

CURRICULUM VITAE
Prof. dr. ANDREA MOGUŠ-MILANKOVIĆ

CURRENT POSITION

Senior Scientist, with permanent position, Titled Full Professor

Head of Laboratory for Functional Materials

Rudjer Boskovic Institute, Department of Materials Chemistry

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EDUCATION:

Ph.D. (1989) in Solid State Chemistry, Ruđer Bošković Institute, Univ. of Zagreb, Croatia

M.S. (1982) in Chemistry, University of Zagreb, Croatia

B.S. (1978) in Chemistry, University of Zagreb, Croatia

Scientific Career

2005- Present, Senior Scientist, Ruđer Bošković Institute, Zagreb

1998- 2004, Senior Research Associate, Ruđer Bošković Institute, Zagreb

1994-1998, Research Associate, Ruđer Bošković Institute, Zagreb

1990-1994- Senior Research Assistant, Ruđer Bošković Institute, Zagreb

1978-1990, Research Assistant, Ruđer Bošković Institute, Zagreb

Longer stays at prestigious scientific institution abroad

2015- Visiting Professor, University of Chestochowa, Institute of Physics, Poland

1990-1994, Postdoctoral Specialization, Missouri University for Science and Technology, Rolla, MO, USA

1983-1984, Visiting Scholar, Laboratoire de Chimie du Solide du CNRS, Bordeaux University, France

Academic-Teaching

Undergraduate Courses

2010-2014; Department of Biotechnology, University of Rijeka

Undergraduate study « Biotechnology and investigation of drugs»

Course: *An introduction to the bioinorganic chemistry*

1998 –2013, University of Zagreb, School of Dentistry

Course: *Dental Materials*

Graduate Courses

2015- University of Chestochowa, Institute of Physics, Poland,

Doctoral Course: *Structural and electrical properties of amorphous materials*

2006 – present, IRB, University of Osijek, University of Dubrovnik,

Doctoral Course: Molecular Biosciences, Course: *Biomaterials*

2002 – present, University of Zagreb, School of Sciences, Chemistry

Course: *Investigation and Application of Inorganic Materials*

1996 –present, University of Rijeka, Faculty of Medicine

Course: *New Bioactive Materials: Investigation and Application in Medicine*

1995 – 2002, University of Zagreb, School of Sciences, Chemistry

Course: *Solid State Chemistry*

ADDITIONAL PROFESSIONAL ACTIVITIES:

- Assistant Director General, Ruder Boskovic Institute (2006-2009)
- Counsellor of Director General of IRB for Young Scientists (2005-2009)
- Member of the Croatian Academy of Engineering (2005-)
- Scientific Board of Ruđer Bošković Institute, Member (2016-2018)
- Panel Member of the Croatian Science Foundation (2013-2014)
- Scientific Board of Ruđer Bošković Institute, Member (2004-2006)
- The Scientific Council for Technological Development of the Croatian Academy of Science and Arts, Member, (2003.-)
- The Scientific Council for Crystallography of the Croatian Academy of Science and Arts, Member, (2013.-)
- Advisory Board of the Croatian Chemical Society, Member (1998-2002).
- Committee of Coordinated Research Program on Chemical Durability and Performance of Spent Fuel and High Level Waste Forms under Simulated Repository Conditions, IAEA, Vienna, Austria, Member, (1998- 2005).
- Scientific and Organizing Committee of XVII Croatian Meeting of Chemists and Chemical Engineers, Osijek, (2001.)
- Visiting Lecturer, Université de Bordeaux, France, 1997, 1998.

Commissions and work groups

- President of the Commission for the inventory at RBI (2011-2014)
- Member of Committee of Research, Development and Technology, University of Zagreb (2008)
- Member of Working Group for Research Strategy at the University of Zagreb (2006-2008)
- Member of Commission for the capital equipment of MSES (2006-2008)
- Member of Commission for the capital equipment of RBI (2005-2016)
- Member of Commission for the monitoring Framework program at MSES-in (2006-2008)
- Member of Management Committee of the COST Action MP1308: Towards Oxide-Based Electronics (TO-BE), (2014-2018)

