

LISTA DE LUCRARI
Prof.dr.ing. Mircea-Ionuț PETRESCU

I. TEZA (E) DE DOCTORAT (T)

T1.	<i>Studii și cercetări teoretice și experimentale asupra corelației între duritatea și cristalochimia sulfurilor și sulfosărilor</i> , Universitatea București, Facultatea de Geologie, conducător științific Prof.dr. Emil Constantinescu, 2000.
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II. CĂRȚI PUBLICATE (C)

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

Ca1.	M.I. Petrescu, G. Iacob, „ <i>Structura atomică a mineralelor</i> ”, Ed. Printech București, ISBN 978-606-23-0102-6, 139 p., 2013.
Ca2.	M.I. Petrescu, „ <i>Fizica Cristalelor</i> ”, Ed. Printech București, ISBN 978-606-23-0103-3, 116 p., 2013.

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

Cb1.	M.I. Petrescu, „ <i>Electron Microscopy in Mineralogy</i> ”, Ed. Printech București, ISBN 973-652-434-5, 139p., 2001.
Cb2.	M.I. Petrescu, „ <i>Tratat de știința și ingineria materialelor metalice vol. 1, cap.3.1 – Cristalografia materialelor</i> ”, Ed, AGIR, ISBN 973-720-064-0, 50 p., 2006.
Cb3.	G. Popescu, M.I. Petrescu, „ <i>Tratat de știința și ingineria materialelor metalice vol. 2, cap. 2 - Materii prime și prepararea minereurilor</i> ”, Ed, AGIR, ISBN 978-973-720-162-1, 100 p., 2007.
Cb4.	M.I. Petrescu, „ <i>Tratat de știința și ingineria materialelor metalice vol. 3, cap. 2.4 – „Materiale ceramice și minerale”</i> ”, Ed, AGIR, ISBN 978-973-720-162-1, 15 p., 2009.
Cb5.	M.I. Petrescu, „ <i>Tratat de știința și ingineria materialelor metalice vol. 3, cap. 26.1 „Abrazivi; lubrifianți solizi macrostructurați și nanostructurați”</i> Ed,AGIR, ISBN 978-973-720-162-1, 12p, 2009.
Cb6.	Petrescu M., Petrescu M.I., <i>Structuri Cvasicristaline și Nanocristaline în Materiale Metalice</i> , Editura AGIR, București, 2021.

Cc - Cărți publicate în alte edituri, cu ISBN .

Cc1.	M. Petrescu, M.I. Petrescu, M. Călin, N. Petrescu, „ <i>Metals, Ceramics and Polymers: Structure, Transformations, Crystallography</i> ”, Ed. Man-Dely București, ISBN 973-98857-0-5, 324 p., 2000.
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III. ALTE MATERIALE PUBLICATE (I,D)

I - Culegeri și Îndrumare publicate (separate în **I** - edituri cu ISBN și în **It** - tipografii locale/uz intern sau de uz intern).

It - tipografii locale/de instituții sau de uz intern

It1.	V. Macaleș, M.I. Petrescu, G. Costin, „ <i>Cristalografie Geometrică - îndrumar de laborator</i> ”, Universitatea Politehnica București, 174 p., 1993,
It2.	M.I. Petrescu, M. Călin, M. Petrescu, „ <i>Crystallography and Material Science of Nonmetallic and Special Metallic Materials</i> ”, Universitatea Politehnica București, 263 p. , 1997.

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

Ris - Reviste de specialitate de circulație internațională recunoscute (cotate/indexate ISI Thomson Reuters).

Ris1. (AP)	M.I. Petrescu, <i>Boron nitride theoretical hardness compared to carbon polymorphs</i> , Diamond and Related Materials, Elsevier Journals, Vol 13/10, 2004, 1848-1853, ISSN 0925-9635, DOI:10.1016/j.diamond.2004.05.004, WOS:000326414700013, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 1,072, Factor de impact: 2,195]
Ris2.	M. Pasăre, M.I. Petrescu, <i>A theoretical model for the true hardness determination of Ni-P/SiC electroplated composites</i> , Revista de Materiale Plastice, 45(1), 2008, 87-90, ISSN 0025-5289, WOS:000255295400017, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,149, Factor de impact: 0,903]
Ris3. (AP)	M. Pasăre, M.I. Petrescu, M. Abrudeanu, <i>Heat treatment and P effect on Ni-P/SiC coatings hardness</i> , Revue Roumaine de Chimie, 53(7), 2008, 563–567, ISSN 0035-3930, WOS:000263919200008, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,189, Factor de impact: 0,250]
Ris4. (AP)	M.I. Petrescu, M. Pasăre, <i>True hardness of Ni-P/SiC coatings derived by a mathematical model</i> , Revue Roumaine de Chimie, 53(8), 2008, 643–647, ISSN 0035-3930, WOS:000263919300009, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,189, Factor de impact: 0,250]
Ris5. (AP)	M.G. Balint, M.I. Petrescu, <i>An attempt to identify the presence of polytype stacking faults in hBN powders by means of X-ray diffraction</i> , Diamond and Related Materials, Elsevier Journals,

	Volume: 18 Issue: 9, 2009, 1157-1162, ISSN 0925-9635, DOI:10.1016/j.diamond.2009.02.035, WOS:000268610700019, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 1,072, Factor de impact: 2,195]
Ris6. (AP)	M.G. Balint, M.I. Petrescu, <i>Quantitative linear correlations between the cBN synthesis parameters and the structural features of the hBN precursor</i> , Diamond and Related Materials, Elsevier Journals, Volume: 18 Issue: 9, 2009, 1191-1195, ISSN 0925-9635, DOI:10.1016/j.diamond.2009.03.005, WOS:000268610700025, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 1,072, Factor de impact: 2,195]
Ris7. (AP)	M.I. Petrescu, M. Pasăre, <i>Comparative study between the hardness of micron size coatings and the hardness of bulk ionic-covalent mineral compounds</i> , Revista de Chimie, (62), nr.7, 2011, 736-740, ISSN 0034-7752, WOS:0002292756700012, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,183, Factor de impact: 0,956]
Ris8. (AP)	M.I. Petrescu, <i>Theoretical hardness calculated from crystallo-chemical data for MoS₂ and WS₂ crystals and nanostructures</i> , ACTA CRYSTALLOGRAPHICA SECTION B, Volume: 68 Part: 5, 2012, 501-510, ISSN 2052-5206, DOI: 10.1107/S0108768112033149, WOS:000308961700004, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 2,017, Factor de impact: 2,892]
Ris9. (AP)	Șt. Adam, A.M. Adam, M.I. Petrescu, <i>The thermoelectric power of the stoichiometric Ti₂S compound in liquid state</i> , Metalurgia International, Special Issue 1, 2013, 73-76, ISSN: 1582-2214, WOS: 000315368200016, [ISI-Web of Science/Science Citation Index Expanded - Factor de impact: 0,134]
Ris10. (AP)	A.M. Adam, Șt. Adam, M.I. Petrescu, <i>An insight in the thermoelectric devices and applications based on the seebeck and peltier effects</i> , Metalurgia International, Special Issue 1, 2013, 77-80, ISSN: 1582-2214, WOS: 000315368200017, [ISI-Web of Science/Science Citation Index Expanded - Factor de impact: 0,134]
Ri11. (AP)	M.I. Petrescu, <i>Accuracy in microhardness tests applied to sulfide mineral compounds</i> , Metalurgia International, vol XVIII, nr. 4, 2013, 76-79, ISSN: 1582-2214, WOS: 000315177400016, [ISI-Web of Science/Science Citation Index Expanded - Factor de impact: 0,134]
Ris12.	Cinca I., M.I. Petrescu, <i>Commercially Ti grade 2 alloy processed by SPD (severe plastic deformation)</i> , Metalurgia International, vol XVIII, nr. 4, 2013, 83-86, ISSN: 1582-2214, WOS: 000315177400018, [ISI-Web of Science/Science Citation Index Expanded - Factor de impact: 0,134]
Ris13. (AP)	S. Adam, M.I. Petrescu, <i>Thermoelectric power in two liquid Ti-S alloys (64.7 at.%Ti and 57.1 at.%Ti) in the low temperature range down to the liquidus point</i> , Journal of Optoelectronics and Advanced Materials, Volume: 15, Issue 9-10, 2013, 995-1002, ISSN 1454-4164, WOS:000326414700013, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,193, Factor de impact: 0,383]
Ris14. (AP)	M.I. Petrescu, G. Ghiban, N. Ghiban, M. Pasăre, <i>Calculated theoretical hardness from chemical data for boron nitride nanotubes</i> , Revista de Chimie, (64), nr.10, p.1151-1155, 2013, ISSN 0034-7752, WOS:000327577600019, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,183, Factor de impact: 0,956]
Ris15. (AP)	M. Buzatu, S. Săceanu, M.I. Petrescu, G.V. Ghica, T. Buzatu, <i>Recovery of zinc and manganese from spent batteries by reductive leaching in acidic media</i> , Journal of Power Sources, 247, p.612-617, 2014, ISSN 0378-7753, DOI: 10.1016/j.jpowsour.2013.09.001, WOS:000328177000083, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 2,578, Factor de impact: 6,333]
Ris16.	G.V. Ghica, M. Buzatu, G. Iacob, M.I. Petrescu, <i>Electron Microscopy Researches on the Microstructure of Inconel 718 Alloy</i> , Revista de Chimie, (65), nr.1, p.105-109, 2014, ISSN 0034-7752, WOS:000334150300021, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,183, Factor de impact: 0,956]
Ris17.	Șt. Adam, M. Buzatu, M.I. Petrescu, <i>Thermoelectric Power in Liquid Compositions Richer in S than Ti₂S Semiconductor Compound</i> , UPB Sci. Bul. A, 76 (4), p. 227-238, 2014, ISSN 1223-7027, WOS:000346133600023, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,161, Factor de impact: 0,365]
Ris18	G. Iacob, V.G. Ghica, M. Buzatu, T. Buzatu, M.I. Petrescu, <i>Studies on wear rate and micro-hardness of the Al/Al₂O₃/Gr hybrid composites produced via powder metallurgy</i> , Composites Part B: engineering, vol. 69, p. 603-611, 2015, ISSN 1359-8368, DOI: 10.1016/j.compositesb.2014.07.088, WOS:000347266600068, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 3,229, Factor de impact: 3,850]
Ris19	T. Buzatu, E. Talpoș, M.I. Petrescu, V.G. Ghica, G. Iacob, M. Buzatu, <i>Utilization of granulated lead slag as a structural material in roads constructions</i> , Journal of Materials Cycles and Waste

