

PERSONAL INFORMATION

Name and surname **Radenka Krsmanović Whiffen**
 Academic title Ph. D.
 Year and institution of PhD obtained 2006, EMAT (Electron Microscopy for Materials Science), Department of Physics, University of Antwerp, Belgium
 Phone and Email +381 69 154 1975, radenka@vinca.rs
 Date & place of birth 15th of April 1975, Podgorica, Montenegro

WORK EXPERIENCE (CHRONOLOGICALLY)

Date (from – until) 01.09.2018 - Present
 Institution ENEA - Casaccia Research Centre, Rome, Italy
 Position Maria Sklodowska-Curie Individual Fellow
 Work field *Material Science, Nanotechnology, Solid State Physics*

Date (from – until) 06. 07. 2016 – Present **NOTE. On Maternity Leave: 15.09. 2016 – 06.09.2017**
 Institution Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia
 Position Research Professor (on leave)
 Work field *Material Science, Nanotechnology, Applied Physics*

Date (from – until) 07.09.2017 – 05.07.2018
 Institution University of Madeira, CQM - Centro de Química da Madeira, Portugal
 Position Science and Technology Manager
 Work field *Material Science, Nanotechnology, Scanning Electron Microscopy*

Date (from – until) 22. 12. 2010 – 05.07.2016 **NOTE. On Maternity Leave: 28.03. 2014 – 28.03. 2015**
 Institution Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia
 Position Research Associate Professor
 Work field *Material Science, Nanotechnology, Applied Physics*

Date (from – until) 01. 12. 2006 – 21. 12. 2010
 Institution Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia
 Position Research Assistant Professor
 Work field *Material Science, Nanotechnology*

Date (from – until) 01. 05. 2004 – 25. 11. 2006
 Institution EMAT - Electron microscopy for materials science, University of Antwerp, Belgium
 Position PhD Student
 Work field *Physics, Material Science*

Date (from – until) 01. 04. 2002 – 01. 05. 2004
 Institution Physical Chemistry Department, Ca' Foscari University of Venice, Italy
 Position PhD Student
 Work field *Chemical Physics, Material Science*

Date (from – until) 01. 11. 2001 – 30. 03. 2002
 Institution ENEA - Casaccia Research Centre, Rome, Italy
 Position Young Research Fellowship Holder
 Work field *Physics, Material Science*

EDUCATION (CHRONOLOGICALLY)

Date 22.06.2006
 Place Antwerp, Belgium
 Institution EMAT, University of Antwerp, Mentor: Prof. Gustaaf (Staf) Van Tendeloo
 Title of qualification awarded PhD. in Physics, “Structural Characterization of Advanced Optical Materials”

Date	19.09.2001
Place	Lecce, Italy
Institution	ISUFI, University of Lecce, Mentors: Dr. Marco Vittori Antisari and Dr. Amelia Montone
Title of qualification awarded	MSc. in the field: Materials and Innovative Technologies: “Electron Microscopy: a Tool for Industrial Quality and Environment Monitoring” (2000/2001). Master thesis: “Heavy metal phases in fly ashes: an investigation by scanning electron microscopy”.
Date	24.12.1999
Place	Podgorica, Montenegro
Institution	Faculty of Electrical Engineering, University of Montenegro
Title of qualification	BSc. in Electronics

TRAINING (CHRONOLOGICALLY)

Year and Location	2013-2014, Paris, France (4 months)
Institution	Chimie-ParisTech and Collège de France
Subject and skills covered	<i>Visiting Senior Researcher Grant</i> “Research in Paris”. The goal was to examine and reveal the influence of different sintering conditions and of starting precursor's characteristics on the densification mechanisms in the Spark Plasma Sintering Process and the resultant yttrium oxide ceramics' microstructure.
Year and Location	2010-2011, Brindisi, Italy (6 months)
Institution	ENEA Brindisi Research Center
Subject and skills covered	Postdoctoral specialization at the Department of Materials and New Technologies, specializing in the techniques of high resolution transmission electron microscopy including analytical techniques in TEM, and of atomic force microscopy.