Organization skills

- Participation in organization of the Annual meetings: IAEA Programme: Chemical Durability and Performance Assessment of Spent Fuel and High Level Waste Forms and Simulated Repository, Vienna, Austria (1998-2005)
- Member of the Scientific and Organizing Committee of XVII Croatian Meeting of Chemists and Chemical Engineers, Osijek (2001)
- Coordinator of the workshop: Regional Training Course on “How To Write Competitive Research Proposals For Various Funding Programmes”, RER/0/023, in the framework of IAEA Programme: Strategic Planning for Management, Self-reliance, and Sustainability of National Nuclear Institutions, Zagreb, Croatia 2008.
- Member of the Scientific and Organizing Committee of the International Seminar on Science and Technology of Glass Materials, ISSTGM-2009, Acharya Nagarjuna University Nuzvid, India
- Member of the Programme Committee of the 29. European Crystallographic Meeting (ECM29), Rovinj, Croatia, 2013-2015;
- Member of the International Advisory Body of the International Seminar on Glasses and other Functional Materials, isgfm-2014, Acharya Nagarjuna University,

Andhra Pradesh, India

- Member of the Scientific and Organizing Committee of Industrial Crystallization Meeting, Zagreb, 2015.

Thesis Advisor: Ph.D. (4), M.S. (2), B.S. (6).

Scholarships and Visits

1983-1984, Bordeaux University, Laboratoire de Chimie du Solide du CNRS, France

1990-1994, Missouri University of Science and Technology, Graduate Center for Materials Research, USA

1997, Bordeaux University, Laboratoire de Chimie du Solide du CNRS, France

1998, Bordeaux University, Laboratoire de Chimie du Solide du CNRS, France

1999, 2002, Missouri University of Science and Technology, USA

2006, University of Muenster, Institute fur Physikalische Chemie, Muenster, Germany

2009, University of Muenster, Institute fur Physikalische Chemie, Muenster, Germany

2015, University of Chestochowa, Institute of Physics, Poland

Papers: Author and co-authors of over 100 papers, **86 papers cited in the Current Contents**, 10 papers with international peer-review published in proceedings and books, 3 technical papers, 1 chapter in script, 1 chapter in online textbook

Papers are cited over 1584 times, **h-index: 24 (WoS)**

(WoS Author Search: **mogus a or mogus-milankovic a or mogus-milankovic am or mogusmilankovic a or mogusmilankovic am**)

Invited lectures

- **Visiting professor, Invited lecture**, "Electrical properties of glasses and glass-ceramics" University of Czestochowa, Institute of Physics, Department of Mathematical and Natural Science Jan Dlugosz University, Czestochowa, Poland, 11. 05. 2015.

- **Plenary lecture:** "Structure and properties of phosphate glasses" at 13th Slovenian-Croatian Crystallographic Meeting, Bovec, Slovenia, 16.-20. 06. 2004.

- **Plenary lecture:** "Electrical Properties of Phosphate Glasses" International Seminar on Science and Technology of Glass Materials, ISSTGM 16.-19. 03. 2009, Nuzvid, India.

- **Invited lecture:** "Electrical Relaxation in Phosphate Glasses" at University of Muenster, Institute fur Physikalische Chemie, Muenster, Germany, 07. 09. 2006.

- **Invited lecture:** Zašto istražujemo fosfatna stakla? Hrvatsko mikroskopijsko društvo, Zagreb, 2009.

- **Invited lecture:** "Structure and electrical properties of $\text{Li}_2\text{O-ZnO-P}_2\text{O}_5$ glasses" University of Muenster, Institut fur Physikalische Chemie and SFB 458, Muenster, Germany, 4. studeni 2009.

- Structural Features and Properties of Phosphate Glasses, Université de Bordeaux, Institut de Chimie de la Matière Condensée de Bordeaux, France, 1998.

- Electrical Properties of Iron Phosphate Glasses, Missouri University of Science and Technology, Materials Research Center, Rolla, USA, 1999.