	Management, 17(4), 707-717, 2015, ISSN 1438-4957, DOI: 10.1007/s10163-014-0297-z, WOS:000362520800011, [ISI-Web of Science /Science Citation Index Expanded - Scor relativ de influență: 0,517, Factor de impact: 1,422]
Ris 20	T. Buzatu, M.I. Petrescu, V.G. Ghica, M. Buzatu, Gh. Iacob, <i>Processing oxidic waste of lead-acid batteries in order to recover lead</i> , Asia-Pacific Journal of Chemical Engineering, 10(1), 125-132, 2015, ISSN 1932-2143, DOI: 10.1002/apj.1854, WOS:000348909900012, [ISI-Web of Science/Science Citation Index Expanded -, Factor de impact: 0,728]
Ris 21	G. V. Ghica, M. Buzatu. M.I. Petrescu, Gh. Iacob, <i>Alloy 5083 (AlMg4.5Mn0.7Cr0.15) obtained using rapidly solidified master alloys</i> , Journal of Optoelectronics and Advanced Materials, Volume: 17, Issue 5-6, 2015, 799-805, ISSN 1454-4164, WOS: 000357766600045, [ISI-Web of Science/Science Citation Index Expanded - Scor relativ de influență: 0,193, Factor de impact: 0,383]
Ris 22	A. Ioana, F.E. Istrate, M. Buzatu, M.I. Petrescu, A. Semenescu, M. Sohaciu, Analysis of collecting and recycling of some waste categories in Romania, Sci.Bull.UPB, series B (Chemistry and Materials Science), ISSN 1454-2331, Vo.78, No.2, p. 203-212, 2016. WOS:000417052900020, Factor de impact: (1)
Ris 23	Mihai Buzatu, Ștefan Ioan Ghica, Eugenia Vasile, Victor Geantă, Radu Ștefănoiu, Mircea Ionuț Petrescu, Gheorghe Iacob, Mihai Buțu, M. Sohaciu "On the design of new b-phase titanium alloys Ti-Mo-W", Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.78, No.3, 161-172, 2016. WOS:000417053200015, Factor de impact: (1)
Ris 24	T. Buzatu, G.V. Ghica, M.I. Petrescu, G. Iacob, M. Buzatu, F. Niculescu, <i>Studies on mathematical modeling of the leaching process in order to efficiently recover lead from the sulfate/oxide lead paste</i> , Waste Management, 60, 723-733, 2017, WOS:000397357100075, [ISI-Web of Science/Science Citation Index Expanded - Factor de impact: 3,829]
Ris 25	F. Niculescu, D. Marcu, Șt. Burciu, M. Buzatu, I.M. Petrescu, N. Șerban, G. Iacob, <i>Experimental Researches Regarding the Thermodynamic Activities in the Binary Pb-Sb Alloy System</i> , Journal of Phase Equilibria and Diffusion, 38(5), 700-706, 2017, DOI 10.1007/s11669-017-0555-6, WOS:000409081100010, [ISI-Web of Science/Science Citation Index Expanded -, Factor de impact: 0,784]
Ris 26	A. Soare, I. Csaki, M. Sohaciu, C. Oprea, S. Soare, I. Costina, M.I. Petrescu, <i>New Bond Coat Materials for Thermal Barrier Coating Systems Processed Via Different Routes</i> , International Conference on Innovative Research - ICIR EUROINVENT 2017, IOP Publishing, IOP Conf. Series: Materials Science and Engineering 209, doi:10.1088/1757-899X/209/1/012045, 2017, WOS:000423732100045
Ris 27	C.M. Toma, G.V. Ghica, M. Buzatu, M.I. Petrescu, E. Vasile, G. Iacob, <i>A Recovery Process of Active Cathode Paste from Spent Li-Ion Batteries</i> , International Conference on Innovative Research - ICIR EUROINVENT 2017, IOP Publishing, IOP Conf. Series: Materials Science and Engineering 209, doi:10.1088/1757-899X/209/1/012034, 2017, WOS:000423732100034
Ris 28	G.V. Ghica, C.M. Toma, M. Buzatu, M.I. Petrescu, Gh. Iacob, I.V. Antoniac, E. Vasile, F. Veglio, <i>RECOVERY OF ACTIVE CATHODE MATERIAL CONTAINING Co AND Li FROM WASTE Li-ION BATTERIES</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.79, No.3, 75-86, 2017, WOS:000416417800008
Ris 29	M.Buzatu, S.I.Ghica, M.I.Petrescu, V.Geanta, R.Stefanoiu, F.Iacob, M.Butu, E.Vasile, Obtaining and characterization of the Ti15Mo5W alloy for biomedical applications, Materiale Plastice, 54 (3), 596-600, 2017, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0,778], WOS:000426412300045
Ris 30	E. Istrate, M.I. Petrescu, G. Iacob, T. Buzatu, G.V. Ghica, M. Buzatu, F. Niculescu, Extraction and separation of non-ferrous and precious metals from waste of electrical and electronic equipment through ferric sulfate leaching and electrolysis, Journal of Chemical Technology & Biotechnology, 93(10), p.2878-2886, 2018, , [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 2,587], WOS:000443943700009
Ris 31	F.Niculescu, B.Florea, M.Buzatu, G.V.Ghica, M.I.Petrescu, G.Iacob, E.Niculescu, D.F.Marcu, C.D.Stăncel, Visual Basic Applicatin for Calculation of the Superficial Tension of Solutions in the CuSO ₄ -H ₂ SO ₄ -H ₂ O System, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.80, No.2, 249-261, 2018, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000434271500021
Ris 32	L.R.Bivol, G.V.Ghica, M.Buzatu, M.I.Petrescu, G.Iacob, E.Vasile, D.Gheorghe, T.A.Kovacs, Metallographic Study of XIX Century Oklads Belonging to Russian Icons, Euroinvent ICIR 2018, IOP Conf.Series:Materials Science and Engineering 374 (2018) 012076, doi:10.1088/1757-899X/374/1/012076, WOS:000446775900076

