

CURRICULUM VITAE (November 21, 2025)
ALEKSANDRA D. RADINA

Personal data

Born on 18.12.1999 in Moscow, Russia

Languages: Russian (native), English (B2), Turkish (A2)

Education

2023 - present	PhD in Material Science and Engineering, Skolkovo Institute of Science and Technology
2025	Advanced training in the additional professional program ‘Online intensive course on science journalism and media "Access Code"’ by Saratov National Research State University named after N. G. Chernyshevsky
2025	Advanced training in the additional professional program "Modern Catalytic Processes in Energy" by Boreskov Institute of Catalysis SB RAS
2023	M.Sc. in Applied Mathematics and Physics, National University of Science and Technology “MISIS”
2021	B.Sc. in Materials Science and Technology of Semiconductor Materials, MIREA — Russian Technological University

Skills

Decryption of physical and chemical analysis data.

Ab initio calculations with VASP package and computational search with USPEX.

Decryption of chemical bonds by using LOBSTER package.

Decryption of the X-ray diffraction data by using Jana and CrysAlis.

Visualization of results with programs Dimond, VESTA and OVITO.

My soft-skills are presentation and copywriting.

Honors and Awards

2025	The best poster presentation of the V Russian Congress on Catalysis "ROSKATALIZ"
2024	3rd place in the students’ section of XXIV annual youth conference with international participation of the IBCP RAS
2024	The winner of the section ‘Advanced materials and nanotechnologies’ of the XXV International Scientific Conference ‘Chemistry and Chemical Engineering in XXI Century’
2024	The winner of the program ‘UMNIK’
2024	The winner in the section ‘Theoretical and numerical studies of condensed matter’ of the Youth School on Condensed Matter Physics
2023	The winner in the section ‘Advanced Materials’ of the XXIV International Scientific Conference ‘Chemistry and Chemical Engineering in XXI Century’
2023	The winner in section ‘The future of the planet and global environmental changes’ of the International scientific conference of students, graduate students and young scientists ‘Lomonosov-2023’

2023	The winner of the 65 th All-Russian Scientific Conference of MIPT
2022	The winner in the students' section of XXII annual youth conference with international participation of the IBCP RAS
2022-2023	My paintings were presented in ART FLASH online gallery
2022	3rd place on conference at 77 th Days of Science at National University of Science and Technology 'MISiS'
2022	3rd place in the intercollegiate competition of reciters 'Poems grow like stars and like roses'
2018	The best actress of intercollegiate KVN games in the MIREA — Russian Technological University
2017	The best actress of intercollegiate KVN games in the MIREA — Russian Technological University

PAPERS IN REFEREED JOURNALS AND PREPRINTS

1. Chepkasov, I. V.; Radina, A. D.; Baidyshev, V. S.; Polovinkin, M.; Rybin, N.; Shapeev, A.; Krikorov, A. A.; Oganov, A. R.; Dashevsky, Z.; Kvashnin, D. G.; Kvashnin, A. G. Tuning of Mechanical Properties of Doped PbTe-Based Thermoelectric Materials Driven by Intrinsic Defects. *J. Mater. Chem. A* (2025), (DOI:10.1039/D5TA00823A), Q1.
2. Stepanov, R. S.; Radina, A. D.; Tantardini, C.; Kvashnin, A. G.; Kolobov, A. V. «Chemical Bonding within A^{III}B^{VI} Materials under Uniaxial Compression» *Phys. Chem. Chem. Phys.*, 26 (31), 20984–20992 (2024) (DOI:10.1039/D4CP00937A), Q1.
3. A. D. Radina, V. S. Baidyshev, I. V. Chepkasov, N. A. Matsokin, T. Altalhi, B. I. Yakobson and A. G. Kvashnin, «Theoretical Study of Adsorption Properties and CO Oxidation Reaction on Surfaces of Higher Tungsten Boride», *Scientific Reports*, 14 (1), 12788 (2024), (DOI: 10.1038/s41598-024-63676-7), Q1.
4. A.Yu. Kurenkova, A. D. Radina, V. S. Baidyshev, P. V. Povalyaev, E. E. Aidakov, E. Yu. Gerasimov, D. D. Mishchenko, A. V. Zhurenok, A. Ya. Pak, E. A. Kozlova and A. G. Kvashnin, «Photocatalytic H₂ Generation and CO₂ Reduction by WB_{5-x} Cocatalyst of TiO₂ Catalyst», *Applied Surface Science*, 661, 160095 (2024), (DOI: 10.1016/j.apsusc.2024.160095), Q1.
5. I. V. Chepkasov, A. D. Radina, and A. G. Kvashnin, «Structure-driven tuning of catalytic properties of core–shell nanostructures», *Nanoscale*, 16, 5870–5892 (2024) (DOI: 10.1039/D3NR06194A), Q1.
6. I.V. Chepkasov, A.G. Kvashnin, A.D. Radina, N.A. Matsokin, F.N. Jalolov, D.G. Kvashnin, A.R. Oganov, Z. Dashevsky, «Origin of Brittle Behavior of doped PbTe-based Thermoelectric Materials», *Applied Physical Letters* 124, 022104 (2024) (DOI:10.1063/5.0185002), Q1.