Rao, **D. Batalu**, L. Cai, Y. Dong, X. Zhu, Y. Shi, Z. Shi, Y. Liu, W. Lu (**10**). *Macroscopic Electromagnetic Cooperative Network-Enhanced MXene/Ni Chains Aerogel-Based Microwave Absorber with Ultra-Low Matching Thickness*. Nano-Micro Letters, vol. 14, nr. 1, 2022, #140, [WOS:000821031400002, FI 2022 = 26,6 (Q1), ISSN 2311-6706].
Ris 49.	Mocanu AC; Miculescu F; Dascalu CA; Voicu SI; Pandele MA; Ciocoiu RC; **Batalu D**; Dondea S; Mitran V; Ciocan LT (**10**). *Influence of Ceramic Particles Size and Ratio on Surface-Volume Features of the Naturally Derived HA-Reinforced Filaments for Biomedical Applications*. Journal of Functional Biomaterials, vol. 13, nr. 4, 2022, [WOS:000901197100001, FI 2022 = 4,8 (Q2), eISSN 2079-4983].
Ris 50.	Pan F, Wu XF, **Batalu D**, Lu W, Guan HT. *Assembling of low-dimensional aggregates with interlaminar electromagnetic synergy network for high-efficient microwave absorption*. Advanced Powder Materials, 2023, Vol. 2, nr. 2, #100100 [WOS: 001034500800001, FI 2022 = 0, ISSN 2772-834X].
Ris 51.	Pan F; Ning MQ; Li ZH; **Batalu D**; Guo HT; Wang X; Wu HJ; Lu W (**8**). *Sequential Architecture Induced Strange Dielectric-Magnetic Behaviors in Ferromagnetic Microwave Absorber*. Advanced Functional Materials, 2023, vol. 33, nr. 27 [WOS:000952683500001, FI 2022 = 19 (Q1), ISSN 1616-301X].
Ris 52.	Guo HT; Wang X; Pan F; Shi YY; Jiang HJ; Cai L; Cheng J; Zhang X; Yang Y; Li LX; Xiu Z; **Batalu D**; Lu W (**13**). *State of the art recent advances and perspectives in 2D MXene-based microwave absorbing materials: A review*. Nano Research, 2023, vol. 16, nr. 7, p. 10287-10325 [WOS:001003071500001, FI 2022 = 9,9 (Q1), ISSN 1998-0124].
Ris 53.	Li LX; Chen ZR; Pan F; Guo HT; Wang X; Cheng J; Cai L; Xiu Z; Chen LF; **Batalu D**; Lu W (**11**). *Electrospinning technology on one-dimensional microwave absorbers: fundamentals, current progress, and perspectives*. Chemical Engineering Journal, vol. 470, #144236, 2023, [WOS:001032299400001, FI 2022 = 15,1 (Q1), ISSN 1385-8947].
Ris 54.	**Batalu D.**, Nakamura T., Aldica G., Burdusel M., Grigoroscuta M., Popa S., Pasuk I., Kuncser A., Cretu N., Bezergheanu A., Badica P. *Ex-situ spark plasma sintered MgB_2 with Ge-based organometallic additions: Key ingredients for superconductivity enhancement*. Solid State Sciences, 2024, vol. 148, #107429 [WOS:001165680700001, FI 2022 = 3,5 (Q2), ISSN 1385-8947].
Ris 55.	A.C. Mocanu, A.E. Constantinescu, M.A. Pandele, S.I. Voicu, R.C. Ciocoiu, **D. Batalu**, A. Semenescu, F. Miculescu, L.T. Ciocan. *Biocompatible Composite Filaments Printable by Fused Deposition Modelling Technique: Selection of Tuning Parameters by Influence of Biogenic Hydroxyapatite and Graphene Nanoplatelets Ratios*. Biomimetics, vol. 9, no. 3, 2024, #189 (WOS: 001192013400001, FI 2023 = 3,4, Q1).
Ris 56.	Alexandru-Dinu A.; Locovei C.; Bartha C.; Grigoroscuta M.A.; Burdusel M.; Kuncser A.; Palade P.; Schinteie G.; Iacob N.; Lu W.; Batalu D.; Badica P.; Kuncser V. *Microstructure and coupling mechanisms in MnBi-FeSiB nanocomposites obtained by spark plasma sintering*. Scientific Reports, vol. 14, nr. 1, 2024 (WOS: 001275757700024, FI 2023 = 3,8, Q1).
Ris 57.	Aldica G.; Batalu D.; Nakamura T.; Ferbinteanu M.; Locovei C.; Vlaicu M.A.; Pasuk I.; Badica P. *Structural and thermal analysis of the linear polygermoxane GeSP*. JOURNAL OF THERMAL

	ANALYSIS AND CALORIMETRY, nr. s10973-024-13962-3, 2025 (WOS: 001393056700001, FI 2023 = 3, Q2).

