Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)	**Bogdan Alexandru / Sava**
Telephone(s)	0040214233194 Mobile: 0040728062160
E-mail	savabogdanalexandru@yahoo.com; savabogdanalexandru@gmail.com; bogdan.sava@inflpr.ro; bogdan.sava2901@upb.ro
Nationality	romanian
Date of birth	[redacted]
Gender	male

Work experience

Dates	06.2021-present
Occupation or position held	Professor
Main activities and responsibilities	Part of Doctoral school as PhD students supervisor
Name and address of employer	University Politehnica Bucharest, Doctoral School of Applied Chemistry and Materials Science
Type of business or sector	University
Dates	07.2010-present
Occupation or position held	Senior Researcher
Main activities and responsibilities	Vitreous and ceramics for lasers, nanomaterials and thin films, bio-composites, new materials for agriculture and optoelectronics, sol-gel method, melting at high temperatures methods, structural characterization and properties of vitreous and vitroceramic materials
Name and address of employer	National Institute for Laser, Plasma and Radiation Physics, 409th Atomistilor str., PO Box MG-36, 077125, Magurele, Bucharest, Romania
Type of business or sector	Materials, glass, ceramics, glass ceramics for Lasers, Optoelectronics, Magneto-Optics, Bio-composites, Sol-gel, Research-Development
Dates	06.2010-2013
Occupation or position held	Senior Researcher first degree
Main activities and responsibilities	Phosphate vitreous bulk and pelicular materials, optoelectronics purposes
Name and address of employer	National Institute for Research and Development in optoelectronics INOE 2000, 409th Atomistilor str., 077125, Magurele, Bucharest, Romania
Type of business or sector	Optoelectronics, new materials, environment and medical applications
Dates	11-12.2011
Occupation or position held	Senior Researcher first degree
Main activities and responsibilities	Sol-gel, coatings, special glasses, advanced purity materials, bio-materials, ecological glasses, non-conventional techniques
Name and address of employer	National Institute for Research and Development for Electrical Engineering ICPE CA, 313rd Splaiul Unirii, sector 3, 030138, Bucharest, Romania
Type of business or sector	Materials for Electrical Research-Development
Dates	01.2003-06.2010
Occupation or position held	Senior Researcher first degree
Main activities and responsibilities	Special glasses, sol-gel, coatings, quartz glass, special refractories, advanced purity materials, bio-materials, ecological glasses, nanomaterials, non-conventional techniques
Name and address of employer	SC National Institute of Glass SA Bucharest, 47th Th. Pallady bvd, S3, Romania

Type of business or sector	Glass Research-Development
Dates	09.1996–12.2002
Occupation or position held	Senior Researcher first degree, second degree
Main activities and responsibilities	Research and production quartz glass, special refractories, new techniques
Name and address of employer	SC MATPUR SA , Bucharest, 43rd Garii Catelu Av., S3, Romania
Type of business or sector	Advanced purity materials, electronics and electro-techniques materials research and development
Dates	05.1996–09.1996
Occupation or position held	Technological engineer
Main activities and responsibilities	Research for the optimization of electronic's glasses
Name and address of employer	SC Baneasa SA, Bucharest, Romania
Type of business or sector	Electronics
Dates	03.1996–05.1996
Occupation or position held	Scientific Manager
Main activities and responsibilities	Management of research projects
Name and address of employer	Dalex SRL, Bucharest, Romania
Type of business or sector	Research and production of electronic's glass
Dates	08.1984-03.1996
Occupation or position held	Chief of Optical Glass Division, Senior Researcher second degree, Senior Researcher third degree, Scientific Researcher, Engineer Chief of equipe
Main activities and responsibilities	Research, development and production in optical glass, glass filters, special glass, glass-ceramics, ceramics and refractories domains
Name and address of employer	SC National Institute of Glass SA Bucharest, 47th Th. Pallady bvd, S3, Romania
Type of business or sector	Glass Research-Development and Production
Dates	09.1983–07.1984
Occupation or position held	Technologic engineer
Main activities and responsibilities	Flat glass obtaining
Name and address of employer	Flat glass factory Scaieni, Prahova, Romania
Type of business or sector	Flat glass production

Education and training

Dates	14.06.2021
Title of qualification awarded	Habilitation atestate
Principal subjects/occupational skills covered	Chemical engineering, Doctoral School of Apllied Chemistry and Materials Science
Name and type of organisation providing education and training	University Politehnica Bucharest, Doctoral School of Applied Chemistry and Materials Science, OME nr. 3967/14.06.2021 si HCSUD 61/28.06.2021
Dates	10.2007
Title of qualification awarded	Graduating certificate
Principal subjects/occupational skills covered	Project and management of European research projects
Name and type of organisation providing education and training	Bucharest Chamber of Commerce and Industry in collaboration with University "Politehnica" Bucharest – Advanced technologies centre CTANM, Romania
Dates	10.2003 – 07.2007
Title of qualification awarded	Doctor of Philosophy Diploma, Chemical engineering domain
Principal subjects/occupational skills covered	Vitreous layers with electrical and optical properties, obtained from gels
Name and type of organisation providing education and training	University "Politehnica" Bucharest, Faculty of Applied Chemistry and Materials Science, Romania
Dates	01.1985 - 11.1985

