

# CURRICULUM VITAE

## PERSONAL INFORMATION

Name and surname **Iva Šarić**  
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## CURRENT POSITION

Dates (from – to) 15.11.2017.-today  
Department of Physics and Centre for Micro and Nano Sciences and Technologies, University of Rijeka, Croatia, Radmile Matejčić, br. 2, 51000 Rijeka  
Position Assistant professor

## PREVIOUS POSITION

Dates (from – to) 1.9.2016.-15.11.2017.  
Department of Physics and Centre for Micro and Nano Sciences and Technologies, University of Rijeka, Croatia, Radmile Matejčić, br. 2, 51000 Rijeka  
Position Postdoctoral researcher

Dates (from – to) 1.2.2014.-1.9.2016.  
Department of Physics, Faculty of Civil Engineering, University of Rijeka, Croatia, Radmile Matejčić, br. 3, 51000 Rijeka  
Position Postdoctoral researcher

Dates (from – to) 1.2.2008.-1.2.2014.  
Department of Physics, Faculty of Civil Engineering, University of Rijeka, Croatia, Radmile Matejčić, br. 3, 51000 Rijeka  
Position Phd student and teaching assistant

## EDUCATION

Dates (from – to) 2008. – 2014.  
Faculty of Science, Physics Department, University of Zagreb, Croatia  
Title Ph. D. of Natural Science  
Dissertation EPR spectroscopy of solid trehalose: the effect of matrix disorder on the dynamics of the paramagnetic centers, Faculty of Science, Physics Department, University of Zagreb, Croatia, 27. 4. 2014. mentor: dr. Marina Ilakovac Kveder, Ruđer Bošković Institute.

Dates (from – to) 2002.-2007.  
Faculty of Arts and Sciences, University of Rijeka, Croatia  
Title M. Ed.

Dates (from – to) 1998.-2002.  
Rijeka's First Croatian High School

## PROFESSIONAL DEVELOPMENT

- 1) **Weizman Institute of Science (Rehavot, Izrael)** – The 6th EFEPR School on Advanced Electron Paramagnetic Resonance (EPR) Spectroscopy (12. 1. 2013. – 18. 1. 2013.)
- 2) **CIC nanoGUNE (San Sebastian, Spain)** – guest researcher: COST Action MP1402 Short Term Scientific Missions (STSM) (1. 11. 2016. – 15. 12. 2016.)
- 3) **CIC nanoGUNE (San Sebastian, Spain)** – guest researcher within the framework of the European Project " *Acquiring the research and scientific excellence in functionalization of biomedical materials* " funded by Ministry of Science, Education and Sports of the Republic of Croatia and European Social Fund, Project leader: M. Petravić (1. 8. 2016. – 31. 8. 2016.)
- 4) **CIC nanoGUNE (San Sebastian, Spain)** – guest researcher within the framework of the European Project " *Acquiring the research and scientific excellence in functionalization of biomedical materials* " funded by Ministry of Science, Education and Sports of the Republic of Croatia and European Social Fund, Project leader: M. Petravić (6. 9. 2015. – 30. 10. 2015.)
- 5) **Max-Planck-Institut fuer Chemische Energiekonversion (Muelheim an der Ruhr, Germany)** – guest researcher within the framework of the Alexander von Humboldt Research Group Linkage Programme project " *The study of soft condensed matter by EPR: dynamics in glassy and crystalline matrices* " (20. 4. 2015. – 30. 4. 2015.)
- 6) **Elettra Sincrotrone Trieste (Basovizza, Italy)** – line BEAR (S. Nannarone) (20. – 22. 9. 2016., 3. – 5. 10. 2016., 20. – 21. 1. 2017.)

## LANGUAGE SKILLS

Croatian (first language)

Other languages	UNDERSTANDING		TALKING		WRITING
	Listening	Reading	Talk interaction	Talk production	
English	C1	C1	B2/C1	B2/C1	C1

## PARTICIPATION IN RESEARCH PROJECTS

- 1) Collaborator on the research project of the Croatian Science Foundation entitled " *The study of long-range correlations and stochastic modeling on cellular level* "; Project leader: prof. dr. sc. Boris Podobnik (2008. – 2014.)