Risb. Reviste de specialitate de circulație internațională recunoscute (cotate/indexate în alte Baze de Date Internaționale, BDI, specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță). Se menționează la fiecare lucrare denumirea BDI.

Risb 1 **D. Batalu**, G.Q. He, C.S. Chen, X.S. Liu **(4)**. *Influence of heat treatment on properties of TiNi (atomic percent Ni = 50.6%) alloy*. Tongji Daxue Xuebao/Journal of Tongji University, 33 (3), 2005, p. 350-354 [SCOPUS, Q3].

Risb 2 X.S. Liu, G.Q. He, **D. Batalu**, Z.X. Chen **(4)**. *Study of SME by using factorial design analysis in TiNi alloy*. Jianzhu Cailiao Xuebao/Journal of Building Materials, 8 (6), 2005, p. 714-717 [SCOPUS, Q3].

Risb 3 **D. Batalu**, H. Guoqiu, A. Aloman, L. Xiaoshan, Z. Zhihua **(5)**. *A factorial design study of ageing heat treatment influence on phase transformation of Ti50.6 at. % Ni alloy*. UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 67 (1), 2005, p. 65-76 [SCOPUS, Q4].

Risb 4 Semenescu A., Radu-Ioniță F., Mateș I.M., Bădică P., **Batalu N.D.**, Negoita O.D., Purcarea V.L. (**7**) *Finite element analysis on a medical implant*, Romanian journal of ophthalmology, vol. 60, nr. 2, 2016, p. 116-119 [SCOPUS, Q3].

Risb 5 **Batalu N.D.**, Semenescu A., Mates I.M., Negoita O.D., Purcarea V.L., Badica P. (**6**) *Computer assisted design and finite element analysis of contact lenses*, Romanian journal of ophthalmology, vol. 60, nr. 3, 2016, p. 132-137 [SCOPUS, Q3].

Rns. Reviste de specialitate de circulaţie naţională recunoscute de CNCSIS.

Rns1. **DAN BATALU**, G. Coşmeleaţă, A. Aloman. *Critical analysis of Aℓ-Ni phase diagrams.* Metalurgia International, vol. 11, nr. 8, 2006, p. 36 – 45.

Rns2. **DAN BATALU**, G. Coşmeleaţă, A. Aloman, I. Ciucă, H. Guoqiu, L. Xiaoshan, Z. Zhihua. *Critical analysis of some experimental Ti-Ni phase diagrams. Short review*. Metalurgia International, vol. 11, nr. 7, 2006, p. 32-39.

Rns3. **BATALU DAN**, G. Coşmeleaţă, A. Aloman, H. Guoqiu, L. Xiaoshan, Z. Zhihua. *Studii privind îmbunătăţirea rezistenţei la coroziune a aliajului TiNi (50.6 % at. Ni) cu aplicaţii în ingineria medicală*. Metalurgia, vol. 58, nr. 11, 2006, p. 36 – 44.

Rns4. **DAN BATALU**, G. COŞMELEAŢĂ, A. ALOMAN, H. GUOQIU, L. XIAOSHAN, Z. ZHIHUA. *A Review on TiNi Shape Memory Alloys (SMA) Used for Medical Applications. Recycling Aspects*. The Danube River Environment and Education. Year III, No. 5, 2005, p. 20 - 25.

Rns5. A. Aloman, **DAN BATALU**. *Ecuaţiile empirice ale curbei solidus TTi p1 şi ale curbelor liquidus din diagrama de echilibru binară Ti-Aℓ*. Metalurgia, vol. 50, nr. 7, p. 39-51, 1998.

Rns6. A. Aloman, **DAN BATALU**. *Calculul termodinamic al curbelor liquidus şi solidus pentru faza beta-Ti din diagrama de echilibru Ti-Aℓ utilizând diferite modele ale soluţiilor*. Metalurgia, vol. 50, nr. 5, p. 40-52, 1998.

