

## Niklas Nilius - Curriculum Vitae

<b>Current Position:</b>	<p>Full Professor in Physics          Carl von Ossietzky Universität Oldenburg          Institut für Physik          D-26111 Oldenburg, Germany          Phone: +49-441-798-3152          Email: <a href="mailto:Niklas.nilius@uni-oldenburg.de">Niklas.nilius@uni-oldenburg.de</a></p>
<b>Studies and Degrees:</b>	<p>1993-1997 Studies in Physics, 'Martin-Luther-University', Halle-Wittenberg          1997 Diploma thesis with Prof. H. Neddermeyer 'Low-temperature STM study of the O<sub>2</sub> adsorption on Ru(0001)'          1998-2001 PhD student at Fritz-Haber-Institute, Department of Chemical Physics with Prof. H.-J. Freund          2001 PhD degree from the Humboldt-University Berlin on 'Light emission from single, oxide supported metal clusters in the STM'          2005-2009 Habilitation at the Humboldt-University of Berlin          2009 Venia legendi from the Humboldt-University Berlin</p>
<b>Scientific Vita:</b>	<p>2001-2002 Postdoctoral position at the University of California, Irvine with Prof. W. Ho working on:          • Artificial nanostructures built via atom manipulation in the STM          • Electronic / vibrational properties of single atoms and molecules          2009 Research Stay at the University of Modena, Italy with Prof. S. Valeri 'Photoelectron diffraction on oxide supported metal particles'          2010-2012 Coordinator of the Max-Planck-Research School 'Complex Surfaces in Materials Science'          since 2012 Professor (W2) in Physics at the Carl von Ossietzky University of Oldenburg</p>
<b>Awards:</b>	<p>1994-1997 Scholarship of the Studienstiftung des Deutschen Volkes          2001 Otto-Hahn-Medal of the Max-Planck-Society</p>
<b>Research Interests</b>	<p>Experimental methods: Scanning tunneling microscopy and embedded spectroscopic techniques (luminescence spectroscopy with the STM, conductance spectroscopy and inelastic tunneling spectroscopy)</p> <p>Research Topics:</p> <ul style="list-style-type: none"> <li>• Preparation and characterization of oxide thin films for applications in heterogeneous catalysis, microelectronics and photovoltaics</li> <li>• Tailoring oxide properties via doping and defect engineering</li> <li>• Structural, electronic and optical properties of individual metal particles</li> <li>• Electron quantization effects in supported metal islands</li> <li>• Molecular adsorption on metal-oxide systems</li> </ul>
<b>Publication metrics</b>	<p>200 publications, 10200 citations, h-factor 53 (Google scholar 2025)</p>