

Scanning Probe Methods Group, Prof. Dr. Roland Wiesendanger

Publications: Original Articles

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Magneto-Seebeck tunneling on the atomic scale*C. Friesen, H. Osterhage, J. Friedlein, A. Schlenhoff, R. Wiesendanger, and S. Krause, Science* **363** 1065 (2019)**Localized spin waves in isolated kpi-skyrmions***L. Rózsa, J. Hagemeister, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. B* **98** 224426 (2018)**Magnetic domain walls in strain-patterned ultrathin films***A. Finco, M. Perini, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B* **98** 174435 (2018)**Pb-induced skyrmions in a double layer of Fe on Ir(111)***J. Sassmannshausen, A. Kubetzka, P.-J. Hsu, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B* **98** 144443 (2018)**Combined feedback and sympathetic cooling of a mechanical oscillator coupled to ultracold atoms***P. Christoph, T. Wagner, H. Zhong, R. Wiesendanger, K. Sengstock, A. Schwarz, and C. Becker, New Journ. Phys.* **30** 093020 (2018)**Engineering the spin couplings in atomically crafted spin chains on an elemental superconductor***A. Kamlapure, L. Cornils, J. Wiebe, and R. Wiesendanger, Nature Communications* **9** 3253 (2018)**Non-collinear spin states in bottom-up fabricated atomic chains***M. Steinbrecher, R. Rausch, K. T. That, J. Hermenau, A. A. Khajetoorians, M. Potthoff, R. Wiesendanger, and J. Wiebe, Nature Communications* **9** 2853 (2018)**Scanning Seebeck tunneling microscopy***C. Friesen, H. Osterhage, J. Friedlein, A. Schlenhoff, R. Wiesendanger, and S. Krause, J. Phys. D: Appl. Phys.* **51** 324001 (2018)**Controlled creation and stability of $k\pi$ skyrmions on a discrete lattice***J. Hagemeister, A. Siemens, L. Rózsa, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. B* **97** 174436 (2018)**Domain walls and Dzyaloshinskii-Moriya interaction in epitaxial Co/Ir(111) and Pt/Co/Ir(111)***M. Perini, S. Meyer, B. Dupé, S. von Malottki, A. Kubetzka, K. von Bergmann, R. Wiesendanger, and S. Heinze, Phys. Rev. B* **97** 184425 (2018)**Competition of Dzyaloshinskii-Moriya and Higher-Order Exchange Interactions in Rh/Fe Atomic Bilayers on Ir(111)***N. Romming, H. Pralow, A. Kubetzka, M. Hoffmann, S. von Malottki, S. Meyer, B. Dupé, R. Wiesendanger, K. von Bergmann, and S. Heinze, Phys. Rev. Lett.* **120** 207201 (2018)**Toward tailoring Majorana bound states in artificially constructed magnetic atom chains on elemental superconductors***H. Kim, A. Palacio-Morales, T. Posske, L. Rózsa, K. Palotás, L. Szunyogh, M. Thorwart, R. Wiesendanger, Science Advances* **4** eaar5251 (2018)**Effective damping enhancement in noncollinear spin structures***L. Rózsa, J. Hagemeister, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. B* **30** 100404 (2018)**Inducing skyrmions in ultrathin Fe films by hydrogen exposure***P. J. Hsu, L. Rózsa, A. Finco, L. Schmidt, K. Palotas, E. Vedmedenko, L. Udvardi, L. Szunyogh, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Nature Communications* **9** 1571 (2018)**Enhanced spin-ordering temperature in ultrathin FeTe films grown on a topological insulator***U. R. Singh, J. Warmuth, A. Kamlapure, L. Cornils, M. Bremholm, Ph. Hofmann, J. Wiebe, and R. Wiesendanger, Phys. Rev. B* **97** 144513 (2018)**Domain imaging across the magneto-structural phase transitions in Fe_{1+y}Te***J. Warmuth, M. Bremholm, P. Hofmann, J. Wiebe, and R. Wiesendanger, npj Quantum Materials* **3** 21 (2018)**Long Spin-Relaxation Times in a Transition-Metal Atom in Direct Contact to a Metal Substrate***Jan Hermenau, Markus Ternes, Manuel Steinbrecher, Roland Wiesendanger, and Jens Wiebe, Nano Letters* **18** 1978 (2018)

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