

- (672) F. Nickel, A. Kubetzka, M. Gutzeit, R. Wiesendanger, K. von Bergmann, and S. Heinze, npj Spintronics (2025), accepted: "Antiferromagnetic order of topological orbital moments in atomic-scale skyrmion lattices".
- (671) R. Lo Conte, J. Wiebe, S. Rachel, D.K. Morr, and R. Wiesendanger, La Rivista del Nuovo Cimento (2025), accepted: "Magnet-superconductor hybrid quantum systems: a materials platform for topological superconductivity".
- (670) H. Osterhage, A. H. Khan, K. Oetker, R. Dao, S. Setayandeh, R. Wiesendanger, P. Burr, and S. Krause, Surf. Sci. 752, 122609 (2025): "Growth of an Fe buckled honeycomb lattice on Be(0001)".
- (669) S. Rachel and R. Wiesendanger, Physics Reports 1099, 1 (2025): "Majorana quasiparticles in atomic spin chains on superconductors".
- (668) D. Crawford, R. Wiesendanger, S. Rachel, Phys. Rev. B 110, L220505 (2024): "Preparation and readout of Majorana qubits in magnet-superconductor hybrid systems".
- (667) T. Matthies, L. Rózsa, L. Szunyogh, R. Wiesendanger, and E. Y. Vedmedenko, Phys. Rev. Res. 6, 043158 (2024): "Interlayer and interfacial Dzyaloshinskii-Moriya interaction in magnetic trilayers: First-principles calculations".
- (666) H. Kim, D. Morr, and R. Wiesendanger, Nano Lett. 24, 14139 (2024): "Proximity-induced superconductivity in a 2D Kondo lattice of an f-electron-based surface alloy".
- (665) J. Neuhaus-Steinmetz, T. Matthies, E. Y. Vedmedenko, Th. Posske, and R. Wiesendanger, Phys. Rev. B 110, 155427 (2024): "Large diversity of magnetic phases in two-dimensional magnets with spin-orbit coupling and superconductivity".
- (664) L. Schneider, Ch. von Bredow, H. Kim, K. That Ton, T. Hänke, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 110, L100505 (2024): "Scanning tunneling spectroscopy study of proximity superconductivity in finite-size quantized surface states".
- (663) J. Spethmann, N. D. Khanh, H. Yoshimochi, R. Takagi, S. Hayami, Y. Motome, R. Wiesendanger, S. Seki, and K. von Bergmann, Phys. Rev. Mater. 8, 064404 (2024): "SP-STM study of the multi-Q phases in GdRu₂Si₂".
- (662) X. Huang, R. Xiong, C. Hao, Ph. Beck, B. Sa, J. Wiebe, and R. Wiesendanger, Advanced Materials e2308007 (2024): "Two-dimensional lateral heterojunction arrays with tailored interface band bending".

-
- (661) A. Rodriguez-Sota, V. Saxena, J. Spethmann, R. Wiesendanger, R. Lo Conte, A. Kubetzka, and K. von Bergmann, *ACS Nano* 18, 3699 (2024):
"Phase coexistence of Mn trimer clusters and antiferromagnetic Mn islands on Ir(111)".
 - (660) X. Huang, R. Xiong, C. Hao, W. Li, B. Sa, J. Wiebe, and R. Wiesendanger, *Advanced Materials* 36, e2309023 (2024):
"Experimental realization of monolayer alpha-tellurene".
 - (659) F. Nickel, A. Kubetzka, S. Haldar, R. Wiesendanger, S. Heinze, and K. von Bergmann, *Phys. Rev. B* 108, L180411 (2023):
"Coupling of the triple-q state to the atomic lattice by anisotropic symmetric exchange".
 - (658) L. Schneider, K. That Ton, I. Ioannidis, J. Neuhaus-Steinmetz, Th. Posske, R. Wiesendanger, and J. Wiebe, *Nature* 621, 60 (2023):
"Proximity superconductivity in atom-by-atom crafted quantum dots".
 - (657) T. Kieu, E. Mascot, J. Bedow, R. Wiesendanger, and D. K. Morr, *Phys. Rev. B* 108, L060509 (2023):
"Topological nodal point superconductivity in checkerboard magnet-superconductor hybrid systems".
 - (656) J. Goedecke, M. Bazarnik, and R. Wiesendanger, *Phys. Rev. Mater.* 7, 084803 (2023):
"STM study of Nb(111) prepared by different methods".
 - (655) L. Schneider, Ph. Beck, L. Rozsa, Th. Posske, J. Wiebe, and R. Wiesendanger, *Nature Commun.* 14, 2742 (2023):
"Probing the topologically trivial nature of end states in antiferromagnetic atomic chains on superconductors".
 - (654) Ph. Beck, B. Nyári, L. Schneider, L. Rózsa, A. Lászlóffy, K. Palotás, L. Szunyogh, B. Ujfalussy, J. Wiebe, and R. Wiesendanger, *Commun. Phys.* 6, 83 (2023):
"Search for large topological gaps in atomic spin chains on proximitized superconducting heavy-metal layers".
 - (653) D. Crawford, E. Mascot, M. Shimizu, R. Wiesendanger, D. K. Morr, H. O. Jeschke, and S. Rachel, *Phys. Rev. B* 107, 075410 (2023):
"Increased localization of Majorana modes in antiferromagnetic chains on superconductors".
 - (652) M. Bazarnik, R. Lo Conte, E. Mascot, K. von Bergmann, D. K. Morr, and R. Wiesendanger, *Nature Commun.* 14, 614 (2023):
"Antiferromagnetism-driven two-dimensional topological nodal-point superconductivity".

- (651) Ph. Beck, L. Schneider, R. Wiesendanger, and J. Wiebe, Phys. Rev. B 107, 024426 (2023):
"Systematic study of Mn atoms, artificial dimers and chains on superconducting Ta(110)".
- (650) D. Crawford, E. Mascot, M. Shimizu, L. Schneider, Ph. Beck, J. Wiebe, R. Wiesendanger, H. O. Jeschke, D. K. Morr, and S. Rachel, npj Quantum Materials 7, 117 (2022):
"Majorana modes with side features in magnet-superconductor hybrid systems".
- (649) M. Gutzeit, A. Kubetzka, S. Haldar, H. Pralow, R. Wiesendanger, S. Heinze, and K. von Bergmann, Nature Commun. 13, 5764 (2022):
"Nano-scale collinear multi-Q states driven by higher-order interactions".
- (648) J. J. Goedecke, L. Schneider, Y. Ma, K. Ton That, D. Wang, J. Wiebe, and R. Wiesendanger, ACS Nano 16, 14066 (2022):
"Correlation of magnetism and disordered Shiba bands in Fe monolayer islands on Nb(110)".
- (647) X. Huang, R. Xiong, K. Volckaert, C. Hao, D. Biswas, M. Bianchi, Ph. Hofmann, Ph. Beck, J. Warmuth, B. Sa, J. Wiebe, and R. Wiesendanger, Advanced Functional Materials 2208281 (2022):
"Experimental realization of semiconducting monolayer Si₂Te₂ films".
- (646) G. Chen, C. Ophus, R. Lo Conte, R. Wiesendanger, G. Yin, A. K. Schmid, and K. Liu, Nano Lett. 22, 6678 (2022):
"Ultrasensitive sub-monolayer Pd induced chirality switching and topological evolution of skyrmions".
- (645) E. Y. Vedmedenko and R. Wiesendanger, npj Sci. Rep. 12, 13608 (2022):
"Spin revolution breaks time reversal symmetry of rolling magnets".
- (644) P. Siegl, M. Stier, A. F. Schäffer, E. Y. Vedmedenko, Th. Posske, R. Wiesendanger, and M. Thorwart, Phys. Rev. B 106, 014421 (2022):
"Creating arbitrary sequences of mobile magnetic skyrmions and antiskyrmions".
- (643) R. Brüning, A. Kubetzka, K. von Bergmann, E. Vedmedenko, and R. Wiesendanger, Phys. Rev. B 105, L241401 (2022):
"Nanoscale skyrmions on a square atomic lattice".
- (642) T. Matthies, A. Schäffer, Th. Posske, R. Wiesendanger, and E. Vedmedenko, Phys. Rev. Appl. 17, 054022 (2022):
"Topological characterization of dynamic chiral magnetic textures using machine learning".