Title of qualification awarded	Post University Diploma in special refractories
Principal subjects/occupational skills covered	Special refractories
Name and type of organisation providing education and training	University “Politehnica” Bucharest, Faculty of Applied Chemistry and Materials Science, Romania
Dates	09.1978-07.1983
Title of qualification awarded	Engineer Diploma
Principal subjects/occupational skills covered	Chemical Technology, Silicates and Oxide Compounds Technology
Name and type of organisation providing education and training	University “Politehnica” Bucharest, Faculty of Applied Chemistry and Materials Science, Romania
Dates	09.1973-06.1977
Title of qualification awarded	School-leaving examination Diploma
Principal subjects/occupational skills covered	Mathematics, Physics, Chemistry, Romanian language
Name and type of organisation providing education and training	„Mihai Viteazul” College, Ploiesti, Romania

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English Language	C1	C1	B2	B2	B2
French Language	C1	C2	B2	B2	B2
German Language	A1	A1	A1	A1	A1

(*) Common European Framework of Reference for Languages

Social skills and competences

Professional organization membership: International Commission on Glass, Romanian Glass Association (AROS); Romanian Materials Association (ARM); Romanian Chemists Association; International Sol-Gel Society
International Cooperation: EC TEMPUS, 1991-1993, participant, MNT-ERA-NET 2011-2013, participant, Bilateral Romania-Moldavia 2010-2012 and 2013-2014, participant.

Organisational skills and competences

Project responsible for 1 project H2020-FETOPEN-2018-2020, 2019-2023
Project responsible of 2 projects in PCCDI frame, 2018-2020
Project Manager of M-ERA.NET MAGPHOGLAS project, 2013-2016
Project responsible of 4 projects in PNII frame, 2007-2016
Project Technical Manager in CEEX frame, 2006-2008;
Project responsible in CEEX frame, 2005-2008;
Project Manager in MATNANTECH frame, 2004-2006;
Project responsible in INVENT frame, 2003-2005;
Project responsible in MATNANTECH frame, 2001-2004;
Manager of 3 national projects in RELANSIN frame, 2000-2002;
Manager of 3 national projects in ORIZONT 2002 frame, 1999-2002;
Manager of 7 national projects in ORIZONT 2000 frame, 1996-2000;
Manager of 5 national projects, 1990-1995;
Scientific Manager of Dalex society, 1996;
Chief of Optical Glass Division, 1993-1995;
Deputy Chief of Optical Glass Division, 1992-1993;
Engineer Chief of Division in Optical Glass Division, 1984-1985.

Personal competences	I am open, honest, positive, flexible and constructive. I am motivated, tenacious and enterprising. I am responsible and able to draw the line and take responsibility for learning new things. I reflect and act on professional and personal feedback from colleagues. I am able to learn from my own mistakes and to correct them. I perform tasks quickly and with the quality needed. I can overcome obstacles and get the job done. I have overview and can see the overall picture and connections between tasks. I can distinguish what is important from what is less important. I am able to assess deadlines realistically and meet them.

Technical skills and competences

Judicial technical expert certificate in domains Chemistry and Glass and Ceramics, Romania Justice Ministery, 25.11.2011.

Patents author:

1. Romanian patent RO 122828 B1, 2010, titled „Optoelectronic accordable comutators", owner: INCDFM Bucharest, authors: Igor Nazarenco, Jeno Jaklovsky, Ioana Albeanu, Mirela Dumitrescu, Bogdan Alexandru Sava, D. Ulieru.
2. Romanian patent RO 121337 B1, 2007, titled "Technic for cadmium sulpho-selenides, zinc-cadmium sulphides and zinc-cadmium sulpho-selenides obtaining, for colored glass, filter glass, ceramic colours and plastics colours obtaining, for yelow-orange-red colours"; owner: MATPUR SA Bucharest; authors: Bogdan Alexandru Sava, Horatiu Niciu.
3. Romanian patent 98788/02.06.1987, titled "Technic for refractory products obtaining"; owner: National Institute of Glass Bucharest; authors: Bogdan Alexandru Sava, I. Dragoman, Maria Hanganu, Constanta Grecicosei, A. Szabo.
4. Romanian patent, RO 128736 B1, 28/09/2018, named "Vitreous potassium-phosphate fertilizers and method of producing them", registered at OSIM at 16.11.2011, with no. A/01159/2011, national deposit no. a 2011 01159, owner: INFLPR Magurele, INOE2000 Magurele, USAMV Bucuresti; authors: Bogdan Alexandru Sava, Lucica Boroica, Mihai Sava, Mihai Elisa.
5. Romanian patent, RO 130686 B1, 30/07/2019, named „Alumino-phosphate glasses containing rare-earth ions, used for optical sensors and the obtaining method for them", registered at OSIM at 01.04.2014, national deposit no. A/00251, owners: INOE2000 Magurele, INFLPR Magurele; authors: Mihail Elisa, Bogdan Alexandru Sava, Lucica Boroica, Raluca Iordanescu, Ionut Feraru, Mihai Eftimie, Anca Beldiceanu.
6. Romanian patent RO 132655 B1, 30/08/2021, entitled "Boro-phosphate glass with magneto-optical properties and method for obtaining them", owners: INFLPR Magurele, S.C. SITEX45 S.R.L.; authors: Sava Bogdan Alexandru, Boroica Lucica, Elisa Mihail, Ulieru Dumitru, Craciun Doina.