LANGUAGES

English – fluent, Italian – fluent, French – basic, German – beginner, Dutch – beginner, Serbo-Croatian (BCS) – mother tongue

RESEARCH PROJECTS WITH FUNDING (CHRONOLOGICALLY; PROJECT LEADER)

- **2016-2017** Leader of the Serbian – French bilateral project: “Nanostructured transparent ceramics prepared by coupling slip casting and microwave sintering of cubic phase nanopowders”, between Laboratory for Radiation Chemistry and Physics, Vinča Institute of Nuclear Sciences, Belgrade and Université Pierre et Marie Curie – LCMCP, Paris [EUR 4000/per year = **EUR 8,000**].
- **2016-2017** Leader of the Serbian – Croat bilateral project: “Preparation and characterization of thin films from modified TiO₂ nanostructures for application in photovoltaic cells”, between Laboratory for Radiation Chemistry and Physics, Vinča Institute of Nuclear Sciences, Belgrade and Laboratory for Energy Conversion Materials and Sensors, Division of Materials Physics, Rudjer Boskovic Institute, Zagreb [EUR 3000/per year = **EUR 6,000**].
- **2013-2014** “Research in Paris” Grant for Visiting Senior Researcher [**EUR 13,500** for 4.5 months]
- **2011-2012** Leader of the Serbian – French bilateral project: “Optically active oxide ceramics: advanced preparation and characterization methods”, between Laboratory for Radiation Chemistry and Physics, Vinča Institute of Nuclear Sciences, Belgrade and Laboratoire de Chimie de la Matière Condensée de Paris, Centre National de la Recherche Scientifique (CNRS), Paris [EUR 4000/per year = **EUR 8,000**].
- **2010- 2011** Grant for Post-doctoral Study (6 months), awarded by the Ministry of Education and Science of the Republic of Serbia [**RSD 876,962** c.a. **EUR 8,000** at the time, for 6 months]
- **2008-2011** Leader of the project “Synthesis and Characterization of Luminescent Thin Films and Nanocomposites”, awarded by the Reintegration Grant, NATO Science for Peace and Security Programme, grant reference number CBP.EAP.RIG.983373 [**EUR 25,000** in total].

TEACHING (CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE, POSTGRADUATE STUDY PROGRAMMES)

- One-day course (theory and practice) on scanning electron microscopy for PhD students: “Basics of Scanning Electron Microscopy”, May 2018, CQM, University of Madeira, Portugal (Postgraduate Programme).
- One-day course (theory and practice) on scanning electron microscopy for Master students: “Basics of Scanning Electron Microscopy”, March 2018, CQM, University of Madeira, Portugal (Postgraduate Programme).
- Practical lessons on XRD technique for the Masters in NanoPhysics, March 2006, EMAT, University of Antwerp, Belgium (Postgraduate Programme).
- Practical lesson with conventional TEM during the EMAT Winter School on Transmission Electron Microscopy,

January 2005, EMAT, University of Antwerp, Belgium (Postgraduate Programme).

- Practical lessons with conventional SEM and TEM during the “SEM Samples Preparation in Material Science” and “TEM Samples Preparation in Material Science”, theoretical and experimental workshops organized by SISM – Italian Electron Microscopy Society; 21-25 October 2002, Ca’ Foscari University of Venice, Italy.

MENTORSHIP OF DOCTORAL AND MASTER DISSERTATIONS AND TRAINING OF YOUNG RESEARCHERS

- 2009-2011: Helping the realization of the PhD thesis: “Exploring physical properties of noble metals nanoparticles dispersed in synthetic polymers and biopolymers“, defended by D. Božanić at the Faculty of Physics, University of Belgrade, 2011.
- 2007-2010: **Co-mentor** of the PhD thesis: “Synthesis and characterization of luminescent europium-doped nanopowders”, defended by Ž. Antić at the Faculty of Technology and Metallurgy, University of Belgrade, 2010.
- 2007-2009: Helping the realization of the Masters thesis: “Optical and structural characteristics of zink silicate powders doped with rare earth and transition metals ions“, defended by Lj. Đačanin at the University of Novi Sad, Physics Department, 2009.
- 2007-2009: Helping the realization of the Masters thesis: “Physical characteristics of starch nanocomposites with metal and semiconductor nanoparticles“, defended by D. Božanić at the Faculty of Physics, University of Belgrade, 2009.