-
- (641) J. Neuhaus-Steinmetz, E. Vedmedenko, Th. Posske, and R. Wiesendanger, Phys. Rev. B 105, 165415 (2022):
"Complex magnetic ground states and topological electronic phases of atomic spin chains on superconductors".
 - (640) L. Schneider, Ph. Beck, J. Neuhaus-Steinmetz, L. Rozsa, Th. Posske, J. Wiebe and R. Wiesendanger, Nature Nanotechnol. 17, 384 (2022):
"Precursors of Majorana modes and their length-dependent energy oscillations probed at both ends of atomic Shiba chains".
 - (639) R. Lo Conte, M. Bazarnik, K. Palotás, L. Rozsa, L. Szunyogh, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B 105, L100406 (2022):
"Coexistence of antiferromagnetism and superconductivity in Mn/Nb(110)".
 - (638) Ph. Beck, L. Schneider, L. Bachmann, J. Wiebe, and R. Wiesendanger, Phys. Rev. Mater. 6, 024801 (2022):
"Structural and superconducting properties of ultrathin Ir films on Nb(110)".
 - (637) J. Spethmann, E. Vedmedenko, R. Wiesendanger, A. Kubetzka, and K. von Bergmann, Commun. Phys. 5, 19 (2022):
"Zero-field skyrmionic states and in-field edge-skyrmions induced by boundary tuning".
 - (636) M. Przychodnia, M. Hermanowicz, E. Sierda, M. Elsebach, T. Grzela, R. Wiesendanger, and M. Bazarnik, Phys. Rev. B 105, 035416 (2022):
"Controlled growth of Gd-Pt surface alloys on Pt(111)".
 - (635) H. Kim, Y. Nagai, L. Rozsa, D. Schreyer, and R. Wiesendanger, Appl. Phys. Rev. 8, 031417 (2021):
"Anisotropic non-split zero-energy vortex bound states in a conventional superconductor".
 - (634) J. Fikacek, J. Warmuth, F. Arnold, C. Piamonteze, Z. Mao, V. Holy, Ph. Hofmann, M. Bremholm, J. Wiebe, R. Wiesendanger, and J. Honolka, J. Magn. & Magn. Mater. 540, 168426 (2021):
"Disorder-induced time effect in the antiferromagnetic domain state of Fe_{1+y}Te".
 - (633) D. Wang, R. Zhong, G. Gu, and R. Wiesendanger, Phys. Rev. Research 3, L032055 (2021):
"Surface orbital order and chemical potential inhomogeneity of the iron-based superconductor FeTe_{0.55}Se_{0.45} investigated with special STM tips".
 - (632) A. Kamlapure, L. Cornils, R. Zitko, M. Valentyuk, R. Mozara, S. Pradhan, J. Fransson, A.I. Lichtenstein, J. Wiebe, and R. Wiesendanger, Nano Lett. 21, 6748 (2021):
"Correlation of Yu-Shiba-Rusinov states and Kondo resonances in artificial spin arrays on an s-wave superconductor".

- (631) L. Schneider, Ph. Beck, Th. Posske, D. Crawford, E. Mascot, S. Rachel, R. Wiesendanger, and J. Wiebe, *Nature Physics* 17, 943 (2021):
"Evidence of topological Shiba bands in artificial spin chains on superconductors".
- (630) M. Ashino, K. Nishioka, K. Hayashi, and R. Wiesendanger, *Phys. Rev. B* 104, 085407 (2021):
"Precise measurement of the configurational energy of bent graphene membranes via three-dimensional force field spectroscopy".
- (629) J. Spethmann, M. Grünebohm, R. Wiesendanger, K. von Bergmann, and A. Kubetzka, *Nature Commun.* 12, 3488 (2021):
"Discovery and characterization of a new type of domain wall in a row-wise antiferromagnet".
- (628) J. Honolka, S. Krotzky, M. Herzog, T. Herden, V. Sessi, H. Ebert, J. Minar, K. von Bergmann, R. Wiesendanger, and O. Sipr, *Phys. Rev. B* 103, 174419 (2021):
"Spin-spiral state of a Mn monolayer on W(110) studied by soft x-ray absorption spectroscopy at variable temperature".
- (627) H. Osterhage, R. Wiesendanger and S. Krause, *Phys. Rev. B* 103, 155428 (2021):
"Phonon-mediated tunnelling into a two-dimensional electron gas on the Be(0001) surface".
- (626) G. Chen, M.C. Robertson, M. Hoffmann, C. Ophus, A.L.F. Cauduro, R. Lo Conte, H. Ding, R. Wiesendanger, S. Blügel, A. K. Schmid, and K. Liu, *Phys. Rev. X* 11, 021015 (2021):
"Observation of hydrogen-induced Dzyaloshinskii-Moriya interaction and reversible switching of magnetic chirality".
- (625) M. Ashino, K. Nishioka, K. Hayashi, and R. Wiesendanger, *Phys. Rev. Lett.* 126, 146101 (2021):
"Anomalous flexural elasticities of graphene membranes unveiled by manipulating topology".
- (624) Ph. Beck, L. Schneider, L. Rozsa, K. Palotás, A. Lászlóffy, L. Szunyogh, J. Wiebe, and R. Wiesendanger, *Nature Commun.* 12, 2040 (2021):
"Spin-orbit coupling induced splitting of Yu-Shiba-Rusinov states in antiferromagnetic dimers".
- (623) D. Wang, J. Wiebe, R. Zhong, G. Gu, and R. Wiesendanger, *Phys. Rev. Lett.* 126, 076802 (2021):
"Spin-polarized Yu-Shiba-Rusinov states in an iron-based superconductor".

- (622) L. Schneider, Ph. Beck, J. Wiebe, and R. Wiesendanger, *Science Advances* 7, eabd7302 (2021):
"Atomic-scale spin-polarization maps using functionalized superconducting probes".
- (621) W. Li, S. Paul, K. von Bergmann, S. Heinze, and R. Wiesendanger, *Phys. Rev. Lett.* 125, 227205 (2020):
"Stacking-dependent spin interactions in Pd/Fe bilayers on Re(0001)".
- (620) A. F. Schäffer, P. Sigl, M. Stier, T. Posske, J. Berakdar, M. Thorwart, R. Wiesendanger, and E. Y. Vedmedenko, *Sci. Rep.* 10, 20400 (2020):
"Rotating edge-field driven processing of chiral spin textures in racetrack devices".
- (619) J. Bedow, E. Mascot, Th. Posske, G. S. Uhrig, R. Wiesendanger, S. Rachel, and D. K. Morr, *Phys. Rev. B* 102, 180504 (2020):
"Topological superconductivity induced by a triple-q magnetic structure".
- (618) L. Schneider, S. Brinker, M. Steinbrecher, J. Hermenau, T. Posske, M. dos Santos Dias, S. Lounis, R. Wiesendanger, and J. Wiebe, *Nature Commun.* 11, 4707 (2020):
"Controlling in-gap end states by linking nonmagnetic atoms and artificially-constructed spin chains on superconductors".
- (617) H. Kim, L. Rózsa, D. Schreyer, E. Simon, and R. Wiesendanger, *Nature Commun.* 11, 4573 (2020):
"Long-range focusing of magnetic bound states in elemental lanthanum".
- (616) P. Rohse, J. Butlewski, F. Klein, T. Wagner, C. Friesen, A. Schwarz, R. Wiesendanger, K. Sengstock, and C. Becker, *Rev. Sci. Instrum.* 91, 103102 (2020):
"A cavity optomechanical locking scheme based on the optical spring effect".
- (615) D. Schreyer, H. Kim, and R. Wiesendanger, *New J. Phys.* 22, 093013 (2020):
"Spectroscopic signature of the Stark shifted Tamm-type surface state of La(0001)".
- (614) G. Chen, A. Mascaraque, H. Jia, B. Zimmermann, M.C. Robertson, R. Lo Conte, M. Hoffmann, M.A. González Barrio, H. Ding, R. Wiesendanger, E.G. Michel, S. Blügel, A. K. Schmid, and K. Liu, *Science Advances* 6, eaba4924 (2020):
"Large Dzyaloshinskii–Moriya interaction induced by chemisorbed oxygen on a ferromagnet surface".
- (613) A. Kubetzka, J. Bürger, R. Wiesendanger, and K. von Bergmann, *Phys. Rev. Mater.* 4, 081401 (2020):
"Towards skyrmion – superconductor hybrid systems".

