

a) PhD Thesis: ZrO_2 and Al_2O_3 based Nanopowders and nanocomposites

b) Projects

Manager/Responsible

- a. EU Cofunded projects;
 - Re-generating (raw) materials and end-of-life products for re-use in Cement/Concrete (RECEMENT), UEFISCDI – European and International Cooperation, Subprogram 3.2. Horizon 2020, Contract No. 115/2019 (2019-2022) – Romanian Project manager;
 - Creating National Research Center for Food Safety CNpSA, ID 1970, SMIS 48652 (2014-2015) – Implementation Responsible;
- b. National Projects;
 - Nanostructured sondes for diagnostics, (2018-2020) – Component Project Responsible;
 - Advanced ceramic thermal barrier coatings developed by EB-PVD combinatorial deposition technique, (2017-2019) – Project Responsible;
 - Technologies for the recovery of sludge from urban waste water treatment plants and waste from waste dumps, (2017 – 2018) – Project Responsible.

Participant/Key Person in Project

No.	Project code	Title	Acronym
1	ERANET-MANUNET-AMMBI	Additive Manufacturing of Magnesiumbased Biodegradable Implants with Controlled Corrosion Rate and Infection	AMMBI
2	PN-III-P2-2.1-PED-2019-4813	Exploitation of the magnetic nanoparticles in developing magnetic micro-devices	Magnetic MicroDev
3	PN-III-P2-2.1-PED-2019-4018	Evaluation of the exploitation potential Potential of Porous Materials in the tREatment of Microbiota-related dISeasEs - PREMISE	PREMISE
4	PN-III-P1-1.1-TE-2019-1450	Multifunctional lab-on-a-chip microfluidic platform for the fabrication of nanoparticles	NANOC HIP
5	PN-III-P2-2.1-PED-2019-4569	COLD PLASMA FOR FLUORIDE RETENTION IMPROVEMENT AND BIOFILM MODULATION IN DENTAL APPLICATION	PlasmaDent
6	PN-III-P2-2.1-PED-2019-1375	Development of novel antiseptics based on zinc oxide for clinical wound management	MANAGEWOUND
7	COFUND-ERANET-ERAMIN-Deasphor	Design of a product for SUBSTITUTION of phosphate rocks	Deasphor
8	PN-III-P1-1.2-PCCDI-2017-0697	Intelligent therapies for non-communicable diseases based on controlled release of pharmacological compounds from encapsulated engineered cells and targeted bionanoparticles	INTERA
9	PN-III-P1-1.2-PCCDI-2017-0689	Lib2Life- The revival of libraries and cultural heritage through advanced technologies	Lib2Life

10	PN-III-P1-1.2- PCCDI-2017- 0629	INNOVATIVE BIONANOMATERIALS FOR TREATMENT AND DIAGNOSIS	BIONAN OINOV
11	PN-III-P1-1.2- PCCDI-2017- 0749	Bioactive nanostructures for innovative therapeutic strategies	NANO- LIFE
12	PN-III-P1-1.2- PCCDI-2017- 0185	Eco-innovative technologies for recovering of the platinum group metals from scrap catalytic convertors	ECOTEC H-GMP
13	PN-III-P4-ID- PCE-2016- 0072	Controlled functionalities in multiscale BaTiO ₃ -based systems by combining microstructural design and doping strategy	BATIFE R
14	PN-III-P2-2.1- PTE-2016- 0177	Composite hydrogels based on inorganic nanoparticles and collagen with prolonged antimicrobial activity for the prevention of wound infections	NanoCol aGel
15	PN-III-P2-2.1- PTE-2016- 0156	Recovery of recycled thermoplastic polymers by reinforcement with functionalized natural fibres to obtain new added value products	VALPO LYMER
16	PN-III-P2-2.1- PTE-2016- 0146	New nanostructured polymeric composites for centre pivot liners, centre plate and other components for the railway industry	RONER ANANO STRUCT
17	ERA- MANUNET- ARHNANOT PV	Multiphase elasto-plastic architectures dynamically vulcanized and reinforced with nanoparticles for specific products used in food and pharmaceutical industries	ARHNA NOTPV
18	PN-III-P2-2.1- PED-2016- 0630	Proton exchange membrane fuel cells based on nitrogen-doped nanocarbons	NITRO- NANOC- FC
19	PN-II-PT- PCCA-2013- 4-0470	Optimized pyroelectric materials through the polarization gradient concept and experimental model for a pyroelectric detector with potential for applications in monitoring high power/energy lasers.	OPTIPY ROGRA D
20	PN-II-PT- PCCA-2013- 4-0584	New ocular implant with high biocompatibility and proliferation rate	ORBIMP LANT
21	PN-II-PT- PCCA-2013- 4-1374	Optical Nanofabrication in the domain 5 nm - 50 nm	NANOF AB
22	PN-II-PT- PCCA-2013- 4-0891	Innovative dental products with multiple applications	LavEndo
23	PN-II-PT- PCCA-2013- 4-0270	RECONSTRUCTION OF THE LIGAMENTS USING ADVANCED STRUCTURED MATERIALS BASED ON LIGASINT NATURAL AND SYNTHETIC POLYMERS	LIGASI NT
24	PN-II-PT- PCCA-2011- 3.2-0210	Petabyte Optical Disc	PETOPT
25	PN-II-PT- PCCA-2011- 3.1-0209	Complex ferromagnetic/antiferromagnetic nanostructures with improved magnetic properties for data storage applications obtained by sequential laser deposition	FANLAS
26	PN-II-PT- PCCA-2011- 3.1-0031	Oxide nanomaterials with photocatalytic properties applied in the advanced degradation of the xenobiotic compounds in the water	NATIXE N
27	PN-II-ID- PCE-2011-3- 0668	Size effects, formation mechanisms, and properties in micro- and nanostructured perovskite ferroic systems prepared by alternative methods	

28	PN-II-PT- PCCA-2011- 3.2-0284	Novel nanostructured prosthetic tubular devices with antibacterial and antibiofilm properties induced by physico-chemical and morphological changes	AntiBioT ube
29	PN-II-PT- PCCA-2011- 3.2-1392	Hybrid composite materials with thermoplastic matrices doped with fibres and disperse nano fillings for materials with special purposes	HYBRID MAT
30	PN-II-ID- PCCE-2008- 0106	DOPING AND SIZE EFFECTS ON THE MAGNETIC, STRUCTURAL AND MORPHOLOGICAL PROPERTIES AND SPIN DYNAMICS IN MICRO AND NANOSTRUCTURED FERROMAGNETIC OXIDES.	

c) Books and Book Chapters:

1. *Synthesis, Characterization and Application of Micro and Nanostructured Materials*, Bogdan Stefan VASILE, ISBN 978-3-03928-967-7, MDPI Publisher;
2. ***Inorganic micro- and nanostructured implants for tissue engineering***, Neacsu, I.A., Nicoară, A.I., Vasile, O.R., Vasile, B.S., *Nanobiomaterials in Hard Tissue Engineering: Applications of Nanobiomaterials*, 10.1016/B978-0-323-42862-0.00009-2 (2016) (Book Chapter);
3. ***Incorporation Mechanism and Functional Properties of Ce-Doped BaTiO₃ Ceramics Derived from Nanopowders Prepared by the Modified Pechini Method***, Ianculescu A.C., Berger D.C., Vasilescu C.A., Olariu M., Vasile B.S., Curecheriu L.P., Gajovic A., Trusca R., *Nanoscale Ferroelectrics and Multiferroics: Key Processing and Characterization Issues, and Nanoscale Effects, First Edition*. Edited by Miguel Alguero, J Marty Gregg and Liliana Mitoseriu. 2016 John Wiley & Sons, Ltd. Published 2016 by John Wiley & Sons, Ltd. ISBN: 978-7-118-93575-0 (Book Chapter);
4. ***Bi_{0.5}Na_{0.5}TiO₃ based piezoelectric ceramics***, Marin Cernea, Vasile B.S., Trusca R., Andronescu E., Politehnica Press, Bucuresti, 2014, ISBN: 978-606-515-562-6 (Book);

d) ISI Papers:

d.1 Principal author papers (IF 2019)

1. ***Scar-Free Healing: Current Concepts and Future Perspectives***, A. E. Stoica, A. M. Grumezescu, A. O. Hermenean, E. Andronescu, B. S. Vasile, *Nanomaterials* 2020, 10, 2179; doi:10.3390/nano10112179, IF **4.034, Q1**;
2. ***End-of-life materials used as supplementary cementitious materials in concrete industry***, Adrian Ionut Nicoara, Alexandra Elena Stoica, Mirijam Vrabc, Nastja Rogan Šmuc, Saso Sturm, Cleva Ow-Yang, Mehmet Ali Gulgun, Zeynep Basaran Bundur, Ion Ciuca, **Bogdan Stefan Vasile**, *Materials*, 2020, 13, 1954; doi:10.3390/ma13081954, IF **2.972, Q2**;
3. ***Wound dressings coated with silver nanoparticles and essential oils for the management of wound infections***, **B.S. Vasile**, , Birca, A.C., Musat, M.C., Holban, A.M., *Materials*, Volume 13, Issue 7, 1 April 2020, Article number 1682, IF **2.972, Q2**;
4. ***Ceramic Composite Materials Obtained by Electron-Beam Physical Vapor Deposition Used as Thermal Barriers in the Aerospace Industry***, **B.S. Vasile**, A.C. Birca, V.A. Surdu, I.A. Neacsu, A.I. Nicoară, *Nanomaterials*, 2020, Volume 10, Issue 2, Pages 370, 10.3390/nano10020370, IF **4.034, Q1**;
5. ***Recent advances in magnetite nanoparticle functionalization for nanomedicine***, Popescu, R.C., Andronescu, E., **Vasile, B.S.**, *Nanomaterials*, 2019, Volume 9, Issue 12, 10.3390/nano9121791, IF **4.034, Q1**;
6. ***Bi_{1-x}Eu_xFeO₃ Powders: Synthesis, Characterization, Magnetic and Photoluminescence Properties***, Vasile-Adrian Surdu, Roxana Doina Truşcă, **Bogdan Ştefan Vasile**, Ovidiu Cristian Oprea,