RESEARCH PROJECTS:

◆ **Electrical Transport in Glasses and Glass-ceramics**, Croatian Science Foundation, Principal Investigator, No IP-09-2014-5863, (2015-2018);

◆ **COST Action MP1308, Towards Oxide-Based Electronics**, (TO-BE), (2014-2018);

- ◆ *Evaluation of new bioactive materials and procedures in restorative dental medicine*, Collaborative Research Programmes RBI-Institute of Physics-School of Dentistry Zagreb, RBI Project leader; Programme leader: Z. Tarle, (Croatian Science Foundation), (2012-2015);
- ◆ *Influence of structure on electrical properties of (bioactive) glasses/ceramics*, Ministry of Science, Education and Sports, Croatia, Principal Investigator, No 0980982929-2916 (2007-2013)
- ◆ *Structure and electrical relaxation in glasses and glass-ceramics*, Ministry of Science and Technology, Republic of Croatia, Principal Investigator No. 0098027, (2002-2006);
- ◆ *Electrical polarization of bioactive glasses*, Croatian Academy of Science and Arts, Principal Investigator, (2005/2006);
- ◆ *Investigation of electrical mobility and dielectric relaxation of bioactive glass*, Croatian-Slovenian bilateral project, Principal Investigators: A. Moguš-Milanković, S. Novak (2010-2012);
- ◆ *New insights into charge transport in iron phosphate glasses from analysis of conductivity spectra over a wide temperature range*, Croatian-German bilateral project, (DAAD), Principal investigators: A. Moguš-Milanković, K. Funke (2009-2010)
- ◆ *Chemically durable Iron Phosphate Glasses for Vitrifying Simulated Nuclear Waste*, IAEA Program: Chemical Durability and Performance Assessment of Spent Fuel and High Level Waste Forms and Simulated Repository, IAEA Contract No: 10638/R (1998-2005), Vienna, Austria, Principal Investigator

Collaborator on the projects

- ◆ *Expanding insights into the mechanisms of POLARonic and IONic conduction in oxide GLASS-(ceramics)*, No IP-2018.01-5425, (2018-2022), Croatian Science Foundation, Principal Investigator: A. Šantić, Collaborator: A. Moguš-Milanković
- ◆ *Modeling Ionic Conductivity in Materials - Glasses, Ionic Liquids and Ionogels*, NewFelPro Senior Researcher Project, FP7 Programme, People Programme, Project leader: Radha D. Banhatti, Host IRB: A. Moguš-Milanković, (2015-2017);
- ◆ *Titanium dioxide nanostructures for photovoltaic cell, the professional development of young researchers/postdocs*, European Social Fund, No HR.3.2.01-0312, Principal Investigator: D. Gracin, Collaborator: A. Moguš-Milanković (2015-2016);
- ◆ *Development of novel supramolecular ionogels for advanced electrolytes"*, Croatian-German bilateral project, MZOS-DAAD, Principal Investigators: A. Šantić, M. Schönhoff, Collaborator: A. Moguš-Milanković, (2015-2016);
- ◆ *The origin of structural defects and their influence on macroscopic properties of solar silica glass*, The National Foundation for Science-Ruder Boskovic Institute-Lipik Glas, doo, Croatia, Head of the project: D. Gracin, Collaborator: A. Moguš-Milanković (2007-2010);
- ◆ *Toward education-research-education triangle, Where we are starting from?*, TEMPUS OPUS, Leader: M. Kovačević, University of Zagreb, Project collaborator: A. Moguš-Milanković, (2008.-2010);
- ◆ *Novel method to support bone growth bioactive glass coated with protein/lipid poroxidation products*, Nationalbank Jubiläumsfondsgrant (Nr. 12611), Graz, Austria, Head of the project: R. Wildburger, Collaborator: A. Moguš-Milanković, N. Zarkovic (2007);
- ◆ *Iron Phosphate Glass: An Alternative for Vitrifying Certain High Level Nuclear Waste*, DOE Contract – DE FG07- 96ER45618, EMSP Project 55100, Department of Energy, USA, Project collaborator (2000.-2003.)

Research interests

Structural, electrical/dielectric properties of materials, properties of glasses and glass-ceramics of various systems: phosphates, borates, germanates, tellurides, electrical properties of bioactive and dental materials, ionic liquids, ionogels, tin films, TiO₂ nanotubes, use of various methods: Raman, IR, XRD, Mossbauer spectroscopy, SEM microscopy, thermal analysis, Impedance spectroscopy (IS), Thermally simulated current method (TSDC).