- (612) P. Lindner, L. Bargsten, S. Kovarik, J. Friedlein, J. Harm, S. Krause and R. Wiesendanger, Phys. Rev. B 101, 214445 (2020):
"Temperature and magnetic field dependent behavior of atomic-scale skyrmions in Pd/Fe/Ir(111) nanoislands".
- (611) R. Lo Conte, A. K. Nandy, G. Chen, A. L. Fernandes Cauduro, A. Maity, C. Ophus, Z. Chen, A. T. N'Diaye, K. Liu, A. K. Schmid, and R. Wiesendanger, Nano Lett. 20, 4739 (2020):
"Tuning the properties of zero-field room temperature magnetic skyrmions by interlayer exchange coupling".
- (610) J. Spethmann, S. Meyer, K. von Bergmann, R. Wiesendanger, S. Heinze, and A. Kubetzka, Phys. Rev. Lett. 124, 227203 (2020):
"Discovery of magnetic single- and triple-q states in Mn/Re(0001)".
- (609) A. Schlenhoff, S. Kovarik, S. Krause and R. Wiesendanger, Appl. Phys. Lett. 116, 122406 (2020):
"Real-space imaging of atomic-scale spin textures at nanometer distances".
- (608) G. Bihlmayer, J. Sassmannshausen, A. Kubetzka, S. Blügel, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 124, 126401 (2020):
"Plumbene on a magnetic substrate: a combined scanning tunneling microscopy and density functional theory study".
- (607) M. Elsebach, E. Sierda, J. Goedecke, L. Bignardi, M. Hermanowicz, M. Rohde, R. Wiesendanger, and M. Bazarrik, J. Phys. Chem. C 124, 4279 (2020):
"In-situ synthesis of metal-salophene complexes on intercalated graphene".
- (606) J. Friedlein, J. Harm, P. Lindner, L. Bargsten, M. Bazarrik, S. Krause and R. Wiesendanger, Rev. Sci. Instrum. 90, 123705 (2019):
"A radio frequency spin-polarized scanning tunneling microscope".
- (605) E. Sierda, M. Elsebach, R. Wiesendanger, and M. Bazarrik, Nano Lett. 19, 9013 (2019):
"Probing weakly hybridized magnetic molecules by single-atom magnetometry".
- (604) M. Perini, S. Meyer, A. Kubetzka, R. Wiesendanger, S. Heinze, and K. von Bergmann, Phys. Rev. Lett. 123, 237205 (2019):
"Electrical detection of domain walls and skyrmions in Co films using noncollinear magnetoresistance".
- (603) R. Mozara, A. Kamlapure, M. Valentyuk, L. Cornils, A. Lichtenstein, J. Wiebe, and R. Wiesendanger, Phys. Rev. Mater. 3, 094801 (2019):
"Atomically thin oxide layer on the elemental superconductor Ta(001) surface".
- (602) S. Meyer, M. Perini, S. von Malottki, A. Kubetzka, R. Wiesendanger, K. von Bergmann, and S. Heinze, Nature Commun. 10, 3823 (2019):
"Isolated zero field sub-10 nm skyrmions in ultrathin Co films".

-
- (601) L. Schneider, M. Steinbrecher, L. Rozsa, J. Bouaziz, K. Palotas, M. dos Santos Dias, S. Lounis, J. Wiebe, and R. Wiesendanger, *NPG Quantum Materials* 4, 42 (2019):
"Magnetism and in-gap states of 3d transition metal atoms on superconducting Re".
 - (600) A. Schlenhoff, S. Kovaric, S. Krause and R. Wiesendanger, *Phys. Rev. Lett.* 123, 087202 (2019):
"Vacuum resonance states as atomic-scale probes of non-collinear surface magnetism".
 - (599) A. Palacio-Morales, E. Mascot, S. Cocklin, H. Kim, S. Rachel, D. K. Morr, and R. Wiesendanger, *Science Advances* 5, eaav6600 (2019):
"Atomic-scale interface engineering of Majorana edge modes in a 2D magnet-superconductor hybrid system".
 - (598) A. Schlenhoff, S. Krause and R. Wiesendanger, *Phys. Rev. Lett.* 123, 037201 (2019):
"Step-edge-induced anisotropic chiral spin coupling in ultrathin magnetic films".
 - (597) A. F. Schäffer, L. Rózsa, J. Berakdar, E. Y. Vedmedenko, and R. Wiesendanger, *NPG Commun. Phys.* 2, 72 (2019):
"Stochastic dynamics and pattern formation of geometrically confined skyrmions".
 - (596) J. Hermenau, S. Brinker, M. Marciani, M. Steinbrecher, M. dos Santos Dias, R. Wiesendanger, S. Lounis, and J. Wiebe, *Nature Commun.* 10, 2565 (2019):
"Stabilizing spin systems via symmetrically tailored RKKY interactions".
 - (595) D. Cortés-Ortuno, N. Romming, M. Beg, K. von Bergmann, A. Kubetzka, O. Hovorka, H. Fangohr, and R. Wiesendanger, *Phys. Rev. B* 99, 214408 (2019):
"Nanoscale magnetic skyrmions and target states in confined geometries".
 - (594) M. Bazarnik, M. Abadia, J. Brede, M. Hermanowicz, E. Sierda, M. Elsebach, T. Hänke and R. Wiesendanger, *Phys. Rev. B* 99, 174419 (2019):
"Atomically resolved magnetic structure a Gd-Au surface alloy".
 - (593) A. Finco, P.-J. Hsu, K. von Bergmann, and R. Wiesendanger, *Phys. Rev. B* 99, 064436 (2019):
"Tuning non-collinear magnetic states by hydrogenation".
 - (592) R. H. Blick, H. Graener, A. Mews, H. Weller, R. Wiesendanger, and W. Parak, *ACS Nano* 13, 1 (2019):
"Nanoscience and Nanotechnology at the Centennial of Universität Hamburg".

-
- (591) C. Friesen, H. Osterhage, J. Friedlein, S. Kovarik, A. Schlenhoff, R. Wiesendanger, and S. Krause, *Science* 363, 1065 (2019):
"Magneto-Seebeck tunneling on the atomic scale".
 - (590) L. Rózsa, J. Hagemeister, E. Y. Vedmedenko, and R. Wiesendanger, *Phys. Rev. B* 98, 224426 (2018):
"Localized spin waves in isolated kpi-skyrmions".
 - (589) A. Finco, M. Perini, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, *Phys. Rev. B* 98, 174435 (2018):
"Magnetic domain walls in strain-patterned ultrathin films".
 - (588) J. Sassmannshausen, A. Kubetzka, P.-J. Hsu, K. von Bergmann, and R. Wiesendanger, *Phys. Rev. B* 98, 144443 (2018):
"Pb-induced skyrmions in a double layer of Fe on Ir(111)".
 - (587) L. Rózsa, J. Hagemeister, E. Y. Vedmedenko, and R. Wiesendanger, *Phys. Rev. B* 98, 100404 (2018):
"Effective damping enhancement in noncollinear spin structures".
 - (586) Ph. Christoph, T. Wagner, H. Zhong, R. Wiesendanger, K. Sengstock, A. Schwarz, and Ch. Becker, *New J. Phys.* 20, 093020 (2018):
"Combined feedback and sympathetic cooling of a mechanical oscillator coupled to ultracold atoms".
 - (585) A. Kamlapure, L. Cornils, J. Wiebe, and R. Wiesendanger, *Nature Commun.* 9, 3253 (2018):
"Engineering the spin couplings in atomically crafted spin chains on an elemental superconductor".
 - (584) M. Steinbrecher, R. Rausch, K. T. Ton, J. Hermenau, A. A. Khajetoorians, M. Potthoff, R. Wiesendanger, and J. Wiebe, *Nature Commun.* 9, 2853 (2018):
"Non-collinear spin states in bottom-up fabricated atomic chains".
 - (583) 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):
"Domain walls and Dzyaloshinskii-Moriya interaction in epitaxial Co/Ir(111) and Pt/Co/Ir(111)".
 - (582) C. Friesen, H. Osterhage, J. Friedlein, A. Schlenhoff, R. Wiesendanger, and S. Krause, *J. Phys. D: Appl. Phys.* 51, 324001 (2018):
"Seebeck tunneling with scanning tunneling microscopy".
 - (581) 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):
"Competition of Dzyaloshinskii-Moriya and higher-order exchange interactions in Rh/Fe atomic bilayers on Ir(111)".