- Eugenia Tanasă, Lucian Diamandescu, Ecaterina Andronescu, Adelina Carmen Ianculescu, *Nanomaterials*, 2019, Volume 9, Issue 10, 10.3390/nano9101465, **IF 4.034, Q1**;
7. ***Photoluminescent Hydroxylapatite: Eu³⁺ Doping Effect on Biological Behaviour***, Andronescu, E., Predoi, D., Neacsu, I.A., Padurar, A.V., Musuc, A.M., Trusca, R., Oprea, O., Tanasa, E., Vasile, O.R., Nicoara, A.I., Surdu, V.A., Iordache, F., Birca, A.C., Iconaru, S.L., **Vasile, B.S.**, *Nanomaterials*, 2019, Volume 9, Issue 9, 10.3390/nano9091187, **IF 4.034, Q1**;
 8. ***Towards understanding the enhancement of antibacterial activity in manganese doped ZnO nanoparticles***, Mesaros A, **Vasile BS**, Toloman D, Pop OL, Marinca T, Unguresan M, Perhaita I, Filip M, Iordache F, *Applied Surface Science*, 2019, Volume 471, Pages 960-972, 10.3390/nano9091187, WOS:000455471100110, **IF 5.155, Q1**;
 9. ***Luminescent Hydroxyapatite Doped with Rare Earth Elements for Biomedical Applications***, I.A. Neacsu, A.E. Stoica, **B.S. Vasile**, E. Andronescu, *Nanomaterials*, 2019, Volume 9, Issue 2, 10.3390/nano9020239, **IF 3.504, Q1**;
 10. ***Study of Edge and Screw Dislocation Density in GaN/Al₂O₃ Heterostructure***, Vladimir Lucian Ene, Doru Dinescu, Iulia Zai, Nikolay Djourellov, **Bogdan Stefan Vasile**, Andreea Bianca Serban, Victor Leca, Ecaterina Andronescu, *Materials*, 2019, Volume 12, Issue 24, Pages 4205, 10.3390/ma12244205, **IF 2.972, Q2**;
 11. ***Structure–grain size–synthesis route of silver nanoparticles: a correlation with the cytotoxic effect***, OTILIA-RUXANDRA Vasile, ECATERINA Andronescu, ROXANA Truşcă, EUGENIU Vasile, ALINA-MARIA Holban, Mariana-Carmen Chifiriuc, Florin Iordache, Horia Maniu, Coralia Bleotu, IONELA ANDREEA Neacşu, **BOGDAN-ŞTEFAN Vasile**, *Romanian journal of morphology and embryology*, 2019, Volume 60, Issue 2, Pages 617-628, **IF 1.5, Q3**;
 12. ***Antimicrobial wound dressings as potential materials for skin tissue regeneration***, Padurar, A., Ghitulica, C., Trusca, R., Surdu, V.A., Neacsu, I.A., Holban, A.M., Birca, A.C., Iordache, F., **Vasile, B.S.**, *Materials*, 2019, Volume 12, Issue 11, Pages 1859, 10.3390/ma12111859, WOS:000472638600133, **IF 2.972, Q2**;
 13. ***Porous ceramic support embedded with microorganisms used in water purification***, Ghitulica C., Stefan S., Vasile O.R., Trusca R., Neacsu I.A., **Vasile B.S.**, *Romanian Journal of Materials*, 2019, Volume 49, Issue 1, Pages 33-41, **IF 0.628; Q3**;
 14. ***Probing the dielectric, piezoelectric and magnetic behavior of CoFe₂O₄/BNT-BT_{0.08} composite thin film fabricated by sol-gel and spin-coating methods***, Cernea M, **Vasile BS**, Surdu VA, Trusca R, Bartha C, Craciun F, Galassi C, *Scientific Reports*, 2018, Volume 8, Issue 1, 10.1038/s41598-018-36232-3, WOS:000453224400044, **IF 4.011, Q1**;
 15. ***Microstructure of 800 keV Ar ion irradiated thin ZrC films***, **Vasile, B.S.**, Craciun, D., Ionescu, P., Pantelica, D., Dorcioman, G., Craciun, V., *Applied Surface Science*, 2018, Volume 442, Pages 773-777, 10.1016/j.apsusc.2018.02.216, WOS:000428294500090, **IF 5.155, Q1**;
 16. ***Structural and physical properties of InAlAs quantum dots grown on GaAs***, **Vasile, B.S.**, Daly, A.B., Craciun, D., Alexandrou, I., Lazar, S., Lemaître, A., Maaref, M.A., Iacomi, F., Craciun, V., *Physica B: Condensed Matter*, 2018, Volume 535, Pages 262-267, 10.1016/j.physb.2017.07.054, WOS:000427578300051, **IF 1.874, Q3**;
 17. ***Mg–Zn alloys, most suitable for biomedical applications***, Birca, A.B., Neacsu, I.A., Vasile, O.R., Ciuca, I., Vasile, I.M., Faye, M.A., **Vasile, B.S.**, *Romanian journal of morphology and embryology*, 2018, Volume 59, Issue 1, Pages 49–54, WOS:000438117200006, **IF 1.5; Q3**;
 18. ***Eu³⁺-doped ZnO nanostructures: advanced characterizations, photoluminescence and cytotoxic effect***, **Vasile, B.S.**, Vasile, O.R., Ghitulică, C.D., Ilie, F.C., Nicoară, I.F., Trusca, R., Oprea, O., Surdu, V.A., Neacsu, I.A., *Romanian journal of morphology and embryology*, 2017, Volume 58, Issue 3, Pages, 941–952, WOS:000419089600028, **IF 1.5, Q3**;

19. ***Influence of the size and the morphology of ZnO nanoparticles on cell viability***, Vasile, O.R., Serdaru, I., Andronescu, E., Trusca, R., Surdu, V.A., Oprea, O., Ilie, A., **Vasile, B.S.**, Comptes Rendus Chimie, 2015, Volume 18, Issue 12, Pages 1335-1343, 10.1016/j.crci.2015.08.005, WOS:000368050300012, **IF 2.366, Q3**;
20. ***Structural and electrical properties of NBT-BT_{0.08} ceramic prepared by the pyrosol method***, C. Ghitulica, M. Cernea, **B. S. Vasile**, E. Andronescu, O. R. Vasile, C. Dragoi, R. Trusca, Ceramics International, 2013, Volume 39, Issue 5, Pages 5925–5930, 10.1016/j.ceramint.2013.01.015, WOS:000318577600148, **IF 3.45, Q1**;
21. ***Synthesis and characterization of a novel controlled release zinc oxide/gentamicin–chitosan composite with potential applications in wounds care***, **B. S. Vasile**, O. Oprea, G. Voicu, A. Ficaï, E. Andronescu, A. Teodorescu, A. Holban, International Journal of Pharmaceutics, 2014, Volume 463 Issue 2, 161-169, 10.1016/j.ijpharm.2013.11.035, WOS:000331188000007, **IF 4.213, Q1**;
22. ***Synthesis and characterization of nanostructured zinc oxide particles synthesized by the pyrosol method***, O. R. Vasile, E. Andronescu, C. Ghitulica, **B.S. Vasile**, O. Oprea, E. Vasile, R. Trusca, J Nanopart Res, 2012, Volume 14, Issue 12, 10.1007/s11051-012-1269-7, WOS:000312894200014, **IF 2.009, Q2**;
23. ***Microstructure and electrical properties of zirconia and composite nanostructured ceramics sintered by different methods***, **B.S. Vasile**, E. Andronescu, C. Ghitulica, O. R. Vasile, L. Curechiu, R. Scurtu, E. Vasile, R. Trusca, L. Pall, V. Aldica, Ceramics International, 2013, Volume 39, Issue 3, Pages 2535–2543, 10.1016/j.ceramint.2012.09.013, WOS:000316032900044, **IF 3.45, Q1**;
24. ***Yttria totally stabilized zirconia nanoparticles obtained through the pyrosol method***, **B. S. Vasile**, O. R. Vasile, C. Ghitulica, E. Andronescu, R. Dobranis, E. Dinu, R. Trusca, Phys. Status Solidi A, 2010, Volume 207, Issue 11, Pages 2499–2504, 10.1002/pssa.200925623, WOS:000284055700014, **IF 1.606, Q2**
25. ***Structural Investigations on Yttria - Doped Zirconia Nanopowders Obtained by Sol-gel Method***, **B. S. Vasile**, C. Ghitulica, N. Popescu-Pogrión, S. Constantinescu, I. Mercioniu, R. Stan, E. Andronescu, Journal of Optoelectronics and Advanced Materials, 2007, Volume 9, Issue 12, Pages 3774 – 3780, WOS:000251768700016, **IF 0.39, Q3**;
26. ***Synthesis, structural and morphological characteristics, magnetic and optical properties of Co doped ZnO nanoparticles***, A. Mesaros, C. D. Ghitulica, M. Popa, R. Mereu, A. Popa, T. Petrisor Jr., M. Gabor, A. I. Cadis, B. S. Vasile, Ceramics International, 2014, Volume 40, Issue 2, Pages 2835–2846, 10.1016/j.ceramint.2013.10.030, WOS:000329882100039, **IF 3.45, Q1**;

d.2 Co-author papers

27. ***In Situ and Ex Situ Designed Hydroxyapatite: Bacterial Cellulose Materials with Biomedical Applications***, Adrian Ionut Nicoara , Alexandra Elena Stoica, Denisa-Ionela Ene, Bogdan Stefan Vasile, Alina Maria Holban, Ionela Andreea Neacsu, Materials 2020, 13, 4793; doi:10.3390/ma13214793;
28. ***Four-fold multifunctional properties in self-organized layered ferrite***, L. Curecheriu, C. Hamagea, M. T. Buscaglia, I. Pallecchi, B. S. Vasile, V. A. Surdu, A. C. Ianculescu, A. Pignolet, F. Rosei, L. Mitoseriu, V. Buscaglia, Ceramics International 2020, <https://doi.org/10.1016/j.ceramint.2020.08.021>;
29. ***Sulpho-Salicylic Acid Grafted to Ferrite Nanoparticles for n-Type Organic Semiconductors***, C. Ravariu, D. Mihaiescu, A. Morosan, B. S. Vasile, B. Purcareanu, Nanomaterials 2020, 10(9), 1787; <https://doi.org/10.3390/nano10091787>;
30. ***The enhancement mechanism of dielectric properties of Pb (Zr, Ti) O₃ via (Mg²⁺, Sb³⁺) incorporation for supercapacitors***, F. Craciun, E. Dimitriu, B.S. Vasile, C.C. Negriřa, R. Trusca, R.

- Birjega, M. Cernea, *Materials Today Chemistry* 2020, 18, 100350, <https://doi.org/10.1016/j.mtchem.2020.100350>;
31. ***Design, fabrication, and characterization of new materials based on zirconia doped with mixed rare earth oxides: Review and first experimental results***, A. M. Motoc, S. Valsan, A. E. Slobozeanu, M. Corban, D. Valerini, M. Prakasam, M. Botan, V. Dragut, B. S. Vasile, A. V. Surdu, R. Trusca, M. L. Grilli, R. R. Piticescu, *Metals* 2020, 10, 746; doi:10.3390/met10060746;
 32. ***Efficient uptake and retention of iron oxide-based nanoparticles in HeLa cells leads to an effective intracellular delivery of doxorubicin***, RC Popescu, D Savu, I Dorobantu, BS Vasile, H Hosser, A Boldeiu, M Temelie, M Straticiu, DA Iancu, E Andronescu, F Wenz, FA Giordano, C Herskind, MR Veldwijk, *Scientific reports*, 2020, 10 (1), 1-10;
 33. ***Lanthanum Ferrite Ceramic Powders: Synthesis, Characterization and Electrochemical Detection Application***, Raluca Dumitru, Sorina Negrea, Adelina Ianculescu, Cornelia Păcurariu, Bogdan Vasile, Adrian Surdu, Florica Manea, *Materials* 2020, 13, 2061; doi:10.3390/ma13092061;
 34. ***Biocompatible Ag/Fe-Enhanced TiO₂ Nanoparticles as an Effective Compound in sunscreens***, Adrian Ionut Nicoara, Vladimir Lucian Ene, Bianca Beatrice Voicu, Mihaela Adriana Bucur, Ionela Andreea Neacsu, Bogdan Stefan Vasile, Florin Iordache, *Nanomaterials* 2020, 10, 570; doi:10.3390/nano10030570;
 35. ***Lead-Free BNT–BT_{0.08}/CoFe₂O₄ Core–Shell Nanostructures with Potential Multifunctional Applications***, Marin Cernea, Roxana Radu, Harvey Amorín, Simona Gabriela Greculeasa, Bogdan Stefan Vasile, Vasile Adrian Surdu, Paul Ganea, Roxana Trusca, Marwa Hattab, Carmen Galassi, *Nanomaterials* 2020, 10, 672; doi:10.3390/nano10040672;
 36. ***The Synthetization and Analysis of Dicyclopentadiene and Ethylidene-Norbornene Microcapsule Systems***, Ionut Sebastian Vintila, Horia Iovu, Andreea Alcea, Andraia Cucuruz, Andrei Cristian Mandoc, Bogdan Stefan Vasile, *Polymers* 2020, 12, 1052; doi:10.3390/polym12051052;
 37. ***Graphene inclusion effect on anion-exchange membranes properties for alkaline water electrolyzers***, Daniela Ion-Ebrasu, Bruno G Pollet, Simona Caprarescu, Alin Chitu, Roxana Trusca, Violeta Niculescu, Raluca Gabor, Elena Carcadea, Mihai Varlam, Bogdan Stefan Vasile, *International Journal of Hydrogen Energy*, 2020, 45, 17057-17066, doi.org/10.1016/j.ijhydene.2020.04.195;
 38. ***Size-Dependent Biological Activities of Fluorescent Organosilane-Modified Zinc Oxide Nanoparticles***, Bușilă, Mariana; Tăbăcaru, Aurel; Mușsat, Viorica; Vasile, Bogdan Ștefan; Neașu, Ionela Andreea; Pinheiro, Teresa; Roma-Rodrigues, Catarina; Baptista, Pedro V.; Fernandes, Alexandra R.; Matos, António P.; Marques, Fernanda, *Journal of Biomedical Nanotechnology*, Volume 16, Number 2, February 2020, pp. 137-152(16), doi.org/10.1166/jbn.2020.2882, **IF 5.068**;
 39. ***Defect Structure Determination of GaN Films in GaN/AlN/Si Heterostructures by HR-TEM, XRD, and Slow Positrons Experiments***, Vladimir Lucian Ene, Doru Dinescu, Nikolay Djourelou, Iulia Zai, Bogdan Stefan Vasile, Andreea Bianca Serban, Victor Leca, Ecaterina Andronescu, *Nanomaterials*, 2020, Volume 10, Issue 2, Pages 197, 10.3390/nano10020197, **IF 3.504, Q1**;
 40. ***The Effect of Silver Nanoparticles on Antioxidant/Pro-Oxidant Balance in a Murine Model***, Anca Oana Docea, Daniela Calina, Ana Maria Buga, Ovidiu Zlatian, MMB Paoliello, George Dan Mogosanu, Costin Teodor Streba, Elena Leocadia Popescu, Alexandra Elena Stoica, Alexandra Catalina Bîrcă, Bogdan Ștefan Vasile, Alexandru Mihai Grumezescu, Laurentiu Mogoanta, *International Journal of Molecular Sciences*, 2020, Volume 21, issue 4, Pages 1233, 10.3390/ijms21041233, **IF 6.203, Q1**;
 41. ***Bioactive Surfaces of Polylactide and Silver Nanoparticles for the Prevention of Microbial Contamination***, Oana Gherasim, Alexandru Mihai Grumezescu, Valentina Grumezescu, Florin Iordache, Bogdan Stefan Vasile, Alina Maria Holban, *Materials*, 2020, Volume 13, Issue 3, Pages 768, 10.3390/ma13030768, **IF 2.972, Q2**.