1. *Patent deposition* entitled „Films based on titanium (TiO2) and phosphorus (P2O5) oxides modified with reduced graphene oxide (rGO) with controllable photocatalytic properties and process to obtain them", registered at OSIM at 17.06.2021, national deposit no. A/00342/17.06.2021, titulari: INOE2000, INFLPR Magurele, authors: Vasiliu Ileana Cristina, Iordache Ana Maria, Elisa Mihail, Pana Iulian, Sava Bogdan Alexandru, Boroica Lucica, Filip Ana Violeta
2. *Patent deposition* entitled „Doped boro-lead-phosphate glass and nanocarbon composites and method for obtaining them", registered at OSIM at 30.06.2021, national deposit no. A/00379/30.06.2021, owners: INFLPR Magurele, INOE2000, authors: Sava Bogdan Alexandru, Boroica Lucica, Filip Ana Violeta, Vasiliu Ileana Cristina, Elisa Mihail, Iordache Ana Maria
3. *Patent deposition* entitled „Borosilicate glasses doped with gadolinium oxide and/or dysprosium oxide for neutron guides and process for obtaining them", registered at OSIM at 21.12.2021, national deposit no. A/00797/21.12.2021, owners: INFLPR Magurele, INCDFM Magurele, authors: Dinca Marius Catalin, Sava Bogdan Alexandru, Boroica Lucica, Bita Bogdan Ionut, Galca Aurelian Catalin
4. *Patent deposition* entitled „Filtre compozite sticlă – zeolit clinoptilolit și procedeu de obținere a acestora", registered at OSIM at 29.05.2023, national deposit no. A/00267/29.05.2023, owner: USAMV Bucuresti, authors: Surmeli (Sava) Steluța Camelia, Sava Bogdan Alexandru, Nicolae Carmen Georgeta
5. *Patent deposition* entitled „Vanado-boro-phosphate glasses with electrical properties and method of obtaining them", registered at OSIM at 05.09.2023, national deposit no. A/00484/05.09.2023, owner: INFLPR Magurele, authors: Filip Ana Violeta, Sava Bogdan Alexandru, Eftimie Mihai, Craciun Valentin
6. *Patent deposition* entitled „Sticlă bio-boratică dopată cu oxid de ceriu sub formă de film subțire pentru îmbunătățirea suprafețelor de interes medical și procedeu de obținere a acesteia", registered at OSIM at 27.10.2023, national deposit no. A/00615/27.10.2023, owner: INFLPR Magurele, authors: Gabriela- Irina Ungureanu (Neguț), Bogdan Alexandru Sava, Grațiela Grădisteanu, Bogdan Biță

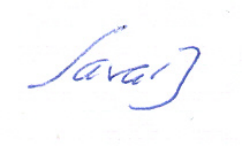
Reviewer for prestigious journals: J of Sol-Gel Science and Technology; J of Non Cryst Solids; Physics and Chemistry of Glasses; Physica B; Physica Status Solidi A; Current Applied Physics; J. Molecular Structure; J. of Materials Science; Journal of Nano Research; Materials Chemistry and Physics; J of Advanced Ceramics; J of Alloys and Compounds; Physical Sciences Research International; JOAM; OAM-RC.

Excellent Scientific Achievements Diploma in RELANSIN frame.