LONGER VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS (CHRONOLOGICALLY)

- 2013-2014 Visiting scientist at the Laboratoire de Chimie de la Matière Condensée de Paris, Chimie- ParisTech, through the "Research in Paris" Grant for Senior Researcher (from 1st of October 2013 to 11th of February 2014). Part of the experimental work was conducted at the Collège de France, Paris.
- 2010–2011 Postdoctoral specialization at the Department of Materials and New Technologies, Research Center ENEA Brindisi (from 15th of September 2010 to 15th of April 2011).
- 2010-2012 Short visits (4 weeks in total) to the Laboratoire de Chimie de la Matière Condensée de Paris, Centre National de la Recherche Scientifique (CNRS), Paris (bilateral project activity).

AWARDS AND RECOGNITIONS (CHRONOLOGICALLY)

- 2018 **MSCA IF** fellowship for my project proposal “ZnS Wurtzite Nanotextured Ceramic Materials for Pyroelectric Energy Harvesting” (Physics Panel), awarded by the European Commission on January 30th 2018. Host institution: **ENEA Casaccia**, Rome, Italy. Supervisor: **Dr Amelia Montone**. Starting date: 1st September 2018.
- 2017 **Seal of Excellence** for the **MSCA IF** project proposal “ZnS Wurtzite Nanotextured Ceramic Materials for Pyroelectric Energy Harvesting” (89.8/100, Physics Panel), awarded by the European Commission on April 24th 2017.
- 2nd SEE Regional Workshop on Science Communication, 20-22 September 2014, Podgorica, Montenegro, participation awarded by UNESCO Venice Office.
- 2014 Front Cover as **FEATURED ARTICLE** of the Chemical Engineering Journal (253 (2014) 341) with the article “ZnO/Ag hybrid nanocubes in alginate biopolymer: Synthesis and properties”.
- 2013 “**Research in Paris**” 6-months Grant for Visiting Senior Researcher, awarded by the City of Paris.
- 2010-2011 **Grant for Post-doctoral Study** (6 months) at the Research Center ENEA Brindisi, Italy, awarded by the Ministry of Education and Science of the Republic of Serbia.
- 2009 **European Microscopy Society Scholarship** to attend the MC2009 congress in Graz, Austria.
- 2008 Fellowship for Young Researchers, Women in Nano-Winter School, held under the auspices of the EC-FP6 Specific Support Action: "Strengthening the Role of Women Scientists in Nano-Science", Kranjska Gora, Slovenia.
- 2007 **Joint Research Centre (JRC) Fellowship** for Young Researchers for participation at the 15th International Symposium “Spectroscopy in Theory and Practice”, Nova Gorica, Slovenia.
- 2006 Best Poster prize at the 8th Yugoslav Materials Research Society Conference - YUCOMAT 2006, Herceg Novi, Montenegro.
- 2003 **SIME (Italian Electron Microscopy Society) Scholarship for Young Scientists** for attendance at the 6th Multinational Congress on Microscopy, Pula, Croatia.
- 2003 Best Poster prize at the 5th Yugoslav Materials Research Society Conference - YUCOMAT 2003, Herceg Novi, Montenegro.

- 2001-2002 ENEA (Italian National Agency for New Technologies, Energy and Environment) Young Researcher Fellowship, Rome, Italy.

ORGANIZATIONAL SKILLS AND COMPETENCES (HOME AND INTERNATIONAL SCIENCE EVENTS)

- 2018 Member of the Organizing and Programme Committee of the 5th International Conference on the Physics of Optical Materials and Devices - ICOM 2018, Igalo, Montenegro.
- 2015 Member of the Organizing and Programme Committee of the 4th International Conference on the Physics of Optical Materials and Devices - ICOM 2015, Budva, Montenegro.
- 2012 Member of the Organizing and *Program Committee* of the 3rd International Conference on the Physics of Optical Materials and Devices - ICOM 2012, Belgrade, Serbia.
- 2010 Member of the *Scientific Board* and Member of the Organizing Board of the 4th Serbian Congress for Microscopy, Belgrade, Serbia.
- 2009 Member of the Organizing Committee of the 2nd International Conference on the Physics of Optical Materials and Devices - ICOM 2009, Herceg Novi, Montenegro.
- 2007 Member of the Organizing Board of the 3rd Serbian Congress for Microscopy, Belgrade, Serbia.
- 2002 Member of the Organizing Board and *docent* on: "SEM Samples Preparation in Material Science" and "TEM Samples Preparation in Material Science", theoretical and experimental workshops organized by Italian Electron Microscopy Society; October 2002, Università Ca' Foscari di Venezia, Italy.

MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES (HOME AND INTERNATIONAL)

- 2018 – Present, Member of the Marie Curie Alumni Association and founder of the MCAA Western Balkans Group.
- 2017 – Present, Portuguese Microscopy Society, Member.
- 2015 – Present, Balkan Network of Science Journalists, Member.
- 2012 – Present, Serbian Physical Society, Member.
- 2010 – Present, Member of the Managing Board of the Serbian Microscopy Society.
- 2007 – Present, Serbian Microscopy Society (SMS), Member.
- 2005 – Present, European Microscopy Society (EMS), Member.
- 2005 – 2007, Belgian Society for Microscopy (BVM/SBM), Member.
- 2004 – Present, Yugoslav Materials Research Society (YUMRS), Member.
- 2002 – 2005, SIME (Italian Electron Microscopy Society), Member.

COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS (HOME AND INTERNATIONAL)

- 2010 - Ph.D. Commission Member for Dr. Željka Antić's thesis: "Synthesis and characterization of luminescent europium-doped nanopowders", defended at the Faculty of Technology and Metallurgy, University of Belgrade.
- 2010 – 2011, Member of the Managing Board of the Serbian Microscopy Society.

OTHER SCIENTIFIC ACTIVITY

Invited talk: "Trans Adriatic Transmission Electron Microscopy – a bilateral project", Workshop on "Remote Microscopy for Electron Microscopy" 20-22 October 2008, Pula, Cagliari, Italy.

Referee for international journals: Chemistry of Materials (ACS Publications), Ceramics International (Elsevier), Optical Materials (Elsevier), Materials Research Bulletin (Elsevier), Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier), Solid State Sciences (Elsevier), Materials Chemistry and Physics (Elsevier), Chemical Engineering Communications (Taylor & Francis), Physica Scripta (IOP).

Associate Editor for Chemistry, Book Programme, at *De Gruyter Open* (June 2015-February 2016).

External referee for FWO projects: evaluating the application in writing. FWO is an independent funding agency that supports fundamental research in all disciplines in Flanders (Belgium).

External referee for The Ministry of Science of the Republic of Montenegro, for several bilateral project proposals: evaluating the applications in writing.

Promotion of Science:

- Participating in the "**Bridging the Gap**" (BtG) – science promotion project. The CQM received 40 pupils (10-year-old) from Escola EB1/PE CC Professor Eleutério de Aguiar as part of the BtG project, to which I presented scanning electron microscope technique, May 28th, 2018, CQM, University of Madeira, Portugal.
- "**A Química é Divertida**" – science promotion project that runs at CQM, University of Madeira. I was involved in demonstration of selected laboratory experiments for Primary and Secondary School pupils, November 23rd-24th 2018, CQM, University of Madeira, Portugal.

- “Nanophosphors – materials for brighter future“, an invited talk for the Open Science Days, at the **European Researchers' Night** event, September 25th 2015, Podgorica, Montenegro. Organizers: Montenegrin Science Promotion Foundation PRONA, The Ministry of Science of the Republic of Montenegro and The Natural History Museum of Montenegro.
- Member of the Organizing Board for the Scientific Debates at the Vinca Institute of Nuclear Sciences, University of Belgrade, 2013-2014.
- Participation in the Open Door events for high school pupils, organized by the Vinca Institute of Nuclear Sciences, Belgrade, Serbia, 2009.

COMPUTER SKILLS

Experience in working with different environments related to scientific data analysis: Origin (OriginLab), Digital Micrograph, JEMS and MacTempas (HRTEM Image simulation software packages), different software for XRD, FTIR and PL measurements and analysis. Proficient in common Word Processing, Image Editing, Graphing, and Utility software at advanced user level.