42. ***Solution for green organic thin film transistors: Fe₃O₄ nano-core with PABA external shell as p-type film***, Cristian Ravariu, Dan Eduard Mihaiescu, Alina Morosan, Daniela Istrati, Bogdan Purcareanu, Rodica Cristescu, Roxana Trusca, **Bogdan Stefan Vasile**, Journal of Materials Science: Materials in Electronics, 2020, Pages 1-11, 10.1007/s10854-019-02851-3, **IF 2.195, Q2**;
43. ***A reliable chemiresistive sensor of nickel-doped tin oxide (Ni-SnO₂) for sensing carbon dioxide gas and humidity***, V Manikandan, Iulian Petrila, S Vigneselvan, RS Mane, **Bogdan Vasile**, Raghu Dharmavarapu, Stefan Lundgaard, Saulius Juodkazis, J Chandrasekaran, RSC Adv, 2020, Volume 10, Issue 7, Pages 3796-380, 10.1039/C9RA09579A, **IF 3.049, Q2**;
44. ***Influence of Sintering Strategy on the Characteristics of Sol-Gel Ba_{1-x}CexTi_{1-x}/4O₃ Ceramics***, Cătălina A Stanciu, Ioana Pintilie, Adrian Surdu, Roxana Truşcă, **Bogdan S Vasile**, Mihai Eftimie, Adelina C Ianculescu, Nanomaterials, 2019, Volume 9, Issue 12, Pages 1675, 10.3390/nano9121675, **IF 3.504, Q1**;
45. ***3D structures of hydroxyapatite obtained from Rapana venosa shells using hydrothermal synthesis followed by 3D printing***, Ana Maria Mocioiu, Raluca Tutuianu, Laura Madalina Cursaru, Roxana Mioara Piticescu, Paul Stanciu, Bogdan Stefan Vasile, Roxana Trusca, Viviana Sereanu, Aurelia Meghea, Journal of Materials Science, 2019, Volume 54, Issue 22, Pages 13901-13913, 10.1007/s10853-019-03872-3, WOS:000482914800005, **IF 3.442, Q2**;
46. ***Development of Vitroceramic Coatings and Analysis of Their Suitability for Biomedical Applications***, Sorin-Ion Jinga, Michael Skokin, **Bogdan-Stefan Vasile**, Izabela Constantinoiu, Dana Miu, Mihaela Bacalum, Cristina Busuioc, Coatings 2019, Volume 9, Issue 10, Pages 671, 10.3390/coatings9100671, **IF 2.330, Q2**;
47. ***Novel Nanocomposites Based on Functionalized Magnetic Nanoparticles and Polyacrylamide: Preparation and Complex Characterization***, Eugenia Tanasa, Catalin Zaharia, Ionut-Cristian Radu, Vasile-Adrian Surdu, **Bogdan Stefan Vasile**, Celina-Maria Damian, Ecaterina Andronescu, Nanomaterials 2019, Volume 9, Issue 10, Pages 1384, 10.3390/nano9101384, **IF 3.504, Q1**;
48. ***Microstructural investigations of 800 keV Ar ions irradiated nanocrystalline ZrN thin films***, D Craciun, **BS Vasile**, E Lambers, H Makino, V Craciun, Surface Engineering, 2019, Pages 326-333, 10.1080/02670844.2019.1668677, **IF 2.229, Q2**;
49. ***Radiosensitization of Tumor Cells by Intracellular Delivery of Doxorubicin Using Novel Iron Oxide-based Nanoconstructs***, RC Popescu, D Savu, I Dorobantu, **BS Vasile**, H Hosser, F Schneider, A Boldeiu, E Andronescu, F Wenz, FA Giordano, C Herskind, MR Veldwijk, International Journal of Radiation Oncology• Biology• Physics, 2019, Volume 105, Issue 1, Pages E681, 10.1016/j.ijrobp.2019.06.1003, **IF 6.203, Q1**;
50. ***Electrospun Polyethylene Terephthalate Nanofibers Loaded with Silver Nanoparticles: Novel Approach in Anti-Infective Therapy***, Alexandru Mihai Grumezescu, Alexandra Elena Stoica, Mihnea-Ştefan Dima-Bălcescu, Cristina Chircov, Sami Gharbia, Cornel Baltă, Marcel Roşu, Hildegard Herman, Alina Maria Holban, Anton Ficăi, **Bogdan Stefan Vasile**, Ecaterina Andronescu, Mariana Carmen Chifiriuc, Anca Hermenean, Journal of clinical medicine, 2019, Volume 8, Issue 7, Pages 1039, 10.3390/jcm8071039, WOS:000479003300123, **IF 5.688, Q1**;
51. ***Annealing of preexisting defects in silicon single crystals by ion irradiation***, Mihai, M.D., Ionescu, P., Pantelica, D., Petrascu, H., Craciun, D., Craciun, V., Vasiliu, F., **Vasile, B.S.**, Mercioniu, I., Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, 2019, Volume 450, Pages 85-89, 10.1016/j.nimb.2018.09.005, WOS:000474501400018, **IF 1.21, Q3**;
52. ***Multiferroic (Nd,Fe)-doped PbTiO₃ ceramics with coexistent ferroelectricity and magnetism at room temperature***, Craciun, F., Cordero, F., Cernea, M., Fruth, V., Atkinson, I., Stanica, N., **Vasile, B.S.**, Trusca, R., Iuga, A., Galizia, P., Galassi, C., Ceramics International, 2019, Volume 45, Issue 7, Pages 9390-9396, 10.1016/j.ceramint.2018.08.147, WOS:000463688400010, **IF 3.45, Q1**;

53. **Enhancement in magnetic and dielectric properties of the ruthenium-doped copper ferrite($Ru-CuFe_2O_4$) nanoparticles**, V Manikandan, V Kuncser, **Bogdan Vasile**, S Kavita, S Vigneselvan, RS Mane, Journal of Magnetism and Magnetic Materials, 2019, Volume 476, Pages 18-32, 10.1016/j.jmmm.2018.12.050, WOS:000456696000003, **IF 2.683, Q2**;
54. **Fabrication and characterization of Ru-doped $LiCuFe_2O_4$ nanoparticles and their capacitive and resistive humidity sensor applications**, Manikandan V, Tudorache F, Petrila I, Mane RS, Kuncser V, **Vasile B**, Morgan D, Vigneselvan S, Mirzaei A, Journal of Magnetism and Magnetic Materials, 2019, Volume 474, Pages 563-569, 10.1016/j.jmmm.2018.11.072, WOS:000459494600082, **IF 2.683, Q2**;
55. **Influence of the matrix of aqueous solutions on the adsorption of endocrine disruptors by fullerene C_{60}** , Ion, I., Senin, R.M., **Vasile, B.**, Ion, A.C., Journal of Environmental Engineering and Landscape Management, 2019, Volume 27, Issue 1, Pages 1-11, 10.3846/jeelm.2019.7644, WOS:000462767600001, **IF 1.503, Q3**;
56. **Tantalum Oxynitride Thin Films: Assessment of the Photocatalytic Efficiency and Antimicrobial Capacity**, Cristea, D., Cunha, L., Gabor, C., Ghiuta, I., Croitoru, C., Marin, A., Velicu, L., Besleaga, A., **Vasile, B.**, Nanomaterials, 2019, Volume 9, Issue 3, 10.3390/nano9030476, WOS:000464450100003, **IF 4.034, Q1**;
57. **$BiFeO_3$ -synthesis, characterization and its photocatalytic activity towards doxorubicin degradation from water**, Dumitru, R., Ianculescu, A., Păcurariu, C., Lupa, L., Pop, A., **Vasile, B.**, Surdu, A., Manea, F., Ceramics International, 2019, Volume 45, Issue 2, Pages 2789-2802; 10.1016/j.ceramint.2018.07.298, WOS:000453491400012, **IF 3.45, Q1**;
58. **Study of antimicrobial effects of functionalized silver nanoparticles**, Elena Leocadia Popescu, Maria Bălăsoiu, Oana Mariana Cristea, Alexandra Elena Stoica, Ovidiu Cristian Oprea, **Bogdan Ștefan Vasile**, Alexandru Mihai Grumezescu, Gabriela Băncescu, Cristina Jana Busuioc, GD Mogoșanu, Costin Teodor Streba, Laurențiu Mogoantă, Romanian journal of morphology and embryology, 2019, Volume 60, Issue 3, Pages 939-946, WOS:000505600500025, **IF 1.5, Q3**;
59. **Study on ageing of cobalt ferrite nanoparticles and their fate in the environment**, L Popescu, D Buzatu, M Balasoiu, C Stan, **BS Vasile**, L Sacarescu, D Creanga, O Ivankov, D Soloviov, AM Balasoiu-Gaina, Romanian Journal of Physics, 2019, Volume 64, Pages 818, WOS:000501555500009, **IF 1.398, Q3**;
60. **Composite $BNT-BT_{0.08}/CoFe_2O_4$ with core-shell nanostructure for piezoelectric and ferromagnetic applications**, Cernea M., **Vasile B.S.**, Ciuchi I.V., Surdu V.A., Bartha C., Iuga A., Galizia P., Galassi C., Materials Science & Engineering B Volume 240, 2019, Pages 7-15, 10.1016/j.mseb.2019.01.001, WOS:000460188500002, **IF 3.507, Q2**;
61. **Near infrared emission properties of Er doped cubic sesquioxides in the second/third biological windows**, Avram D, Tiseanu I, **Vasile BS**, Florea M, Tiseanu C, Scientific Reports, 2018, Volume 8, Issue 1, 10.1038/s41598-018-36639-y, WOS:000454141600016, **IF 4.122, Q1**;
62. **Synthesis and Characterization of a Core-shell Material Using $YBa_2Cu_3O_{7-\delta}$ and Cobalt Ferrite Nanoparticles**, Maria Colie, Dan Eduard Mihaiescu, Daniela Istrati, Adrian Vasile Surdu, **Bogdan Vasile**, Nicolae Stanica, Adrian Fudulu, Ecaterina Andronescu, REVISTA DE CHIMIE, 2018, Volume 69, Issue 12, Pages 3345-3348, WOS:000458533800002, **IF 1.605, Q3**;
63. **Lincomycin-embedded PANI-based coatings for biomedical applications**, Popescu-Pelin, G., Fufă, O., Popescu, R.C., Savu, Socol, M., Zgură, I., Holban, A.M., **Vasile, B.S.**, Grumezescu, V., Socol, G., Applied Surface Science, 2018, Volume 455, Pages 653-666, 10.1016/j.apsusc.2018.06.016, WOS:000438578700078, **IF 5.155, Q1**;
64. **MAPLE deposition of *Nigella sativa* functionalized Fe_3O_4 nanoparticles for antimicrobial coatings**, Negut, I., Grumezescu, V., Fica, A., Grumezescu, A.M., Holban, A.M., Popescu, R.C., Savu,