Rns7. Ciobotaru E., Militaru M., Soare T., Ionaşcu I., Gherghiceanu M., Vlăgioiu C., Dinescu G., **Batalu D.**, Bololoi R. *Histological and Electron Microscopy Features in Local Muscular Biocompatibility of TiNi Alloys Coated with Oxides and Polymers. Acute and Chronic Experimental Model in Rabbit*. Scientific Works. C Series: Veterinary Medicine. Vol. LIII, 2008, p. 69 - 79 (ISSN 1222-5304).

Rns8. **DAN BATALU**, Georgeta Coşmeleaţă, Angel Aloman, Ion Ciucă, Robert Bololoi. *The optimal equations of the phase transformation curves from the Ti-Ni binary phase equilibrium diagram.* Metalurgia International, vol. 13, nr. special 3, 2008, p. 47–52.

Vis. Volumele unor manifestări ştiinţifice internaţionale recunoscute, organizate în ţară şi străinătate, indexate ISI Thomson Reuters sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a publicațiilor pe baza unor criterii de performanță. Se menționează la fiecare lucrare includerea în Baza ISI [ISI Proceedings, Accession Number, WOS, ISSN] sau denumirea altei BDI.

Vis 1 **Batalu D**, Bojin D, Aldica G, Stanciuc A, Moldovan L, Bucur M, Badica P. Evaluation of MgB_2-based nanocomposites for medical applications. 24th European Conference on Biomaterials (EBS 2011), 2011, conference paper [SCOPUS].

Vis 2 **D. Batalu**, D. Bojin, B. Ghiban, G. Aldica, P. Badica **(5)**. *Corrosion behavior of pristine and added MgB_2 in Phosphate Buffered Saline Solution*. 2012, IOP Conf. Ser.: Mater. Sci. Eng., vol. 40, #012032: p. 1-6, [WOS:000312413700032, ISSN 1757-8981].

Vis 3 **Dan Batalu**, D. Bojin, G. Aldica, S. Popa, P. Badica **(5)**. *Influence of La_2O_3 addition powders with different morphology on MgB_2 superconducting ceramic*. Proceeding of the 15th European Conference on Composite Materials (ECCM 2012), ISBN 978-88-88785-33-2, 2012, conference paper, p. 1-4 [SCOPUS].

Vis 4 R. Bololoi, M. Burdusel, P. Badica, **Dan Batalu (4)**. *Total Elbow Implant. Computer Assisted Design And Simulation.* Key Engineering Materials, vol. 638, 2015, p. 161-164 [SCOPUS, Q4].

Vis 5 **Dan Batalu**, G. Aldica, M. Burdusel, P. Badica **(4)**. *Short review on rare earth and metalloid oxide additions to MgB_2 as a candidate superconducting material for medical applications*. Key Engineering Materials, vol. 638, 2015, p. 357-362 [SCOPUS, Q4].

Vis 6 **Batalu D.**, Aldica G., Badica P. (3) *Composites of MgB_2 - rare-earth-oxides: fabrication by spark plasma sintering and functional properties*. 20th INTERNATIONAL CONFERENCE ON COMPOSITE MATERIALS, 2015 [WOS:000614628003094).

Vis 7 Miculescu F, Maidaniuc A, Voicu SI, Miculescu M, **Batalu D (5)**. *Strategies for production of naturally-derived calcium phosphates particles*. Advanced Materials-TechConnect Briefs, 2016, p. 31-34 [SCOPUS].

Vis 8 YOKOYAMA K, OKA T, BERGER K, DORGET R, KOBLISCHKA M, GRIGOROSCUTA MA, BURDUSEL M, **BATALU ND**, ALDICA GV, BADICA P, SAKAI N, MURALIDHAR M, MURAKAMI M (**13**). *Investigation of flux jumps during pulsed field magnetization in graphene-added MgB_2 bulks*, JOURNAL OF PHYSICS CONFERENCE SERIES, vol. 1559, #012080, 2020, [WOS:000558737600080, ISSN 1742-6588].

Vn. Volumele unor manifestări ştiinţifice naţionale.

Vn1. Coşmeleaţă D., **Batalu D**. *Analiza critică a diagramei de echilibru Si-O*. Simpozionul naţional al tinerilor cercetători în domeniul ingineriei materialelor. Simpozionul național al tinerilor cercetători în domeniul ingineriei materialelor. Editura Printech, Bucureşti, 2008, p. 37 - 42 (ISBN 978-606-521-018-9).

