

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 Bi₂Se₃***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. Wałkowska, 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) Terbium(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)

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