- D., **Vasile, B.S**, Socol, G., Applied Surface Science, 2018, Volume 455, Pages 513-521, 10.1016/j.apsusc.2018.05.202, WOS:000438578700061, **IF 5.155, Q1**;
65. **Iron doped TiO₂ films and their photoactivity in nitrobenzene removal from water**, CriSan, M., Mardare, D., Ianculescu A., Drăgan, N., Nițoi, I., CriSan, D., Voicescu, M., Todan, L., Oancea, P., Adomniței, C., Dobromir, M., Gabrovska, M., **Vasile, B.**, Applied Surface Science, 2018, Volume 455, Pages 201-215, 10.1016/j.apsusc.2018.05.124, WOS:000438578700024, **IF 5.155, Q1**;
 66. **Electric and magnetic properties of ferromagnetic/piezoelectric bilayered composite**, Cernea M, **Vasile BS**, Surdu VA, Trusca R, Bartha C, Craciun F, Galassi, C., Journal of Materials Science, 2018, Volume 53, Issue 20, Pages 14160-14171, 10.1007/s10853-018-2673-x, WOS:000440287100009, **IF 3.442, Q2**;
 67. **MAPLE fabricated coatings based on magnetite nanoparticles embedded into biopolymeric spheres resistant to microbial colonization**, Grumezescu V, Negut I, Grumezescu AM, Ficai A, Dorcioman G, Socol G, Iordache, F., Trusca, R., **Vasile B.S.**, Holban A.M., Applied Surface Science 2018, Volume 448, Pages 230-236, 10.1016/j.apsusc.2018.04.053, WOS:000432797100026, **IF 5.155, Q1**;
 68. **Piezoelectric/ferromagnetic BNT-BT_{0.08}/CoFe₂O₄ coaxial core-shell composite nanotubes for nanoelectronic devices**, Cernea, M., **Vasile, B.S.**, Surdu, V.A., Trusca, R., Sima, M., Craciun, F., Galassi, C., Journal of Alloys and Compounds, 2018, Volume 752, Pages 381-388, 10.1016/j.jallcom.2018.04.146, WOS:000432672300045, **IF 4.175, Q1**.
 69. **Synthesis and characterization of novel ferrite-piezoelectric multiferroic core-shell-type structure**, Cernea, M., **Vasile, B.S.**, Ciuchi, I.V., Surdu, V.A., Bartha, C., Iuga, A., Galizia, P., Galassi, C., Journal of Materials Science, 2018, Volume 53, Issue 13, Pages 9650-9661, 10.1007/s10853-018-2264-x, WOS:000430171400023, **IF 3.442, Q2**.
 70. **Synthesis and characterization of CoFe₂O₄/BNT-BT_{0.08} core-shell nanotubes by a template based sol-gel method**, Cernea, M., **Vasile, B.S.**, Surdu, V.A., Trusca, R., Craciun, C., Galassi, C., Ceramics International, 2018, Volume 44, Issue 9, Pages 10813-10819, 10.1016/j.ceramint.2018.03.123, WOS:000431470200101, **IF 3.45, Q1**.
 71. **Sorption of bisphenol A (BPA) In aqueous solutions on fullerene C₆₀**, Senin RM, Ion I, Oprea O, **Vasile B**, Stoica R, Ganea R, Ion, A.C, Revista de Chimie 2018, Volume 69, Issue 6, Pages 1309-1314, WOS:000438397400004, **IF 1.605, Q3**;
 72. **Combined use of Mossbauer spectroscopy, XPS, HRTEM, dielectric and anelastic spectroscopy for estimating incipient phase separation in lead titanate-based multiferroics**, Craciun, F., Cordero, F., **Vasile, B.S.**, Fruth, V., Zaharescu M., Atkinson, I., Trusca, R., Diamandescu, L., Tanase, L.C., Galizia, P., Cernea, M., Galassi, C., Physical chemistry chemical physics, 2018, Volume 20, Issue 21, Pages 14652-14663, 10.1039/c8cp01456f, WOS:000434246300036, **IF 3.567, Q2**;
 73. **Biocompatibility study of magnetite nanoparticle synthesized using a Green method**, Temelie, M., Popescu, R.C., Cocioaba, D., Vasile, B.S., Savu, D., Romanian Journal of Physics, 2018, Volume 63, WOS:000444838700007, **IF 1.46, Q3**;
 74. **Bioactive mesoporous silica nanostructures with anti-microbial and anti-biofilm properties**, Balaure, P.C., Boarca, B., Popescu, R.C., Savu, D., Trusca, R., **Vasile, B.S.**, Grumezescu, A.M., Holban, A.M., Bolocan, A., Andronescu, E., International Journal of Pharmaceutics, 2017, Volume 531, Issue 1, Pages 35-46, 10.1016/j.ijpharm.2017.08.062, WOS:000410648200004, **IF 4.213, Q1**;
 75. **Optical and structural properties in type-II InAlAs/AlGaAs quantum dots observed by photoluminescence, X-ray diffraction and transmission electron microscopy**, Ben Daly, A., Craciun, D., Laura Ursu, E., Lemaître, A., Maaref, M.A., Iacomi, F., **Vasile, B.S.**, Craciun, V.,

- Superlattices and Microstructures, 2017, Volume 110, Pages 1-9, 10.1016/j.spmi.2017.08.017, WOS:000413391500001, **IF 2.385, Q2**;
76. **Biomaterials based on functional graphene oxide and natural compounds with improved biocompatibility, biodistribution and low immunomodulatory effects**, Grumezescu, A. M.; Fikai, A.; Fikai, D.; Holban, A.M., **Vasile B.S.**, Andronescu, E., Febs Journal, 2017, Volume 284, Pages 328, WOS:000409918904061, **IF 4.739, Q1**;
 77. **Fabrication and cytotoxicity of gemcitabine-functionalized magnetite nanoparticles**, Popescu, R.C., Andronescu, E., **Vasile, B.S.**, Truscă, R., Boldeiu, A., Mogoantă, L., MogoSanu, G.D., Temelie, M., Radu, M., Grumezescu, A.M., Savu, D., Molecules, 2017, Volume 22, Issue 7, 10.3390/molecules22071080, WOS:000406621300055, **IF 3.06, Q2**;
 78. **Development of Stabilized Magnetite Nanoparticles for Medical Applications**, Ardelean, I.L., Stoencea, L.B.N., Fikai, D., Fikai, A., Trusca, R., **Vasile, B.S.**, Nechifor, G., Andronescu, E., Journal of Nanomaterials, 2017, Volume 2017, 10.1155/2017/6514659, WOS:000403116400001, **IF 2.233, Q3**;
 79. **Synthesis of cobalt ferrite nanoparticles via a sol-gel combustion method**, RA, Bortnic; F, Goga; A, Mesaros; M, Nasui; **B.S. Vasile**; D, Roxana; A, Avram, Studia universitatis babes-bolyai chemia, 2016, Volume 61, Issue 4, Pages 213-222, WOS:000393578800017, **IF 0.275, Q3**;
 80. **Optical and photocatalytic properties of copper(II) doped zinc oxide**, Radulescu, M., Arsenie, L.V., Oprea, O., **Vasile, B.S.**, Revista de Chimie, 2016, Volume 67, Issue 12, Pages 2596-2599, WOS:000393230400042, **IF 1.412, Q3**;
 81. **Thin coatings based on ZnO@C18-usnic acid nanoparticles prepared by MAPLE inhibit the development of Salmonella enterica early biofilm growth**, Stan, M.S., Constanda, S., Grumezescu, V., Andronescu, E., Ene, A.M., Holban, A.M., **Vasile, B.S.**, Mogoantă, L., BĂISeanu, T.-A., MogoSanu, G.D., Socol, G., Grumezescu, A.M., Dinischiotu, A., Lazar, V., Chifiriuc, M.C., Applied Surface Science, 2016, Volume 374, Pages 318-325, 10.1016/j.apsusc.2015.12.063, WOS:000375937300049, **IF 5.155, Q1**;
 82. **Mesoporous silica coatings for cephalosporin active release at the bone-implant interface**, Rădulescu, D., Voicu, G., Oprea, A.E., Andronescu, E., Grumezescu, V., Holban, A.M., **Vasile, B.S.**, Surdu, A.V., Grumezescu, A.M., Socol, G., Mogoantă, L., MogoSanu, G.D., Balaure, P.C., Rădulescu, R., Chifiriuc, M.C., Applied Surface Science, 2016, Volume 374, Issue , Pages 165-171, 10.1016/j.apsusc.2015.10.183, WOS:000375937300027, **IF 5.155, Q1**;
 83. **Characteristics of Ce³⁺ -doped barium titanate nanoshell tubes prepared by template-mediated colloidal chemistry**, Journal of the european ceramic society, AC, Ianculescu; CA, Vasilescu; L, Trupina; **B.S. Vasile**; R, Trusca, M, Cernea; L, Pintilie; A, Nicoara, Journal of the european ceramic society, 2016, Volume 36, issue 7, Pages 1633-1642, 10.1016/j.jeurceramsoc.2016.01.045, WOS:000372381300012, **IF 4.029, Q1**;
 84. **Antimicrobial nanostructured bioactive coating based on Fe₃O₄ and patchouli oil for wound dressing**, Rădulescu, M., Andronescu, E., Holban, A.M., **Vasile, B.S.**, Iordache, F., Mogoantă, L., Dan MogoSanu, G., Grumezescu, A.M., Georgescu, M., Chifiriuc, M.C., Metals, 2016, Volume 6, Issue 5, 10.3390/met6050103, WOS:000378861000009, **IF 1.259, Q3**;
 85. **Structural and characterisation analysis of zinc-substituted hydroxyapatite with wet chemical precipitation method**, Karacan, I., Senturk, D., Oktar, F.N., Fikai, A., Fikai, D., Trusca, R., **Vasile, B.S.**, Gokce, H., Ozuyar, H.D., Gunduz, O., International Journal of Nano and Biomaterials, 2016, Volume 6, Pages 188-204, 10.1504/IJNB.2016.086110, **IF 0.37, Q3**;
 86. **Structural and mechanical properties changes induced in nanocrystalline ZrC thin films by Ar ion irradiation**, Craciun, D., Socol, G., Simeone, D., Behdad, S., Boesl, B., **Vasile, B.S.**, Craciun, V.,

- Journal of Nuclear Materials, 2016, Volume 468, Pages 78-83, 10.1016/j.jnucmat.2015.11.012, WOS:000367761700010, **IF 2.47, Q2**;
87. **Synthesis of silver secondary shell magnetic nanoparticles**, Mihaiescu, D.E., Gudovan, D., Traistaru, V., Ionescu, P., Fudulu, A., Voicu, G., Ficai, A., TruScĂ, R., Istrati, D., Marton, A., Buteica, S.A., **Vasile, B.**, Andronescu, E., Revue Roumaine de Chimie, 2016, Volume 61, Issue 2, Pages 105-110, WOS:000378984200005, **IF 0.395, Q3**.
 88. **Multifunctional materials such as MCM-41/Fe₃O₄/folic acid as drug delivery system**, Popescu, S., Ardelean, I.L., Gudovan, D., Rădulescu, M., Ficai, D., Ficai, A., **Vasile, B.S.**, Andronescu, E., Romanian Journal of Morphology and Embryology, 2016, Volume 57, Issue 2, Pages 483-489, WOS:000381899000018, **IF 1.5, Q3**;
 89. **Biocompatible 3d matrix with antimicrobial properties**, Ion, A., Andronescu, E., Rădulescu, D., Radulescu, M., Iordache, F., **Vasile, B.S.**, Surdu, A.V., Albu, M.G., Maniu, H., Chifiriuc, M.C., Grumezescu, A.M., Holban, A.M., Molecules, 2016, Volume 21, Issue 1, 10.3390/molecules21010115, WOS:000369486800043, **IF 3.06, Q2**;
 90. **Vinyltrimethoxysilane-modified zinc oxide quantum dots with tuned optical properties**, Tabacaru, A., Musat, V., Tigau, N., **Vasile, B.S.**, Surdu, V.-A., Applied Surface Science, 2015, Volume 359, Issue 30, Pages 766-773, 10.1016/j.apsusc.2015.10.175, WOS:000366220600102, **IF 5.155, Q1**;
 91. **Hydrothermal Synthesis of SrTiO₃: Role of Interfaces**, Kalyani, V., **Vasile, B.S.**, Ianculescu, A., Testino, A., Carino, A., Buscaglia, M.T., Buscaglia, V., Nanni, P., Crystal Growth and Design, 2015, Volume 15, Issue 12, Pages 5712–5725, 0.1021/acs.cgd.5b00770, WOS:000365930300012, **IF 4.153, Q2**;
 92. **Characteristics of 5 mol% Ce³⁺-doped barium titanate nanowires prepared by a combined route involving sol–gel chemistry and polycarbonate membrane-templated process**, Vasilescu, C.-A., Trupina, L., **Vasile, B.S.**, Trusca, R., Cernea, M., Ianculescu, A.-C., Journal of Nanoparticle Research, 2015, Volume 17, Issue 11, Pages 1-8, 10.1007/s11051-015-3241-9, WOS:000370143800002, **IF 2.009, Q3**;
 93. **Synthesis, structural and electrical properties of BN-BTCe@SiO₂ core-shell heterostructure**, M, Cernea; **B.S. Vasile**; IV, Ciuchi; A, Iuga; E, Alexandrescu; J, Pinteaa; C, Galassi, Science of advanced materials, 2015, Volume 7, Issue 11, Pages 2297-2305, 10.1166/sam.2015.2287, WOS:000366295900005, **IF 3.585, Q3**;
 94. **Synthesis, characterization and testing of MCM-41/TiO₂ catalyst for organic dye degradation**, M, Sonmez; D, Gudovan; R, Trusca; A, Ficai; D, Ficai; E, Andronescu; **B.S. Vasile**, Digest journal of nanomaterials and biostructures, 2015, Volume 10, Issue 4, Pages 1329-1341, WOS:000366264800022, **IF 0.638, Q3**;
 95. **Novel nanostructured molecular sieves of silica with included titanium dioxide: Preparation and characteristics**, Al Tameemi, M.B.M., Mihaiescu, D., Stan, R., Meghea, A., Voicu, G., **Vasile, B.S.**, Traistaru, V., Istrati, D., Digest Journal of Nanomaterials and Biostructures, 2015, Volume 10, Issue 4, Pages 1229-1235, WOS:000366264800012, **IF 0.638, Q3**;
 96. **Sol–gel iron-doped TiO₂ nanopowders with photocatalytic activity**, Maria Crișan, Mălina Răileanu, Nicolae Drăgan, Dorel Crișan, Adelina Ianculescu, Ines Nițoi, Petruța Oancea, Simona Șomăcescu, Nicolae Stănică, Bogdan Vasile, Cristina Stan, Applied Catalysis A: General, 2015, Volume 504, Pages 130-142, 10.1016/j.apcata.2014.10.031, **IF 4.63, Q1**;
 97. **A valence states approach for luminescence enhancement by low dopant concentration in Eu-doped ZnO nanoparticles**, Mesaros A., Toloman D., Nasui M., Mos R.B., Petrisor T., **Vasile B.S.**,