Other research activities

- Co-editor: IOP Conference Series: Materials Science and Engineering, Eds: N. Veeraiyah, GP Kothiyal, IV Kityk, KSR Koteswara Rao, A. Moguš-Milanković, V. Levin, D. Ehrt, DK Rao, Vol. 2 (2009)

Reviewer: J. Amer, Ceram. Soc, J.Non-Cryst. Solids, Phys. Chem. Glasses, J. Eur. Ceram. Soc., Solid State Ionics, Projects: MSES, HIT, ESF, HrZZ, Acharya Nagarjuna, University Nuzvid Campus, Nuzvid, India

Awards

Award of the Ruđer Bošković Institute for the project: *Evaluation of new bioactive materials and procedures in restorative dental medicine* in the framework of the Collaborative Research Programmes, Croatian Science Foundation

PROFESSIONAL ORGANIZATIONS:

The Croatian Chemical Society,
The American Ceramic Society,
Croatian Crystallographic Association

Languages: English, French

INTERNATIONAL COLLABORATIONS

- Acharya Nagarjuna University, Nagarjuna Nagar, Nuzvid A.P., India, Prof. N. Veeriah,
- Jozef Stefan Institute, Department of Nanostructured Materials, Slovenia, Prof. Saša Novak
- University of Münster, Institute of Physical Chemistry, Germany, Prof. Klaus Funke,
- Missouri University of Science and Technology, MRC, Rolla, MO65409, USA, Profs. Delbert E. Day, Signo T. Reis, Richard K. Brow,
- University of Kafkaz, Dept. of Physics, 36000 Kars, Turkey, Prof. dr. Mevlut Karabulut,
- Université de Bordeaux, Institut de Chimie de la Matière Condensée de Bordeaux, Bordeaux, France, Prof. J. Ravez,
- University of Pardubice, Czech Republic, Profs. L. Koudelka, P. Mošner
- University of Lille, LASIR-UMR-CNRS, Villeneuve d'Ascq, France

Prof. dr. Andrea Moguš-Milanković

List of publications

1. K. Kovačević, Z. B. Maksić, and **A. Moguš**:

- Geometry of Molecules. Part 4. Iterative Maximum Overlap Calculations of Interatomic Distances, Bond Angles and Strain Energies in Some Rotanes and Related Spiro-Compounds., *Croat. Chem. Acta*, 52 (1979) 249-263.
2. Z. B. Maksić, K. Kovačević, and **A. Moguš**:
Semiempirical versus ab initio Calculations of Molecular Properties. II. Comparative Study of Interatomic Distances and Bond Angles in Some Strained Medium Size Hydrocarbons as Obtained by the STO-3G, MINDO/3 and IMO A Methods, *Theor. Chim. Acta, (Berl.)* 55 (1980) 127-132.
 3. Z. B. Maksić, K. Kovačević, and **A. Moguš**:
Investigation of the Hybridization in Some Small-Ring Spirohydrocarbons by the IMO A Method, *J. Mol. Struct.*, 85 (1981) 9-24.
 4. M. Topić and **A. Moguš**:
Pyroelectric Temperature Analysis of Polycrystalline Ferroelectrics., *Ferroelectrics*, 34 (1981) 61-67.
 5. M. Topić and **A. Moguš-Milanković**:
A Search for Ferroelectricity in Polycrystalline Ammonium Heptamolybdate Tetrahydrate., *Czech. J. Phys.*, 33 (1983) 235-240.
 6. J. Ravez, **A. Moguš-Milanković**, J. P. Chaminade, and P. Hagenmuller:
Ferroelastic Properties of AlF_3 ., *Mat. Res. Bull.*, 19 (1984) 1311-1316.
 7. K. Kovačević, Z. B. Maksić, and **A. Moguš-Milanković**:
Geometry of Molecules. Part 7. Interatomic Distances, Bond Angles and Strain Energies in Some Rotanes and Related Spirocompounds by the IMO A Method, *Croat. Chem. Acta*, 57 (1984) 187-200.
 8. M. Topić and **A. Moguš-Milanković**:
A Multiple Thermal Analysis of Ammonium Heptamolybdate Tetrahydrate., *Croat. Chem. Acta*, 57 (1984) 75-83.
 9. M. Topić, **A. Moguš-Milanković**, and Z. Katović:
Thermally Stimulated Depolarization Current Study in Novolac Phenol-Formaldehyde Resin, *Phys. Stat. Sol., (a)* 86 (1984) 413-420.
 10. **A. Moguš-Milanković**, J. Ravez, J. P. Chaminade, and P. Hagenmuller:
Ferroelastic Properties of TF_3 Compounds (T = Ti, V, Cr, Fe, Ga)., *Mat. Res. Bull.*, 20 (1985) 9-17.
 11. J. Ravez and **A. Moguš-Milanković**: The Rhenium Oxide (ReO_3) - Related Structure Ferroelastic Fluorides., *Jpn. J. Appl. Phys. Suppl.*, 24 Suppl. 24-2 (1985) 687-689.
 12. M. Topić, **A. Moguš-Milanković**, and Z. Katović: Depolarization Current of Novolac Phenol-Formaldehyde Resins Doped with 1, 4- Diazabicyclo [2.2.2] Octane, *Angew. Makromol. Chem.*, 155 (1987) 129-142.