OTHER IMPORTANT SCIENTIFIC COMPETENCES AND SKILLS

- Experience in initiating, developing, and directing research projects.
- Experience in the individual writing of scientific articles and giving presentations at an international level.
- Experience and professional training in writing scientific proposals.
- Preparation and structured analysis of novel nanophosphors (bixbyite oxides, garnets and silicates doped with rare earths), luminescent glass ceramics, metal/semiconductor nanoparticles and polymer nanocomposites.
- Structural characterization of nanocrystalline and hybrid materials by XRD and Electron Microscopy techniques (SEM, TEM, HRTEM) and composition determination with EDX and EFTEM.
- Optical characterization of luminescent nanopowders and from them derived ceramics and thick/thin films using photoluminescent spectroscopy techniques (PL, UV-vis).
- Preparation of optically active oxide ceramics, using Spark Plasma Sintering technique and High Pressure-Low Temperature (HP-LT) approach developed with my colleague Dr. Damien Bregiroux from the College de France, Paris, along with its full physical characterization.

ADDITIONAL INFORMATION AND NOTES

- Total number of articles published in peer reviewed journals: **46**
- **851** citations (total), *h*-factor: **16**, source: Google Scholar
- **631** citations (total), *h*-factor: **14**, source: Scopus
- Active international network of collaborations (over **30** researchers from **10** different countries in Europe).

FULL LIST OF PUBLICATIONS

- R. M. Krsmanović Whiffen, D. Bregiroux, B. Viana, *Nanostructured Y₂O₃ ceramics elaborated by Spark Plasma Sintering of nanopowder synthesized by PEG assisted combustion method: The influence of precursor morphological characteristics*, [CERAMICS INTERNATIONAL 43 \(2017\) 15834](#).
- R. M. Krsmanović Whiffen, Ž. Antić, A. Speghini, M.G. Brik, B. Bartova, M. Bettinelli, M.D. Dramićanin, *Structural and Spectroscopic Studies of Eu³⁺ Doped Lu₂O₃-Gd₂O₃ Solid Solutions*, [OPTICAL MATERIALS 36 \(2014\) 1083–1091](#).
- L.V. Trandafilović, R. Krsmanović Whiffen, S. Dimitrijević-Branković, M. Stoiljković, A.S. Luyt, V. Djoković, *ZnO/Ag hybrid nanocubes in alginate biopolymer: Synthesis and properties*, [CHEMICAL ENGINEERING JOURNAL 253 \(2014\) 341-349](#) – FEATURED article of this issue (Cover page).
- R. Krsmanović Whiffen, D.J. Jovanović, Ž. Antić, B. Bártová, D. Milivojević, M.D. Dramićanin, M.G. Brik, *Structural, optical and crystal field analyses of undoped and Mn²⁺-doped ZnS nanoparticles synthesized via reverse micelle route*, [JOURNAL OF LUMINESCENCE 146 \(2014\) 133-140](#).
- R. Krsmanović Whiffen, Ž. Antić, B. Milićević, M. Pošarac-Marković, Dj. Janačković, M.D. Dramićanin, M.G. Brik, I. Steins, Dj. Veljović, *Polycrystalline (Y_{0.7}Gd_{0.3})₂O₃:Eu³⁺ Ceramics Fabricated by Spark Plasma Sintering: Densification and Microstructure Development*, [CERAMICS INTERNATIONAL 40 \(2014\) 8853](#).
- M. Marinović-Cincović, B. Janković, B. Milićević, Ž. Antić, R. Krsmanović Whiffen, M. D. Dramićanin, *The comparative kinetic analysis of the non-isothermal crystallization process of Eu³⁺ doped Zn₂SiO₄ powders prepared via polymer induced sol–gel method*, [POWDER TECHNOLOGY 249 \(2013\) 497-512](#).
- V. Đorđević, M.G. Nikolić, B. Bartova, R.M. Krsmanović, Ž. Antić, M. D. Dramićanin, *Eu³⁺ doped*

($Y_{0.5}La_{0.5}$) $_2O_3$: new nanophosphor with the bixbyite cubic structure, [JOURNAL OF NANOPARTICLE RESEARCH 15 \(2013\) 1322-1332](#).