- Surdu V.A., Perhaita I., Biris A., Pana O., Journal of Materials Science, 2015, Volume 50, issue 18, Pages 6075-6086, 10.1007/s10853-015-9157-z, WOS:000356775900015, **IF 3.442, Q2**;
98. **Formation mechanism and characteristics of lanthanum-doped BaTiO₃ powders and ceramics prepared by the sol-gel process**, Ianculescu A.C., Vasilescu C.A., Crisan M., Raileanu M., **Vasile B.S.**, Calugaru M., Crisan D., Dragan N., Curecheriu L., Mitoseriu L., Materials Characterization, 10.1016/j.matchar.2015.05.022, WOS:000360417200023, **IF 3.22, Q1**;
 99. **3D direct laser writing of Petabyte Optical Disk**, E. Pavel, S.I. Jinga, **B.S. Vasile**, A. Dinescu, R. Trusca, N. Tosa, Optics and Laser Technology, Volume 71, Pages 45-49, 10.1016/j.optlastec.2015.02.011, WOS:000354506900006, **IF 3.319, Q2**;
 100. **Kinetic studies on the hydrothermal crystallization of Co-doped nanostructured TiO₂ anatase with ferromagnetic properties**, RR, Piticescu; SN, Valsan; M, Petriceanu; V, Badilita; IA, Tudor; D, Taloi; **B.S. Vasile**, O, Raita, Journal of optoelectronics and advances materials, 2015, Volume 17, Issue 5-6, Pages 646-654, WOS:000357766600021, **IF 0.29, Q?**;
 101. **Out of plane superferromagnetic behavior of quasi two-dimensional Fe/Al₂O₃ multilayer nanocomposites**, D. Miu, S.I. Jinga, **B.S. Vasile**, L. Miu, Journal of Applied Physics, 2015, Volume 117, Issue 7, 10.1063/1.4908219, WOS:000351130900018, **IF 2.328, Q2**;
 102. **Structural and optical properties of fluorescent BaFBr-Eu²⁺@SiO₂ core/shell phosphor heterostructure**, M. Secu, M. Cernea, C.E. Secu, **B.S. Vasile**, Materials Chemistry and Physics, 2015, Volume 151, Pages 81-86, 10.1016/j.matchemphys.2014.11.038, WOS:000348263600013, **IF 2.781, Q2**;
 103. **Composite scaffolds based on silver nanoparticles for biomedical applications**, JM, Patrascu; IA, Nedelcu; M, Sonmez; D, Ficai; A, Ficai; **B.S. Vasile**; C, Ungureanu; MG, Albu; B, Andor; E, Andronescu; LC, Rusu; Journal of nanomaterials, 2015, 10.1155/2015/587989, WOS:000363133500001, **IF 2.233, Q3**;
 104. **Biocompatible hydrodispersible magnetite nanoparticles used as antibiotic drug carriers**, A, Bolocan; DE, Mihaiescu; E, Andronescu; G, Voicu; AM, Grumezescu; A, Ficai; **BS, Vasile**; C, Bleotu; MC, Chifiriuc; CS, Pop, Romanian journal of morphology and embryology, 2015, Volume 56, Issue 2, Pages 365-370, WOS:000358559400004, **IF 1.5, Q3**;
 105. **Characterizing nanoparticles with a laboratory diffractometer: from small-angle to total X-ray scattering**, M, Sommariva; M, Gateshki; JA, Gertenbach; J, Bolze; U, Konig; **BS, Vasile**; VA Surdu, Powder diffraction, 2014, Volume 29, Pages S47-S53, 10.1017/S0885715614001043, WOS:000353561300010, **IF 0.511, Q3**;
 106. **Research regarding sol-gel hydroxyapatite coating on 316L Stainless Steel**, AA, Poinescu; C, Radulescu; **BS, Vasile**; I, Ionita, Revista de chimie, 2014, Volume 65, Issue 10, Pages 1245-1248, WOS:000344719500027, **IF 1.605, Q3**.
 107. **Temperature effect over structure and photochemical properties of nanostructured SnO₂ powders**, A. M. Ungureanu, O. Oprea, **B. S. Vasile**, C. Andronescu, G. Voicu, I. Jitaru, Cent. Eur. J. Chem., 2014, Volume 12, Issue 9, Pages 909-917, 10.2478/s11532-013-0400-7, WOS:000335552800003, **IF 1.46, Q3**;
 108. **The effect of Co dopant on TiO₂ structure of sol-gel nanopowders used as photocatalysts**, N. Dragan, M. Crisan, M. Raileanu, D. Crisan, A. Ianculescu, P. Oancea, S. Somacescu, L. Todan, N. Stănică, **B. Vasile**, Ceramics International, 2014, Volume 40, Issue 8, Pages 12273–12284, 10.1016/j.ceramint.2014.04.072, WOS:000340328600097, **IF 3.45, Q1**;
 109. **The emergence of magnetic properties in (Pb_{0.845}Sm_{0.08}Fe_{0.035})(Ti_{0.98}Mn_{0.02})O₃ and (Pb_{0.88}Nd_{0.08})(Ti_{0.98}Mn_{0.02})O₃ perovskite ceramics**, Grigoras, N. Lupu, **B. S. Vasile**, M. Cernea, Journal of Applied Physics, 2014, Volume 116, Issue 7, 10.1063/1.4893318, WOS:000341189400030, **IF 2.328, Q2**;

110. **Quantum optical lithography from 1 nm resolution to pattern transfer on silicon wafer**, E. Pavel, S. I. Jinga, **B. S. Vasile**, A. Dinescu, V. Marinescu, R. Trusca, N. Tosa, Optics & Laser Technology, 2014, Volume 60, Pages 80–84, 10.1016/j.optlastec.2014.01.016, WOS:000333513200013, **IF 3.319, Q1**;
111. **Bioevaluation of Novel Anti-Biofilm Coatings Based on PVP/Fe₃O₄ Nanostructures and 2-((4-Ethylphenoxy)methyl)-N-(arylcarbamoithiyl)benzamides**, C. Limban, A. V. Missir, A. M. Grumezescu, A. E. Oprea, V. Grumezescu, **B. S. Vasile**, G. Socol, R. Trusca, M. T. Caproiu, M. C. Chifiriuc, B. Galateanu, M. Costache, L. Morusciag, G. Pircalabioru, D. C. Nuta, Molecules, 2014, Volume 19, Issue 8, Pages 12011-12030, 10.3390/molecules190812011, WOS:000341502600074, **IF 3.098, Q2**;
112. **MAPLE fabricated magnetite@eugenol and (3-hidroxybutyric acid-co-3-hidroxyvaleric acid)-polyvinyl alcohol microspheres coated surfaces with anti-microbial properties**, V. Grumezescu, A. M. Holban, F. Iordache, G. Socol, G. D. Mogos, A. M. Grumezescu, A. Ficai, **B. S. Vasile**, R. Trusca, M. C. Chifiriuc, H. Maniu, Applied Surface Science, 2014, Volume 306, Pages 16–22, 10.1016/j.apsusc.2014.01.126, WOS:000336591500004, **IF 5.155, Q1**;
113. **Antimicrobial nanospheres thin coatings prepared by advanced pulsed laser technique**, A. M. Holban, V. Grumezescu, A. M. Grumezescu, **B. S. Vasile**, R. Trusca, R. Cristescu, G. Socol, F. Iordache, Beilstein J. Nanotechnol. 2014, Volume 5, Pages 872–880, 10.3762/bjnano.5.99, WOS:000337812700001, **IF 2.269, Q3**;
114. **Usnic acid-loaded biocompatible magnetic PLGA-PVA microsphere thin films fabricated by MAPLE with increased resistance to staphylococcal colonization**, V. Grumezescu, A. M. Holban, A. M. Grumezescu, G. Socol, A. Ficai, **B. S. Vasile**, R. Trusca, C. Bleotu, V. Lazar, C. M. Chifiriuc, G. D. Mogosanu, Biofabrication, 2014, Volume 6, Issue 3, 10.1088/1758-5082/6/3/035002, WOS:000341823500002, **IF 7.236, Q1**;
115. **Antioxidant and antimicrobial activities of green tea extract loaded into nanostructured lipid carriers**, A.M. Manea, **B.S. Vasile**, A. Meghea, C. R. Chimie, 2014, Volume 17, Issue 4, Pages 331-341, 10.1016/j.crci.2013.07.015, WOS:000334155600006, **IF 2.366, Q2**;
116. **Biocompatible Fe₃O₄ increases the efficacy of amoxicillin delivery against gram-positive and gram-negative bacteria**, A. M. Grumezescu, M. C. Gestal, A. M. Holban, V. Grumezescu, **B. S. Vasile**, L. Mogoanta, F. Iordache, C. Bleotu, G. D. Mogosanu, Molecules 2014, Volume 19, Issue 4, Pages 5013-5027, 10.3390/molecules19045013, WOS:000336087800076, **IF 3.06, Q2**;
117. **Anionic polymers and 10 nm Fe₃O₄@UA wound dressings support human foetal stem cells normal development and exhibit great antimicrobial properties**, A. M. Grumezescu, A. M. Holban, E. Andronescu, G. D. Mogosanu, **B. S. Vasile**, M. C. Chifiriuc, V. Lazar, E. Andrei, A. Constantinescu, H. Maniu, International Journal of Pharmaceutics, 2014, Volume 463, Issue 2, Pages 146-154, 10.1016/j.ijpharm.2013.08.026, WOS:000331188000005, **IF 4.213, Q1**;
118. **New silica nanostructure for the improved delivery of topical antibiotics used in the treatment of staphylococcal cutaneous infections**, A.M. Grumezescu, C.D. Ghitulica, G. Voicu, K.S. Huang, C.H. Yang, A. Ficai, **B. S. Vasile**, V. Grumezescu, C. Bleotu, M.C. Chifiriuc, International Journal of Pharmaceutics, 2014, Volume 463, Issue 2, Pages 170-176, 10.1016/j.ijpharm.2013.07.016, WOS:000331188000008, **IF 4.213, Q1**;
119. **A simple approach for the magnetic relaxation in systems of weakly-interacting, dispersive nanoparticles in applied magnetic field**, D. Miu, C. Sima, S. I. Jinga, **B. S. Vasile**, L. Miu, JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, 2014, Volume 27, Issue 3, Pages 781-785, 10.1007/s10948-013-2345-7, WOS:000331380000018, **IF 1.13, Q3**;
120. **Synthesis of Poly (vinylpyrrolidone) protected Pd-Ag, Bimetallic Nanoparticles by Polyol Method**, C. Matei, D. Berger, **B. S. Vasile**, Materiale Plastice, 2014, Volume 51, Issue 1, Pages 6-11, WOS:000333795300002, **IF 1.393, Q3**;