13. M. Topić, **A. Moguš-Milanković**, and Z. Katović: Thermally Stimulated Discharge of Blends of Novolac Phenol-Formaldehyde Resin and Nylon-6, *Polymer* 28 (1987) 33-37.
14. M. Topić, **A. Moguš-Milanković**, and Z. Katović: The Study of Glass-Transition in Epoxy Resin by the Use of Thermally Stimulated Depolarization Current Measurements, *Polymer*, (1991), 32 (16) 2892-2897.
15. M. Topić, **A. Moguš-Milanković**, Compensation of the Initial Parasitic Current in Thermally Stimulated Depolarization Current Measurements, *Polymer Communications*, 32 (17), (1991), 533-535.
16. **A. Moguš-Milanković** and Delbert E. Day: Thermally Stimulated Polarization and DC Conductivity in Iron-Phosphate Glasses, *J. Non-Cryst. Solids*, 162, (1993), 275-286.
17. **A. Moguš-Milanković**, Gary J. Long and Delbert E. Day: Magnetic Phases Present in $\text{SiO}_2\text{-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3\text{-K}_2\text{O}$ Glass, *Phys. Chem Glass*, 36 (1) (1995) 31-36.
18. **A. Moguš-Milanković**, Delbert E. Day, Gary J. Long, and G. K. Marasinghe Structural and Magnetic Properties of $\text{Fe}_2\text{O}_3\text{-P}_2\text{O}_5\text{-Na}_2\text{O}$ Glass. Oxygen Heat Treatment, *Phys. Chem. Glasses*, 37 (1996) 57.
19. **A. Moguš-Milanković**, Delbert E. Day, B. Pivac and K. Furić Structural Study of Iron Phosphate Glasses, *Phys. Chem. Glasses*, 38 (1997) 74.
20. **A. Moguš-Milanković**, K. Furić, C. S. Ray, W. Huang, and D. E. Day, Raman Studies of $\text{PbO-Bi}_2\text{O}_3\text{-Ga}_2\text{O}_3$ Glasses and Crystallized Compositions, *Phys. Chem. Glasses*, 38 (1997) 148-55.
21. **A. Moguš-Milanković**, D. E. Day and K. Furić, Structure and crystallization of iron phosphate glasses, *Key Engineering Materials*, 132-136 (1997) 2212.
22. **A. Moguš-Milanković**, M. Rajić, A. Drašner, R. Trojko and D. E. Day, Crystallization of iron phosphate glasses, *Phys. Chem. Glasses*, 39 (1998) 70.
23. B. Pivac, **A. Moguš-Milanković** and D. E. Day, Iron valence and coordination in phosphate glasses as studied by optical spectroscopy, *J. Non-Cryst Solids*, 226 (1998) 41.
24. **A. Moguš-Milanković**, D. E. Day and B. Šantić, DC conductivity and polarization in iron phosphate glasses, *Phys. Chem. Glasses*, 40 (1999) 69.
25. **A. Moguš-Milanković**, B. Šantić, K. Furić and D. E. Day, TSC and dc conductivity in cesium iron phosphate glasses, *Phys. Chem. Glasses*, 40 (1999) 305.
26. M. Topić, **A. Moguš-Milanković** and D. E. Day, The study of polarization mechanisms in sodium iron phosphate glasses by partial thermally stimulated depolarization current, *J. Non-Cryst. Solids*, 261 (2000) 146

