Curriculum Vitae

Personal information

First name(s) / SURNAME(S)	**Bojana PASKAŠ MAMULA**
Current position	**Assistent research professor**
Affiliation	Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia
Department	Laboratory for nuclear and plasma physics
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Date of birth	23.10.1977.
Gender	Female

Education

Dates	2017
Title of qualification awarded	PhD at Faculty of Physics University of Belgrade
Principal subjects/occupational skills covered	Theme: **"**Electronic structure and topological analysis of charge density of metal-hydride systems with NaCl and rutile crystal structure**"**
Name and type of organisation providing education and training	Faculty of Physics University of Belgrade, 12-16, Studentski trg, 11000 Belgrade, Serbia
Dates	2005
Title of qualification awarded	Graduate degree in physics
Principal subjects/occupational skills covered	Theme: **"**Analysis of time series of energy losses of mions cosmic radiation in plastic scintillation detectors**"**
Name and type of organisation providing education and training	Faculty of Physics, University of Belgrade, 12-16, Studentski trg, 11000 Belgrade, Serbia

Research interests

- **Theoretical modelling of various metal-hydrogen systems**
- **Electronic structure calculation of various crystal type compounds - a charge topology study**

Citations/h-index

127 / h=5

Participation in the national projects

Project title /Dates	"Synthesis, processing and characterization of nanostructured materials for application in the fields of energy, mechanical engineering, environment and biomedicine"/ from 2010 to 2020
Occupation or position held	Researcher
Project title /Dates	"Optoelectronic nanodimesional systems" / from 2010 to 2020
Occupation or position held	Researcher

Participation in the international projects

Project title /Dates	COST Action CA 18112 - Mechanochemistry for Sustainable Industry/ from 2018 to 2022
Occupation or position held	Researcher
Project title /Dates	COST Action CA15102 - Solutions for Critical Raw Materials Under Extreme Conditions/ from 2015 to 2019
Occupation or position held	Researcher
Project title /Dates	Bilateral Project Serbia-Montenegro: Synthesis and Characterization of PCM (phase change materials) materials leading to the economy based on hydrogen energy/ from 2019 to 2020
Occupation or position held	Researcher
Project title /Dates	CERIC 0182021 - Characterization of changes induced by low energy ion implantation and hydrogenization of Mg-V stacked thin films
Occupation or position held	Researcher

Reviewer of a journal

Title of the journal	Solid State Communications

Membership in scientific Committees & Boards

- Vice-president and member of organizing committee of the *3rd International Symposium on Materials for Energy Storage and Conversion - mESC-IS 2018*, Belgrade, Serbia (10-12.9.2018)
- Member of program and organizing committee of the 1st (18-19.10.2016) and *2nd (*3-4.10.2017*) Workshop of French, Croatian and Serbian Researchers on Hydrogen Storage and Energy Related Materials in Belgrade, Serbia*
- Member of program and organizing committee of the joint meeting of *11th Conference of young researchers in field of material science* and the *1st European early stage researchers conference of hydrogen storage*, 03-05.12.2012, Belgrade, Serbia
- Member of program committee of the *1st Conference of the Serbian Ceramic Society*, 17-18.3.2011, Belgrade, Serbia
- Member of organizing board of *4th Serbian congress on microscopy*

Memberships in scientific and technical societies

- Member of The Commission for Educational Activities - working body of The Scientific Council in Vinča Institute of Nuclear Sciences
- Supervisory Board member of Hydrogen storage Initiative Serbia society
- Serbian Physical Society

Selected Papers in last 5 years

1. Sandra Kurko, **Bojana Paskaš Mamula**, Jelena Rmuš, Jasmina Grbović Novaković, Nikola Novaković.
   DFT study of boron doped MgH_2: bonding mechanism, hydrogen diffusion and desorption.
   International Journal of Hydrogen Energy, https://doi.org/10.1016/j.ijhydene.2019.05.015 (2019)
2. Jasmina Grbović Novaković, Nikola Novaković, Sandra Kurko, Sanja Milošević Govedarović, Tijana Pantić, **Bojana Paskaš Mamula**, Katarina Batalović, Jana Radaković, Jelena Rmuš, Marina Shelyapina, Nataliya Skryabina, Particia de Rango Daniel Fruchart.
   Influence of defects on Mg-based hydrides stability and hydrogen sorption behavior.
   ChemPhysChem, https://doi.org/10.1002/cphc.201801125 (2019)
3. **Bojana Paskaš Mamula**, Bojana Kuzmanović, Mirjana Medić Ilić, Nenad Ivanović, Nikola Novaković.
   Bonding mechanism of some simple ionic systems: Bader topological analysis of some alkali halides and hydrides revisited.
   Physica B Condens Matter. 545 p.146–151 (2018)

Congresses and conferences attended -last 3 years

1. **Bojana Paskaš Mamula**, Jasmina Grbović Novaković, Igor Milanović, Bojana Kuzmanović, Nikola Biliškov, Nikola Novaković. **Interaction of amidoborane molecular chains with alkali metals: a theoretical study**. 3rd Int. Symposium on Materials for Energy Storage and Conversion mESC-IS 2018, Programme & the book of Abstracts p. 100-100, Belgrade, Serbia 10-12. September 2018.
2. **Bojana Paskaš Mamula**, Nenad Ivanović, Nikola Novaković. **Properties of charge density topology of simple and transition metal doped metal hydrides – characterization of bond nature and strength using non-covalent interactions and Bader charge density analysis.**
   E-MRS Spring Meeting 2018, B-14, Strasbourg, France, 18-22. June, 2018.
3. **Bojana Paskaš Mamula**, Bojana Kuzmanović, Mirjana Medić Ilić, Nenad Ivanović, Nikola Novaković. **Bonding in alkali halides and hydrides: a charge topology study*.** Solid-State Science & Research Meeting, p.100-100, Zagreb, Croatia, 28-30 June 2017.
4. S. Kurko, **B. Paskaš Mamula**, S. Milošević Govedarović, J. Grbović Novaković, N. Novaković. **Vacancies influence on MgH_2 properties.** 2nd International symposium of Energy storage and conversion mESC-IS 2017, p. 66-66, Cappadocia, Turkey, 26-29. Sep, 2017.
5. R. Vujasin, **B. Paskaš Mamula**, J. Grbović Novaković, N. Novaković. **Hydrogen interaction with TiO_2 surface**. High Performance Computing on CRESCO infrastructure: research activities and results, ENEA, p. 137-140, 2016.