121. **Synthesis, structural and morphological characteristics, magnetic and optical properties of Co doped ZnO nanoparticles**, A. Mesaros, C. D. Ghitulica, M. Popa, R. Mereu, A. Popa, T. Petrisor Jr., M. Gabor, A. I. Cadis, **B. S. Vasile**, *Ceramics International*, 2014, Volume 40, Issue 2, Pages 2835–2846, 10.1016/j.ceramint.2013.10.030, WOS:000329882100039, **IF 3.45, Q1**;
122. **Synthesis, crystal structure and thermal decomposition kinetics of yttrium propionate**, M. Nasui, T. Petrisor Jr, R. B. Mos, A. Mesaros, R. A. Varga, **B. S. Vasile**, T. Ristoiu, L. Ciontea, T. Petrisor, J. Anal. Appl. Pyrolysis, 2014, Volume 106, Pages 92–98, 10.1016/j.jaap.2014.01.004, WOS:000334081100014, **IF 3.47, Q1**;
123. **Synthesis, structural characterization and dielectric properties of Nb doped BaTiO₃/SiO₂ core-shell heterostructure**, M. Cernea, **B.S. Vasile**, A. Boni, A. Iuga, *Journal of Alloys and Compounds*, 2014, Volume 587, Pages 553–559, 10.1016/j.jallcom.2013.10.228, WOS:000329114100085, **IF 4.175, Q2**;
124. **BiFeO₃ doped-BNT-BT0.08 piezoelectric and magnetic nanowires, derived from sol-gel precursor**, M. Cernea, L. Trupina, **B. S. Vasile**, C. Bartha, R. Radu, C. Chirila, A. Teodorescu, *J Nanopart Res*, 2014, Volume 16, Issue 2, 10.1007/s11051-013-2231-z, WOS:000329623700001, **IF 2.009, Q3**;
125. **Rice bran and raspberry seed oil-based nanocarriers with self-antioxidative properties as safe photoprotective formulations**, G. Niculae, I. Lacatusu, N. Badea, R. Stan, **B.S. Vasile**, A. Meghea, *Photochem Photobiol Sci.*, 2014, Volume 13, Issue 4, Pages 703-16, 10.1039/c3pp50290b, WOS:000333093000009, **IF 2.408, Q3**;
126. **Size-dependent photoluminescence of zinc oxide quantum dots through, organosilane functionalization**, V. Musat, A. Tabacaru, **B. S. Vasile**, V. A. Surdu, *RSC Advances*, 2014, Volume 4, Issue 108, Pages 63128-63136, 10.1039/c4ra10851e, WOS:000345701500042, **IF 3.049, Q2**;
127. **Synthesis of ceria nanoparticles with controlled morphology**, C. Matei; CI, Cavaliu; **B.S. Vasile**; D. Berger, *Revista romana de materiale-Romanian journals of materials*, 2014, Volume 44, Issue 1, Pages 74-78, WOS:000335276800010, **IF 0.628, Q3**
128. **Iron oxide nanoparticles modulate the interaction of different antibiotics with cellular membranes**, Istrate, CM; Holban, AM; Grumezescu, AM; Mogoanta, L; Mogosanu, GD; Savopol, T; Moisescu, M; Iordache, M; **Vasile, BS**; Kovacs, E. *Romanian Journal of Morphology and Embryology*, 2014, Volume 55, Issue 3, Pages 849-856, WOS:000344040000013, **IF 1.5, Q3**;
129. **Synthesis of photoluminescent pure and doped cadmium sulfide by reverse microemulsion method**, A. I. Iorgu, D. Berger, L. Alexandrescu, **B. S. Vasile**, C. Matei, *Chalcogenide Letters*, 2013, Volume 10, Issue 12, Pages 525 – 531, WOS:000328603900002, **IF 0.977, Q3**;
130. **Hydrothermal synthesis and characterization of rod-like co-doped anatase for spintronic applications**, S. N. Valsan, I. A. Tudor, V. Badilita, **B. Vasile**, O. Raita, R.-R. Piticescu, *Optoelectronics and Advanced Materials – Rapid Communications*, 2013, Volume 7, Issue 11-12, Pages 1011-1014, WOS:000328253100039, **IF 0.386, Q3**;
131. **Optical properties correlated with morphology and structure of TEAH modified ZnO nanoparticles via precipitation method**, M. Popa, A. Mesaros, R.A. Mereu, R. Suci, **B.S. Vasile**, M.S. Gabor, L. Ciontea, T. Petrisor, *Journal of Alloys and Compounds*, 2013, Volume 574, Pages 255–259, 10.1016/j.jallcom.2013.04.078, WOS:000321749600042, **IF 4.175, Q1**;
132. **Synthesis and photocatalytic properties of Fe(III)-doped TiO₂ prepared by sol-gel method**, O. Oprea; CD, Ghitulica, G, Voicu, **BS, Vasile**; A, Oprea, *Revista romana de materiale-Romanian journals of materials*, 2013, Volume 43, Issue 4, Pages 408-416, WOS:000328923700007, **IF 0.628, Q3**;
133. **Antibacterial activity of zinc oxide – gentamicin hybrid material**, G. Voicu, O. Oprea, **B. S. Vasile**, E. Andronescu, *Digest Journal of Nanomaterials and Biostructures*, 2013, Volume 8, Issue 3, 2013, WOS:000327816300027, **IF 0.638, Q3**;

134. **Nanotubes of piezoelectric BNT–BT_{0.08} obtained from sol–gel precursor**, M. Cernea, L. Trupina, **B. S. Vasile**, R. Trusca, C. Chirila, J Nanopart Res, 2013, Volume 15, Issue 7, Pages 1787, 10.1007/s11051-013-1787-y, WOS:000322173600034, **IF 2.009, Q3**;
135. **In vitro activity of the new water-dispersible Fe₃O₄@usnic acid nanostructure against planktonic and sessile bacterial cells**, A. M. Grumezescu, A. I. Cotar, E. Andronescu, A. Fikai, C. D. Ghitulica, V. Grumezescu, **B. S. Vasile**, M. C. Chifiriuc, J Nanopart Res, 2013, Volume 15, Issue 7, Pages 1766, 10.1007/s11051-013-1766-3, WOS:000322173600014, **IF 2.009, Q3**;
136. **Hybrid composite materials with biofunctional properties**, A. A. Poinescu, R. M. Ion, **B. Vasile**, Journal of Optoelectronics and Advanced Materials, 2013, Volume 15, Issue 7-8, Pages 874 – 878, WOS:000323397900047, **IF 0.588, Q3**;
137. **BNT–BT_{0.08} wires derived from sol–gel precursor and their piezoelectric behavior**, M. Cernea, L. Pintilie, L. Trupina, **B. S. Vasile**, C. Chirila, I. Pasuk, J Nanopart Res, 2013, Volume 15, Issue 5, Pages 1668, 10.1007/s11051-013-1668-4, WOS:000318555400067, **IF 2.009, Q3**;
138. **Structural properties of silver doped hydroxyapatite and their biocompatibility**, C.S. Ciobanu, S.L. Iconaru, I. Pasuk, **B.S. Vasile**, A.R. Lupu, A. Hermenean, A. Dinischiotu, D. Predoi, Materials Science and Engineering, 2013, Volume 33, Issue 3, Pages 1395–1402, 10.1016/j.msec.2012.12.042, WOS:000315751600052, **IF 4.959, Q1**;
139. **Synthesis and characterization of magnetite-polysulfone micro-and nanobeads with improved chemical stability in acidic media**, D. Fikai; A. Fikai; R. Trusca; **B.S. Vasile**; G. Voicu; C. Guran; E. Andronescu, Current nanoscience, 2013, Volume 9, Issue 2, Pages 271-277, 10.2174/1573413711309020017, WOS:000317837100016, **IF 1.586, Q3**;
140. **Photoluminescence and photocatalytic activity of Mn- doped ZnO nanoparticles**, G. Voicu, O. Oprea, **B. S. Vasile**, E. Andronescu, Digest Journal of Nanomaterials and Biostructures, 2013, Volume 8, Issue 2, Pages 667 – 675, WOS:000322737500019, **IF 0.638, Q3**.
141. **2 nm Quantum Optical Lithography**, E. Pavel, S. Jinga, E. Andronescu, **B. S. Vasile**, G. Kada, A. Sasahara, N. Tosa, A. Matei, M. Dinescu, A. Dinescu, O. R. Vasile, Optics Communications, 2013, Volume 291, Pages 259–263, 10.1016/j.optcom.2012.10.079, WOS:000315001200041, **IF 1.961, Q3**;
142. **Spin dynamics evidenced by EPR in Sn_{1-x}Mn_xO₂ nanoparticles annealed at different temperatures**, A. Popa, D. Toloman, O. Raita, M. Stan, **B.S. Vasile**, C. Leostean, L.M. Giurgiu, Journal of Alloys and Compounds, 2013, Volume 551, Pages 300–305, 10.1016/j.jallcom.2012.10.007, WOS:000313651600051, **IF 4.175, Q2**;
143. **Evidence by EPR of ferromagnetic phase in Mn-doped ZnO nanoparticles annealed at different temperatures**, D. Toloman, A. Mesaros, A. Popa, O. Raita, T.D. Silipas, **B.S. Vasile**, O. Pana, L.M. Giurgiu, Journal of Alloys and Compounds, 2013, Volume 551, Pages 502–507, 10.1016/j.jallcom.2012.10.183, WOS:000313651600086, **IF 4.175, Q1**.
144. **Structural and optical characterization of sol-gel derived Tm-doped BaTiO₃ nanopowders and ceramics**, M. Cernea, C. E. Secu, **B. S. Vasile**, M. Secu, Current Applied Physics, 2013, Volume 13, Issue 1, Pages 137-141, 10.1016/j.cap.2012.06.024, WOS:000308716900022; **IF 2.01, Q2**.
145. **Thermal characterization of Co-doped TiO₂ nanopowders obtained by a hydrothermal procedure**, Al, Tudor; SN, Valsan; RR, Piticescu; V, Badilita; **B.S. Vasile**; C, Predescu, Metalurgia International, 2013, Volume 18, Issue 2, Pages 142-146, WOS:000315312100031, **IF 0.134, Q3**.
146. **Synthesis and Characterization of Mesoporous Magnetite Based Nanoparticles**, D. Fikai, E. Andronescu, A. Fikai, G. Voicu, **B. Vasile**, V. Ionita, C. Guran, Current Nanoscience, 2012, Volume 8, Pages 875-879, 10.2174/157341312803989114, WOS:000311285100010, **IF 1.586, Q3**.
147. **Nanoalumina obtained by pyrosol method**, R. Rogojan, E. Andronescu, G. Voicu, **B. S. Vasile**, Materials Science-Poland, 2012, Volume 30, Issue 4, Pages 368 – 374, 10.2478/s13536-012-0045-9, WOS:000312407100011, **IF 0.918, Q3**.