Technical competences in next domains, research and development**:** Biomaterials, Biocomposites, Optical glasses and optical glass filters; Refractories for glass industry; Coloured, opal and technical glasses; New methods for glass preparation: sol-gel, coprecipitation, plasmachemical and microwave methods; Vitroceram; Quartz glasses and doped quartz glasses; High alumina and silice products; High purity materials; Nano structurated materials; Glasses for optoelectronics, non-linear optics and electronics; High refractories and high durity materials; Nano-materials; Bio-vitro-materials;

Computer skills and competences	Computer knowledge: Word, Fortran, Excel, Power point, Corel, Paint, Origin
Driving licence	Driving licence, B category
Annexes	Annex 1. Papers published in ISI and other database indexed journals in last years Annex 2. Contribution in books Annex 3. Papers presented at International Conferences and published in Conferences books. Annex 4. Main achievements

Date: 21.01.2026 **Signature:**



ANNEX 1

Papers published in ISI and other database indexed ISSN journals in last years

1. B. A. Sava, "Investigarea sintezei prin metoda sol-gel a unor sticle în sistemul $ZnO-TiO_2-SiO_2$", Revista De Chimie, Bucuresti, 55, 4, 2004, p. 200-202, **IDS Number:** 829FI, **ISSN:** 0034-7752
2. S. Craciun, E. Craciun, B. A. Sava, "The silicone nitride ceramics obtaining by microwave field sintering method", Rev. Rom. de Materiale, vol XXXV, nr. 2, 2005, p 85-97.
3. B. A. Sava, "Sinteza prin metoda sol-gel a sticlelor în sistemul $ZnO-TiO_2-B_2O_3$", Revista De Chimie, Bucuresti, 56, 4, 2005, p. 387-389, **IDS Number:** 938EE, **ISSN:** 0034-7752.
4. I. Nazarenco, Jaklovszky J., Ghiordănescu V., Sava B. A., Albeanu I., Dumitrescu M., Ulieru D.,"$A^{II}B^{VI}$ photoresistances by sintering-sublimation technics", Journal of Optoelectronics and Advanced Materials, Vol. 7, No. 4, august 2005, p. 2113-2118, **scor influenta 2011: 0,3299, IDS Number:** 957XK, **ISSN:** 1454-4164.
5. Nazarenco Igor, Sava Bogdan Alexandru, Aurelia Meghea, Dumitru Ulieru, "A Combined Sintering-Sublimation Method to Grow Light Responsive Polycrystalline Thin Films", Molecular Crystals and Liquid Crystals, edit. M M Labes, Dept of Chemistry,Temple Univ Philadelphia, Pennsylvania,USA, vol 448, is 1, june 2006, pp 211/(813)-221/(823), **ISSN:** 1563-5287 (electronic), **DOI:** 10.1080/15421400500400842, **scor influenta 2011: 0,36702, IDS Number:** 013JD, **ISSN:** 1542-1406.
6. B.A. Sava, "The study of the vitreous materials obtained by the sol-gel method, in the ternary $ZnO-V_2O_5-B_2O_3$ system", Revue Roumaine de Chimie, 11, 2006, 1079-1087, **IDS Number:** 164GP, **ISSN:** 0035-3930.
7. B.A.Sava, Adriana.Diaconu, M.Elisa, C.E.A.Grigorescu, I.C.Vasiliu, A.Manea, "Structural characterization of the sol-gel oxide powders from the $ZnO-TiO_2-SiO_2$ system", Superlattices and Microstructures (2007), doi:10.1016/j.spmi.2007.04.004, volume 42, issue 1-6, pages 314-321, Impact factor 2006 1,259, **scor influenta 2011: 0,86119, IDS Number:** 222BN, **ISSN:** 0749-6036.
8. Sava Bogdan Alexandru, Ţârdei Christu, Stamatin Ioan, Năstase Claudia and Năstase Florin, "Ceramic Composites with improved Thermo-Mechanical Properties", J. Optoelectron. Adv. Mater., vol. 9, iss. 7 (2007), 2056-2062, ISI Impact factor for 2006 1.106, **ISSN ON-LINE**: 1841–7132, **scor influenta 2011: 0,3299, IDS Number:** 197UX, **ISSN:** 1454-4164.
9. M. Elisa, C. Vasiliu, C. Grigorescu, B.A. Sava, A. Diaconu, H.J. Trodahl, M. Dalley, "Optical transmission and Raman spectroscopy of aluminophosphate glasses containing chromium and manganese ions", Glass Technology: European Journal of Glass Science and Technology Part A, 48 (5), october 2007, pages 247-251, **scor influenta 2011: 0,88136, IDS Number:** 239KA, **ISSN:** 1753-3546.
10. Sava Bogdan Alexandru, Visan Teodor, "Raman and FTIR studies of the sol-gel glasses in the $ZnO-TiO_2-SiO_2$ system", U.P.B. Sci. Bull., series B, 69, 1, 2007, 11-24, **ISSN**: 1454-2331.
11. Boroica Lucica, I. Boroica, E. Rotiu, B. A. Sava, R. Medianu, C. Timus, D. Hülsenberg, "Radio frequency magnetron sputtering deposition of borate and phosphate glass films", Int. Conference Micro- to Nano-Photonics - ROMOPTO 2006 - Eighth Conference on Optics, August 28-31. 2006 Sibiu Romania, publicat in Proceedings of SPIE - The International Society for Optical Engineering 6785/2007, art. no. 678524, p. 24-27, Editor Valentin I. Vlad, 01.08.2007, DOI: 10.1117/12.756819, **IDS Number:** BGU42, **ISSN:** 0277-786X, **ISBN:** 978-0-8194-6949-6, **Publisher:** SPIE-INT SOC OPTICAL ENGINEERING, 1000 20TH ST, PO BOX 10, BELLINGHAM, WA 98227-0010 USA.
12. B.A. Sava, Adriana Diaconu, Luminita-Daniela Ursu, Lucica Boroica, M. Elisa, Cristiana Grigorescu, Cristina Vasiliu, I. Stamatin, F. Nastase, Claudia Nastase, Anca Dumitru, "Ecological silicate glasses", Advanced Materials Research Vols. 39-40 (2008) pp 667-670, **IDS Number:** BHX26, **ISSN**: 1022-6680, **ISBN:** 978-0-87849-387-6, **Publisher:** TRANS TECH PUBLICATIONS LTD, LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND.
13. Adriana Diaconu, B.A. Sava, Luminita-Daniela Ursu, Ileana Mitiu, Elisabeta Rosu, D. Radu, O. Dumitrescu, M. Eftimie "Study on the recycling of borate silicate vitreous waste with capitalization of heavy metals sludge", Advanced Materials Research Vols. 39-40 (2008) pp 659-662, **IDS Number:**