27. **A. Moguš-Milanković**, B. Šantić, C. S. Ray and D. E. Day, Electrical relaxation in mixed alkali iron pyrophosphate glasses, *J. Non-Cryst. Solids*, 263&264 (2000) 299.
28. **A. Moguš-Milanković**, B. Šantić, C. S. Ray and D. E. Day, Electrical conductivity in mixed alkali iron phosphate glasses, *J. Non-Cryst. Solids*, 283 (2001) 119.
29. X. Fang, C. S. Ray, **A. Moguš-Milanković** and D. E. Day, Iron redox equilibrium, structure and properties of iron phosphate glasses, *J. Non-Cryst. Solids*, 283 (2001) 162.
30. **A. Moguš-Milanković**, A. Gajović, A. Šantić and D. E. Day, Structural properties of sodium phosphate glasses containing Al₂O₃ and/or Fe₂O₃, Part I, *J. Non-Cryst. Solids*, 289 (2001) 204.
31. **A. Moguš-Milanković**, A. Šantić, A. Gajović and D. E. Day, *Electrical properties of sodium phosphate glasses containing Al₂O₃ and/or Fe₂O₃*, Part II, *J. Non-Cryst. Solids*, 296 (2001) 57.
32. B. Šantić, **A. Moguš-Milanković** and D. E. Day, *The dc electrical conductivity of iron phosphate glasses*, *J. Non-Cryst. Solids*, 296 (2001) 65.
33. C.W. Kim, C.S. Ray, D. Zhu, D.E. Day, D. Gomber, A. Aloy, **A. Moguš-Milanković**, M. Karabulut, *Chemically durable iron phosphate glasses for vitrifying sodium bearing waste (SBW) using conventional and cold crucible induction melting (CCIM) techniques*, *J. Nucl. Mater.*, 322 (2003) 152.
34. **A. Moguš-Milanković**, A. Šantić, A. Gajović and D. E. Day, *Spectroscopic investigation of MoO₃-Fe₂O₃-P₂O₅ and SrO-Fe₂O₃-P₂O₅ glasses*. Part I, *J. Non-Cryst. Solids*, 325 (2003) 76.
35. **A. Moguš-Milanković**, A. Šantić, M. Karabulut and D. E. Day, *Study of electrical properties of MoO₃-Fe₂O₃-P₂O₅ and SrO-Fe₂O₃-P₂O₅ glasses by impedance spectroscopy*. Part II, *J. Non-Cryst. Solids*, 330 (2003) 128.
36. W. Huang, D. E. Day, C. S. Ray, C. W. Kim, **A. Moguš-Milanković**, *Vitrification of High Chrome Oxide Nuclear Waste in Iron Phosphate Glasses*, *J. Nucl. Mater.*, 327 (2004) 46.
37. **A. Moguš-Milanković**, A. Šantić, S. T. Reis, K. Furić, D. E. Day, *Mixed ion-polaron transport in Na₂O-PbO-Fe₂O₃-P₂O₅ glasses*, *J. Non-Cryst. Solids*, 342 (2004) 97.
38. **A. Moguš-Milanković**, A. Šantić, M. Karabulut, D. E. Day, *Electrical conductivity and relaxation in MoO₃-Fe₂O₃-P₂O₅ and SrO-Fe₂O₃-P₂O₅ glasses*. *J. Non-Cryst. Solids*, 345-346C (2004) 494.
39. **A. Moguš-Milanković**, A. Šantić, S. T. Reis, K. Furić, D. E. Day, *Studies of lead-iron phosphate glasses by Raman, Mössbauer and Impedance spectroscopy*, *J. Non-Cryst. Solids*, 351 (2005) 3246.