Vn2. **Dan Batalu**, G. Coşmeleaţă, I. Ciucă, I. Bruckner, R. Silişte, C. Năstase, A. Morozan, A. Dumitru, T. Soare, E. Ciobotaru, M. Militaru. *Biocompatible TiO_2/ DL(PLG) protective coatings. Characterization and in vivo testing*. Conference Excelence Research - A Way to Innovation (Eds. N. Vasiliu, S. Lanyi). Editura Tehnică, Braşov, vol. 2, 2008, #194, p: 1-6. (ISSN 1844-7090).

V. BREVETE DE INVENŢIE (B)

B1. Batalu N.D. et al (**12**). *Proteză totală de cot constrânsă, din aliaje cu memoria formei, cu fixare de tip balama şi sistem de cuplare pe bază de efect al memoriei formei*. **Număr patent**: RO-131379-B1, Derwent Primary Accession Number: 2016-61849C.

B2. Batalu N.D. et al (**11**). *Proteză totală de cot semiconstrânsă, din aliaje cu memoria formei, cu sistem de cuplare pe bază de efect al memoriei formei*. **Patent number**: RO-131261-B1, Derwent Primary Accession Number: 2016-52537M.

B3. Bădică Petre; **Batalu Nicolae-Dan**; Grigoroşcuţă Mihai Alexandru; Burduşel Mihail; Aldica Gheorghe Virgil; Popa Marcela; Chifiriuc Mariana-Carmen (**7**). *Pulberi, corpuri sinterizate şi acoperiri pe bază de mgbrezistente la colonizarea microbiană şi cu eficienţă împotriva biofilmelor microbiene, şi metodă de utilizare a acestora*. **Patent number**: RO-133974-B1, Derwent Primary Accession Number: 2020-27602Q.

B4. Bădică Petre; **Batalu Dan**; Grigoroşcuţă Mihai Alexandru; Aldica Gheorghe Virgil; Săvulescu Ionuţ; Negru Mircea (**6**). *Obţinere şi material ceramic pentru cărămizi, replică a celor romane*. **Patent number**: RO-133976-B1.
B5. Lupşa Mădălina; Popa Marcela; Chifiriuc Mariana Carmen; Măruţescu Luminiţa Gabriela; Bădică Petre; **Batalu Nicolae-Dan**; Grigoroşcuţă Mihai Alexandru; Burduşel Mihail; Aldica Gheorghe Virgil (**9**). *Apă de gură pe bază de clorhexidină şi MgB_2 ca ingrediente active, cu efect sinergic împotriva colonizării microbiene şi formării plăcii dentare*. Patent number: RO-134808-B1, Derwent Primary Accession Number: 2021-36330A.
B6. Bădică Petre; **Batalu Nicolae-Dan**; Balint Emilia Florica; Tudor Niculae; Burduşel Mihail; Grigoroşcuţă Mihai - Alexandru; Aldica Gheorghe Virgil; Trancău Ioan-Ovidiu; Chifiriuc Mariana-Carmen; Bărbuceanu Florica; Peteoacă Alexandra; Micşa Cătălin (**12**). *Sistem bicomponent compozit biodegradabil pentru materiale de osteosinteză cu control biomecanic*. Patent number: RO-135301-B1, Derwent Primary Accession Number: 2021-E81099.

VI. CONTRACTE ŞTIINŢIFICE (P)

P. Proiecte de cercetare-dezvoltare-inovare obținute prin competiție, pe bază de contract/grant, în ţară/ străinătate (Pn – naționale, Pi - internaționale).
Obs! A se menţiona calitatea de responsabil/director sau coautor.