-
- (580) J. Hagemeister, A. Siemens, L. Rózsa, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. B 97, 174436 (2018):
"Controlled creation and stability of kpi-skyrmions on a discrete lattice".
 - (579) H. Kim, A. Palacio-Morales, T. Posske, L. Rózsa, K. Palotas, L. Szunyogh, M. Thorwart, and R. Wiesendanger, Science Advances 4, eaar5251 (2018):
"Towards tailoring Majorana bound states in artificially constructed magnetic atom chains on elemental superconductors".
 - (578) J. Warmuth, M. Bremholm, Ph. Hofmann, J. Wiebe, and R. Wiesendanger, NPG Quantum Materials 3, 21 (2018):
"Domain imaging across the magneto-structural phase transition in Fe_{1+y}Te ".
 - (577) 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 Commun. 9, 1571 (2018):
"Inducing skyrmions in ultrathin Fe films by hydrogen exposure".
 - (576) U. R. Singh, J. Warmuth, A. Kamlapure, L. Cornils, M. Bremholm, Ph. Hofmann, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 97, 144513 (2018):
"Enhanced spin-ordering temperature in ultrathin FeTe films grown on a topological insulator".
 - (575) J. Hermenau, M. Ternes, M. Steinbrecher, R. Wiesendanger, and J. Wiebe, Nano Lett. 18, 1978 (2018):
"Long spin relaxation times in a transition metal atom in direct contact to a metal substrate".
 - (574) F. Arnold, J. Warmuth, M. Michiardi, J. Fikáček, M. Bianchi, J. Hu, Z. Mao, J. Miwa, U.R. Singh, M. Bremholm, R. Wiesendanger, J. Honolka, T. Wehling, J. Wiebe, and Ph. Hofmann, J. Phys.: Condens. Matter 30, 065502 (2018):
"Electronic structure of $\text{Fe}_{1.08}\text{Te}$ bulk crystals and epitaxial FeTe thin films on Bi_2Te_3 ".
 - (573) M. Ashino and R. Wiesendanger, Crystals 8, 102 (2018):
"Atomic-site-specific analysis on out-of-plane elasticity of convexly curved graphene and its relationship to sp^2 to sp^3 re-hybridization".
 - (572) R. Wiesendanger, K. Ton That, H. Kim, L. Rozsa, and T. Posske, Proc. 11th International Symposium on Atomic Level Characterization for New Materials and Devices (ALC'17), p. 468 (2017):
"Bottom-up construction and atomic-level characterization of spin chains on superconducting substrates for topological quantum computation".
 - (571) L. Cornils, A. Kamlapure, L. Zhou, S. Pradhan, A. A. Khajetoorians, J. Fransson, J. Wiebe, and R. Wiesendanger, Phys. Rev. Lett. 119, 197002 (2017): "Spin-polarization of the Yu-Shiba-Rusinov state of an individual atom".

- (570) M. Krizanac, E. Y. Vedmedenko, and R. Wiesendanger, New J. Phys. 19, 078001 (2017): "Reply to Comment on Perturbative calculations of quantum spin tunneling in effective spin systems with a transversal magnetic field and transversal anisotropy".
- (569) E. Sierda, M. Abadia, J. Brede, M. Elsebach, B. Bugenhagen, M. H. Prosenc, C. Rogero, M. Bazarnik, and R. Wiesendanger, ACS Nano 11, 9200 (2017): "On-surface preparation of self-terminating molecular chains for spintronic devices".
- (568) C. Garcia-Fernandez, E. Sierda, M. Abadia, 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): "Exploring the relation between intramolecular conjugation and band dispersion in one-dimensional polymers".
- (567) J. Hermenau, J. Ibanez-Azpiroz, Chr. Hübner, A. Sonntag, B. Baxevanis, K. T. Ton, M. Steinbrecher, A. A. Khajetoorians, M. dos Santos Dias, S. Blügel, R. Wiesendanger, S. Lounis, and J. Wiebe, Nature Commun. 8, 41467 (2017): "A gateway towards non-collinear spin processing using three-atom magnets with strong substrate coupling".
- (566) J. Grenz, A. Köhler, A. Schwarz, and R. Wiesendanger, Phys. Rev. Lett. 119, 047205 (2017): "Probing the nano-skyrmion lattice on Fe/Ir(111) with magnetic exchange force microscopy".
- (565) A. Finco, L. Rozsa, P.-J. Hsu, A. Kubetzka, E. Vedmedenko, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 119, 037202 (2017): "Temperature-induced increase of spin spiral periods".
- (564) M. Ashino and R. Wiesendanger, Sci. Rep. 7, 46083 (2017): "Attractive force-driven superhardening of graphene membranes as a pin-point breaking of continuum mechanics".
- (563) A. Kubetzka, Ch. Hanneken, R. Wiesendanger, and K. von Bergmann, Phys. Rev. B 95, 104433 (2017): "Impact of the skyrmion spin texture on magnetoresistance".
- (562) A. Kamlapure, S. Manna, L. Cornils, T. Hänke, M. Bremholm, Ph. Hofmann, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 95, 104509 (2017): "Spatial variation of the two-fold anisotropic superconducting gap in a monolayer of FeSe_{0.5}Te_{0.5} on a topological insulator".
- (561) H. Zhong, G. Fläschner, A. Schwarz, R. Wiesendanger, P. Christoph, T. Wagner, A. Bick, C. Staarmann, B. Abeln, K. Sengstock, and C. Becker, Rev. Sci. Instrum. 88, 023115 (2017): "A millikelvin all-fiber cavity optomechanical apparatus for merging with ultra-cold atoms in a hybrid quantum system".

-
- (560) P.-J. Hsu, A. Kubetzka, A. Finco, N. Romming, K. von Bergmann, and R. Wiesendanger, *Nature Nanotechnology* 12, 123 (2017):
"Electric-field-driven switching of individual magnetic skyrmions".
 - (559) R. Schmidt, A. Schwarz, and R. Wiesendanger, *Appl. Phys. Lett.* 110, 061601 (2017):
"Characterizing tips suitable for atomic force microscopy and spectroscopy with atomic resolution and spin sensitivity".
 - (558) M. Krizanac, E. Y. Vedmedenko, and R. Wiesendanger, *New J. Phys.* 19, 013032 (2017):
"Perturbative calculations of quantum spin tunneling in effective spin systems with a transversal magnetic field and transversal anisotropy".
 - (557) S. Manna, A. Kamlapure, L. Cornils, T. Hänke, E. M. J. Hedegaard, M. Bremholm, B. B. Iversen, Ph. Hofmann, J. Wiebe, and R. Wiesendanger, *Nature Commun.* 8, 14074 (2017):
"Interfacial superconductivity in a bi-collinear antiferromagnetically ordered FeTe monolayer on a topological insulator".
 - (556) T. Hänke, U. R. Singh, L. Cornils, S. Manna, A. Kamlapure, M. Bremholm, E. M. J. Hedegaard, B. B. Iversen, Ph. Hofmann, J. Hu, Z. Mao, J. Wiebe, and R. Wiesendanger, *Nature Commun.* 8, 13939 (2017):
"Reorientation of the diagonal double-stripe spin structure at Fe_{1+y}Te bulk and thin film surfaces".
 - (555) U. R. Singh, J. Warmuth, V. Markmann, J. Wiebe, and R. Wiesendanger, *J. Phys.: Condens. Matter* 29, 025004 (2017):
"Structural and electronic properties of ultrathin FeSe films grown on Bi₂Se₃(0001) studied by STM/STS".
 - (554) A. Finco, P.-J. Hsu, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, *Phys. Rev. B* 94, 214402 (2016):
"Tailoring non-collinear magnetism by misfit dislocation lines".
 - (553) J. Hagemeister, D. Iaia, E. Y. Vedmedenko, K. von Bergmann, A. Kubetzka, and R. Wiesendanger, *Phys. Rev. Lett.* 117, 207202 (2016):
"Skyrmions at the edge: Confinement effects in Fe/Ir(111)".
 - (552) M. Vondracek, L. Cornils, J. Minar, J. Warmuth, M. Michiardi, C. Piamonteze, L. Barreto, J. A. Miwa, M. Bianchi, Ph. Hofmann, L. Zhou, A. Kamlapure, A. A. Khajetoorians, R. Wiesendanger, J.-L. Mi, B. B. Iversen, S. Mankovsky, St. Borek, H. Ebert, M. Schüler, T. Wehling, J. Wiebe, and J. Honolka, *Phys. Rev. B* 94, 161114 (2016):
"Nickel: The time-reversal symmetry conserving partner of iron on a chalcogenide topological insulators".