- D.J. Jovanović, Ž. Antić, R. Krsmanović, M. Mitrić, V. Đorđević, B. Bártoová, M.D. Dramićanin, *Annealing effects on the microstructure and photoluminescence of Eu^{3+} -doped $GdVO_4$ powders*, [OPTICAL MATERIALS 35 \(2013\) 1797-1804](#).
- Ž. Antić, R.M. Krsmanović, M.G. Nikolić, V. Djordjević, M.D. Dramićanin, *Processing and characterization of up-converting Er^{3+} doped ($Lu_{0.5}Y_{0.5}$) $_2O_3$ nanophosphor*, [IJMR - INTERNATIONAL JOURNAL OF MATERIALS RESEARCH 2 \(2013\) 216-221](#).
- Ž. Antić, R.M. Krsmanović, M.G. Nikolić, M. Marinović-Cincović, M. Mitrić, S. Polizzi, M.D. Dramićanin, *Multisite luminescence of rare earth doped TiO_2 anatase nanoparticles*, [MATERIALS CHEMISTRY AND PHYSICS 135 \(2012\) 1064-1069](#).
- R.M. Krsmanović, Ž. Antić, B. Bartova, M.G. Brik, M.D. Dramićanin, *Fabrication of polycrystalline ($Y_{0.7}Gd_{0.3}$) $_2O_3:Eu^{3+}$ ceramics: The influence of initial pressure and sintering temperature on its morphology and photoluminescence activity*, [CERAMICS INTERNATIONAL 38 \(2012\) 1303-1313](#).
- I.Lj. Validžić, T.D. Savić, R.M. Krsmanović, D.J. Jovanović, M.M. Novaković, M.Č. Popović, M.I. Čomor, *Synthesis, strong room-temperature PL and photocatalytic activity of $ZnO/ZnWO_4$ rod-like nanoparticles*, [MATERIALS SCIENCE AND ENGINEERING B 177 \(2012\) 645-651](#).
- V. Lojpur, Ž. Antić, R.M. Krsmanović, M. Medić, M.G. Nikolić, M.D. Dramićanin, *Thermographic properties of Eu^{3+} - and Sm^{3+} -doped Lu_2O_3 nanophosphor*, [JOURNAL OF THE SERBIAN CHEMICAL SOCIETY 77 \(12\) \(2012\) 1735-1746](#).
- M.G. Nikolić, D.J. Jovanović, V. Đorđević, Ž. Antić, R.M. Krsmanović, M.D. Dramićanin, *Thermographic properties of Sm^{3+} -doped $GdVO_4$ phosphor*, [PHYSICA SCRIPTA T 149 \(2012\) 014063-6](#).
- Ž. Antić, R.M. Krsmanović, M. Marinović-Cincović, M. Mitrić, M.D. Dramićanin, *Structural and optical investigation of gadolinia-doped ceria powders prepared by polymer complex solution method*, [IJMR - INTERNATIONAL JOURNAL OF MATERIALS RESEARCH 7 \(2012\) 884-888](#).
- R.M. Krsmanović, Ž. Antić, M. Mitrić, M.D. Dramićanin, M.G. Brik, *Structural, spectroscopic and crystal field analyses of Ni^{2+} and Co^{2+} doped Zn_2SiO_4 powders*, [APPLIED PHYSICS A: MATERIALS SCIENCE & PROCESSING 104 \(2011\) 483-492](#).
- R.M. Krsmanović, Ž. Antić, M.G. Nikolic, M. Mitrić, M.D. Dramićanin, *Preparation of $Y_2O_3:Eu^{3+}$ nanopowders via polymer complex solution method and luminescence properties of the sintered ceramics*, [CERAMICS INTERNATIONAL 37 \(2011\) 525-531](#).
- D.K. Božanić, V. Djoković, S. Dimitrijević-Branković, R. Krsmanović, M. McPherson, P.S. Nair, M.K. Georges, T. Radhakrishnan, *Inhibition of Microbial Growth by Silver-Starch Nanocomposite Thin Films*, [JOURNAL OF BIOMATERIALS SCIENCE, POLYMER EDITION 22 \(2011\) 2343-2355](#).