Pn-1 (membru). Contract CEEX 46/2005, Rețea tehnologică integrată de cercetare a structurilor avansate biocompatibile pentru implanturi dentare (**Rete-β-dent)**, Responsabil Mihai TÂRCOLEA (3 ani, 2005-2008, BIOMAT).
Pn-2 (membru). Contrat CEEX 55/2005, Corelația dintre disfuncția endotelială și afectarea miocardică la pacienții cu diabet zaharat (**CARDIAB**), Responsabil Georgeta COȘMELEAȚĂ (3 ani, 2005-2008).
Pn-3 (membru). Contract CEEX 4395/ 2006, Tehnologii integrate in vederea obținerii structurilor multistrat, pe suport de cupru, rezistente la temperaturi înalte, eroziune si contact cu metal lichid, cu destinație specială (**STECUSID**), Director Georgeta COȘMELEAȚĂ (2 ani, 2006 - 2008).
Pn-4 (membru). Contract CEEX 143/2006, Materiale complexe multifuncționale cu structura nanometrică și caracteristici controlate cu destinație specială (**NANOSTRUCT**), Director Georgeta COȘMELEAȚĂ (2 ani, 2006-2008).
Pn-5 (coautor). Contract CEEX 194/2006, Cercetări fundamentale și experimentale privind biomaterialele cu memoria formei cu aplicabilitate în realizarea stenturilor vasculare (**ANGIOMAT**), Director Ion CIUCĂ (2 ani, 2006-2008).
Pn-6 (membru). Contract Inovare 115/2007, Tehnologii integrate pentru realizarea unor materiale biocompatibile complexe (**BIOCOMPLEXMAT**), Responsabil Georgeta COȘMELEAȚĂ (2 ani, 2007-2009).
Pn-7 (membru). Contract CNMP 71-080/2007, Materiale multifuncționale cu efect bioactiv destinate implantologiei (**MULTIBIOMAT**), Responsabil Georgeta COȘMELEAȚĂ (3 ani, 2007-2010).
Pn-8 (membru). Contract CNMP 71-059/2007, Tehnologii inovative de realizare a unor produse din aliaje tip Permalloy, competitive la export (**PERMATECH**), Responsabil Rami ȘABAN (3 ani, 2007-2010).
Pn-9 (membru). Contract PN II 305/2014, Sisteme complexe cu structura deformabila destinate protecției balistice a vehiculelor blindate implicate în conflicte asimetrice (**ARMPROT**), Director Nicolae CONSTANTIN (3 ani, 2014-2017).
Pn-10 (responsabil). **Contract** PN II 214/2014, Benzi supraconductoare pe baza de MgB_2 (**BENZISUPRA**), (3 ani, 2014-2017), Finanțat de UEFISCDI.
Pn-11 (coautor). Contract PN-III-P2-2.1-PED-2016-1741, 163PED din 03/01/2017, De la cărămizile romane de la Romula la materiale moderne pentru restaurare (**ROMBRICKS**), Director Mircea NEGRU (1,5 ani, 2017-2018).

Pn-12 (director UPB). **Contract** PN-III-P2-2.1-CI-2017-0652, 78CI/25.07.2017, Valorificarea avansată a rocii calcaroase de Buciumi - *Novumcalc* (1/2 ani: 25.07.2017-31.12.2017), Finanțat de UEFISCDI și S.C. Proconic S.R.L.
Pn-13 (responsabil). **Contract** PN-III-P2-2.1-PTE-2019-0655, 5PTE *Algoritm de valorificare a reziduurilor entomologice si de pielarie in sisteme multivalente pentru regenerare de tesut cutanat (BIOTEHKER)* (2 ani: 01.06.2020-01.06.2022), Finanțat de UEFISCDI.
Pn-14 (membru) Contract PN-III-P2-2.1-PED-2021-1650, 583 PED/2022, *Novel technology for implants manufacturing from 3D printable reinforced composite filaments for guided bone regeneration* (BoneGapFill, 2 ani, 2022-2024), Finanțat de UEFISCDI.

Pi-1 (membru). Research Grant of the National Foundation of Science and Nature (China, G. 50371063), TiNi Shape memory alloys used in biomedical engineering, Director He GUOQIU (2 ani, 2002 - 2004).
Pi-2 (membru). Contract MANUNET-ERANET 7-060/2012, Development of a new Cobalt-based alloys modified with Titanium for dental applications (**DENTICO**), Director Brândușa GHIBAN (1 an, 2012-2013).
Pi-3 (responsabil). **Contract** PN-II-CT-RO-UA-2013 – 1, 3BM/2016, *Noi materiale compozite ceramice dure pentru scule așchietoare* (Newcomposite; 30.06.2016-30.11.2017: 1,5 ani), Programul 3: Cooperare europeană și internațională, Subprogramul 3.1 Bilateral/multilateral, Finanțat de UEFISCDI și Ministry of Education and Science of Ukraine - 0117U004301.
Pi-4 (responsabil). **Contract** COFUND-M-ERA.NET II-BIOMB, 74/2017 *Materiale avansate biodegradabile pe baza de MgB_2 rezistente la colonizare microbială* – Biomb (4 ani: 14.06.2017-31.07.2021), Finanțat de UEFISCDI și CE.
Pi-5 (director). **Contract** PN-III-P3-3.1-PM-RO-CN-2018-0113, Nr. 17/02.07.2018, Mecanisme de control al proprietăților magneților permanenți nanocristalini pe baza de MnBi fără adaosuri de pământuri rare (1,5 ani: 02.07.2018-31.12.2019), Finanțat de UEFISCDI și National Natural Science Foundation of China (NSFC), 51671146.
Pi-6 (membru) **Contract** PN-III-CEI-BIM-PBE-2020-0014, Membrane pe bază de grafenă printate 3D pentru aplicații medicale (2 ani, 2021-2022, Finanțat de UEFISCDI și Belgia; GraphMem)