Ris 33	D.F.Marcu, M.Buzatu, G.V.Ghica, M.I.Petrescu, G.Popescu, F.Niculescu, G.Iacob, Experimental Characterization of Aluminium Obtained Through Powder Metallurgy, Euroinvent ICIR 2018, IOP Conf.Series:Materials Science and Engineering 374 (2018) 012036, doi:10.1088/1757-899X/374/1/012036, WOS:000446775900036
Ris 34	D.A. Ardeleanu, V.G. Ghica, M. Buzatu, M.I. Petrescu, G. Iacob, J. Novak, T.A. Kovacs, M. Buțu, Analysis of the automotive piston using finite element method, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.80, No.3, 195-206, 2018, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000440890800017
Ris 35	A.M. Turcu, V.G. Ghica, F. Veglio, M. Buzatu, M.I. Petrescu, G. Iacob, I. Bîrloagă, Catalytic paste solubilization researches regarding the cobalt recovery from used Li-Ion batteries – ANOVA application, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.80, No.3, 183-194, 2018, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000440890800016
Ris 36	M. Buzatu, V. Geantă, R. Ștefănoiu, M. Buțu, M.I. Petrescu, M. Buzatu, I. Antoniac, G. Iacob, F. Niculescu, Ș.I. Ghica, H. Moldovan, Investigations into Ti-15Mo-W Alloys Developed for Medical Applications, Materials, 12(1), 147, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 2.467], WOS:000456410200147
Ris 37	M. Buzatu, V. Geantă, R. Ștefănoiu, M. Buțu, M.I. Petrescu, M. Buzatu, V.G.. Ghica, F. Niculescu, G. Iacob, Influence of the Tungsten Content on the Elastic Modulus of New Ti-15Mo-W Alloys Intended for Medical Applications, The Journal of The Minerals, Metals and Materials Society (JOM), 71(7), 2272-2279, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 2.305], WOS:000471617100012
Ris 38	M. Buzatu, V. Geantă, R. Ștefănoiu, M. Buțu, M.I. Petrescu, M. Buzatu, S.I. Ghica, I. Antoniac, G. Iacob, F. Niculescu, D.F. Marcu, H. Moldovan, Mathematical Modeling for Correlation of the Resistance to Compression with the Parameters Md, Bo and e/a, for the Design of Titanium β Alloys Developed for Medical Applications, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.81, No.1, 183-192, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000465035300016
Ris 39	I.R. Bivol, E. Vasile, D. Gheorghe, V.G. Ghica, M. Buzatu, M.I. Petrescu, T.A. Kovacs, G. Iacob, Analysis by Optical and Electronic Microscopy on the Silver Oklad of St. Andrew Icon (Romanian Art, 19 th Century), Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.81, No.3, 139-148, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000487215400014
Ris 40	C.A. Manea, I. Csaki, L.E. Geambazu, F. Miculescu, M.I. Petrescu, F. Faniccia, M. Sohaciu, L. Roșu, HfNbTaZr High Entropy Alloy Processed by Mechanical Alloying, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.81, No.3, 201-208, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000487215400020
Ris 41	E.R.F. Mojaveri, T. Buzatu, M. Butu, M.I. Petrescu, F. Niculescu, G. Iacob, M.M. Stanescu, Recovery of Copper by Electrolysis of Solutions Obtained from the Solubilization of Polymetallic Concentrates from WPCBs, Sci.Bull. UPB, series B (Chemistry and Materials Science), 81(4), 227-236, 2019, [ISI-Web of Science/Science Citation Index Expanded, Factor de impact: 0.100], WOS:000501994100021
Ris 42	C. Carata, E. Vasile, V.G. Ghica, M.I. Petrescu, G. Iacob, M. Buzatu, Recovery of Silver from Waste Silver Oxide Button Cells – Part I: Characterization of Active Material, Romanian Journal of Materials, 50(2), 191-197, 2020, Factor de impact: 0.628 , WOS:000538152900005
Ris 43	C. Carata, E. Vasile, V.G. Ghica, M.I. Petrescu, G. Iacob, M. Buzatu, Recovery of Silver from Waste Silver Oxide Button Cells – Part II: Obtaining Silver Chloride Material, Romanian Journal of Materials, 50(3), 354-360, 2020, Factor de impact: 0.628 , WOS:000573097800008
Ris 44	V.G. Ghica, E. Vasile, C.I. Covaliu, D. Gheorghe, M.I. Petrescu, G. Iacob, M. Buzatu, Analysis of a Painting Made on Metal Suport in order to Establish Paternity, Romanian Journal of Materials, 50(3), 320-330, 2020, Factor de impact: 0.628 , WOS:000573097800004
Ris 45	I. Bratosin, V.G. Ghica, M. Buzatu, M.I. Petrescu, G. Iacob, T.N. Kovacs, A.D. Necșulescu, Separation Process Optimization of the Paste from the Aluminium Cathode, in the Process of Recovery of Cobalt from Used Batteries, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.82(3), 199-210, 2020, WOS:000610098500017
Ris 46	C.D. Stancel, M. Buzatu, V.G. Ghica, M.I. Petrescu, G. Popescu, F. Niculescu, G. Iacob, D.F. Marcu, The Pressing-Sintering Process for the Production of Al/Al ₂ O ₃ /Gr Hybrid Composites, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.82(1), 199-208, 2020, WOS:000550837300017