-
- (551) J. Hagemeister, E. Y. Vedmedenko, and R. Wiesendanger,
Phys. Rev. B 94, 104434 (2016):
"Pattern formation in skyrmionic materials with anisotropic environments".
 - (550) A. Palacio-Morales, A. Kubetzka, K. von Bergmann, and R. Wiesendanger,
Nano Lett. 16, 6252 (2016):
"Coupling of coexisting non-collinear spin states in the Fe monolayer on Re(0001)".
 - (549) R. Wiesendanger,
Nature Reviews Materials 1, 16044 (2016),
"Nanoscale magnetic skyrmions in metallic films and multilayers: a new twist for spintronics".
 - (548) H. von Allwörden, K. Ruschmeier, A. Köhler, T. Eelbo, A. Schwarz, and R. Wiesendanger, Rev. Sci. Instrum. 87, 073702 (2016):
"Set-up of a high-resolution 300 mK atomic force microscope in an ultra-high vacuum compatible $^3\text{He}/10\text{T}$ cryostat".
 - (547) L. Schmidt, J. Hagemeister, P.-J. Hsu, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, New J. Phys. 18, 075007 (2016):
"Symmetry breaking of spin spirals and skyrmions by in-plane and canted magnetic fields".
 - (546) T. Eelbo, V. I. Zdravkov, and R. Wiesendanger,
Surf. Sci. 653, 113 (2016):
"STM study of the preparation of clean Ta(110) and the subsequent growth of two-dimensional Fe islands".
 - (545) A. O. Leonov, T. L. Monchesky, N. Romming, A. Kubetzka, A. N. Bogdanov, and R. Wiesendanger, New J. Phys. 18, 065003 (2016):
"The properties of isolated chiral skyrmions in thin magnetic films".
 - (544) W. P. Schleich, K. S. Ranade, C. Anton, M. Arndt, M. Aspelmeyer, M. Bayer, G. Berg, T. Calarco, H. Fuchs, E. Giacobino, M. Grassl, P. Hänggi, W.M. Heckl, I. V. Hertel, S. Huelga, F. Jelezko, B. Keimer, J. P. Kotthaus, G. Leuchs, N. Lütkenhaus, U. Maurer, T. Pfau, M. B. Plenio, E. M. Rasel, O. Renn, C. Silberhorn, J. Schiedmayer, D. Schmitt-Landsiedel, K. Schönhammer, A. Ustinov, P. Walther, H. Weinfurter, E. Welzl, R. Wiesendanger, S. Wolf, A. Zeilinger, and P. Zoller, Appl. Phys. B 122, 130 (2016):
"Quantum technology: from research to application".
 - (543) Ch. Hanneken, A. Kubetzka, K. von Bergmann, and R. Wiesendanger,
New J. Phys. 18, 055009 (2016):
"Pinning and movement of individual nanoscale magnetic skyrmions via defects".

- (542) J. Warmuth, A. Bruix, M. Michiardi, T. Hänke, M. Bianchi, J. Wiebe, R. Wiesendanger, B. Hammer, Ph. Hofmann, and A. A. Khajetoorians, Phys. Rev. B 93, 165437 (2016):
"Band-gap engineering by Bi intercalation of graphene on Ir(111)".
- (541) S. Krause and R. Wiesendanger, Nature Materials 15, 493 (2016):
"Skyrmionics gets hot".
- (540) A. Siemens, Y. Zhang, J. Hagemester, E. Vedmedenko, and R. Wiesendanger, New J. Phys. 18, 045021 (2016):
"Minimal radius of magnetic skyrmions: statics and dynamics".
- (539) D. Iaia, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B 93, 134409 (2016):
"Structural and magnetic properties of the Ni/Fe nanostructures on Ir(111)".
- (538) M. Krizanac, D. Altwein, E. Y. Vedmedenko, and R. Wiesendanger, New J. Phys. 18, 033029 (2016):
"Quantum revivals and magnetization tunnelling in effective spin systems".
- (537) D. Serrate, Y. Yoshida, M. Moro-Lagares, A. Kubetzka, and R. Wiesendanger, Phys. Rev. B 93, 125424 (2016):
"Spin-sensitive shape asymmetry of adatoms on non-collinear magnetic substrates".
- (536) S. Krause, A. Sonntag, J. Hermenau, J. Friedlein, and R. Wiesendanger, Phys. Rev. B 93, 064407 (2016):
"High frequency magnetization dynamics of individual atomic-scale magnets".
- (535) A. A. Khajetoorians, M. Steinbrecher, M. Ternes, M. Bouhassoune, S. Lounis, M. dos Santos Dias, J. Wiebe, and R. Wiesendanger, Nature Commun. 7, 10620 (2016):
"Tailoring the chiral magnetic interaction between two individual atoms".
- (534) M. Steinbrecher, A. Sonntag, M. dos Santos Dias, M. Bouhassoune, S. Lounis, J. Wiebe, R. Wiesendanger, and A. A. Khajetoorians, Nature Commun. 7, 10454 (2016):
"Absence of a spin-signature from a single Ho adatom as probed by spin-sensitive tunneling".
- (533) M. Bazarnik, B. Bugenhagen, M. Elsebach, E. Sierda, A. Frank, M. H. Prosenc, and R. Wiesendanger, Nano Lett. 16, 577 (2016):
"Towards tailored all-spin molecular devices".

-
- (532) P.-J. Hsu, A. Finco, L. Schmidt, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 116, 017201 (2016):
"Guiding spin spirals by local uniaxial strain relief".
 - (531) P. Löptien, L. Zhou, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger, Surf. Sci. 643, 6 (2016):
"Tunneling into thin superconducting films: interface-induced quasiparticle lifetime reduction".
 - (530) Ch. Hanneken, F. Otte, A. Kubetzka, B. Dupé, N. Romming, K. von Bergmann, R. Wiesendanger, and S. Heinze, Nature Nanotechnology 10, 1039 (2015):
"Electrical detection of magnetic skyrmions by tunnelling non-collinear magnetoresistance".
 - (529) A. A. Khajetoorians, M. Valentyuk, M. Steinbrecher, T. Schlenk, A. Shick, J. Kolorenc, A. I. Lichtenstein, T. O. Wehling, R. Wiesendanger, and J. Wiebe, Nature Nanotechnology 10, 958 (2015):
"Tuning emergent magnetism in a Hund's impurity".
 - (528) J. Hagemeister, N. Romming, K. von Bergmann, E. Y. Vedmedenko, and R. Wiesendanger, Nature Commun. 6, 8455 (2015):
"Stability of single skyrmionic bits".
 - (527) M. Wasniowska, M. Sikora, M. Dobrzanski, T. Eelbo, M. M. Soares, M. Rams, I. Miotkowski, R. Wiesendanger, R. Berndt, Z. Kakol, and A. Kozlowski, Phys. Rev. B 92, 115412 (2015):
"Investigating the differences between Co adatoms states on surfaces of selected bismuth chalcogenides".
 - (526) A. Schlenhoff, P. Lindner, J. Friedlein, S. Krause, R. Wiesendanger, M. Weinl, M. Schreck, and M. Albrecht, ACS Nano 9, 5908 (2015):
"Magnetic nano-skyrmion lattice observed in a Si-wafer-based multilayer system".
 - (525) K. von Bergmann, M. Menzel, A. Kubetzka, and R. Wiesendanger, Nano Lett. 15, 3280 (2015):
"Influence of the local atom configuration on a hexagonal skyrmion lattice".
 - (524) M. Bazarnik, R. Decker, J. Brede, and R. Wiesendanger, Surf. Sci. 639, 70 (2015):
"Multi-layer and multi-component intercalation at the graphene / Ir(111) interface".

