

Alexander Tselev
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Education

Nizhny Novgorod State University, Russia B.Sc./M.Sc. 1991 Radiophysics and Electronics (*Summa Cum Laude*)

Dresden University of Technology, Germany, Ph.D. 2000, Materials Science (*Magna Cum Laude*)

Professional Experience

2009-present Research Assistant Professor, Department of Physics and Astronomy, University of Tennessee, Knoxville, TN

2006–2009 Research Associate, Duke University, Durham, NC

2003–2006 Post Doctoral Fellow, Georgetown University, Washington, DC

2001–2003 Post Doctoral Research Associate, University of Maryland College Park, MD

1997–2001 Scientific Employee, Dresden University of Technology, Germany

1991–1997 Junior Research Scientist, Institute of Applied Physics/Institute for Physics of Microstructures, Russian Academy of Sciences, Russia

Professional and Synergistic Activities

Referee for *Nature Nanotechnology*, *Physical Review Letters*, *Physical Review B*, *ACS Nano*, *Applied Physics Letters*, and other journals.

Honors and Awards

European Materials Research Society (E-MRS) Graduate Student Award (1998).

Publications

56 peer reviewed publications (7 Nano Letters, 4 ACS Nano, 1 Advanced Materials, 1 Advanced Functional Materials).

Research Synopsis

In-situ Scanning Probe Microscopy of Complex Oxides.

In-situ UHV scanning probe microscopy techniques are used to study surfaces of complex oxide thin films grown by Pulsed Laser Deposition/ Laser MBE.

Near-field scanning microwave microscopy.

We apply and develop near-field scanning microwave microscopy to study local electrical properties of a broad class of material: dielectrics, semiconductors, two-dimensional conductors (such as graphene), and structures based on these materials.