- Lj. Đaćanin, S.R. Lukić, D.M. Petrović, Ž. Antić, R. Krsmanović, M. Marinović-Cincović, M.D. Dramićanin, *PMMA/ $Zn_2SiO_4:Eu^{3+}(Mn^{2+})$ Composites: Preparation, Optical and Thermal Properties*, [JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE \(2011\) 1-5](#).
- V. Djoković, D.K. Božanić, V.V. Vodnik, R.M. Krsmanović, L.V. Trandafilović, S. Dimitrijević-Branković, *Structure and optical properties of noble metal and oxide nanoparticles dispersed in various polysaccharide biopolymers*, [Proc. of SPIE, Physical Chemistry of Interfaces and Nanomaterials X, \(doi: 10.1117/12.899934\) 8098 \(2011\), art. no. 809816\(1-8\)](#).
- R. Krsmanović, Ž. Antić, B. Bártoová, M.D. Dramićanin, *Characterization of rare-earth doped Lu_2O_3 nanopowders prepared with polymer complex solution synthesis*, [JOURNAL OF ALLOYS AND COMPOUNDS 505 \(2010\) 224-228](#).
- R. Krsmanović, Ž. Antić, I. Zeković, B. Bártoová, M.D. Dramićanin, *($Y_{0.5}Lu_{0.5}$) $_2O_3:Eu^{3+}$ nanopowders: combustion synthesis, structure and optical properties*, [RADIATION MEASUREMENTS 45 \(2010\) 438-440](#).
- Ž. Antić, R. Krsmanović, M. Marinović-Cincović, M. Mitrić, M.D. Dramićanin, *Rare-earth doped ($Lu_{0.85}Y_{0.15}$) $_2SiO_5$ nanocrystalline powders obtained by polymer assisted sol-gel synthesis*, [RADIATION MEASUREMENTS 45 \(2010\) 475-477](#).
- Ž. Antić, R. Krsmanović, M. Wojtowicz, E. Zych, B. Bártoová, M.D. Dramićanin, *Preparation, structural and spectroscopic studies of (Y_xLu_{1-x}) $_2O_3:Eu^{3+}$ nanopowders*, [OPTICAL MATERIALS 32 \(2010\) 1612-1617](#).
- Ž. Antić, R. Krsmanović, M. Marinović-Cincović, M.D. Dramićanin, *$Gd_2O_3:Eu^{3+}/PMMA$ composite: Thermal and luminescence properties*, [ACTA PHYSICA POLONICA A 117 \(2010\), 831-836](#).
- R. Krsmanović, Ž. Antić, I. Zeković, M.D. Dramićanin, *Polymer-assisted sol-gel synthesis and characterization of $Zn_2SiO_4:Eu^{3+}$ powders*, [JOURNAL OF ALLOYS AND COMPOUNDS 480 \(2009\) 494-498](#).
- V. Djoković, R. Krsmanović, D.K. Božanić, M. McPherson, G. Van Tendeloo, P. Sreekumari Nair, M.K. Georges, T. Radhakrishnan, *Adsorption of Sulfur onto a Surface of Silver Nanoparticles Stabilized With Sago Starch Biopolymer*, [COLLOIDS AND SURFACES B: BIOINTERFACES 73 \(2009\) 30-35](#).
- Ž. Antić, R. Krsmanović, V. Đorđević, T. Dramićanin, M.D. Dramićanin, *Optical Properties of $Y_2O_3:Eu^{3+}$ Red Emitting Phosphor Obtained via Spray Pyrolysis*, [ACTA PHYSICA POLONICA A 116 \(2009\) 622-624](#).
- R. Krsmanović, Ž. Antić, M. Marinović-Cincović, M.D. Dramićanin, *Samarium and terbium doped Zn_2SiO_4 phosphors obtained by polymer supported sol-gel synthesis*, [JOURNAL OF OPTOELECTRONICS AND ADVANCED](#)