Ris 47	Antoniac, R. Adam, A. Biță, M. Miculescu, O. Trante, M.I. Petrescu, M. Pogărașanu, Comparative I Assessment of In Vitro and In Vivo Biodegradation of Mg-1Ca Magnesium Alloys for Orthopedic Applications, Materials, 14(84), 2021, WOS: 000606152800001
Ris 48	E. Niculescu, G. Iacob, F. Niculescu, I. Pencea, M. Buzatu, M.I. Petrescu, D.F. Marcu, R.N. Turcu, V. Geantă, M. Buțu, Experimental Determination of the Activities of Liquid Bi-Sn Alloys, Journal of Phase Equilibria and Diffusion, 42, 278–289, 2021, WOS: 000639616800001
Ris 49	C.A. Manea, M.Sohaciu, R. Ștefănoiu, M.I.Petrescu, M.V. Lungu, I. Csaki, New HfNbTaTiZr High-Entropy Alloy Coatings Produced by Electrospark Deposition with High Corrosion Resistance, Materials, 14(15), 2021, WOS: 000682111500001
Ris 50	M. Muscalu, V.G. Ghica, G. Iacob, M.I. Petrescu, M. Buzatu, STUDIES AND RESEARCH ON WASTE MoSi ₂ HEATING ELEMENTS, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.83(1), 239-248, 2021, WOS: 000627764100022
Ris 51	E.L. Niculescu, M. Buzatu, M.I. Petrescu, M. Buțu, G. Iacob, F. Niculescu, B. Florea, D.F. Marcu, C.D, Stăncel, M.M.Stănescu, THERMODYNAMIC CALCULATION OF THE BINARY SYSTEMS Bi-Sn BY IMPLEMENTING A JAVA INTERFACE, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.83(1), 219-228, 2021, WOS: 000627764100020
Ris 52	S.I. Ghica, C.M. Cotrut, M. Buzatu, V. Geanta, V.G. Ghica, M.I. Petrescu, G. Iacob, E. Ungureanu, EVALUATION OF THE CORROSION RESISTANCE OF Ti-Mo-W ALLOYS IN SIMULATED BODY FLUID (SBF), Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.84(1), 189-198, 2022, WOS: 000813376200014
Ris 53	I. Antoniac, V. Manescu (Paltanea), G. Paltanea, A. Antoniac, I.V. Nemoianu, M.I. Petrescu, H. Dura, A.D. Bodog, Additive Manufactured Magnesium-Based Scaffolds for Tissue Engineering, Materials, 15(23), 8693, 2022, WOS:000897445600001
Ris 54	V.G. Ghica, G. Iacob, M.I. Petrescu, I. Bratosin, A. Vasile, I.G. Scarlat, Li-Ion Batteries - An Important Component in Critical Infrastructure Protection, SECURITY-RELATED ADVANCED TECHNOLOGIES IN CRITICAL INFRASTRUCTURE PROTECTION: THEORETICAL AND PRACTICAL APPROACH, Book Series NATO Science for Peace and Security Series C-Environmental Security, 271-283, 2022, WOS:000865860300024
Ris 55	M. Buzatu, M.I. Petrescu, V. Geantă, R. Ștefănoiu, M.Buzatu, M. Buțu, G. Iacob, F. Niculescu, FULL FACTORIAL DESIGN FOR Ti-Mo-W BETA ALLOYS TO CORRELATE THE MODULUS OF ELASTICITY WITH THE MATERIAL PARAMETERS Md, Bo AND e/a, Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.84(4), 181-190, 2022
Ris 56	Pencea, I; Turcu, RN; Popescu-Argeș, AC; Timis, AL; Priceputu, A; Ungureanu, C; Matei, E; Nedelcu, L; <u>Petrescu, MI</u> ; Niculescu, F, An improved balanced replicated sampling design for preliminary screening of the tailings ponds aiming at zero-waste valorization. A Romanian case study, JOURNAL OF ENVIRONMENTAL MANAGEMENT, Volume 331, 2023, WOS:000964753800001
Ris 57	Valcea, AE; Maris, I; Negrea, AD; Cimpoesu, N; Garbea, G; Grecu, D; Moga, SG; Istrate, B; Finta, FN; Rizea, AD; Anghel, DC; Munteanu, C; <u>Petrescu, MI</u> ; Abrudeanu, M, Interdisciplinary Research on Medieval Fresco Subjected to Degradation Processes in the Corbii de Piatra Cave Church, MATERIALS, Volume 16, Issue15, 2023, WOS:001045733600001
Ris 58	Ștefan-Ioan Ghica, Valeriu-Gabriel Ghica, <u>Mircea-Ionuț Petrescu</u> , Gheorghe Iacob, Victor Geantă, Mihai Buzatu, Elena Ungureanu, “Design of Ti-Mo-W Alloys and Its Correlation with Corrosion Resistance in Simulated Body Fluid (SBF)”, MATERIALS, vol. 16, nr. 6, art. nr. 2453, 2023, WOS:000960486600001
Ris 59	Valcea, AE; Grecu, D; Maris, I; Negrea, AD; Cimpoesu, N; Giugea, D; Istrate, B; Munteanu, C; Moga, SG; Anghel, DC; Rizea, AD; <u>Petrescu, MI</u> ; Abrudeanu, M, The Characterization of a Fragment of a Medieval Fresco from Corbii de Piatra Cave Church, APPLIED SCIENCES-BASEL, Volume 13, Issue8, 2023, WOS:000977806700001
Ris 60	Matei, AA; Turcu, RN; Pencea, I; Hergheliegiu, E; <u>Petrescu, MI</u> ; Niculescu, F, Comparative Characterization of the TiN and TiAlN Coatings Deposited on a New WC-Co Tool Using a CAE-PVD Technique, CRYSTALS, Volume 13, Issue1, DOI10.3390/cryst13010112, Article Number 112, 2023, WOS:000914677600001
Ris 61	Ana Vasile, Valeriu-Gabriel Ghica, <u>Mircea-Ionuț Petrescu</u> , Florentina Niculescu, Ramona-Nicoleta Turcu, Maria-Elena Enache, Gheorghe Iacob, “Physical separation and recycling-oriented characterization of metallic material contained in spent NiMh batteries”, U.P.B. Sci. Bull., Series B, vol. 85, nr. 2, 2023, WOS:001015437100012
Ris 62	Iacob G., Ghica V.G. , Niculescu F., Petrescu M.I., Vasile A., Processing and Characterization of Spent Nickel-Metal Hydride Type AA Batteries to Recover Valuable Materials (Cobalt, Nickel and Rare Earth Elements), MATERIALS, 17(9),2024, WOS:001332406300001

Ris 63	Arva E..U., Abrudeanu M., Negrea D.A., Galatanu A., Galatanu M., Rizea A.D., Anghel D.C., Branzei M., Jinga A.I., Petrescu M.I., Experimental Research on the Influence of Repeated Overheating on the Thermal Diffusivity of the Inconel 718 Alloy, APPLIED SCIENCES-BASEL, 14(18), 2024, WOS:001323989500001
Ris 64	Arva E.R.U., Negrea D.A., Galatanu A., Galatanu M., Moga S.G., Anghel D.C., Branzei M., Stoica L., Jinga A.I., Petrescu M.I., Munteanu C., Abrudeanu M., The Influence of Cyclic Thermal Shocks at High Temperatures on the Microstructure, Hardness and Thermal Diffusivity of the Rene 41 Alloy, MATERIALS 17(10), 2024, WOS:001231559300001
Ris 65	Niculescu F., Pencea I., Iacob G., Ghita M., Stanescu M.M., Petrescu M.I., Niculescu E.L., Butu M., Stancel C.D., Serban N., Solea R.M., Ilie A.A., Thermodynamic Assessment of Molten Bi-Sn1-x (x=0.1 to 0.9) Alloys and Microstructural Characterization of Some Bi-Sn Solder Alloys, MATERIALS 17(7), 2024, WOS:001201626400001
Ris 66	Iacob G., Ghica V.G., Petrescu M.I., Niculescu F., Butu M., Stancel C.D., Stanescu M.M., Ilie A.A., RESEARCH ON THE DEVELOPMENT AND CHARACTERIZATION OF Bi-Sn, Bi-Sn-Sb AND Bi-Sn-Ag SOLDER ALLOYS, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE 86(1), 2024, WOS:001196525500014
Ris 67	Vasile A., Ghica V.G., Iacob G., Petrescu M.I., Mihailov E., Patroi D., RECYCLING Ni-MH BATTERIES USED IN MEDICAL DEVICES. PART I - INVESTIGATIONS ON THE CONTENTS OF Ni-MH BATTERIES, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE 86(2), 2024, WOS:001247485400018
Ris 68	Vasile A., Ghica V.G., Iacob G., Petrescu M.I., Mihailov E., Patroi D., RECYCLING Ni-MH BATTERIES USED IN MEDICAL DEVICES. PART II - INVESTIGATIONS ON THE CONTENTS OF Ni-MH BATTERIES, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE 86(2), 2024, WOS:001250906300003
Ris 69	Jinga AI, Abrudeanu M, Radu, Nitu A, Stoica L, Toma D, Petrescu MI, Evaluation of the Zirconium Hydride Morphology at the Flaws in the CANDU Pressure Tube Using a Novel Metric, Volume 15, Issue 2, 2025, WOS:001404012500001
Ris 70	Abrudeanu M, Simion CA, Valcea AE, Ilie MV, Ispas EA, Marin ML, Mirea DA, Olteanu DC, Manailescu C, Petre AR, Negrea DA, Moga SG, Maris I, Grecu D, Garbea G, Finta FN, Petrescu MI, Radiocarbon Dating of Mortar Fragments from the Fresco of a Romanian Monastery: A Field Study, Volume 18, Issue 5, 2025, WOS:001442581500001
Ris 71	Rizea AD, Ungureanu ERA, Negrea DA, Moga SG, Abrudeanu M, Petrescu MI, Stefanoiu R, Haeussler A, Anghel DC, Constantinescu LM, The Influence of Accidental Overheating on the Microstructure and Hardness of the Inconel 718 Alloy, Volume 15, Issue 6, 2025, WOS:001453533000001

:(AP) – Autor principal

Risb - Reviste de specialitate de circulație internațională recunoscute (indexate in alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta).