VII. COMUNICĂRI ȘTIINȚIFICE NEPUBLICATE (E)

E – Lucrări prezentate la diferite seminare/expoziţii, conferinţe etc.

E1. P. Badica, G. Aldica, V. Sandu, L. Miu, M. Burdusel, **Dan Batalu**. *MgB_2-Based Composites*. 22nd Annual International Conference on Composites/Nano Engineering, July 13-19, 2014, Saint Julian's, Malta.
E2. Dan Batalu, P. Badica, G. Aldica, C. Nastase, F. Nastase, T. Soare, E. Ciobotaru, M. Militaru, M. Gherghiceanu, A. Stanciuc, L. Moldovan, M. Bucur. *Different Approaches of Materials for Medical Applications. Advanced Workshop in Nanophysics and Solar Energy Conversion*, September 1-3, 2014, Magurele – Bucharest, Romania.
E3. Dan Batalu, F. Miculescu, P. Badica. *MgO whiskers prepared by vapor deposition.* 18th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 18), Sinaia, Romania, 4-7 September, 2013.
E4. M. Burdusel, G. Aldica, P. Badica, **Dan Batalu**. *Evaluation of GeO_2 added MgB_2 as a candidate superconducting material for MRI applications*. 6th International Conference "Biomaterials, Tissue Engineering and Medical Devices" (BiomMedD 2014), Constanta, Romania, September 17 - 20, 2014.
E5. G. Aldica, S. Popa, M. Enculescu, **Dan Batalu**, P. Badica. *MgB_2 obtained by ex-situ Spark Plasma Sintering: addition of Ho_2O_3 with different morphology*. European Conference on Applied Superconductivity (EUCAS 2013), Session for LTS and MgB2 Bulk (3P-MA4-10), 15-19th September, 2013, Genova, Italy.

E6. Dan Batalu. *MgB_2 prin SPS: adaosuri de tip pământuri rare şi evaluarea potenţialului MgB_2 ca material pentru aplicaţii noi*, 2010, seminar INCDFM.

E7. Dan Batalu, D. Bojin, G. Aldica, P. Badica. *Evaluation of Eu_2O_3 added MgB_2 as a candidate superconducting material for NMR applications*. 5th International Conference of "Biomaterials, Tissue Engineering and Medical Devices", 29 September - 1 August, 2012, Constanta, Romania (Biommedd 2012). Abstract published in ISSN 2069-0193 (poster presentation, P5).

E8. Dan Batalu, D. Bojin, H.H. Huang, Y.S. Sun, G. Aldica, P. Badica. *Spark Plasma Sintered MgB_2-based Composites with Additions of La_2O_3 and Ho_2O_3: an Evaluation for Medical Applications*. 9th World Biomaterials Congress, Chengdu, China, June 1-5, 2012 (poster presentation P-SAT-C-087 and rapid fire session R1-03).

E9. Dan Batalu, D. Bojin, S. Popa, G. Aldica, L. Miu, M. Enculescu, P. Badica. *Spark Plasma Sintering of rare earth oxide added MgB_2.* Superconductivity Centennial Conference 2011 (EUCAS - ISEC- ICMC), Session for MgB_2 Bulk and Single Crystal (oral presentation, no. 4-MA-O2), 18th - 23th September, 2011, The Hague, Nederland.