BHX26, **ISSN**: 1022-6680, **ISBN:** 978-0-87849-387-6, **Publisher:** TRANS TECH PUBLICATIONS LTD, LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND.

14. Luminita-Daniela Ursu, Adriana Diaconu, B.A. Sava, Lucica Boroica, Ileana Mitiu, Elisabeta Rosu, D. Radu, M. Dinulescu, M. Eftimie, "A study of the industrial waste incorporating in glass", Advanced Materials Research Vols. 39-40 (2008) pp 675-678, **IDS Number:** BHX26, **ISSN**: 1022-6680, **ISBN:** 978-0-87849-387-6, **Publisher:** TRANS TECH PUBLICATIONS LTD, LAUBLSRUTISTR 24, CH-8717 STAFA-ZURICH, SWITZERLAND.
15. B. A. Sava, A. Dinischiotu, A. Cîmpean "Bio compatible glass for ionomeric cements" Optoelectronics and Advanced Materials – Rapid Communications, Vol. 2, No. 5, May 2008, p. 258 – 261, **IDS Number:** 310MR, **ISSN**: 1842-6573.
16. B. A. Sava, A. Diaconu, D. Ursu, M. Elisa, I. Stamatin, F. Nastase, C. Nastase, "Structure of ecological lead free silicate glasses", Optoelectronics and Advanced Materials – Rapid Communications Vol. 3, No. 5, May 2009, pp. 435 – 438, **IDS Number:** 478XP, **ISSN:** 1842-6573.
17. M.Elisa, B.Sava, A.Diaconu, D.Ursu, R.Patrascu, „Fluorescence of copper, manganese and antimony ions in phosphate glass host", J.Non-Cryst.Solids, doi:10.1016/j.jnoncrysol.2009.03.010, 355, 37-42 (2009) 1877–1879, **scor influenta 2011 4,32203; IDS Number:** 504ML, **ISSN:** 0022-3093.
18. B. A. Sava, Adriana Diaconu, Lucica Boroica, Daniela Ursu, T. Visan, M. Elisa and Alina Balu, "Raman and ESR study of sol-gel materials from ZnO-TiO_2-B_2O_3 system", J.Non-Cryst.Solids, doi:10.1016/j.jnoncrysol.2009.06.023, 355 (2009) 2020–2022, **scor influenta 2011: 4,32203; IDS Number:** 504ML, **ISSN:** 0022-3093.
19. E. M. Rotiu, B. A. Sava, M. Elisa, "Molecular Dynamics Simulation for Ternary Lithium-Aluminium-Phosphate Glass", Optoelectronics and Advanced Materials – Rapid Communications Vol. 3, No. 10, Octomber 2009, pp 1050-1055; **IDS Number:** 516XN, **ISSN:** 1842-6573 .
20. S. Peretz, B. Sava, M. Elisa, G. Stanciu, "Cadmium sulphide nanoparticles embedded in polymeric matrices", Journal of Optoelectronics and Advanced Materials, Vol. 11, No. 12, decembrie 2009, pp 2098-2104, **scor influenta 2011**: **0,3299; IDS Number:** 542KA, **ISSN:** 1454-4164
21. M. Elisa, B. A. Sava, A. Diaconu, L.Boroica, D. Ursu, I Stamatin, F. Nastase, C. Nastase, "Thermal properties of ecological phosphate and silicate glasses", Glass Physics and Chemistry, Vol. 35, No. 6, 2009, pp. 596–601, ISSN 1087-6596, **scor influenta 2011, 0,80508; IDS Number:** 541FJ, **ISSN:** 1087-6596**.**
22. M. Elisa, B.A. Sava*, A. Volceanov, R.C.C. Monteiro, E. Alves, N. Franco, F.A. Costa Oliveira, H. Fernandes, M.C. Ferro, "Structural and thermal characterization of SiO_2–P_2O_5 sol–gel powders upon annealing at high temperatures", J. Non-Cryst. Solids, 356, 9-10, 15 martie 2010, pp. 495-501, doi:10.1016/j.jnoncrysol.2009.12.006,**scor influenta 2011: 4,32203; IDS Number:** 571QO, **ISSN:** 0022-3093.
23. Roxana Patrascu, G. Darie, A. Volceanov, B. A. Sava, M. Elisa, Adina Stanculea, "Model of complex energy and environmental analysis of processes from glass industry", Romanian Journal of Materials, 40 (2) 2010, 153-160, impact factor 0,242; **IDS Number:** 619SM, **ISSN**: 1583-3186
24. M. Elisa, B. A. Sava, R. Iordanescu, I. Feraru, C. Vasiliu, M. Calin, A. Diaconu, L. D. Ursu, L. Boroica, Z. Plaiasu, F. Nastase, C. Nastase, A. Dumitru, „Obtaining and characterization of calcium/magnesium/iron lithium phosphate glasses", Optoelectronics and Advanced Materials Rapid Communications, Vol. 4, No. 9, September 2010, p. 1301 – 1303; **IDS Number:** 671OJ, **ISSN:** 1842-6573.
25. M. Sava, B. A. Sava, Lucica Boroica, Adriana Diaconu, Luminita-Daniela Ursu, M. Elisa, "Efficiency of vitreous phosphate-potassium fertilizers on autumn crops", Scientific papers, UASMV Bucharest, Series A, Vol. LIII, 2010, ISSN 1222-5339, pp. 187-193
26. M. Elisa, I. C. Vasiliu, B. A. Sava, F. Nastase, C. Nastase, A. Volceanov, V. Dima, S. Stoleriu, M. Eftimie, "Structural and morphological characterization of silicophosphate thin films containing Nd^{3+} ions", Phys. Chem. Glasses: Eur. J. Glass Sci. Technol. B, **51** (6), 2010, pp. 309–317, **factor impact 2012: 0,628**; **scor influenta 2011**, **1,94068, IDS Number:** 704TQ, **ISSN**: 1753-3562**.**
27. M. Elisa, R. Iordanescu, B. A. Sava, G. Aldica, V. Kuncser, C. Valsangiacom, G. Schinteie, F. Nastase, C. Nastase, V. Bercu, A. Volceanov, S. Peretz, "Optical and structural investigations on iron-