148. **Magnetite nanoparticles for functionalized textile dressing to prevent fungal biofilms development**, I. Anghel, A.M. Grumezescu, E. Andronescu, A. Georgiana, A. Ficai, C. Saviuc, V. Grumezescu, **B.S. Vasile**, M.C. Chifiriuc, *Nanoscale Research Letters*, 2012, Volume 7, Issue 1, Pages 501, 10.1186/1556-276X-7-501, WOS:000310951100001, **IF 3.159, Q2**.
149. **Synthesis and characterization of nanostructured zinc oxide particles synthesized by the pyrosol method**, O. R. Vasile, E. Andronescu, C. Ghitulica, **B.S. Vasile**, O. Oprea, E. Vasile, R. Trusca, *J Nanopart Res*, 2012, Volume 14, Issue 12, Pages 1269, 10.1007/s11051-012-1269-7, WOS:000312894200014, **IF 2.009, Q3**;
150. **Solar Physical Vapor Deposition Preparation and Microstructural Characterization of TiO₂ Based Nanophases for Dye-Sensitized Solar Cell Applications**, D. Negrea, C. Ducu, S. Moga, V. Malinovschi, C. J. A. Monty, **B. Vasile**, D. Dorobantu, M. Enachescu, *Journal of Nanoscience and Nanotechnology*, 2012, Volume 12, Issue 11, Pages 8746-8750, 10.1166/jnn.2012.6814, WOS:000313851000080, **IF 1.093, Q3**.
151. **Use of preceramic polymers for magnesium diboride composites**, V. Sandu, E. Cimpoiasu, G. Aldica, S. Popa, E. Sandu, **B. S. Vasile**, N. Hurduc, I. Nor, *Physica C*, 2012, Volume 480, Pages 102–107, 10.1016/j.physc.2012.03.052, WOS:000308591900019, **IF 0.985, Q3**.
152. **Hydrothermal synthesis of SrTiO₃ mesocrystals: single crystal to mesocrystal transformation induced by topochemical reactions**, V. Kalyani, **B. S. Vasile**, A. Ianculescu, M. T. Buscaglia, V. Buscaglia, P. Nanni, *Cryst. Growth Des.*, 2012, Volume 12, Issue 9, Pages 4450–4456; 10.1021/cg300614f, WOS:000308279900022, **IF 4.153, Q1**.
153. **Structural, dielectric, and piezoelectric properties of fine-grained NBT–BT_{0.11} ceramic derived from gel precursor**, M. Cernea, C. Galassi, **B. S. Vasile**, C. Capiiani, C. Berbecaru, I. Pintilie, L. Pintilie, *Journal of the European Ceramic Society*, 2012, Volume 32, Issue 10, Pages 2389–2397, 10.1016/j.jeurceramsoc.2012.02.021, WOS:000304782600039, **IF 4.029, Q1**.
154. **Preparation and properties of nanocrystalline BNT-BTx piezoelectric ceramics by sol-gel and spark plasma sintering**, M. Cernea, G. Poli, G. V. Aldica, C. Berbecaru, **B. S. Vasile**, C. Galassi, *Current Applied Physics*, 2012, Volume 12, Issue 4, Pages 1100 – 1105, 10.1016/j.cap.2012.01.016, WOS:000303129800018, **IF 2.01, Q2**.
155. **Influence of a TiO₂ buffer layer on the magnetic properties of anatase Co:TiO₂ thin films**, M. S. Gabor, T. Petrisor, C. Tiusan, M. Hehn, **B. S. Vasile**, T. Petrisor, *J. Appl. Phys.*, 2012, Volume 111, Issue 8, Pages 083917, 10.1063/1.4706570, WOS:000303598800085, **IF 2.328, Q2**.
156. **Spark-plasma-sintering temperature dependence of structural and piezoelectric properties of BNT-BT_{0.08} nanostructured ceramics**, M. Cernea, F. Fochi, G. V. Aldica, **B. S. Vasile**, R. Trusca, C. Galassi, *Journal of Materials Science*, 2012, Volume 47, Issue 8, Pages 3669-3673, 10.1007/s10853-011-6215-z, WOS:000299524400022, **IF 3.442, Q2**.
157. **Sol-gel zirconia nanopowders with alpha-cyclodextrin as organic additive**, M. Răileanu, L. Todan, D. Crisan, N. Drăgan, M. Crisan, C. Stan, C. Andronescu, M. Voicescu, **B.S. Vasile**, A. Ianculescu, *Journal of Alloys and Compounds*, 2012, Volume, 517, Pages 157-163, 10.1016/j.jallcom.2011.12.070, WOS:000300186200024, **IF 4.175, Q1**.
158. **Structural and piezoelectric characteristics of BNT-BT_{0.05} thin films processed by sol-gel technique**, M. Cernea, L. Trupina, C. Dragoi, **B. S. Vasile**, R. Trusca, *Journal of Alloys and Compounds*, 2012, Volume 515, Pages 166-170, 10.1016/j.jallcom.2011.11.129, WOS: 000299105800032, **IF 4.175, Q1**.
159. **Bioassay and electrochemical evaluation of controlled Release behavior of cephalosporins from magnetic nanoparticles**, D. E. Mihaiescu, A. M. Grumezescu, A. S. Buteica, D. E. Mogosanu, P. C. Balaure, O. M. Mihaiescu, V. Trăistaru, **B.S. Vasile**, *Digest Journal of Nanomaterials and Biostructures*, 2012, Volume 7, Pages 253 – 260, WOS:000303649000028, **IF 0.638, Q3**.

160. **Dielectric and piezoelectric behaviors of NBT-BT_(0.05) processed by sol-gel method**, M. Cernea, **B. S. Vasile**, C. Capiani, A. Ioncea, C. Galassi, Journal of the European Ceramic Society, 2012, Volume 32, Issue 1, Pages 133-139, 10.1016/j.jeurceramsoc.2011.07.038, WOS:000297451400014, **IF 4.029, Q1**.
161. **Structural characterization and photoluminescence of nanocrystalline Ho-doped BaTiO₃ derived from sol-gel method**, M. Secu, M. Cernea, C. E. Secu, **B. S. Vasile**, J Nanopart Res, 2011, Volume 13, Issue 8, Pages 3123-3128, 10.1007/s11051-011-0224-3, WOS:000292749100005, **IF 2.009, Q3**.
162. **Synthesis of rod-like magnetite by using low magnetic field**, D. Ficai, A. Ficai, **B. S. Vasile**, M. Ficai, O. Oprea, C. Guran, E. Andronescu, Digest Journal of Nanomaterials and Biostructures, 2011, Volume 6, Pages 943 – 951, WOS:000297986100007, **IF 0.638, Q3**.
163. **Synthesis and characterization of ZnO nanopowder by non-basic route**, O. Oprea, E. Andronescu, **B. S. Vasile**, G. Voicu, C. Covaliu, Digest Journal of Nanomaterials and Biostructures, 2011, Volume 6, Pages 1393-1401, WOS:000297986100057, **IF 0.638, Q3**.
164. **Gold Nanowire Networks: Synthesis, Characterization, and Catalytic Activity**, M. Chirea, A. Freitas, **B. S. Vasile**, C. Ghitulica, C. M. Pereira, F. Silva, Langmuir, 2011, Volume 27, Issue 7, Pages 3906-3913, 10.1021/la104092b, WOS: 000288970900089, **IF 3.683, Q2**.
165. **The Influence of Ultrasonication on the Formation of COLL/HA Composite Materials**, M. Ficai, I.A. Nedelcu, D. Ficai, **B.S. Vasile**, A. Ficai, E. Andronescu, Materiale Plastice, 2011, Volume 48, Pages 23-26, WOS:000289661700005, **IF 1.393, Q3**.
166. **Dielectric and Ferroelectric Characterization of Ba_{0.95}Tm_{0.05}TiO₃ Ceramics Derived from Sol to Gel**, M. Cernea, **B. S. Vasile**, P. Ganea, R. Radu, V. Mihalache, A. Husanu, J. Am. Ceram. Soc., 2011, Volume 94, Issue 3, Pages 736-741, 10.1111/j.1551-2916.2010.04179.x, WOS:000288261500020, **IF 2.956, Q1**.
167. **Structural and chemical properties of cerium-magnetoplumbite in cerium based IT-SOFC compounds**, A. M. Vlaicu, I. Mercioniu, **B. S. Vasile**, C. C. Negrila, C. Logofatu, N. C. Cretu, P. Nita, N. Popescu-Pogrion, Optoelectronics and advanced Materials – Rapid Communications, 2011, Volume 5, Pages 143 – 145, WOS:000288625000030, **IF 0.452, Q3**.
168. **Influence of preparation conditions on nanometric characteristics of zirconia and alumina powders**, S. Stoleriu, E. Andronescu, C. A. Lucia, **B. S. Vasile**, Revista Romana de Materiale-Romanian Journal of Materials, 2011, Volume 41, Issue 3, Pages 255-261, WOS:000295564200010, **IF 0.628, Q3**.
169. **SYNTHESIS AND CHARACTERIZATION OF CALCIA STABILIZED ZIRCONIA NANO-POWDER, OBTAINED BY SOL - GEL METHOD**, RODICA ROGOJAN, ECATERINA ANDRONESCU, IRINA ILIESCU, ROXANA TRUȘCĂ, BOGDAN ȘTEFAN VASILE, Revista Română de Materiale/Romanian Journal of Materials, 2011, Volume 41, Issue 3, Pages 240-247, WOS:000295564200008, **IF 0.628, Q3**.
170. **Structural and thermoluminescence properties of undoped and Fe-doped-TiO₂ nanopowders processed by sol-gel method**, M. Cernea, M. Secu, C. E. Secu, M. Baibarac, **B. S. Vasile**, J Nanopart Res, 2011, Volume 13, Issue 1, Pages 77–85, 10.1007/s11051-010-0002-7, WOS:000286667000009, **IF 2.009, Q3**.
171. **5 nm structures produced by direct laser writing**, E. Pavel, S. Jinga, E. Andronescu, **B. S. Vasile**, E. Rotiu, L. Ionescu, C. Mazilu, Nanotechnology, 2011, Volume 22, Issue 2, 10.1088/0957-4484/22/2/025301, WOS:000285093500008, **IF 3.399, Q2**.
172. **Looking for new synthesis of hydroxyapatite doped with europium**, C.S. Ciobanu, E. Andronescu, **B. S. Vasile**, Optoelectronics and Advanced Materials-Rapid Communications, 2010, Volume 4, Issue 10, Pages 1515-1519, WOS:000284126600020, **IF 0.452, Q3**.

173. **The anti-bacterial activity of magnetic nanofluid: Fe₃O₄ /oleic acid/cephalosporins core/shell/adsorption-shell proved on S. Aureus and E. Coli and possible applications as drug delivery systems**, A. S. Buteică, D. E. Mihaiescu, A. M. Grumezescu, **B. S. Vasile**, A. Popescu, O. M. Mihaiescu, R. Cristescu, Digest Journal of Nanomaterials and Biostructures, 2010, Volume 5, Issue 4, Pages 927-932, WOS:000284000400016, **IF 0.638, Q3**.
174. **The Environmentally Benign Synthesis of Nanosized Co_xZn_{1-x}Al₂O₄ Blue Pigments**, D. Visinescu, C. Paraschiv, A. Ianculescu, B. Jurca, **B. Vasile**, O. Carp, Dyes and Pigments, 2010, Volume 87, Issue 2, Pages 125-131, 10.1016/j.dyepig.2010.03.006, WOS: 000279061700006, **IF 3.767, Q1**.
175. **Fe₂O₃@BaTiO₃ Core-Shell Particles as Reactive Precursors for the Preparation of Multifunctional Composites Containing Different Magnetic Phases**, M. T. Buscaglia, V. Buscaglia, L. Curecheriu, P. Postolache, L. Mitoseriu, A. C. Ianculescu, **B. S. Vasile**, Z. Zhe, P. Nanni, Chem. Mater., 2010, Volume 22, Issue 16, Pages 4740–4748, 10.1021/cm1011982, WOS:000280855100028, **IF 10.159, Q1**.
176. **The cytotoxicity of (non)magnetic nanoparticles tested on escherichia coli and staphylococcus aureus**, A. S. Buteică, D. E. Mihaiescu, A. M. Grumezescu, **B. S. Vasile**, A. Popescu, D. Călina, O. M. Mihaiescu, Digest Journal of Nanomaterials and Biostructures, 2010, Volume 5, Issue 3, Pages 651–655, WOS:000279345400011 **IF 0.638, Q3**.
177. **Self Assembled Collagen/Hydroxyapatite Composite**, A. Fici, E. Andronescu, G. Voicu, C. Ghitulica, **B. S. Vasile**, D. Fici, V. Trandafir, Chemical Engineering Journal, 2010, Volume 160, Issue 2, Pages 794–800, 10.1016/j.cej.2010.03.088, WOS: 000279137900050, **IF 8.355, Q1**.
178. **Electrical Investigations of Holmium-Doped BaTiO₃ Derived From Sol-gel Combustion**, M. Cernea, C. Galassi, **B. S. Vasile**, Paul Ganea, Roxana Radu, Georgiana Ghita, J. Mater. Res., 2010, Volume 25, Issue 6, Pages 1057-1063, 10.1557/JMR.2010.0149, WOS:000278161900010, **IF 1.982, Q3**.
179. **Polysulfone Based Membranes with Desired Pores Characteristics**, D. Fici, A. Fici, G. Voicu, **B. S. Vasile**, C. Guran, E. Andronescu, Materiale Plastice, 2010, Volume 47, Pages 24-27, WOS:000276587100005, **IF 1.393, Q3**.

e) **B+ papers:**

1. **Optical properties of pyrosol synthesized TiO₂ nanostructures**, Otilia–Ruxandra VASILE, Ecaterina Andronescu, Roxana Trusca, Ovidiu Oprea, Eugeniu Vasile, Bogdan Stefan Vasile, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 2016, Volume 78, Issue 3, Pages 75-86.
2. **Structural Investigations of Scandia - Doped Zirconia Nanopowders Obtained by Sol-gel Method**, **Bogdan Stefan Vasile**, Ecaterina Andronescu, Daniel Florea, Cristina Ghitulica, U.P.B. Sci. Bull., Series B, 2010, Volume 72, Issue 1, Pages 81-92.
3. **Synthesis, characterization and biological activity of composite combinations of Cu(II), Fe(III) and Mn(III) with α -Ketoglutaric Acid and 1-(o-Tolyl) Biguanide**, Mihalache, M., Oprea, O., **Vasile, B.S.**, Guran, C., Ardelean, I.L., UPB Scientific Bulletin, Series B: Chemistry and Materials Science 2018, Volume 80, Issue 1, Pages 113-26.
4. **NANOTUBES OF Ba_{0.95}Ce_{0.05}Ti_{0.9875}O₃ PREPARED BY SOL-GEL CHEMISTRY**, Marin Cernea, Adelina Carmen Ianculescu, Bogdan Stefan Vasile, Catalina Andreea Vasilescu, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 2016, Volume 78, Issue 1, Pages 51-58, WOS:000417051900005.
5. **Collagen/TiO₂-Ag composite nanomaterials for antimicrobial applications**, Angela, S., Georgeta, V., Denisa, F., Ungureanu, C., Albu, M.G., **Vasile, B.S.**, Fici, A., Andronescu, E.,

University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 2015, Volume 77, Issue 4, Pages 275-290, WOS:000417047800025.