E10. Dan Batalu, D. Bojin, C. Nastase, F. Nastase, T. Soare, M. Militaru, M. Gherghiceanu, P. Badica. *Biocompatible oxide-based composite protective coatings for TiNi stents*. 20th Materials Research Society of Japan (MRS-J) International Conference, Session E (Synthesis, Characterizations and Applications of Oxide Nanocomposites), Keynote Lecture 1, 18th -23th December, 2010, Yokohama, Japan.

E11. Dan Batalu, D. Bojin, M. Burdusel, G. Aldica, L. Miu, P. Nita, P. Badica. *MgB_2 Nanosized Ceramic as a Candidate for Medical Applications* (P7). 4th International Conference of "Biomaterials, Tissue Engineering and Medical Devices", 23-25 of September, 2010, Sinaia, Romania (Biommedd 2010). Abstract published in ISSN 2069-0193.

E12. Dan Batalu, D. Bojin, R. Bololoi, P. Badica, R. Siliste, C. Nastase, F. Nastase, T. Soare, E. Ciobotaru, M. Mlitaru, M. Gherghiceanu. *Biocompatible Oxide/ Polymer Composite Protective Coatings for TiNi Stents. Characterization and in vivo Testing* (P8). 4th International Conference of "Biomaterials, Tissue Engineering and Medical Devices", 23-25 of September, 2010, Sinaia, Romania (Biommedd 2010). Abstract published in ISSN 2069-0193.

E13. Dan Batalu, G. Coşmeleaţă, A. Aloman, I. Ciucă, H. Guoqiu. Poster P7: *Rezultate privind influenţa complexă a unor factori asupra temperaturilor de transformare ale aliajului cu memoria formei TiNi (50,6 % at. Ni)*. Conferinţa naţională SNB 2007, 18-20 Octombrie, Cluj Napoca, "Biomateriale şi aplicaţii medico-chirurgicale".

E14. Dan Batalu, G. Aldica, P. Badica. *Composites of MgB_2-rare earth oxides: fabrication by spark plasma sintering and functional properties*. Proceedings of 20th International Conference on Composite Materials, Copenhagen, 19-24th July 2015.

E15. A. Ghinea, **Dan Batalu**, G. Aldica, P. Badica. *FINITE ELEMENT ANALYSIS OF THE TEMPERATURE DISTRIBUTION DURING SPARK PLASMA SINTERING*. 4th International Workshop on Numerical Modelling in Aerospace Sciences, May 11-12, 2016, Bucharest, Romania.

E16. R. Duțu, **Dan Batalu**, P. Bădică, G. Aldică. *MATERIALE METALO-CERAMICE SINTERIZATE ÎN CÂMP ELECTRIC UTILIZÂND PULBERI DE CRISTALE EUTECTICE PE BAZĂ DE BORURI*. Al XII-lea Simpozion Național de Pulberi Ceramice, Noiembrie 20, 2015, București, România.

E17. M. Stamate, A. Modan, R. Griga, **Dan Batalu**. *Unconventional alternatives for powering cochlear implants*. 12th European Balkan Congress. Hearing Implants and High Tech Hearing Aids, October 09-11, 2014, Balatonfüred, Hungary.

E18. Dan Batalu, P. Badica, G. Aldica, C. Nastase, F. Nastase, T. Soare, E. Ciobotaru, M. Militaru, M. Gherghiceanu, A. Stanciuc, L. Moldovan, M. Bucur. *Different Approaches of Materials for Medical Applications*. Advanced Workshop in Nanophysics and Solar Energy Conversion, September 1-3, 2014, Magurele – Bucharest, Romania.

E19. Dan N. Batalu, Petre BADICA, Any C. SERGENTU, Mihai T. DRAGOMIR, Eduard LICIU, Ovidiu I. TRANCĂU, Cristian SCHEAU, Şerban DRAGOSLOVEANU, Alina NECŞULESCU, Robert BOLOLOI, Alina BOLOLOI, Carmen M. CHIFIRIUC, Niculae TUDOR, Emilia F.

BALINT, Ana-Maria PRELIPCEAN, Coralia BLEOTU. *MgB_2 as a candidate material for medical applications and 3D printed composites*. 10th International Conference "Biomaterials, Tissue Engineering & Medical Devices", Bucharest, Romania, October 10-12, 2024 (Biommedd 2024).
E20. Dan Batalu. 3D printing techniques to create medical implants and devices. Workshop, International Medical Students' Congress of Bucharest, 4-8 Decembrie 2024, Bucharest, Romania.

Data
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Semnătura