-
- (523) N. Romming, A. Kubetzka, Ch. Hanneken, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 114, 177203 (2015):
"Field-dependent size and shape of single magnetic skyrmions".
 - (522) G. Fläschner, K. Ruschmeier, A. Schwarz, R. Bakhtiari, M. Thorwart, and R. Wiesendanger, Appl. Phys. Lett. 106, 123102 (2015):
"Temperature and non-linear response of cantilever-type mechanical oscillators used in atomic force microscopes with interferometric detection".
 - (521) F. Pielmeier, G. Landolt, B. Slomski, S. Muff, J. Berwanger, A. Eich, A. A. Khajetoorians, J. Wiebe, Z. S. Aliev, M. B. Babanly, R. Wiesendanger, J. Osterwalder, E. V. Chulkov, F. J. Giessibl, and J. H. Dil, New J. Phys. 17, 023067 (2015):
"Response of the topological surface state to surface disorder in TlBiSe₂".
 - (520) B. Dupé, J. E. Bickel, Y. Mokrousov, F. Otte, K. von Bergmann, A. Kubetzka, S. Heinze, and R. Wiesendanger, New J. Phys. 17, 023014 (2015):
"Giant magnetization canting due to symmetry breaking in zigzag Co chains on Ir(001)".
 - (519) K. Them, E. Y. Vedmedenko, K. Fredenhagen, and R. Wiesendanger, J. Phys. A: Math. Theor. 48, 075301 (2015):
"Bounds on expectation values of quantum subsystems and perturbation theory".
 - (518) J. Brede, N. Atodiresei, V. Caciuc, M. Bazarnik, A. Al-Zubi, S. Blügel, and R. Wiesendanger, Nature Nanotechnology 9, 1018 (2014):
"Long-range magnetic coupling between nanoscale organic-metal hybrids mediated by a nanoskyrmion lattice".
 - (517) A. Eich, M. Michiardi, G. Bihlmayer, X.-G. Zhu, J.-L. Mi, B. B. Iversen, R. Wiesendanger, Ph. Hofmann, A. A. Khajetoorians, and J. Wiebe, Phys. Rev. B 90, 155414 (2014):
"Intra- and interband electron scattering in a hybrid topological insulator: Bismuth bilayer on Bi₂Se₃".
 - (516) P. Löptien, L. Zhou, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger, J. Phys.: Condensed Matter 26, 425703 (2014):
"Superconductivity of lanthanum revisited: enhanced critical temperature in the clean limit".
 - (515) S. Ouazi, T. Pohlmann, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Surf. Sci. 630, 280 (2014):
"Scanning tunnelling microscopy study of Fe, Co, and Cr growth on Re(0001)".

- (514) R. Decker, M. Bazarnik, N. Atodiresei, V. Caciuc, S. Blügel, and R. Wiesendanger, *J. Phys.: Condens. Matter* 26, 394004 (2014):
"Local tunnel magnetoresistance of an iron intercalated graphene-based heterostructure".
- (513) K. von Bergmann, A. Kubetzka, O. Pietzsch, and R. Wiesendanger, *J. Phys.: Condens. Matter* 26, 394002 (2014):
"Interface-induced chiral domain walls, spin spirals and skyrmions revealed by spin-polarized scanning tunneling microscopy".
- (512) A. Sonntag, J. Hermenau, S. Krause, and R. Wiesendanger, *Phys. Rev. Lett.* 113, 077202 (2014):
"Thermal stability of an interface-stabilized skyrmion lattice".
- (511) B. Behin-Aein, J.-P. Wang, and R. Wiesendanger, *MRS Bulletin* 39, 696 (2014):
"Computing with Spins and Magnets".
- (510) J. Brede and R. Wiesendanger, *MRS Bulletin* 39, 608 (2014):
"Spin-resolved imaging and spectroscopy of individual molecules with sub-molecular spatial resolution".
- (509) A. Schwarz, A. Köhler, J. Grenz, and R. Wiesendanger, *Appl. Phys. Lett.* 105, 011606 (2014):
"Detecting the dipole moment of a single carbon monoxide molecule".
- (508) D. Z. Gao, J. Grenz, M. B. Watkins, F. F. Canova, A. Schwarz, R. Wiesendanger, and A. L. Shluger, *ACS Nano* 8, 5339 (2014):
"Using metallic NC-AFM tips for imaging insulators and polar molecules: Tip characterization and imaging mechanisms".
- (507) H. Zhong, A. Schwarz, and R. Wiesendanger, *Rev. Sci. Instrum.* 85, 045006 (2014):
"Miniaturized high-precision piezo driven two axes stepper goniometer".
- (506) T. Eelbo, M. Wasniowska, M. Sikora, M. Dobrzanski, A. Kozlowski, A. Pulkín, G. Autes, I. Miotkowski, O. V. Yazyev, and R. Wiesendanger, *Phys. Rev. B* 89, 104424 (2014):
"Strong out-of-plane magnetic anisotropy of Fe adatoms on Bi₂Te₃".
- (505) T. Iwasaki, A. A. Zakharov, T. Eelbo, M. Wasniowska, R. Wiesendanger, J. H. Smet, and U. Starke, *Surf. Sci.* 625, 44 (2014):
"Formation and structural analysis of twisted bilayer graphene on Ni(111) thin films".

-
- (504) S. Ouazi, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 112, 076102 (2014):
"Enhanced atomic-scale spin contrast due to spin friction".
 - (503) P. Löptien, L. Zhou, J. Wiebe, A. A. Khajetoorians, J. Mi, B. B. Iversen, Ph. Hofmann, and R. Wiesendanger, Phys. Rev. B 89, 085401 (2014):
"Screening and atomic-scale engineering of the potential at a topological insulator surface".
 - (502) M. Menzel, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. Lett. 112, 047204 (2014):
"Parity effects in 120° spin spirals".
 - (501) A. Sonntag, J. Hermenau, A. Schlenhoff, J. Friedlein, S. Krause, and R. Wiesendanger, Phys. Rev. Lett. 112, 017204 (2014):
"Electric field induced magnetic anisotropy in a nanomagnet investigated on the atomic scale".
 - (500) M. Bazarnik, J. Brede, R. Decker, and R. Wiesendanger, ACS Nano 7, 11341 (2013):
"Tailoring molecular self-assembly of magnetic phthalocyanine molecules on Fe- and Co-intercalated graphene".
 - (499) T. Eelbo, M. Sikora, G. Bihlmayer, M. Dobrzanski, A. Kozłowski, I. Miotkowski, and R. Wiesendanger, New J. Phys. 15, 113026 (2013):
"Co atoms on Bi₂Se₃ revealing a coverage dependent spin reorientation transition".
 - (498) A. A. Khajetoorians, T. Schlenk, B. Schweflinghaus, M. dos Santos Dias, M. Steinbrecher, M. Bouhassoune, S. Lounis, J. Wiebe, and R. Wiesendanger, Phys. Rev. Lett. 111, 157204 (2013):
"Spin excitations of individual Fe atoms on Pt(111): impact of the site-dependent giant substrate polarization".
 - (497) J.-K. Lee, S. Yamazaki, H. Yun, J. Park, G. P. Kennedy, G.-T. Kim, O. Pietzsch, R. Wiesendanger, S. Lee, S. Hong, U. Dettlaff-Weglikowska, and S. Roth, Nano Lett. 13, 3494 (2013):
"Modification of electrical properties of graphene by substrate-induced nano-modulation".
 - (496) N. Romming, Ch. Hanneken, M. Menzel, J. E. Bickel, B. Wolter, K. von Bergmann, A. Kubetzka, and R. Wiesendanger, Science 341, 636 (2013):
"Writing and deleting single magnetic skyrmions".