Risb1.	M.I. Petrescu, <i>The quasicrystals: nature and possibilities of structural description</i> , Bul. IPB, seria Chim-Met., tom LIII, nr.1-2, 1991, 129-136, ISSN 1454-2331; Recenzii/Indexari: INSPEC
Risb2.	M.I. Petrescu, <i>Higher dimensional crystallographic description of quasicrystals</i> , Bul. IPB, seria Chim-Met., tom LIII, nr.1-2, 1991, 165-170, ISSN 1454-2331; Recenzii/Indexari: INSPEC
Risb3.	M.I. Petrescu, <i>Diffraction modalities in higher dimensional crystallographic description of quasicrystals</i> , Bul. IPB, seria Chim-Met., tom LIII, nr.3-4, 1991, 151-157, ISSN 1454-2331; Recenzii/Indexari: INSPEC
Risb4.	M.I. Petrescu, N. Petrescu, <i>Unidirectional solidification equipment to grow eutectic composite materials</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.1-2, 1999, 137-147, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb5.	M.I. Petrescu, Liliana Pavel, N. Petrescu, <i>Chalcogenide comprising composite materials obtained by unidirectional solidification of eutectic melts</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.1-2, 1999, 157-165, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb6.	Lucia Ganovici, N. Petrescu, Gh. Urs, M.I. Petrescu, <i>Extraction kinetics of uranium by means of di-2-ethyl-hexyl phosphoric acid impregnated resins</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.1-2, 1999, 199-207, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb7.	M.I. Petrescu, <i>Quantitative possibilities for converting the Mohs mineralogical hardness numbers into microhardness values obtained by indentation techniques</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.1-2, 1999, 223-232, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS

Risb8.	M.I. Petrescu, <i>Self consistency between the Mohs hardness and the Vickers microhardness for some sulphides and sulphosalts</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.3-4, 1999, 145-151, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb9.	M.I. Petrescu, <i>An analysis of the factors controlling the accuracy of the indentation microhardness measurements</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.3-4, 1999, 173-179, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb10.	M.I. Petrescu, <i>The microhardness load size dependence in a group of hard sulphidic minerals comprising gersdorffite, arsenopyrite, cobaltite, marcasite and pyrite</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.3-4, 1999, 197-205, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb11.	M.I. Petrescu, <i>Effect of the load size dependence on Vickers microhardness in a group of soft sulphidic minerals comprising acanthite, molybdenite, auripigment, realgar and cinnabar</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.61, No.3-4, 1999, 231-238, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb12.	M.I. Petrescu, <i>Vickers microhardness and its load size dependence in a group of twelve sulphides and sulphosalts of intermediate hardness</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), ISSN 1454-2331, Vo.62, No.1, p.67-78, 2000, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb13.	M.I. Petrescu, <i>Extent of anisotropy effect and of indentation load size effect on Vickers microhardness in Sb₂S₃ and Bi₂S₃ anisodesmic minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.62, No.2, 2000, 79-88, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb14.	M.I. Petrescu, <i>The Kick law validity and the load size dependence effect in indentation microhardness tests for a representative group of sulphidic minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.62, No.3, 2000, 69-78, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb15.	M.I. Petrescu, <i>The power law applied to microhardness tests performed on a group of twenty four sulphidic minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.62, No.4, 2000, 83-92, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb16.	M.I. Petrescu, <i>A possible interpretation of the exponent in the Meyer law for microhardness in a group of sulphidic minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.63, No.1, 2001, 51-56, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb17.	M. Fecioru, M.I. Petrescu, E. Jianu, <i>Natural and synthetic diamonds: crystallography, synthesis, application</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.63, No.2, 2001, 37-48, ISSN 1454-2331; Recenzii/Indexari: INSPEC
Risb18.	M.I. Petrescu, <i>Analysis of the factors involved in deriving a theoretical hardness from crystallochemical data for mineral and ceramic compound</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.63, No.4, 2001, 61-72, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb19.	M.I. Petrescu, <i>Theoretical hardness for two anisodesmic minerals : molybdenite and stibnite</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.64, No.1, 2002, 67-76, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb20.	M.I. Petrescu, M. Fecioru, <i>The interatomic spacing, a key crystallo-chemical factor for the theoretical hardness of diamond and graphite</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.64, No.3, 2002, 49-58, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb21.	M.I. Petrescu, Rodica Roman, <i>A mineralogical study on the constitution of slags resulted from flash smelting of romanian copper sulfide ores</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.64, No.4, 2002, 27-36, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb22.	M.I. Petrescu, <i>Contributions to the theoretical hardness of modern carbon allotropes</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.65, No.1, 2003, 37-48, ISSN 1454-2331; Indexari: INSPEC, SCOPUS
Risb23.	M.I. Petrescu, <i>Nanohardness and microhardness: Some specific mechanical effects</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.65, No.3, 2003, 43-54, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb24.	M.I. Petrescu, <i>A correlation between crystallochemical features and mechanical behaviour of solid lubricants</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.65, No.4, 2003, 83-92, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb25.	M.I. Petrescu, <i>A theoretical model for including the ISE effect in the Kick law applied to microhardness data of sulfides minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.67, No.1, 2005, 39-46, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb26.	M.I. Petrescu, <i>The exponent in the modified quadratic law for indentation hardness of sulfide minerals</i> , Sci.Bull. UPB, series B (Chemistry and Materials Science), Vo.67, No.2, 2005, 71-82,

	ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb27.	H. Ispas, M.I. Petrescu, M. Muşu-Coman, E. Jianu, <i>Correlating the type of metal bond in diamond sintered tools with the mineralogical nature of processed ornamental stones</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.68, No.1, 2006, 75-84, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb28.	M. Muşu-Coman, H. Ispas, M.I. Petrescu, E. Jianu, <i>Improved retention of surface treated diamonds in sintered tools for processing ornamental stones</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.68, No.4, 2006, 47-56, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb29.	M.I. Petrescu, Mădălina-Gabriela Balint, <i>Structure and properties modifications in boron nitride. Part I: Direct polymorphic transformations mechanisms</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.69, No.1, 2007, 35-42, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb30.	M.I. Petrescu, Mădălina - Gabriela Balint, <i>Structure and properties modifications in boron nitride. Part II: Hardness modification induced by the polymorphic transformations</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.69, No.1, 2007, 43-52, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb31.	Mădălina - Gabriela Balint, M.I. Petrescu, <i>Crystallographic features of hBN as a precursor in the cBN high-temperature-high pressure synthesis</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), Vo.69, No.2, 2007, 79-90, ISSN 1454-2331; Recenzii/Indexari: INSPEC, SCOPUS
Risb32.	M. Pasăre, M.I. Petrescu, M. Abrudeanu, <i>Analytical modeling of hardness NiP material</i> , „Constantin Brâncuşi” – Târgu Jiu - University's Annals (engineering series), no.3, 2009, 86-89, ISSN 1842-4856, Recenzii/Indexari: Copernicus, EBSCO,
Risb33.	M. Pasăre, M.I. Petrescu, J.P. Bonino, <i>Proprietes of coatings NiP/SiC by treatment to 190 °C reflected in the hardness</i> , Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume VI (XVI), 2007, 1680-1683, ISSN 1583 – 0691; Recenzii/Indexari: Google scholar, IISS, Index Copernicus, INTUTE, ICAAP, Ulrichs WEB
Risb34.	M. Abrudeanu, M. Pasăre, M.I. Petrescu, <i>Mechanical properties correlated to structure for Ni-P/SiC composite surface coatings</i> , University of Piteşti Scientific Bulletin, Automotive series, XV, no.19. vol.A, 2009, 9-16, ISSN 1453-1100, Recenzii/Indexari: Copernicus, Google scholar
Risb35.	A.G. Plăiaşu, M. Abrudeanu, M.I. Petrescu, C. Monty, <i>Characterization of Al doped ZnO nanopowders obtained by hydrothermal synthesis and solar physical vapor deposition</i> , University of Piteşti Scientific Bulletin, Automotive series, XV, no.19. vol.A, 2009, 107-112, ISSN 1453-1100, Recenzii/Indexari: Copernicus
Risb36.	A.G. Plăiaşu, M. Abrudeanu, M.I. Petrescu, <i>Studies regarding the elaboration of nanometric zinc oxide powders</i> , University of Piteşti Scientific Bulletin, Automotive series, XV, no.19. vol.A, 2009, 113-116, ISSN 1453-1100, Recenzii/Indexari: Copernicus, Google scholar
Risb37.	M. Pasăre, N.M. Mihuţ, M.I. Petrescu, <i>"The processing of hardness coatings Ni-P/SiC heat treated at 300 °C with a mathematical model"</i> , Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume IX (XIX), 2010, 3173-3176, ISSN 1583 – 0691; Recenzii/Indexari: Google scholar, IISS, Index Copernicus, INTUTE, ICAAP, Ulrichs WEB
Risb38.	Cinca I., M.I. Petrescu, <i>Deformation behaviour of commercially Ti grade 2 alloy</i> , Metalurgia International, vol XVIII (2013), nr. 5, 2013, 78-80, Recenzii/Indexari: Proquest, EBSCO
Risb39.	Cinca I., M.I. Petrescu, <i>Microstructural changes occurred during thermomechanical processing of Ti-6Al7Nb alloy</i> , Metalurgia International, vol XVIII (2013), nr. 5, 2013, 84-86, Recenzii/Indexari: Proquest, EBSCO
Risb40.	G. Bădănoiu, T. Buzatu, V.G. Ghica, M. Buzatu, Gh. Iacob, M.I. Petrescu, <i>Study of PbSO₄ solubilisation in NaOH solution, for the treatment of oxide-sulphate pastes obtained from dismembered lead-acid batteries</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), ISSN 1454-2331, Vo.76, No.1, p. 209-218, 2014
Risb41.	M.I. Petrescu, H. Ispas, M. Muşu-Coman, <i>Industrial diamond application in cutting ornamental rocks</i> , Romanian Journal of Mineral Deposits, vol. 87 (2), p. 23-26, 2014.
Risb42.	S. Adam, M. Buzatu, M.I. Petrescu, <i>Thermoelectric power for liquid Ti-S alloys correlated to the phase diagram</i> , Sci.Bull.UPB, series B (Chemistry and Materials Science), ISSN 1454-2331, Vo.76, No.3, p. 181-194, 2014
Risb43.	C.M.Toma, V.G.Ghica, Gh.Iacob, M.Buzatu, M.I.Petrescu, E.Vasile, <i>Research on Useful Metal Recovery from Spent Li-Ion Batteries</i> , Journal of Materials Science and Technology, 5 (2), 71-79, 2017, ISSN 0861-9786.
Risb44.	I. Bratosin, V.G. Ghica, M.I. Petrescu, M. Buzatu, A.D. Neculescu, Gh. Iacob, <i>Recycling Li-ion batteries in eco-friendly environments</i> , HADITEHNIKA LIV(5), 8-14, Google Scholar, 2020
Risb45.	I.O. Marcosan, V.G. Ghica, M.I. Petrescu, G. Iacob, <i>INCREASING THE PRODUCTIVITY OF THE ELDAN INSTALLATION—CASE STUDY</i> , Acta Technica Corviniensis-Bulletin of Engineering,

