

Full List of Publications in Peer-Reviewed Journals (30.8.2024)

1. D. V. Christensen et al., *2024 roadmap on magnetic microscopy techniques and their applications in materials science*, J. Phys. Mater. 7 032501 (2024).
2. W. Jolie, T.-C. Hung, L. Niggli, B. Verlhac, N. Hauptmann, D. Wegner, A. A. Khajetoorians, *Creating Tunable Quantum Corrals on a Rashba Surface Alloy*, ACS Nano 16, 4876–4883 (2022).
3. U. Kamber, A. Bergman, A. Eich, D. Iuşan, M. Steinbrecher, N. Hauptmann, L. Nordström, M. I. Katsnelson, D. Wegner, O. Eriksson, A. A. Khajetoorians, *Self-induced spin glass state in elemental and crystalline neodymium*, Science 368, 966 (2020).
4. N. Hauptmann, S. Haldar, T.-C. Hung, W. Jolie, M. Gutzeit, D. Wegner, S. Heinze, and A. A. Khajetoorians, *Quantifying exchange forces of a spin spiral on the atomic scale*, Nat. Commun. 11, 1197 (2020). *Featured as Editors' Highlights*
5. N. Hauptmann, M. Dupé, T.-C. Hung, A. K. Lemmens, D. Wegner, B. Dupé, A. A. Khajetoorians, *Revealing the Correlation between Real-Space Structure and Chiral Magnetic Order at the Atomic Scale*, Phys. Rev. B 97, 100401(R) (2018).
6. N. Hauptmann, J. W. Gerritsen, D. Wegner, A. A. Khajetoorians, *Sensing Noncollinear Magnetism at the Atomic Scale Combining Magnetic Exchange and Spin-Polarized Imaging*, Nano Lett. 17, 5660-5665 (2017).
7. B. Kiraly, N. Hauptmann, A. N. Rudenko, M. I. Katsnelson, and A. A. Khajetoorians, *Probing Single Vacancies in Black Phosphorus at the Atomic Level*, Nano Lett. 17, 3607 (2017).
8. K. Buchmann, N. Hauptmann, A. S. Foster, and R. Berndt, *Submolecular Resolution in Scanning Probe Images of Sn-Phthalocyanines on Cu(100) using Metal Tips*, J. Phys. Condens. Matter 29, 394004 (2017).
9. A. Bruix, J. A. Miwa, N. Hauptmann, D. Wegner, S. Ulstrup, S. S. Grønberg, C. E. Sanders, M. Dendzik, A. Grubišić, C. Cabo, M. Bianchi, J. V Lauritsen, A. A. Khajetoorians, B. Hammer, and P. Hofmann, *Single-Layer MoS₂ on Au(111): Band Gap Renormalization and Substrate Interaction*, Phys. Rev. B 93, 165422 (2016).
10. N. Hauptmann, R. Robles, P. Abufager, N. Lorente, R. Berndt, *AFM Imaging of Mercaptobenzoic Acid on Au(110): Sub-Molecular Contrast with Metal Tips*, J. Phys. Chem. Lett. 7, 1984-1990 (2016).
11. N. Hauptmann, L. Gross, K. Buchmann, K. Scheil, C. Schütt, F. L. Otte, R. Herges, C. Herrmann and R. Berndt, *High-Conductance Surface-Anchoring of a Mechanically Flexible Platform-Based Porphyrin Complex*, New J. Phys. 17, 013012 (2015).

12. N. M. Caffrey, K. Buchmann, N. Hauptmann, C. Lazo, P. Ferriani, S. Heinze, and R. Berndt, *Competing Forces during Contact Formation between a Tip and a Single Molecule*, Nano Lett. 15, 5156 (2015).
13. N. Hauptmann, C. González, F. Mohn, L. Gross, G. Meyer and R. Berndt, *Interactions between two C₆₀ Molecules measured by Scanning Probe Microscopies*, Nanotechnology, 26, 445703 (2015).
14. N. Hauptmann, Chr. Hamann, H. Tang, and R. Berndt, *Soft-Landing Electrospray Deposition of the Ruthenium Dye N3 on Au(111)*, J. Phys. Chem. C 117, 9734 (2013).
15. N. Hauptmann, Chr. Hamann, H. Tang, and R. Berndt, *Switching and Charging of a Ruthenium Dye on Ag(111)*, Phys. Chem. Chem. Phys. 15, 10326 (2013).
16. N. Hauptmann, K. Scheil, T. G. Gopakumar, F. L. Otte, C. Schütt, R. Herges, and R. Berndt, *Surface Control of Alkyl Chain Conformations*, J. Am. Chem. Soc. 153, 8814 (2013).
17. N. Hauptmann and R. Berndt, *Force and Conductance Spectroscopy of Second-Layer Tin-Phthalocyanine on Ag(111)*, Phys. Status Solidi B 250, 2403 (2013).
18. N. Hauptmann, F. Mohn, L. Gross, G. Meyer, T. Frederiksen, and R. Berndt, *Force and Conductance during Contact Formation to a C₆₀ Molecule*, New J. Phys. 14, 073032 (2012).
19. Chr. Hamann, R. Woltmann, I-Po Hong, N. Hauptmann, S. Karan, and R. Berndt, *Ultrahigh Vacuum Deposition of Organic Molecules by Electrospray Ionization*, Rev. Sci. Instrum. 82, 033903 (2011).
20. N. Hauptmann, M. Becker, J. Kröger, and R. Berndt, *Surface Reconstruction and Energy Gap of Superconducting V₃Si(001)*, Phys. Rev. B 79, 144522 (2009).
21. I. Krasnov, I. Diddens, N. Hauptmann, G. Helms, M. Ogurreck, T. Seydel, S. S. Funari, and M. Müller, *Mechanical Properties of Silk: Interplay of Deformation on Macroscopic and Molecular Length Scales*, Phys. Rev. Lett. 100, 048104 (2008).
22. T. Seydel, K. Kölln, I. Krasnov, I. Diddens, N. Hauptmann, G. Helms, M. Ogurreck, S.-G. Kang, M. M. Koza, and M. Müller, *Silkworm Silk under Tensile Strain investigated by Synchrotron X-Ray Diffraction and Neutron Spectroscopy*, Macromolecules 40, 1035 (2007).