- (495) T. Eelbo, M. Wasniowska, M. Gyamfi, S. Forti, U. Starke, and R. Wiesendanger, Phys. Rev. B 87, 205443 (2013):
"Influence of the degree of decoupling of graphene on the properties of transition metal adatoms".
- (494) E. Y. Vedmedenko, M. Schult, J. Kronjäger, R. Wiesendanger, K. Bongs, and K. Sengstock, New J. Phys. 15, 063033 (2013):
"Collective magnetism in arrays of spinor Bose-Einstein condensates".
- (493) T. Eelbo, M. Wasniowska, P. Thakur, M. Gyamfi, B. Sachs, T. O. Wehling, S. Forti, U. Starke, C. Tieg, A. I. Lichtenstein, and R. Wiesendanger, Phys. Rev. Lett. 110, 136804 (2013):
"Adatoms and clusters of 3d transition metals on graphene: Electronic and magnetic configurations".
- (492) T. Schlenk, M. Bianchi, M. Koleini, A. Eich, O. Pietzsch, T. O. Wehling, T. Frauenheim, A. Balatsky, J.-L. Mi, B. B. Iversen, J. Wiebe, A. A. Khajetoorians, Ph. Hofmann, R. Wiesendanger, Phys. Rev. Lett. 110, 126804 (2013):
"Controllable magnetic doping of the surface state of a topological insulator".
- (491) A. Schwarz, D. Z. Gao, K. Lämmle, J. Grenz, M. B. Watkins, A. L. Shluger, and R. Wiesendanger, J. of Phys. Chem. C 117, 1105 (2013):
"Determining adsorption geometry, bonding, and translational pathways of a metal-organic complex on an oxide surface: Co-salen on NiO(001)".
- (490) R. Wieser, V. Caciuc, C. Lazo, H. Hölscher, E.Y. Vedmedenko, and R. Wiesendanger, New J. Phys. 15, 013011 (2013):
"A theoretical study of the dynamical switching of a single spin by exchange forces".
- (489) K. Them, T. Stapelfeldt, E. Y. Vedmedenko, and R. Wiesendanger, New J. Phys. 15, 013009 (2013):
"Non-equilibrium finite temperature dynamics of magnetic quantum systems: Applications to spin-polarized scanning tunnelling microscopy".
- (488) R. Decker, J. Brede, N. Atodiresei, V. Caciuc, S. Blügel, and R. Wiesendanger, Phys. Rev. B 87, 041403 (2013):
"Atomic scale magnetism of cobalt-intercalated graphene".
- (487) A. A. Khajetoorians, B. Baxevanis, Ch. Hübner, T. Schlenk, S. Krause, T. Wehling, S. Lounis, A. Lichtenstein, D. Pfannkuche, J. Wiebe, and R. Wiesendanger, Science 339, 55 (2013):
"Current-driven spin dynamics of artificially constructed quantum magnets".
- (486) M. Hortamani and R. Wiesendanger, Phys. Rev. B 86, 235437 (2012):
"Role of hybridization in the Rashba splitting of noble metal monolayers on W(110)".

- (485) J. Brede and R. Wiesendanger, Phys. Rev. B 86, 184423 (2012):
"Spin-resolved characterization of single cobalt phthalocyanine molecules on a ferromagnetic support".
- (484) R. Schmidt, A. Schwarz, and R. Wiesendanger, Phys. Rev. B 86, 174402 (2012):
"Magnetization switching utilizing the magnetic exchange interaction".
- (483) K. von Bergmann, M. Menzel, D. Serrate, Y. Yoshida, S. Schröder, P. Ferriani, A. Kubetzka, R. Wiesendanger, and S. Heinze, Phys. Rev. B 86, 134422 (2012):
"Tunneling anisotropic magnetoresistance on the atomic scale".
- (482) L. V. Dzemyantsova, M. Hortamani, C. Hanneken, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B 86, 094427 (2012):
"Magnetic coupling of single Co adatoms to a Co underlayer through a Pd spacer of variable thickness".
- (481) K. Hashimoto, T. Champel, S. Florens, C. Sohrmann, J. Wiebe, Y. Hirayama, R. A. Römer, R. Wiesendanger, and M. Morgenstern, Phys. Rev. Lett. 109, 116805 (2012):
"Robust nodal structure of Landau level wave functions revealed by Fourier transform scanning tunneling spectroscopy".
- (480) B. Wolter, Y. Yoshida, K. von Bergmann, A. Kubetzka, S.-W. Hla, and R. Wiesendanger, Phys. Rev. Lett. 109, 116102 (2012):
"Spin friction observed on the atomic scale".
- (479) M. Bianchi, R. C. Hatch, Z. Li, Ph. Hofmann, F. Song, J. L. Mi, B. B. Iversen, Z. M. Abd El-Fattah, P. Löptien, L. Zhou, A. A. Khajetoorians, J. Wiebe, R. Wiesendanger, and J. W. Wells, ACS Nano 6, 7009 (2012):
"Robust surface doping of Bi₂Se₃ by Rubidium intercalation".
- (478) A. Schlenhoff, A. Sonntag, S. Krause, and R. Wiesendanger, Phys. Rev. Lett. 109, 097602 (2012):
"Individual atomic-scale magnets interacting with spin-polarized field-emitted electrons".
- (477) Y. Fu, J. Schwöbel, S.-W. Hla, A. Dilullo, G. Hoffmann, S. Klyatskaya, M. Ruben, and R. Wiesendanger, Nano Lett. 12, 3931 (2012):
"Reversible chiral switching of Bis(phthalocyaninato) Terbium(III) on a metal surface".
- (476) J. Schwöbel, Y. Fu, J. Brede, A. Dilullo, G. Hoffmann, S. Klyatskaya, M. Ruben, and R. Wiesendanger, Nature Communications 3, 953 (2012):
"Real-space observation of spin-split molecular orbitals of adsorbed single-molecule magnets".

- (475) J. Honolka, A. A. Khajetoorians, V. Sessi, T. O. Wehling, S. Stepanow, J.-L. Mi, B. B. Iversen, T. Schlenk, J. Wiebe, N. Brookes, A. I. Lichtenstein, Ph. Hofmann, K. Kern, and R. Wiesendanger, Phys. Rev. Lett. 108, 256811 (2012):
"In-plane magnetic anisotropy of Fe atoms on Bi₂Se₃(111)".
- (474) A. DiLullo, S.-H. Chang, N. Baadji, K. Clark, J.-P. Klöckner, M.H. Prosenc, S. Sanvito, R. Wiesendanger, G. Hoffmann, and S.-W. Hla, Nano Lett. 12, 3174 (2012):
"Molecular Kondo chain".
- (473) A. A. Khajetoorians, J. Wiebe, B. Chilian, S. Lounis, S. Blügel, and R. Wiesendanger, Nature Physics 8, 497 (2012):
"Atom-by-atom engineering and magnetometry of tailored nanomagnets".
- (472) M. Gyamfi, T. Eelbo, M. Wasniowska, and R. Wiesendanger, Phys. Rev. B 85, 205434 (2012):
"Impact of intercalated cobalt on the electronic properties of graphene on Pt(111)".
- (471) E. Y. Vedmedenko, Q. Zhu, U. Kaiser, A. Schwarz, and R. Wiesendanger, Phys. Rev. B 85, 174410 (2012):
"Atomic-scale magnetic dissipation from spin-dependent adhesion hysteresis".
- (470) M. Menzel, Y. Mokrousov, R. Wieser, J. E. Bickel, E. Vedmedenko, S. Blügel, S. Heinze, K. von Bergmann, A. Kubetzka, and R. Wiesendanger, Phys. Rev. Lett. 108, 197204 (2012):
"Information transfer by vector spin chirality in finite magnetic chains".
- (469) M. Gyamfi, T. Eelbo, M. Wasniowska, T.O. Wehling, S. Forti, U. Starke, A.I. Lichtenstein, M. I. Katsnelson, and R. Wiesendanger, Phys. Rev. B 85, 161406 (2012):
"Orbital selective coupling between Ni adatoms and graphene Dirac electrons".
- (468) Y. Yoshida, S. Schröder, P. Ferriani, D. Serrate, A. Kubetzka, K. von Bergmann, S. Heinze, and R. Wiesendanger, Phys. Rev. Lett. 108, 087205 (2012):
"Conical spin-spiral state in an ultra-thin film driven by higher-order spin interactions".
- (467) Y.-S. Fu, Q.-K. Xue, and R. Wiesendanger, Phys. Rev. Lett. 108, 087203 (2012):
"Spin-resolved splitting of Kondo resonances in the presence of RKKY-type coupling".

