

Scanning Probe Methods Group, Prof. Dr. Roland Wiesendanger

**Publications: Original Articles**

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Subgroup: STM/SPSTM on Magnetic Molecules

**Probing Weakly Hybridized Magnetic Molecules by Single-Atom Magnetometry***E. Sierda, M. Elsebach, R. Wiesendanger, and M. Bazarnik, Nano Lett. 19 9013-9018 (2019)***Stable bismuth sub-monolayer termination of Bi<sub>2</sub>Se<sub>3</sub>***M. Hermanowicz, W. Koczorowski, M. Bazarnik, M. Kopciuszynski, R. Zdyb, A. Materna, A. Hruban, R. Czajka, and M.W. Radny, App. Surf. Sci. 476 701-705 (2019)***Exploring the Relation Between Intramolecular Conjugation and Band Dispersion in One-Dimensional Polymers***C. García-Fernández, E. Sierda, M. Abadía, B. Bugenhagen, M.H. Prosenc, R. Wiesendanger, M. Bazarnik, J.E. Ortega, J. Brede, E. Matito, and A. Arnau, J. Phys. Chem. C 121 27118 (2017)***On-Surface Oligomerization of Self-Terminating Molecular Chains for the Design of Spintronic Devices***E. Sierda, M. Abadía, J. Brede, M. Elsebach, B. Bugenhagen, M. H. Prosenc, C. Rogero, M. Bazarnik, and R. Wiesendanger, ACS Nano 11 9200 (2017)***Toward Tailored All-Spin Molecular Devices***M. Bazarnik, B. Bugenhagen, M. Elsebach, E. Sierda, A. Frank, M. H. Prosenc, and R. Wiesendanger, Nano Lett. 16 577 (2016)***Investigating the differences between Co adatoms states on surfaces of selected bismuth chalcogenides***M. Wałowska, M. Sikora, M. Dobrzańska, T. Eelbo, M. M. Soares, M. Rams, I. Miotkowski, R. Wiesendanger, R. Berndt, Z. Kozłowski, and A. Kozłowski, Phys. Rev. B 92 115412 (2015)***Multi-layer and multi-component intercalation at the graphene/Ir(111) interface***M. Bazarnik, R. Decker, J. Brede, and R. Wiesendanger, Surf. Sci. 639 70 (2015)***Mechanism of a molecular photo-switch adsorbed on Si(100)***M. Bazarnik, L. Jurczyszyn, R. Czajka, K. Morgenstern, Phys. Chem. Chem. Phys. 17 5366 (2015)***Long-range magnetic coupling between nanoscale organic–metal hybrids mediated by a nanoskymion lattice***J. Brede, N. Atodiresei, V. Caciuc, M. Bazarnik, A. Al-Zubi, S. Blügel, and R. Wiesendanger, Nature Nanotechnology 9 1018 (2014)***Local tunnel magnetoresistance of an iron intercalated graphene-based heterostructure***R. Decker, M. Bazarnik, N. Atodiresei, V. Caciuc, S. Blügel, and R. Wiesendanger, J. Phys.: Condens. Matter 26 394004 (2014)***Spin-resolved imaging and spectroscopy of individual molecules with sub-molecular spatial resolution***J. Brede and R. Wiesendanger, MRS Bulletin 39 608 (2014)***Tailoring Molecular Self-Assembly of Magnetic Phthalocyanine Molecules on Fe- and Co-Intercalated Graphene***M. Bazarnik, J. Brede, R. Decker, and R. Wiesendanger, ACS Nano 7 11341 (2013)***Atomic-scale magnetism of cobalt-intercalated graphene***R. Decker, J. Brede, N. Atodiresei, V. Caciuc, S. Blügel, and R. Wiesendanger, Phys. Rev. B 87 041403 (2013)***Spin-resolved characterization of single cobalt phthalocyanine molecules on a ferromagnetic support***J. Brede and R. Wiesendanger, Phys. Rev. B 86 184423 (2012)***Real-space observation of spin-split molecular orbitals of adsorbed single-molecule magnets***J. Schwöbel, Y. Fu, J. Brede, A. Dilullo, G. Hoffmann, S. Klyatskaya, M. Ruben, and R. Wiesendanger, Nature Communications 3 953 (2012)***Reversible chiral switching of Bis(phthalocyaninato) Terbiu(III) on a metal surface***Y. Fu, J. Schwöbel, S.-W. Hla, A. Dilullo, G. Hoffmann, S. Klyatskaya, M. Ruben, and R. Wiesendanger, Nano Lett. 12 3931 (2012)***Controlled sequential dehydrogenation of single molecules by scanning tunneling microscopy***N. Baadji, S. Kuck, J. Brede, G. Hoffmann, R. Wiesendanger, and S. Sanvito, Phys. Rev. B 82 115447 (2010)*

**Design of the Local Spin-polarization at the Organic-Ferromagnetic Interface**

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**"Naked" Iron-5,10,15-triphenylcorrole on Cu(111): Observation of Chirality on a Surface and Manipulation of Multiple Conformational States by STM**

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**A versatile variable-temperature scanning tunneling microscope for molecular growth**

*S. Kuck, J. Wienhausen, G. Hoffmann, and R. Wiesendanger, Rev. Sci. Instr. 79 083903 (2008)*

**Scanning tunneling microscope study of iron(II) phthalocyanine growth on metal and insulating surfaces**

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