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She completed her PhD in Physics in 2013 at Wrocław University of Science and Technology. Her work focused on the optical characterization of quasi-zero dimensional nanostructures of various geometries (dots, dashes, rods, columnar dashes) in III-V material systems (In(Ga)As/GaAs, InAs/InP with InAlAs or InGaAlAs barrier) grown by different techniques aiming at testing their application potential as an active region of conventional optoelectronic as well as novel nanophotonic devices.

In years 2014-2016 she was a postdoc in the group of Prof. Reitzenstein at Technical University of Berlin realizing her own project funded by Polish Ministry of Science and Higher Education within 'Mobilność Plus' programme entitled 'High-Quality Deterministic Single Quantum Dot-Based Light Sources for Quantum Communication Technology'. Additionally, working on different regimes of cavity quantum electrodynamics and its evolution towards semi-classical dressed states in the limit of large number of photons in the cavity as well as lasing in GaAs-based quantum dot-micropillar cavities.

Since 2017 she is an assistant professor at Wrocław University of Science and Technology. Her main research focus is on quantum optics, in particular nonclassical light sources for quantum communication applications. Part of her research is related to more application relevant topics, e.g., quantum dot-based lasers for gas sensing and development of plug&play single-photon sources emitting in the telecommunication spectral range. Her research is funded by national and international projects.

Since 2012 she is a member of Polish Physical Society and since 2015 also – German Physical Society.

Selected recent paper:

- "Telecom Wavelengths InP -Based Quantum Dots for Quantum Communication", **Chapter 18 in Photonic Quantum Technologies: Science and Applications**, Wiley (2023), <https://doi.org/10.1002/9783527837427.ch18>
- "Distributed Bragg Reflector–Mediated Excitation of InAs/InP Quantum Dots Emitting in the Telecom C-Band", **Physica Status Solidi Rapid Research Letters** (2023), <https://doi.org/10.1002/pssr.202300063>
- "Harnessing data augmentation to quantify uncertainty in the early estimation of single-photon source quality", **Machine Learning: Science and Technology** (2023), <https://doi.org/10.1088/2632-2153/ad0d11>
- "Temperature dependence of refractive indices of Al_{0.9}Ga_{0.1}As and In_{0.53}Al_{0.1}Ga_{0.37}As in the telecommunication spectral range", **Optics Express** (2022), <https://doi.org/10.1364/OE.457952>
- "InP-based single-photon sources operating at telecom C-band with increased extraction efficiency", **Applied Physics Letters** (2021), <https://doi.org/10.1063/5.0045997>
- "Plug&Play Fiber-Coupled 73 kHz Single-Photon Source Operating in the Telecom O-Band", **Advanced Quantum Technologies** (2020), <https://doi.org/10.1002/qute.202000018>
- "High-Purity Triggered Single-Photon Emission from Symmetric Single InAs/InP Quantum Dots around the Telecom C-Band Window", **Advanced Quantum Technologies** (2019), <https://doi.org/10.1002/qute.201900082>
- "Excitonic complexes in MOCVD-grown InGaAs/GaAs quantum dots emitting at telecom wavelengths", **Physical Review B** (2019), <https://doi.org/10.1103/PhysRevB.100.115310>
- "Method for direct coupling of a semiconductor quantum dot to an optical fiber for single-photon source applications", **Optics Express** (2019), <https://doi.org/10.1364/OE.27.026772>