MATERIALS – SYMPOSIA 1 (2009) 37–41.

- M. Marinović-Cincović, Ž. Antić, R. Krsmanović, M. Mitrić, M.D. Dramićanin, Thermal and luminescence properties of nano-Gd₂O₃:Eu³⁺/PMMA composite, *JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS – SYMPOSIA 1 (2009)* 54–58.
- R. Krsmanović, S. Bals, G. Bertoni, G. Van Tendeloo, *Structural characterization of Er doped Li₂O-Al₂O₃-SiO₂ glass ceramics*, *OPTICAL MATERIALS* 30 (2008) 1183–1188.
- S.R. Lukić, D. M. Petrović, Lj. Đačanin, M. Marinović-Cincović, Ž. Antić, R. Krsmanović, M.D. Dramićanin, "Gel combustion synthesis of transition metal ions doped Zn₂SiO₄ powder", *JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS* 10 (2008) 2748-2752.
- Ž. Andrić, R. Krsmanović, M. Mitrić, Z. Marković, B. Viana, M.D. Dramićanin, *Properties of the (Y_{0.75}Gd_{0.25})₂O₃:Eu³⁺ scintillating nanopowder*, *ACTA CHIMICA SLOVENICA* 55 (2008) 179-183.
- B. Šećerov, Ž. Andrić, N. Abazović, R. Krsmanović, M. Mitrić, A. Montone, M.D. Dramićanin, *Combustion Synthesis and Characterization of CeO₂ Nanopowder*, *ACTA CHIMICA SLOVENICA* 55 (2008) 486-491.
- R. Krsmanović, V.A. Morozov, O.I. Lebedev, S. Polizzi, G. Van Tendeloo, *Structural characterization of gadolinium-gallium garnet powders obtained by solution combustion synthesis*, *NANOTECHNOLOGY* 18 (2007) 325604-325613.
- Ž. Andrić, R. Krsmanović, M. Marinović-Cincović, T. Dramićanin, B. Šećerov, M.D. Dramićanin, *Investigation on the crystallization process of Eu³⁺:CaSiO₃ gel using optical and thermal methods*, *ACTA PHYSICA POLONICA A* 112 (2007) 969-974.
- R. Krsmanović, Ž. Andrić, M. Marinović-Cincović, I. Zeković, M.D. Dramićanin, *Optical and Thermal Investigation of Sol-Gel Derived Eu³⁺:Y₂SiO₅ Nanoparticles*, *ACTA PHYSICA POLONICA A* 112 (2007) 981-986.
- R. Krsmanović, G. Bertoni, G. Van Tendeloo, *Structural characterization of Erbium - doped LAS Glass Ceramic Obtained with Glass Melting Technique*, *MATERIALS SCIENCE FORUM* 555 (2007) 377-381.
- R. Krsmanović, O.I. Lebedev, A. Speghini, M. Bettinelli, S. Polizzi, G. Van Tendeloo, *Structural characterization and luminescence properties of nanostructured lanthanide - doped Sc₂O₃ prepared by propellant synthesis*, *NANOTECHNOLOGY* 17 (2006) 2805-2812.
- C. Canevali, M. Mattoni, F. Morazzoni, R. Scotti, M. Casu, A. Musinu, R. Krsmanović, S. Polizzi, A. Speghini, M. Bettinelli, *Stability of Luminescent Trivalent Cerium in Silica Host Glasses Modified by Boron and Phosphorus*, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY* 127 (2005) 14681-14691.
- P. Riello, S. Bucella, R. Krsmanović, S. Meneghetti, S. Pietrantonio, R. Francini, *Synthesis, X-ray Diffraction Characterization, and Radiative Properties of Er₂O₃-ZrO₂ Nanocrystals Embedded in LAS Glass Ceramic*, *THE JOURNAL OF PHYSICAL CHEMISTRY B* 109, (2005) 13424-13430.
- F. Vetrone, J.C. Boyer, J.A. Capobianco, A. Speghini, M. Bettinelli, R. Krsmanović, S. Polizzi, *Structural Investigation and Anti-Stokes Emission of Scandium Oxide Nanocrystals Activated with Trivalent Erbium*, *JOURNAL OF THE ELECTROCHEMICAL SOCIETY* 152 (2005) H19-H24.
- C. Canevali, M. Mattoni, F. Morazzoni, R. Scotti, R. Krsmanović, S. Polizzi, M. Bettinelli, A. Speghini, *B and P glass formers as stabilizers of luminescent Ce (III) in silica-based glasses*, *Materials Research Society Symposium Proceedings, Volume 847 (Organic/Inorganic Hybrid Materials) (2005)* 87-92.
- R. Krsmanović, S. Polizzi, P. Canton, *Characterization of Nanoporous Lanthanide-Doped Gadolinium Gallium Garnet Powders Obtained by Propellant Synthesis*, *MATERIALS SCIENCE FORUM* 494 (2005) 143-148.
- R. Krsmanović, P. Canton, A. Speghini, M. Bettinelli, S. Polizzi, *Characterization of Nanoporous Lanthanide-Doped YAG Powders Obtained by Propellant Synthesis*, *MATERIALS SCIENCE FORUM* 453-454 (2004) 251-256.
- M. Vittori Antisari, R. Marazzi, R. Krsmanović, *Synthesis of Multiwall Carbon Nanotubes by Electric Arc Discharge in Liquid Environments*, *CARBON* 41 (2003) 2393-2401.