containing phosphate glasses", J Mater Sci (2011) 46, pp. 1563–1570, DOI 10.1007/s10853-010-4963-9, Published online: 14 October 2010, 0022-2461, Impact factor 2009 1,471, **scor influenta 2011**, **1,18415, IDS Number:** 711ZY, **ISSN:** 0022-2461**.**

28. Luminiţa Daniela Ursu, Adriana Diaconu, Bogdan Alexandru Sava, Adrian Volceanov, U.P.B. Sci. Bull., Series B, Vol. 73, Iss. 2, 2011, pp. 1-16, ISSN 1454-2331.
29. B. A. Sava, Lucica Boroica*, M. Sava, M. Elisa "Vitreous potassium-phosphate materials containing nitrogen as agricultural fertilizers" Romanian Journal of Materials, 41 (4) 2011, ISSN 1583-3186, **ISI impact factor 0,242**, pp. 371-382.
30. B. A. Sava, L. Boroica*, M. Sava, M. Elisa, C. I. Vasiliu, F. Nastase, C. Nastase, R. Medianu "Potassium phosphate glasses used as agro-fertilizers with controlled solubility" Journal of Optoelectronics and Advanced Materials, Vol. 13, No. 11-12, November – December 2011, p. 1534 – 1541, **ISI impact factor 0.46**, **scor influenta 2012**, **0,33089, IDS Number:** 872UC, **ISSN:** 1454-4164.
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ANNEX 2
ISBN books

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ANNEX 4
Main Achievements

28 national research projects implemented, as leader or manager, 13 in last 10 years, among whom:

- Nano-structured carbon-materials for advanced industrial applications, PNIII PCCDI 42/2018;
- New technological development and uses for advanced nano-composite materials, PNIII PCCDI 47/2018;
- Researches for vitreous potassium-phosphate fertilizants obtaining, having controled solubility and establishment of using parameters in plants production, 52-139 PNII;
- Advanced phosphate materials with vitreous structure, doped with rare-earth, for electronic use, 71-054 PNII;
- Laser technologies to achieve "in situ" bioactive glass ceramic coatings for orthopedic prostheses, PN II 71-138/2007;
- Promotion of clean energetic technologies in technical and ware glass, in durable development context, 21-020 PNII;
- Intelligent design flexible photovoltaic conversion with embedded efficiency of photo-electric maximized, PN II 21-021/ 2007;
- Increasing the visibility of scientific research in the field of vitreous / ceramic nanostructured to participate in FP7 EU, CEEX 103;
- Ecological glasses, obtained by nano-technologies, for attenuation, restoration and adaptation of natural environment factors, 635 CEEX;
- Ceramic composites with superior thermo-mechanical properties, for dental purposes, 194 MATNANTECH;
- Diversing the electronic compounds production by opto-electronic comutators implementation, 117 INVENT;
- High durity ceramics, based on synthesized and sintered nitrides in microwave field, 21 MATNANTECH;
- Researches on nano-structured thin films obtaining, with optical properties, from organo-metalics and organic monomers, by co-polimerization, RELANSIN frame;
- Low costs fabrication technique of zinc and cadmium sulphide and sulpho-selenides for colors of yellow-orange-red kind, in glass industry, RELANSIN frame;
- Researches on thin films obtaining from organo-metalic compounds, ORIZONT 2002 frame;
- Translucide alumina components, of high purity, for natrium vapors lamps; ORIZONT 2000 frame;
- Advanced ceramics with controled structure and purity, with high resistivity at high working temperatures. ORIZONT 2000 frame;
- Theoretical models applied to vitreous structure obtained by unconventional methods, ORIZONT 2000 frame;
- Fundamental researches for the approach of new optical glass obtaining;
- Chemical methods used for new optical glasses obtaining;
- New optical glasses based on unconventional methods;
- Chemical equilibrium study, in ternary silicates solutions, by cromatographic methods;

***Achievement* of around 30 new technologies for special materials, 17 in last 10 years**:

- Very thin plasmonic silver films on organic and glass substrates;
- Technologies for nano-composites in doped alumino-phosphate glass systems obtaining;
- Technologies for nano-carbon-vitreous materials composites as bulk materials or thin films;
- Technologies for doped vitreous boron-phosphate as bulk, powders and thin films, by melting-quenching, magnetron sputtering, sol-gel and PLD methods;
- Technologies for vitreous potassium-phosphate fertilizants obtaining, for autumn and spring plants, and for grape vine.
- 2 technologies for obtaining advanced phosphate powders and thin films with vitreous structure, doped with rare-earth, for electronic use;
- Technologies for durable capitalization in vitreous materials of boro-silicate glass wastes and precipitation slugs with high content in heavy metals, of 3 new types;
- Technologies for silicate and phosphate ecological glasses obtaining, of 4 new types;
- Technologies for ceramic composites with superior themo-mechanical properties, for dental purposes obtaining, of 4 new types;
- Technology for the obtaining of high purity cadmium sulphide selenide for opto-electronic actuators;
- Technology for sintered nitrides in microwave field obtaining;
- Technology for nano-structured thin films with optical properties obtaining;
- Technology for low costs fabrication of zinc and cadmium sulphide and sulpho-selenides for colors of yellow-orange-red kind;
- Technology for high purity arsenium tri-sulphide Sn-doped obtaining;
- Technology for translucide alumina components obtaining;
- Technology for plasma quartz glass obtaining;
- Technology for silicone halides obtaining;
- Technology for coloidal silica sols obtaining;
- Technology for refractory stirrers for glass homogenization, of 600 mm throw, obtaining;
- 7 technologies for refractory pots for glass melting, of 200 L, 60L, 20L, 1,25L, 0,5L, 0,125L, 0,025L capacity obtaining;
- Coprecipitation and sol-gel technologies for doped sodium and potassium silicate obtaining;
- 2 technologies for optical R6 and OS17 type glass filter obtaining;
- 5 technologies for optical SF1, SF10, SF11, TF 108, TF 110 type glass obtaining;

Technical competences in next domains, research and development**:**

- Laser glass;
- Magneto-optical glass
- Optical glasses and optical glass filters;
- Glasses for optoelectronics, non-linear optics and electronics;
- Obtaining of nanomaterials;
- High purity materials;

- Nano structured materials;
- Plasma-chemistry and microwave heating for ceramic materials obtaining;
- New methods for glass and ceramics preparation: sol-gel, coprecipitation, plasma chemical, microwave, pulse laser deposition, RF magnetron sputtering methods;
- Quartz glasses and doped quartz glasses;
- Ecological glasses, Vitreous fertilizers for plants;
- Bio-vitro-materials;
- High purity materials;
- Colored, opal and technical glasses;
- Glass-ceramics;
- High alumina and silica products;
- Refractories for glass industry, plastics industry, non-ferrous materials and laboratory use;
- High refractories and high durity materials;
- Ceramic composites;
- Inorganic colorants for glass and plastics.