- 2) Collaborator on the research project of the Croatian Science Foundation entitled "*Molecular Structure and Dynamics of Systems with Paramagnetic Species*"; Project leader: prof. dr. sc. Boris Rakvin (2013. – 2015.)
- 3) Collaborator on the research project within the framework of the Alexander von Humboldt Research Group Linkage Programme project "*The study of soft condensed matter by EPR: dynamics in glassy and crystalline matrices*"; Project leader: prof. dr. sc. Marina Ilakovac Kveder (2013. – 2015.)
- 4) Collaborator on the research project within the framework of the European Project "*Acquiring the research and scientific excellence in functionalization of biomedical materials*"; funded by Ministry of Science, Education and Sports of the Republic of Croatia and European Social Fund, Project leader: prof. dr. sc. Mladen Petravić (travanj 2014. – rujan 2016.)
- 5) Collaborator on the research project "*Modifikacija površina i kontrola defekata za nove primjene naprednih funkcionalnih materijala*"; (funded by the University of Rijeka), Project leader: prof. dr. sc. Mladen Petravić (2014. –)
- 6) Collaborator on the research project of the Croatian Science Foundation entitled "*Preparation of Porous Thin-film Materials for Water Purification using Atomic Layer Deposition (ALD)*"; Project leader: doc. dr. sc. Gabriela Ambrožić (April 2017. –)
- 7) Collaborator on the research project "*Ex-situ priprema tankoslojnih hibridnih materijala s tehnikom Depozicije Atomskih Slojeva*"; (funded by the University of Rijeka), Project leader: doc. dr. sc. Gabriela Ambrožić (April 2017. –)

## TEACHING

Date	Course	Institution
2008. – 2017.	Physics, University Undergraduate Study Programme in Civil Engineering, (60 hours per year)	Faculty of Civil Engineering, University of Rijeka, Croatia
2008. – 2017.	Physics, University Undergraduate Study Programme in Civil Engineering (30 hours per year)	Faculty of Civil Engineering, University of Rijeka, Croatia
2008. – 2015.	Mechanics 2, University Undergraduate Study Programme in Civil Engineering, (60 hours per year)	Faculty of Civil Engineering, University of Rijeka, Croatia
2008. – 2010.	Physics 1, University Undergraduate Study Programme in Electrotechnics,	Faculty of engineering, University of Rijeka, Croatia

	(60 hours per year)	
2008. – 2010.	Physics 2, University Undergraduate Study Programme in Electrotechnics, (60 hours per year)	Faculty of engineering, University of Rijeka, Croatia
2014. – 2017.	Physics practicum 1, University Undergraduate Study of Physics, (67,5 hours per year)	Department of physics, University of Rijeka, Croatia
2016. – 2017.	Physics II: Electricity and magnetism, University Undergraduate Study of Physics, (45 hours per year)	Department of physics, University of Rijeka, Croatia
2016. – 2017.	Measuring in physics, University Undergraduate Study of Physics, (37,5 hours per year)	Department of physics, University of Rijeka, Croatia

## MEMBERSHIP IN SCIENTIFIC ORGANIZATIONS AND BODIES

Croatian Physical Society (since 2014.)

Croatian Biophysical Society (since 2014.)

Croatian Vacuum Society (since 2016.)

COST action: Hooking together European research in Atomic Layer Deposition (HERALD), COST Action MP1402 (since 2016.)

## LIST OF PUBLICATIONS

### Papers published in journals cited by Current Contents

- 1) M. Kveder, **I. Šarić**, D. Merunka, M. Jokić, S. Valić, B. Rakvin, The anhydrous solid trehalose: low-temperature EPR study of glassy and boson peak modes, *J. Non-Cryst. Solids* 375 (2013) 19-24. (Q1, IF: 1,825)
- 2) **I. Šarić**, M. Jokić, B. Rakvin, M. Kveder, N. Maltar-Strmečki, The effect of thermal treatment on radiation-induced EPR signals of different polymorphic forms of trehalose, *Appl. Radiat. Isot.* 83 (2014) Part A 41-46. (Q2, IF: 1,136)
- 3) **I. Šarić**, R. Peter; I. Kavre, I. Jelovica Badovinac, M. Petravić, Oxidation of nickel surfaces by low energy ion bombardment, *Nucl. Instr. Meth. Phys. Res. B: Beam Interactions with Materials and Atoms* 371 (2016) 286-289. (Q2, IF: 1,389)
- 4) **I. Šarić**, R. Peter, M. Petravić, Oxidation of Cobalt by Oxygen Bombardment at Room Temperature, *J. Phys. Chem. C* 120 (2016) 22421-22425. (Q1, IF: 4,509)
- 5) J. Katić, M. Metikoš-Huković, **I. Šarić**, M. Petravić, Semiconducting properties of the oxide films formed on tin: Capacitive and XPS studies, *J. Electrochem. Soc.* 163 (2016) 5 C221-C227. (Q1, IF:

2,76)

- 6) **I. Saric**, R. Peter, I. Kavre Piltaver, I. Jelovica Badovinac, K. Salamon, M. Petravic, Residual chlorine in TiO<sub>2</sub> films grown at low temperatures by plasma enhanced atomic layer deposition, *Thin Solid Films* 628 (2017) 142-147. (Q1 – Surfaces, Coatings and Films, IF: 1,76)
- 7) I. Kavre Piltaver, R. Peter, **I. Šarić**, K. Salamon, I. Jelovica Badovinac, K. Koshmak, S. Nannarone, I. Delač Marion, M. Petravić, Controlling the grain size of polycrystalline TiO<sub>2</sub> films grown by atomic layer deposition, *Appl. Surf. Sci.* 419 (2017) 564-572. (Q1, IF: 3,15)
- 8) J. Katić, M. Metikoš-Huković, **I. Šarić**, M. Petravić, Electronic Structure and Redox Behavior of Tin Sulfide Films Potentiostatically Formed on Tin, *J. Electrochem. Soc.* 164 (2017) 7 C383-C389. (Q1, IF: 2,76)
- 9) R. Peter, **I. Saric**, I. Kavre Piltaver, I. Jelovica Badovinac, M. Petravic, Oxide formation on chromium metal surfaces by low-energy oxygen implantation at room temperature, *Thin Solid Films* 636 (2017) 225-231. (Q1, IF: 1,76)
- 10) R. Peter, **I. Saric**, M. Petravic, Enhanced oxidation of nickel at room temperature by low-energy oxygen implantation, *Croat. Chem. Acta* 90(2) (2017) 163–168. (Q3, IF: 0,732).
- 11) I. Kavre Piltaver, I. Jelovica Badovinac, R. Peter, **I. Saric**, M. Petravic, Modification of molybdenum surface by low-energy oxygen implantation at room temperature, *Appl. Surf. Sci.* 425 (2017) 416-422. (Q1, IF: 3,15)
- 12) K. Salamon, M. Buljan, **I. Šarić**, M. Petravić, S. Bernstorff, Ta<sub>2</sub>N<sub>3</sub> nanocrystals grown in Al<sub>2</sub>O<sub>3</sub> thin layers, *Beilstein J. Nanotechnol.* 8 (2017) 2162-2170. (Q1, IF: 3,13).
- 13) A. Omerzu, **I. Saric**, I. Kavre Piltaver, M. Petravica, T. Kapun, J. Zuleb, S. Stifter, K. Salamon, Prevention of spontaneous combustion of cellulose with a thin protective Al<sub>2</sub>O<sub>3</sub> coating formed by atomic layer deposition, *Surf. Coat. Technol.*, 333 (2018) 81-86. (Q1, IF: 2,589).

### Scientific papers in other journals with an international review

- 1) I. Jelovica Badovinac, I. Kavre Piltaver, **I. Šarić**, R. Peter, M. Petravić, Oxidation of molybdenum by low energy ion bombardment, *Materiali in tehnologije/Materials and technology* (2017) (prihvaćen za objavu) (SCOPUS baza, Q2, IF: 0,439).

### Abstracts in Book of abstracts

- 1) **I. Saric**, D. Merunka, M. Jokic, B. Rakvin, M. Kveder, Low temperature electron-spin relaxation in molecular solid exhibiting frozen-in disorder, Book of Abstracts: The 11th Greta Pifat Mrzljak International School of Biophysics Biomolecular complexes and assemblies, Primošten, Croatia (2012) 102.
- 2) **I. Šarić**, D. Merunka, M. Jokić, B. Rakvin, M. Kveder, Utjecaj neuređenosti matrice na dinamiku paramagnetskih centara: EPR spektroskopija krute trehaloze, Knjiga sažetaka 8. znanstvenog sastanka Hrvatskog fizikalnog društva, Zagreb, Croatia (2013) 102.
- 3) **I. Saric**, M. Jokic, B. Rakvin, M. Kveder, N. Maltar-Strmečki, EPR study of radiation induced radicals in different polymorphic forms of trehalose, Book of abstracts: The Joint

International Symposium on EPR Dosimetry and Dating and the International Conference on Biological Dosimetry, Leiden, Netherlands, (2013) 189.