	14(3), 89-92, 2021
Risb46	I.O. Marcosanu, V.G. Ghica, M.I. Petrescu, G. Iacob, PROCESSING OF ALUMINUM CABLES USING THE ELDAN INSTALLATION, ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering Tome XV (1), 49-52, 2022

Rns - Reviste de specialitate de circulație națională recunoscute de CNCSIS.

Rns1.	Gh. Popescu, M.I. Petrescu, <i>Contribuții la studiul optic cantitativ și cu microsonda electronică a unor sulfosăruri de la Herja (M-ții Gutâi)</i> , Studii și Cercetări de Geologie, Geofizică și Geografie, seria Geologie, Academia Română, tom 34, 1989, 15-19, ISSN 0567-6096
Rns2.	V. Macaleț, M.I. Petrescu, C. Moga, I. Podașcă, V. Lateș, <i>Polymetallic sulphide mineralisations from Puiu-Suhăzel zone (East Carpathians)</i> , An.Univ. București, seria Geologie, an XLIII, 1994, 27-38, ISSN: 1013-4123

Visb- Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a publicațiilor pe baza unor criterii de performanță.

Visb1.	Maria Petrescu, Mariana Călin, N. Petrescu, M.I. Petrescu, Mirela Brițchi, <i>High performance light metallic materials with nonconventional structures for mechanical building</i> , Proceedings of the CSME Forum SCGM 1998, 19-22 May, Toronto - Canada, vol.2, 366-373, ISBN 0-919351-67-0; Recenzii/Indexari: Google scholar
Visb2.	N. Petrescu, Lidia Cristea, M.I. Petrescu, <i>On the decomposition kinetics of the metastable supersaturated solid solution obtained by melt-quenching an Al-48 wt% Ni alloy</i> , Proceedings of the 7th European Conference on Advanced Materials and Processes EUROMAT-2001, 10-14 June 2001, Rimini – Italy, 307-308; Recenzii/Indexari: Google scholar
Visb3.	N. Petrescu, M.I. Petrescu, <i>L'étude des propriétés cinétiques de transport atomique, un point de liaison entre deux états amorphes de la matière : les alliages fondus et les verres métalliques</i> , Proceedings of the 26th Congress of the American Romanian Academy of Arts and Sciences (ARA Montreal – Canada 25-29 July 2001), Polytechnic International Press, 583-588, 2001, ISBN 2-553-00988-7; Indexari: Google scholar
Visb4.	Maria Petrescu, M. Fecioru, M.I. Petrescu, E. Jianu, <i>Crystal morphology of synthetic diamonds and crystallochemical bases of diamond hardness</i> , Proceedings of the 26th Congress of the American Romanian Academy of Arts and Sciences (ARA Montreal – Canada 25-29 July 2001), Polytechnic International Press, 605-610, 2001, ISBN 2-553-00988-7, p.605-610; Recenzii/Indexari: Google scholar
Visb5.	N. Petrescu, N. Dinciu, M. Fecioru, M.I. Petrescu, <i>Diamond versus granite: a manifold technical challenge</i> , Proceedings of the 27-th Congress of the American Romanian Academy of Arts and Sciences (ARA Oradea – Romania June 2002), Polytechnic International Press, 799-802, ISBN: 2-553-01024-9; Indexari: Google scholar
Visb6.	N. Petrescu, M. Pasăre, F.D. Duminiță, M.I. Petrescu, <i>New materials obtained by applying thin surface coatings</i> , Pro-active partnership in creativity for the next generation – Proceedings on the 31-st Annual Congress of the American Romanian Academy of Arts and Science, 31 iulie-5 august 2007, Universitatea Transilvania Brasov, Presses Internationales Polytechnique Quebec, Canada, 174-177, ISBN 978-2-553-01412-3; Recenzii/Indexari: Google scholar
Visb7.	M. Pasăre, M.I. Petrescu, M. Abrudeanu, M. Petrescu, <i>Wear resistant electroplated microcomposite coatings</i> , Pro-active partnership in creativity for the next generation – Proceedings on the 31-st Annual Congress of the American Romanian Academy of Arts and Science, 31 iulie-5 august 2007, Universitatea Transilvania Brasov, Presses Internationales Polytechnique Quebec, Canada, 178-181, ISBN 978-2-553-01412-3; Recenzii/Indexari: Google scholar
Visb8.	H. Ispas, M.I. Petrescu, M. Mușu-Coman, M. Petrescu, <i>Surface treated diamonds inserted in cutting tools for ornamental rocks processing</i> , Proceedings on the 33-rd Annual Congress of the American Romanian Academy of Arts and Science (ARA), 2-7 iunie 2009, Alma Mater University of Sibiu, Polytechnic International Press Montreal-Québec, 372-375, ISBN 978-2-553-01412-3; Recenzii/Indexari: Google scholar
Visb9.	N. Petrescu, M.I. Petrescu, M. Pasăre, M. Abrudeanu, <i>New hypostases of nickel coatings from aqueous solutions</i> , Proceedings on the 33-rd Annual Congress of the American Romanian Academy of Arts and Science (ARA), 2-7 iunie 2009, Alma Mater University of Sibiu, Polytechnic International Press Montreal-Québec, 376-380, ISBN 978-2-553-01412-3; Recenzii/Indexari: Google scholar
Visb10.	L.R. Bivol, V.G. Ghica George, International Conference on Inovative Research, ICIR Euroinvent 2019, IOP Conf.Series:Materials Science and Engineering 572 (2019) 012097, doi:10.1088/1757-899X/572/1/012, M. Buzatu, M.I. Petrescu, G. Iacob, E. Vasile, D. Gheorghe, T.A. Kovacs,