International Cooperation:

Project responsible for:

Horizon 2020: H2020-FETOPEN-2018-2020, no. 863227, "Photo-Piezo-ActUators based on Light SEnsitive COMposite", acronym PULSE-COM project, 2019-2023.

Project manager of:

M-ERA NET no. 7-081/2013, MAGPHOGLAS/ New doped boro-phosphate vitreous materials, as nano-powders and nano-structured thin films, with high optical and magnetic properties, for photonics, 2013-2016

Participant as senior researcher in:

- MNT ERA NET no. 7-031/04.04.2011, SENSGLASS/ Innovative optical micro sensors based on rare-earth doped phosphate glass, 2011-2014;
- Romanian-Moldavian bilateral research project 695/2013, between INOE 2000 and Applied physics Institute of the Academy of Science of Moldavia, 2013-2014;
- Romanian-Moldavian bilateral research project, 428/15.06.2010, between INOE 2000 and Applied physics Institute of the Academy of Science of Moldavia, 2010-2012;
- EC Program TEMPUS, 1991-1993;
- Leonardo da Vinci/ Virtual Glass Academy (FP5), 2001-2005.

Reviewer for: 50 International Journals, such as:
J of Sol-Gel Science and Technology; J of Non Cryst Solids; Physics and Chemistry of Glasses; Physica B; Physica Status Solidi A; Current Applied Physics; J. Molecular Structure; J. of Materials Science; Materials Science and Engineering B; International Journal of Applied Glass Scince, Journal of Nano Research; Materials Chemistry and Physics; J of Advanced Ceramics; J of Alloys and Compounds; Physical Sciences Research International; Optical Materials Express; J of Optoelectronic and Advanced Materials; Optoelectronic and Advanced Materials-Rapid Communications; Revista Romana de Materiale, Karbala International Journal of Modern Science, Current

Nanoscience, Materials Research Express, Journal of Physics D: Applied Physics, Molecules, Materials, Optical Materials, Crystals, Magnetochemistry, Applied Surface Science, Plant Cell Biotechnology and Molecular Biology, Vacuum.
400 reviews visible on Publons/Web of Science

- **Researcher ID: C-2547-2011, in ISI Web of Knowledge;**
- **Scopus Author ID: 8726947700**
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- **UEFISCDI ID (UEF-iD; brainmap ID): U-1700-039C-4920**
- **Google Scholar: https://scholar.google.ro/citations?user=cu7p454AAAAJ&hl=ro**
- **No. Citations: 464 without self-citations;**
- **Papers presented at Conferences or published: 384, of which:**
    - **Papers in Conferences volumes or published: 230, of which:**
    - **No. ISI quoted Articles as coauthor: 74, of which:**
    - **Nr. ISI quoted Articles as main author: 39;**
- **ISI indexed and other Database Journals papers: 5;**
- **ISBN published works: 47, of which;**
    - **Books or books chapters: 6;**
- **Hirsch h index: Google Scholar: 18; Scopus: 16; ISI 15;**
- **International or national projects manager: 5 (1/4);**
- **International or national projects partner responsible: 8 (1/7)**
- **Patents: 6, patents depositions 7**
- **Editor for one Journal, guest-editor for two Journals**
- **Awards and medals: 77, 3 as reviewer, 74 for patents.**

International projects evaluator
1. Eureka 2011, Modul 5, one project evaluation, individual evaluation and panel evaluation

National projects evaluator

1. PNRAS – MATE – 2 – 2023, Call year: 2023, Period of review activity: 2023, 4 projects evaluated
2. PNRR - DOTĂRI - 2023, Call year: 2023, Period of review activity: 2023, 4 projects evaluated
3. PNCDI III, SP 1.1, Postdoctoral Research Projects (PD-2019), Call year: 2019, Period of review activity: 2019,2020, 1 projects evaluated, 1 project as panel leader
4. PNCDI III, SP 1.1, Research Projects for Young Independent Teams (TE-2019), Call year: 2019, Period of review activity: 2019,2020, 6 projects evaluated, 2 as panel leader
5. PNCDI III, SP 1.1, Postdoctoral Research Projects (PD 2016), Call year: 2016, Period of review activity: 2017,2018, 10 projects evaluated, 3 as panel leader
6. PNCDI III, SP 1.1, Research Projects for Young Independent Teams (TE 2016), Call year: 2016, Period of review activity: 2017, 13 projects evaluated, 3 as panel leader