

VALERIA RUSSO

Born in 1970, March 28th.



EDUCATION

1999: Ph.D. in Science and Technology for Nuclear Plants, @PoliMI

1995: Degree (100/100 cum laude) in Nuclear Engineering @PoliMI

ACADEMIC POSITIONS

2019 - present: Associate Professor (SSD FIS/03) @PoliMI

2016 - 2019: Assistant Professor (SSD FIS/03) @PoliMI

2002 - 2016: Postdoc researcher @PoliMI, @INFM

TEACHING ACTIVITY @PoliMI

- Currently professor in charge of the BSc/MSc course Physics of Matter-Atomic Physics
- Formerly lecturer in BSc/MSc courses: General Physics, Solid State Physics, Introduction to Nanotechnology

INSTITUTIONAL ROLES @PoliMI

- Member of the steering board of the Department of Energy.
- Member of the Academic Board and Quality Representative for the MSc in Nuclear Eng
- Member of the Academic Board for the BSc/MSc in Material Eng and Nanotechnology
- Member of the faculty committee of STEN PhD Program.

RESEARCH INTERESTS

- Experimental study of physical properties in nanostructures, nanostructured materials (metal oxides, carbon-based materials), 2D materials and heterostructures.
- Structural vs. functional properties (electronic, optical, transport) correlation.
- Design, synthesis and study of innovative systems with engineered properties at the nanoscale in view of innovative applications in many fields (catalysis, biotechnology, gas sensing and energy applications: photovoltaics, thermoelectricity, water splitting)
- Characterization of nanostructured materials and surfaces by inelastic light scattering (Raman, SERS, RRS, Brillouin spectroscopy), XRD, photoluminescence, STM/STS, AFM.
- Production of advanced material concepts to enhance superintense laser-driven ion acceleration; investigation of applications in materials/nuclear science/engineering.

FELLOWSHIPS

2005 – 2020: NEMAS (Center for NanoEngineered MAterials and Surfaces), Center of Excellence on Nanotechnology at POLIMI, accredited by MIUR (Italian Ministry of Research).

2017 – 2022: IIT Center for Nano Science and Technology

2018 – present: EUROfusion

BIBLIOMETRICS (March 2026)

Author of ~100 scientific publications in Physics of Matter.

h-index: 35 (WoS), 37 (Scopus); citations: ~4,000 (WoS), ~4,360 (Scopus).

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