	Metallographic Analisys of Icon Okland – St, Great Martyr 097,
Visb11.	I Bratosin, C.M. Toma, E. Vasile, V.G. Ghica, M. Buzatu, M.I. Petrescu, T.A. Kovacs, A.D. Necşulescu, G. Iacob, Recovery of LiCoO ₂ Compound from Cathodic Paste of Waste LIBs, by Ultrasonography in Lactic Acid Solution, International Conference on Inovative Research, ICIR Euroinvent 2019, IOP Conf.Series:Materials Science and Engineering 572 (2019) 012053, doi:10.1088/1757-899X/572/1/012053,
Visb12.	Ş.I. Ghica, C.M. Cotruţ, M. Buzatu, I.V. Antoniac, V. Geantă, M. Buţu, M.I. Petrescu, R. Ştefănoiu, E. Ungureanu, G. Iacob, R.N. Ionescu, In Vitro Corrosion Behavior of Ti-Mo-W Alloys in Artificial Saliva, International Conference on Inovative Research, ICIR Euroinvent 2019, IOP Conf.Series:Materials Science and Engineering 572 (2019) 012028, doi:10.1088/1757-899X/572/1/012028,
Visb13.	L.R. Bivol, V.G. Ghica, M.I. Petrescu, G. Iacob, E. Vasile, M. Buzatu, D. Gheorghe, T.A. Kovács, Studies on Two Icons Oklads with the Representation of St. Great Martyr George, International Conference on Innovative Research - ICIR EUROINVENT 2020, IOP Conf. Series: Materials Science and Engineering 877 (2020) 012047, Scopus, 2020
Visb14.	I. Bratosin, V.G. Ghica, M.I. Petrescu, M. Buzatu, G. Iacob, A.D. Necşulescu, Researches on the recovery of useful metals from spent Li-Ion batteries, IOP Conference Series: Materials Science and Engineering, Volume 1037, 012039, 24th Innovative Manufacturing Engineering and Energy International Conference (IManEE 2020) 14th-15th December 2020, Athens, Greece. 2021

Vi - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

Vi1.	M.I. Petrescu, <i>Competiție structurală între solidele cristaline și solidele amorphe, - o abordare termodinamică</i> , Vol. Simpozion Internațional TPSRM'98, 30-31 octombrie 1998 București, 196-199
Vi2.	M.I. Petrescu, <i>Aspecte cristalografice ale materialelor nanocristaline</i> , Vol. Simpozion Internațional TPSRM'98, 30-31 octombrie 1998 București, 206-210
Vi3.	Maria Petrescu, M.I. Petrescu, <i>Unusual structures in metallic materials and their design: amorphous, quasicrystalline, nanocrystalline</i> , Acta Universitatis Cibiniensis, tom XXXIV, 1999, 228-236, (Beyond 2000 International Conference, 25-26 nov. 1999, Sibiu), ISSN 1221-4949
Vi4.	M.I. Petrescu, <i>About the Meyer exponent in the indentation microhardness determination</i> , Acta Universitatis Cibiniensis, , tom XXXIV, 1999, 237-241, (Beyond 2000 International Conference, 25-26 nov. 1999, Sibiu), ISSN 1221-4949
Vi5.	M.I. Petrescu, <i>A reliable possibility to obtain fiber aligned microcomposites for functional and structural application</i> , Proceedings of the Third International Conference on Materials and Manufacturing Technologies MATEHN 2002, 12-14 sept. 2002 Cluj Napoca, Acta Technica Napocensis, vol.45, 2002, 254-259, ISSN-1221-5872
Vi6.	M.I. Petrescu, <i>Hardness dependence on interatomic forces and anisotropy in anisodesmic semiconductor sulfides</i> , Third International Conference on Materials and Manufacturing Technologies MATEHN 2002, 12-14 sept. 2002 Cluj Napoca, Acta Technica Napocensis, vol.45, 2002, 260-265, ISSN-1221-5872
Vi7.	N. Petrescu, Rozalia Rădulescu, Adelina Sporea, M.I. Petrescu <i>Experimental researches on gold extraction from refractory ores by means of non- polluting technologies</i> , Proceedings of the International Conference on Materials Science & Engineering -BRAMAT 2003- 13-14 March, Brasov, vol.1, 93-98, ISBN 973-635-122-X, 973-635-124-6
Vi8.	M.I. Petrescu, Mariana Călin, Maria Petrescu, <i>Nanomaterials and nanocrystallisation</i> , Proceedings of the 28-th Congress of the American Romanian Academy of Arts and Sciences, Section Physics and Chemistry, ARA Tg. Jiu – Romania 3-8 June, 1087-1090, 2003.
Vi9.	F. Maury, N. Petrescu, F.D. Duminiță, Liliana Dumitrescu, M.I. Petrescu, <i>Recherches sur la formation des revêtements en nitrure de chrome et en nitrure de titane</i> , Proceedings of International conference on advanced materials and technologies ROMAT 2004, Bucharest, 21-22 oct. 2004, 146-155, 2004, ISBN 973-718-081-X
Vi10.	H. Ispas, M. Mușu- Coman, M.I. Petrescu, E. Jianu, <i>Diamond reinforced sintered tools designed to process ornamental rocks</i> , Proceedings of the 7th International Conference on Technology and Sustained Development (TQSD) May 25-27 2006, Editura AGIR, 2006, Bucuresti, 127-132, ISBN 973-720-035-7
Vi11.	Minodora Maria Pasăre, M.I. Petrescu, Marioara Abrudeanu, <i>Hardness characterization of SiC / Ni-P surface coatings</i> , Proceedings of the 7th International Conference on Technology and Sustained Development (TQSD) May 25-27 2006, Editura AGIR, 2006, Bucuresti, 383-386, ISBN 973-720-035-7

Vn - Volumele unor manifestări științifice naționale.