4) **I. Šarić**, D. Merunka, M. Jokić, B. Rakvin, M. Ilakovac Kveder; Low-temperature EPR study of solid trehalose, Book of abstracts: Dynamics in Soft Matter Probed by Advanced EPR Techniques, Lužnica, Croatia (2014) 22.

5) **I. Šarić**, R. Peter, I. Kavre, I. Jelovica Badovinac, M. Petravić, Oxidation of nickel surface by low energy ion bombardment, Book of Abstracts: 22nd International Conference on Ion Beam Analysis, Opatija, Croatia (2015) 227.

6) I. Jelovica Badovinac, **I. Šarić**, I. Kavre Piltaver, G. Ambrožić, R. Peter, M. Petravić, Narastanje tankih filmova titanovog nitrida i titanovog oksida tehnikom depozicije atomskih slojeva, Knjiga sažetaka: 9. znanstveni sastanak Hrvatskog fizikalnog društva, Umag, October 5th – 7th 2015., (2015) 80.

7) I. Jelovica Badovinac, I. Kavre Piltaver, **I. Šarić**, R. Peter, M. Petravić, Oxidation of molybdenum by low energy ion bombardment, Program and book of abstracts: 24th International conference on materials and technology, Portorož, Slovenia, (2015) 94.

8) A. Stambolić, M. Jenko, A. Kocijan, Č. Donik, M. Petravić, I. Kavre Piltaver, **I. Šarić**, V. Kononenko, Analysis of coatings on the surface of nitinol formed by ALD process; Program and book of abstracts: 24th International conference on materials and technology, Portorož, Slovenia, (2015) 196.

9) **I. Šarić**, R. Peter, I. Kavre Piltaver, I. Jelovica Badovinac, G. Ambrožić, M. Petravić, Investigation of residual chlorine in TiO<sub>2</sub> films grown by atomic layer deposition; Program and book of abstracts / 16th Joint Vacuum Conference (JVC-16), 14th European Vacuum Conference (EVC-14), 23rd Croatian-Slovenian Vacuum Meeting, Ljubljana, Slovenia, (2016) 68-68.

10) **I. Šarić**, R. Peter, I. Jelovica Badovinac, I. Kavre Piltaver, G. Ambrožić, A. Omerzu, M. Spreitzer, M. Petravić, On crystalline structure of TiO<sub>2</sub> films grown by plasma-enhanced atomic layer deposition, Book of abstracts: 16th Atomic Layer Deposition Conference, Dublin, Ireland (2016).

11) I. Kavre Piltaver, I. Jelovica Badovinac, **I. Šarić**, R. Peter, M. Petravić, Controlling the grain size of polycrystalline TiO<sub>2</sub> films grown by atomic layer deposition, Book of Abstracts: European Microscopy Congress, Lyon, France (2016).

12) I. Kavre Piltaver, R. Peter, **I. Šarić**, K. Salamon, I. Jelovica Badovinac, K. Koshmak, S. Nannarone, I. Delač Marion, M. Petravić, Controlling the grain size of polycrystalline TiO<sub>2</sub> films grown by atomic layer deposition, Book of abstracts of the 24<sup>th</sup> International Scientific Meeting on Vacuum Science and Technique, Zadar, Croatia (2017) 10.

13) R. Peter, **I. Šarić**, I. Kavre Piltaver, I. Jelovica Badovinac, M. Petravić, Oxide formation on chromium metal surfaces by low-energy oxygen implantation at room temperature, Book of abstracts of the 24<sup>th</sup> International Scientific Meeting on Vacuum Science and Technique, Zadar, Croatia (2017) 26.

14) K. Salamon, N. Radić, I. Bogdanović-Radović, M. Buljan, **I. Šarić**, M. Petravić, S. Bernstorff, Ta-N based thin films: on the control of phase and nanostructure, Book of abstracts of the 24<sup>th</sup> International Scientific Meeting on Vacuum Science and Technique, Zadar, Croatia (2017) 26.

## Plenary/Keynote talks

1) **I. Šarić**, D. Merunka, M. Jokić, B. Rakvin, M. Ilakovac Kveder, Low-temperature EPR study of solid trehalose, Dynamics in Soft Matter Probed by Advanced EPR Techniques, Lužnica, Croatia (5. – 9. 5. 2014.)

### OTHER IMPORTANT SKILLS AND COMPETENCES

- Programming in MATLAB; using MS OFFICE package and operating system Windows, EasySpin, software for statistical analyses of data.
- Driving license