6. **Synthesis and characterisation of dextran coated hydroxyapatite for environmental applications**, Adrian Costescu, Ecaterina Andronescu, Bogdan Stefan Vasile, Roxana Trusca, Philippe Le Coustumer, Emil Stefan Barna, Simona Liliana Iconaru, MM Heino, Carmen Steluța Ciobanu, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 2014 Volume 76, Issue 4, Pages 71-80.
7. **Grain size effect on photocatalytic properties of nanocrystalline ZnO**, Otilia-Ruxandra Vasile, Ecaterina Andronescu, Cristina Ghițulică, Bogdan Ștefan Vasile, Eugeniu Vasile, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 2014, Volume 76, Issue 2, Pages 3-12.
8. **Eugenol functionalized magnetite nanostructures used in anti-infectious therapy**, A.M. Grumezescu, **B.S. Vasile**, A.M. Holban, Lett.Appl.Nanobiosci, 2013, Volume 2, Pages 120-123.
9. **A new route for synthesis and characterization of macroporous granular silver**, Adrian STROIA, Cristian MATEI, **Bogdan S. VASILE**, Ovidiu OPREA, Cristina COVALIU, Ioana JITARU, U.P.B. Sci. Bull., Series B, 2012, Volume 74, Issue 3, Pages 7-18.
10. **Hybrid nanostructured materials for bio-interface application in developing new antimicrobial strategies: R2530**, A Grumezescu, E Andronescu, C Saviuc, A Ficai, B Vasile, L Marutescu, M Chifiriuc, V Lazar, Clinical Microbiology & Infection, 2012, Volume 18.
11. **Synthesis, characterization and biological evaluation of a Fe₃O₄/C₁₂ core/shell nanosystem**, A. M. Grumezescu, E. Andronescu, A. Ficai, D. E. Mihaiescu, **B. S. Vasile**, C. Bleotu, Letters in Applied NanoBioScience, ,2012, Volume 1, Pages 31-35.
12. **Magnetic nanofluid with antitumoral properties**, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Anton Ficai, Chih-Hui Yang, Keng-Shiang Huang, Bogdan Stefan Vasile, Georgeta Voicu, Dan Eduard Mihaiescu, Coralia Bleotu, Letters in Applied NanoBioScience, 2012, Volume 1, Issue 3, Pages 56-60.
13. **Preliminary studies on hydroxyapatite doped with europium**, Carmen Steluta CIOBANU, Ecaterina ANDRONESCU, **Bogdan Stefan VASILE**, Roxana TRUSCĂ, Daniela PREDOI, U.P.B. Sci. Bull., Series B, 2011, Volume 73, Pages 63-70.
14. **Synthesis and characterization of alumina nano-powder obtained by sol-gel method**, Rodica ROGOJAN, Ecaterina ANDRONESCU, Cristina GHITULICĂ, **Bogdan Stefan VASILE**, U.P.B. Sci. Bull., Series B, 2011, Volume 73, Issue 2, Pages 67-76.
15. **Poly Bis-Gma/Ha based hybrid composite materials**, Maria FICAI1, Ecaterina ANDRONESCU2, Anton FICAI, Georgeta VOICU, **Bogdan Stefan VASILE**, U.P.B. Sci. Bull., Series B, 2011, Volume 73, Issue 1, Pages 75-84.
16. **Palladium Nanoparticles Synthesis with Controlled Morphology by Polyol Method**, Daniela Berger, Gina Alina Trăistaru, **Bogdan Stefan Vasile**, Ioana Jitaru, Cristian Matei, U.P.B. Sci. Bull., Series B, 2010, Volume 72, Issue 1, Pages 113-120.

f) Oral presentations:

1. **Synthesis and characterization of mesoporous magnetic nanoparticles**, Denisa FICAI, Ecaterina ANDRONESCU, Anton FICAI, **Bogdan VASILE**, Cezar COMANESCU, Cornelia GURAN, 17th Romanian International Conference on Chemistry and Chemical Engineering September 7 – 10, 2011, Sinaia – Romania;
2. **Influence of obtaining conditions on nanometric characteristics of zirconia and alumina powders**, Stefania STOLERIU, Alexandra CARABAT, **Bogdan VASILE**, Ecaterina ANDRONESCU,

17th Romanian International Conference on Chemistry and Chemical Engineering September 7 – 10, 2011, Sinaia – Romania;

3. ***A new route for synthesis of macroporous granular silver***, Adrian STROIA, Cristian MATEI, **Bogdan S. VASILE**, Ovidiu OPREA, Cristina COVALIU, Ioana JITARU, 17th Romanian International Conference on Chemistry and Chemical Engineering September 7 – 10, 2011, Sinaia – Romania;
4. ***Noble metal nanoparticles with controlled morphology***, Daniela BERGER, Doru CONSTANTIN, **Bogdan Stefan VASILE**, Carmen Elena MIRON, Adrian Nicoara, Cristian Matei, 17th Romanian International Conference on Chemistry and Chemical Engineering September 7 – 10, 2011, Sinaia – Romania;
5. ***A comparative study on nanostructured zirconia ceramics and nanocomposites sintered by different methods***, **B. S. Vasile**, E. Andronescu, C. Ghitulica, O. R. Vasile, L. Curechiu, R. Scurtu, 12th Conference of the European Ceramic Society, Stockholm, Sweden, June 19-23, 2011;
6. ***Cubic Stabilized Zirconia Nanoparticles Obtained through the Pirosool Method***, **B.S. Vasile** (presenting author), C. Ghitulica, E. Andronescu, E. Dinu, O.R. Vasile –, ICC3 – 3rd International Congress on Ceramics, Nov. 14-18, 2010, Osaka, Japan;
7. ***Structural Investigations on Yttria – Doped Zirconia Nanopowders Obtained by Different Methods***, Nicoletta Popescu-Pogriion, Ionel Mercioniu, **Bogdan Vasile**, Andrei Popescu, Cristina Ghitulica, Serban Constantinescu, Iancu Mihailescu, Ecaterina Andronescu, 18th National Electron Microscopy Congress, Eskisehir, Turkey, 26-29 August 2007.
8. ***Structural investigations on yttria - doped zirconia nanopowders obtained by sol-gel method***, **B. S. Vasile**, Student Speech Contest, 10th International Conference and Exhibition of the European Ceramic Society, June 17 - 21, 2007, Berlin.

g) Proceedings:

1. ***High temperature superconducting materials based on Graphene / YBCO nanocomposite***, Colie, M., Mihailescu, D., Surdu, A., Trusca, R., **Vasile, B.**, Istrati, D., Ficai, A., Plapcianu, C., Andronescu, E., Materials Today: Proceedings, 2016, Volume 3, Issue 8, Pages 2628-2634, 10.1016/j.matpr.2016.06.006, WOS:000398483700007.
2. ***Antibiotic Incidence, Distribution and Resistance in Wastewaters***, Anton Ficai, Denisa Ficai, **Bogdan Stefan Vasile**, Dan Eduard Mihailescu, Bogdan Purcarea, Marcela Popa, Carmen Mariana Chifiriuc, Multidisciplinary Digital Publishing Institute Proceedings, 2019, Volume 29, Issue 1, Pages 119.
3. ***TEM Characterization of stabilised zirconia nanopowders***, **Bogdan S. Vasile**, Cristina Ghitulica, Ecaterina Andronescu, Otilia R. Vasile, I. International Ceramic, Glass, Porcelain, Enamel, Glaze and Pigment Congress, 12-14 October 2009, Eskisehir, Turkey, ISBN 978-975-94814-7-6.
4. ***Pd nanoparticles synthesis with controlled morphology obtained by polyol method***, Daniela Berger, Gina Alina Trăistaru, **Bogdan Vasile**, Ioana Jitaru, Cristian Matei, 16th Romanian International Conference on Chemistry and Chemical Engineering, September 9 – 12, 2009, Sinaia – Romania;
5. ***Structural investigation on yttria doped zirconia nanocrystalites obtained through pirosol method***, **B.S. Vasile**, Ecaterina Andronescu, Cristina Ghitulica, Raluca Dobranis, Georgeta Pall, Roxana Trusca, 16th Romanian International Conference on Chemistry and Chemical Engineering September 9 – 12, 2009, Sinaia – Romania;
6. ***Dental ceramics for opaque restorations***, **B. S. Vasile**, Ecaterina Andronescu, Cristina Ghitulica, Oana Nicola, The 15th Romanian International Conference on Chemistry and Chemical Engineering, September 19 – 22, 2007.

h) Patents:

1.Ficai D, Andronescu E, Sonmez M, Ficai A, Oprea O, Vasile B.S., "Multifunction systems of the magnetite/thio acids/ag or au type, to be employed in cancer diagnosis and guided treatment". Univ Politehnica Din Bucuresti; RO129824-A2.

i) Patent application:

1.Ianculescu A.C., Stanciu C.A., Vasile B.S., Trușcă R., Nicoară A.I., Eftimie A.M., Surdu V.A., "Preparation process by the negative template method combined with sol-gel chemistry of cerium doped BaTiO₃ one-dimensional nanostructures with ferroelectric and piezoelectric characteristics", Patent request No. A/00898/15.11.2018.

j)Certificate:



Certificate

This is to certify that
Bogdan Stefan Vasile

has participated in the

Tecnai Basic Course

at the **FEI Application Laboratory in Eindhoven, the Netherlands**

November 10 – 14, 2008

Course Leader


Matthijn Vos

FEI Academy Manager


Eric Bathelt

 **FEI COMPANY™**

NanoConsulting
Dieter Vollath



Certificate

From May 25 to May 28, 2009

Bogdan Stefan Vasile

attended the course

Nanomaterials

and participated the group work successfully.

Bad Gastein, May 28, 2009


Prof. Dr. Dieter Vollath

www.nanoconsulting.de



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We, Ronexprim SRL, hereby confirm that **dr.eng. Bogdan Stefan VASILE** has attended the

"Titan Themis 200 on-site Life Science Training Course - Vitrobot and Cryo-TEM"

held at University POLITEHNICA Bucharest, March 08 - 10, 2016.

The course's Instructor: **dr. Maarten Wirix** - Research Scientist TEM, FEI Company.

Covered topics:

CryoTEM sample preparation and basic imaging

- Preparation of cryogen
- Vitrobot and vitrification
- Cryo-TEM imaging

STEMEDS imaging and alignment

- Optimizing & Aligning TEM and electron diffraction for cryo work
- Contrast mechanisms in cryo-TEM and dark field imaging
- Low dose imaging

Tomography

- Tomography Data Acquisition
- Reconstruction using Inspect3D

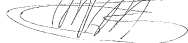
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General Manager



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NanoPort Europe
dr. Maarten Wirix
Research Scientist TEM



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"On-site Training Course - Titan Themis 200 for Materials Science"

held at University POLITEHNICA Bucharest, February 16 - 18, 2016.

The course's Instructor: **dr. Sorin LAZAR** - Senior Research Scientist FEI Company.

Covered topics:

- HR TEM
- Image Corrector Tuning
- HR STEM
- Optic Condenser System
- EDX Enspirt
- CETA Image Acquisition
- EELS
- Velox
- Lorentz Imaging
- STEM, EDX and EELS Mapping

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dr.ing. Rodica STOIAN
General Manager



FEI COMPANY

NanoPort Europe

dr. Sorin LAZAR
Senior Research Scientist



Certificate

We, Ronexprim SRL, hereby confirm that **dr.eng. Bogdan Stefan VASILE** has attended the
**"On-site Training Course - SEM, FIB and EDS
 for Versa 3D"**

held in University POLITEHNICA Bucharest, February 08 - 12, 2016.

The course's instructor: **dr. Ellen BAKEN** - Senior Application Specialist FEI Company.

The course has covered the underlying principles and practical aspects of SEM Versa 3D. Loading and unloading samples, the formation of the SEM image, detector use, stage navigation, aligning the beams and milling a cross-section has been covered in the lectures and practical exercises.

Covered topics:

- The instrument
 - o Introduction to the GUI
 - o Stage navigation
- Electron beam
 - o Types of interaction and resulting signals
- Ion beam
 - o General operation
- Technical and sample related topics
 - o Milling a cross-section
 - o Alignment
 - o TEI/it sample preparation
- EDS module
 - o Interaction and resulting signals

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 dr.ing. Rodica STOIAN
 General Manager

FEI COMPANY
 NanoPort Europe
 dr. Ellen BAKEN
 Senior Application Specialist

X-Ray Diffraction Certificate

This is to certify that

Bogdan Stefan VASILE

has successfully completed the

XRD Course 24th – 28th June 2013

Held at UNIVERSITATEA POLITEHNICA DIN BUCURESTI



Signature of course tutor: Marco Sommariva 	Date: 28 th June 2013
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