Vn1.	M.I. Petrescu, <i>Structuri cvasicristaline aperiodice tratate prin cristalografia hiperdimensională</i> , Bul.St.Univ.Tehn. Cluj-Napoca (Conf. de tratamente termice și termochimice 17-19 sept. 1992), 98-101, ISSN 1224 – 9106
Vn2.	M.I. Petrescu, <i>Modalități de interpretare a structurii interne a unei noi faze mezomorte cvasicristaline din aliaje</i> , Bul.St.Univ. Pitești, (Sesiunea de comunicări științifice 21-22 nov. 1992 Pitești), 157-162, ISSN 1453-1100
Vn3.	M.I. Petrescu, <i>Sulphospinel from Băița Bihor: New occurrence in Romania</i> , Romanian Journal of Mineralogy, vol.77, 1995, (Second Symposium of Mineralogy 5-11 july 1993–Timișoara), 57-61, ISSN 1220-5621
Vn4.	V. Macaleț, M.I. Petrescu, <i>Consideration regarding the epigenetic mineralisations in Cărlibaba-Țibău zone (Bistriței Mountains)</i> , Journal of Mineral Deposits, vol. 77, 1996, (Second Symposium of Mineralogy 5-11 july 1993 – Timișoara, Romanian), 49-53, ISSN 1220-5621
Vn5.	Maria Petrescu, N. Petrescu, Mirela Brițchi, M.I. Petrescu, Liliana Pavel, <i>Metallic composites grown "in situ" by unidirectional solidification and by rapid solidification</i> , An.Univ.Buc. (Fizica), an XLVI, 1997, (Rom.Conf. of Advanced Materials 24-26 Nov. 1977), 178-189, ISSN 0254-8895
Vn6.	M.I. Petrescu, <i>Peculiarities of the Kick and Meyer law application for microhardness measurements in sulphidic minerals</i> , Proceedings of the National Scientific Conference Celebrating: -125 years of Romanian Metallurgical Education–TPSRM; -50 years of Romanian Metallurgical Research–CNM 2000 ICEM, 26-27 octombrie 2000 București, 474-478, ISBN 973-652-222-9
Vn7.	M.I. Petrescu, <i>The true hardness and the ISE effect in Vickers microhardness testing of sulphidic minerals</i> , Proceedings of the National Scientific Conference Celebrating: -125 years of Romanian Metallurgical Education–TPSRM; -50 years of Romanian Metallurgical Research–CNM 2000 ICEM, 26-27 octombrie 2000 București, 479-483, ISBN 973-652-222-9
Vn8.	E. Jianu, M. Fecioru, M.I. Petrescu, G. Băluță, <i>The utilization of cemented carbides in high pressure field</i> , Proceedings of the National Conference of Metallurgy and Materials Science – CNMSM 2001, 20-21 sept. 2001 – București, 454-459, ISBN 973-652-389-6
Vn9.	N. Petrescu, Rozalia Rădulescu, Adelina Sporea, M.I. Petrescu, <i>Study of the extraction kinetics of the aurochloric complex by means of the adsorbant resin XAD-7</i> , Proceedings of the National Conference of Metallurgy and Materials Science - CNMSM 2002 -, 10-11 oct. 2002 Bucharest, 63-68, ISBN 973-652-673-9
Vn10.	N. Dinciu, N. Petrescu, M. Fecioru, M.I. Petrescu, <i>Synthetic diamond crystals for metal bond tools used in hard working conditions</i> , Proceedings of the National Conference of Metallurgy and Materials Science - CNMSM 2002 -, 10-11 oct. 2002 Bucharest, 281-285, ISBN 973-652-673-9
Vn11.	Liana Vlăduțiu, N. Petrescu, D. Sotca, M.I. Petrescu, Fănică Bacalum, <i>New intermetallic compounds with directed structure and catalytic potential</i> , CERES Programe, Institute of Atomic Physics, Annual Scientific Sesion, Bucharest 2-3 dec. 2002, p.III213-III214
Vn12.	M. Abrudeanu, A.G. Plăiașu, M.I. Petrescu, C. Monty, <i>Oxidic nanopowders obtained by solar vapor deposition (SPDV)</i> , volumul Conferinței Naționale „Zilele Academice ale Academiei de Științe Tehnice din România – ediția a V-a”, Craiova 28-29 septembrie 2010, editura AGIR, 2010, 383-388, ISSN 2066-6586
Vn13.	M. Petrescu, H. Ispas, M.I. Petrescu, M. Mușu-Coman, <i>Investigation by electron microscopy of surface treated synthetic diamonds cutting ability</i> , volumul Conferinței Naționale „Zilele Academice ale Academiei de Științe Tehnice din România – ediția a V-a”, Craiova 28-29 septembrie 2010, editura AGIR, 2010, 407-412, ISSN 2066-6586
Vn14.	N. Petrescu, M. Abrudeanu, M. Pasăre, M.I. Petrescu, <i>Ni-P composite coatings on metallic parts obtained by electrochemical and electrocatalytic processes</i> , volumul Conferinței Naționale „Zilele Academice ale Academiei de Științe Tehnice din România – ediția a V-a”, Craiova 28-29 septembrie 2010, editura AGIR, 2010, 413-418, ISSN 2066-6586

VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

P – Proiecte de cercetare-dezvoltare-inovare obținute prin competiție, pe bază de contract/grant, în țară/străinătate (**Pi** – internaționale, **Pn** - naționale).

Pi - Proiecte internaționale de cercetare-dezvoltare-inovare obținute prin competiție, pe baza de contract/grant.

Pi1.	„Delivering Nanotechnologies, advanced Materials and Production to REGional manufacturing NMP-REG”, Interreg Europe Programe nr. 1208C/31.05.2016, Responsabil implementare, 2016
Pi2.	„Obtaining modified nanostructures in sulfide solid lubricating compounds (WS2 or MoS2) for surface coatings with improved tribological properties” - Solar Facilities for the European Research Area (SFERA) project no. 228296/2011; CIEMAT-PSA and the European Commission ; 2011 Responsabil.

Pn - Proiecte nationale de cercetare-dezvoltare-inovare obtinute prin competitie

Pn1.	„Promovarea stiintei si calitatii in cercetare prin burse doctorale- (PROSCIENCE)”, POSDRU nr.155420, 5486306 lei, 2015, Responsabil nucleu cercetare.
Pn2.	“Studiul mineralogic și geochimic al unor mineralizații de metale grele și al unor parageneze exotice din Carpații Meridionali”, Direcția Cercetare și Doctorat, Ministerul Învățământului, nr.5001C/B-206, 100000 lei, 1993, Responsabil.
Pn3.	Studii și cercetări privind mineralizările polimetalice epigenetice din zona cristalino-mezozoică a Carpaților Orientali”, beneficiar Ministerul Cercetării și Tehnologiei, nr. 1019 B, 1500000 lei, 1993, membru în echipă.
Pn4.	“Cercetări privind finisarea morfologică a aliajelor microcristaline și nanocristaline”, CNCSU, beneficiar Ministerul Învățământului - DGISCSU, nr.5001/A83, 6000000 lei, 1996, membru în echipă.
Pn5.	”Competiție structurală la formarea aliajelor amorphe cvasicristaline și microcristaline prin solidificare ultrarapidă”, beneficiar Consiliul Național de Cercetare Științifică Universitară - CNCSU, nr.7001/39, 10000000 lei, 1997, membru în echipă.
Pn6.	Catalizatori pentru sinteza organică fină pe bază de compuși intermetalici cu structură dirijată”, beneficiar Ministerul Educației și Cercetării - ANSTI, nr.496/2000, 5000000 lei, 2000, membru în echipă.
Pn7.	“Cercetări privind elaborarea unor noi tehnologii de procesare a minereurilor aurifere cu risc redus de poluare”, RELANSIN, beneficiar Institutul de Proiectări și Cercetări Metale Rare și Radioactive (ICPMRR S.A.), nr.1247/08.03.2001, 75000000 lei, 2001; membru în echipă.
Pn8.	“Noi compuși intermetalici cu structură dirijată și potențial catalitic” program CERES, nr. 134 / 16.10.2001, 100000000 lei; 2001 membru în echipă.
Pn9.	“Cercetări experimentale și de laborator privind obținerea prin metode noi de elaborare a combinațiilor intermetalice de tip Al-Me (Me=Ni, Co), program CERES, nr.134/2002, 100000000 lei, 2002 membru în echipă.
Pn10.	Metode noi de sinteză a materialelor compozite prin procese in situ, SITCOM, nr. 71-058/1/2007, 200000 lei, 2007, membru în echipă.
Pn11.	„Eco-Nano-Tehnologii pentru dezvoltarea unui modul cu dublă funcționalitate pe bază de nanofire”, POC nr. 49/05.09.2016, 2016, membru în echipă.

F - Rapoarte stiintifice

F1.	“Studiul mineralogic efectuat în scopul îmbunătățirii tratării hidrometalurgice a minereului de uraniu tip Crucea”, Regia Autonomă a Metalelor Rare (RAMR), Uzina R Feldioara, nr. 60-93-27, 150000 lei, 1993, Responsabil.
F2.	“Studiul mineralogic al minereurilor de la Roșia Poieni tratate prin procedee hidrometalurgice”, Institutul de Metale Neferoase și Rare (IMNR S.A.) București, nr.60-93-10, 400000 lei, 1993, Responsabil.
F3.	“Îmbunătățirea calității produsului finit în cadrul operațiilor de rafinare a concentratelor tehnice de uraniu”, beneficiar Compania Națională a Uraniului, Sucursala Feldioara, nr. 60.20.01 (4741 / 12.04.2000), 150000000 lei, 2000, membru în echipă.
F4.	“Recuperarea uraniului din apele uzate urmare a activității de extracție și procesare a minereurilor de uraniu”, beneficiar Compania Națională a Uraniului, Sucursala Feldioara, nr. 60.20.02 (4744 / 12.04.2000), 150000000 lei, 2000, membru în echipă

Data,
27.05.2025

Semnătura,
Prof.dr.ing. Petrescu Mircea Ionuț