40. **A. Moguš-Milanković**, A. Šantić, V. Ličina and D. E. Day, *Dielectric Behavior and Impedance Spectroscopy of Bismuth Iron Phosphate Glasses*, J. Non-Cryst. Solids, 351 (2005) 3235.
41. M. Bengisu , R. K. Brow, E. Yilmaz , **A. Moguš-Milanković**, and S. T. Reis, *Aluminoborate and aluminoborosilicate glasses with high chemical durability and the effect of P₂O₅ additions on the properties*, J. Non-Cryst. Solids 352 (2006) 3668.
42. T. Fuss, **A. Moguš-Milanković**, C. S. Ray, C. E. Lesher , R. Youngman and D. E. Day, *Ex-situ XRD, TEM, IR, Raman and NMR Spectroscopy of crystallization of lithium disilicate glass at high pressure*, J. Non-Cryst. Solids 352 (2006) 4101.
43. S. T. Reis, **A. Moguš-Milanković**, V. Ličina, Jinbo Yang, M. Karabulut, D. E. Day, and R. K. Brow, *Iron Redox Equilibrium, Structure and Properties of Zinc Iron Phosphate Glasses*, J. Non-Cryst. Solids, 353 (2007) 151.
44. A. Šantić, **A. Moguš-Milanković**, K. Furić, V. Bermanec, C. W. Kim, D. E. Day, *Structural properties of Cr₂O₃-Fe₂O₃-P₂O₅ glasses, Part I*, J. Non-Cryst. Solids, 353 (2007) 1070.
45. **A. Moguš-Milanković**, V. Ličina, S.T. Reis, D.E. Day, *Electronic relaxation in zinc iron phosphate glasses*, J. Non-Cryst. Solids 353 (2007) 2659.
46. V. Ličina, **A. Moguš-Milanković**, S.T. Reis, D.E. Day, *Electronic conductivity in zinc iron phosphate glasses*, J. Non-Cryst. Solids 353 (2007) 4395.
47. V. Ličina, A. Gajović, **A. Moguš-Milanković**, I. Djerdj, N. Tomašić, D. Su, *Correlation between the microstructure and the electrical properties of ZrTiO₄ ceramics*, J. Amer. Ceram. Soc., 91 (2008) 178.
48. A. Šantić, **A. Moguš-Milanković**, K. Furić, M. Rajić-Linarić, C.S. Ray, D.E. Day, *Structural properties and crystallization of sodium tellurite glasses*, Croat. Chem. Acta 81(4) (2008) 559.
49. A. Gajović, A. Šantić, I. Djerdj, N. Tomašić, **A. Moguš-Milanković**, D.S. Su, *Structure and electrical conductivity of porous zirconium titanate ceramics produced by mechanochemical treatment and sintering*, J. Alloys Comp., 479 (2009) 525.
50. **A. Moguš-Milanković**, L. Pavić, S. T. Reis, D. E. Day, M. Ivanda, *Structural and electrical properties of Li₂O-ZnO-P₂O₅ glasses*, J. Non-Cryst. Solids, 356 (2010) 715.
51. Mrakovčić, L., Wildburger, R., Jaganjac, M., Cindrić, M., Čipak, A., Borović Šunjić, S. Waeg, G., **Moguš-Milanković, A.**, Žarković, N. *Lipid peroxidation product 4-hydroxynonenal as factor of oxidative homeostasis supporting bone regeneration with bioactive glasses*, Acta Biochimica Polonica. 57 (2010), 173.
52. A. Šantić, C.W. Kim, D. E. Delbert, **A. Moguš-Milanković**, *Electrical properties of Cr₂O₃-Fe₂O₃-P₂O₅ glasses. Part II.*, Journal of Non-Cryst. Solids, 356 (2010) 2699.

53. A. Šantić, Ž. Skoko, A. Gajović, S. T. Reis, D. E. Day, **A. Moguš-Milanković**, *Physical properties of lead iron phosphate glasses containing Cr_2O_3* , J. Non-Cryst. Solids, **357** (2011) 3578.
54. K. Srilatha, L. Pavić, **A. Moguš-Milanković**, Ch. Sirinivasa Rao, Little Flower, V. Ravi Kumar, N. Veeraiah, *The role of vanadium valence state and coordination on electrical conduction in lithium iodide borate glasses mixed with small concentration of silver iodide*, J. Non-Cryst. Solids, **357** (2011) 3538.
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