- (466) S. Meckler, O. Pietzsch, N. Mikuszeit, and R. Wiesendanger, Phys. Rev. B 85, 024420 (2012):
"Micromagnetic description of the spin spiral in Fe double-layer stripes on W(110)".
- (465) S. V. Eremeev, G. Landolt, T. V. Menshchikova, B. Slomski, Y. M. Koroteev, Z. S. Aliev, M. B. Babanly, J. Henk, A. Ernst, L. Patthey, A. Eich, A. A. Khajetoorians, J. Hagemeister, O. Pietzsch, J. Wiebe, R. Wiesendanger, P. M. Echenique, S. S. Tsirkin, I. R. Amiraslanov, J. H. Dil, and E. V. Chulkov, Nature Communications 3, 635 (2012):
"Atom-specific spin mapping and buried topological states in a homologous series of topological insulators".
- (464) R. Wieser, T. Stapelfeldt, E. Y. Vedmedenko, and R. Wiesendanger, Europhys. Lett. 97 17009 (2012):
"Manipulation of domain walls using a spin-polarized STM".
- (463) K. Hashimoto, J. Wiebe, T. Inaoka, Y. Hirayama, R. Wiesendanger, and M. Morgenstern, J. Phys.: Conf. Series 334, 012008 (2011):
"Real-space mapping of a two-dimensional disordered system in the quantum Hall regime".
- (462) B. Chilian, A. A. Khajetoorians, S. Lounis, A. T. Costa, D. L. Mills, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 84, 212401 (2011):
"Anomalously large g-factor of single atoms adsorbed on a metal substrate".
- (461) L. Dzemiantsova, M. Karolak, F. Lofink, A. Kubetzka, B. Sachs, K. von Bergmann, S. Hankemeier, T. Wehling, R. Frömter, H. P. Oepen, A. I. Lichtenstein, and R. Wiesendanger, Phys. Rev. B 84, 205431 (2011):
"Multiscale magnetic study on Ni(111) and graphene on Ni(111)".
- (460) J. Wiebe, L. Zhou, and R. Wiesendanger, J. Phys. D: Appl. Phys. 44, 464009 (2011):
"Atomic magnetism revealed by spin-resolved scanning tunneling spectroscopy".
- (459) S. Krause, G. Herzog, A. Schlenhoff, and R. Wiesendanger, Phys. Rev. Lett. 107, 186601 (2011):
"Joule heating and spin-transfer torque investigated on the atomic scale using a spin-polarized scanning tunneling microscope".
- (458) O. Pietzsch and R. Wiesendanger, Pure and Applied Chemistry 83, 1981 (2011):
"Non-collinear magnetic order in nanostructures investigated by spin-polarized scanning tunneling microscopy".

- (457) M. Gyamfi, T. Eelbo, M. Wasniowska, and R. Wiesendanger, Phys. Rev. B 84, 113403 (2011):
"Fe adatoms on graphene/Ru(0001): adsorption site and local electronic properties".
- (456) J. E. Bickel, F. Meier, J. Brede, A. Kubetzka, K. von Bergmann, and R. Wiesendanger, Phys. Rev. B 84, 054454 (2011):
"Magnetic properties of monolayer Co islands on Ir(111) probed by spin-resolved scanning tunneling microscopy".
- (455) S. Heinze, K. von Bergmann, M. Menzel, J. Brede, A. Kubetzka, R. Wiesendanger, G. Bihlmayer, and S. Blügel, Nature Physics 7, 713 (2011):
"Spontaneous atomic-scale magnetic skyrmion lattice in two dimensions".
- (454) T. Stapelfeldt, R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. Lett. 107, 027203 (2011):
"Domain wall manipulation with a magnetic tip".
- (453) N. Mikuszeit, S. Meckler, R. Wiesendanger, and R. Miranda, Phys. Rev. B 84, 054404 (2011):
"Magnetostatics and the rotational sense of cycloidal spin spirals".
- (452) R. Schmidt, C. Lazo, U. Kaiser, A. Schwarz, S. Heinze, and R. Wiesendanger, Phys. Rev. Lett. 106, 257202 (2011):
"Quantitative measurement of the magnetic exchange interaction across a vacuum gap".
- (451) G. Teobaldi, K. Lämmle, T. Trevethan, M. Watkins, A. Schwarz, R. Wiesendanger, and A. L. Shluger, Phys. Rev. Lett. 106, 216102 (2011):
"Chemical resolution at ionic crystal surfaces using dynamic atomic force microscopy with metallic tips".
- (450) B. Chilian, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 83, 195431 (2011):
"Experimental variation and theoretical analysis of the inelastic contribution to atomic spin excitation spectroscopy".
- (449) P. Weinberger, E. Y. Vedmedenko, R. Wieser, and R. Wiesendanger, Phil. Mag. 91, 2248 (2011):
"A multi-scale model of domain wall velocities based on ab initio parameters".
- (448) A. A. Khajetoorians, J. Wiebe, B. Chilian, and R. Wiesendanger, Science 332, 1062 (2011):
"Realizing all-spin based logic operations atom by atom".
- (447) M. Gyamfi, T. Eelbo, M. Wasniowska, and R. Wiesendanger, Phys. Rev. B 83, 153418 (2011):
"Inhomogeneous electronic properties of monolayer graphene on Ru(0001)".

-
- (446) E. Y. Vedmedenko, N. Mikuszeit, T. Stapelfeldt, R. Wieser, M. Potthoff, A. Lichtenstein, and R. Wiesendanger, *Eur. Phys. J. B* 80, 331 (2011): "Spin-spin correlations in ferromagnetic nanosystems".
 - (445) R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, *Phys. Rev. Lett.* 106, 067204 (2011): "Indirect control of antiferromagnetic domain walls with spin currents".
 - (444) F. Meier, S. Lounis, J. Wiebe, L. Zhou, S. Heers, P. Mavropoulos, P. H. Dederichs, S. Blügel, and R. Wiesendanger, *Phys. Rev. B* 83, 075407 (2011): "Spin polarization of platinum (111) induced by the proximity to cobalt nanostripes".
 - (443) A. A. Khajetoorians, S. Lounis, B. Chilian, A. T. Costa, L. Zhou, D. L. Mills, J. Wiebe, and R. Wiesendanger, *Phys. Rev. Lett.* 106, 037205 (2011): "Itinerant nature of atom-magnetization excitation by tunneling electrons".
 - (442) R. Wiesendanger, *Current Opinion in Solid State and Materials Science* 15, 1 (2011): "Single-atom magnetometry".
 - (441) J. I. Arnaudas, A. Badia-Majós, L. Berbil-Bautista, M. Bode, F. J. Castano, M. Ciria, C. de la Fuente, J. L. Diez-Ferrer, S. Krause, B. G. Ng, R. C. O'Handley, C. A. Ross, and R. Wiesendanger, *The Physics of Metals and Metallography* 168, 177 (2010): "Magnetoelastic effects in nanostructures".
 - (440) H. Bistry, B. Wolter, B. Schütz, R. Wiesendanger, and J. Zhang, *Proc. 10th International Conference on Nanotechnology, IEEE Nano 2010*: "An approach for automated scale invariant STM-scan matching using SIFT".
 - (439) A. A. Khajetoorians, B. Chilian, J. Wiebe, S. Schuwalow, F. Lechermann, and R. Wiesendanger, *Nature* 467, 1084 (2010): "Detecting excitation and magnetization of individual dopants in a semiconductor".
 - (438) R. Wieser, E. Y. Vedmedenko, P. Weinberger, and R. Wiesendanger, *Phys. Rev. B* 82, 144430 (2010): "Current driven domain wall motion in cylindrical nanowires".
 - (437) N. Baadji, S. Kuck, J. Brede, G. Hoffmann, R. Wiesendanger, and S. Sanvito, *Phys. Rev. B* 82, 115447 (2010): "Controlled sequential dehydrogenation of single molecules by scanning tunneling microscopy".

- (436) A. Schlenhoff, S. Krause, G. Herzog, and R. Wiesendanger, Appl. Phys. Lett. 97, 083104 (2010):
"Bulk Cr tips with full spatial magnetic sensitivity for spin-polarized scanning tunneling microscopy".
- (435) K. Lämmle, T. Trevethan, A. Schwarz, M. Watkins, A. L. Shluger, and R. Wiesendanger, Nano Lett. 10, 2965 (2010):
"Unambiguous determination of the adsorption geometry of a small low-symmetry paramagnetic metal-organic complex on a bulk insulator".
- (434) N. Atodiresei, J. Brede, P. Lazic, V. Caciuc, G. Hoffmann, R. Wiesendanger, and S. Blügel, Phys. Rev. Lett. 105, 066601 (2010):
"Design of the local spin-polarization at the organic-ferromagnetic interface".
- (433) L. Zhou, F. Meier, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 82, 012409 (2010):
"Inversion of spin polarization above individual magnetic adatoms".
- (432) J. Brede, N. Atodiresei, S. Kuck, P. Lazic, V. Caciuc, Y. Morikawa, G. Hoffmann, S. Blügel, and R. Wiesendanger, Phys. Rev. Lett. 105, 047204 (2010):
"Spin- and energy-dependent tunneling through a single molecule with intramolecular spatial resolution".
- (431) S.-H. Chang, A. Scarfato, C. Kleeberg, M. Bröring, G. Hoffmann, and R. Wiesendanger, Langmuir 26, 10868 (2010):
"Adsorption behaviour of asymmetric Pd pincer complexes on a Cu(111) surface".
- (430) S. Kuck, M. Probst, M. Funk, M. Bröring, G. Hoffmann, and R. Wiesendanger, J. Vac. Sci. Technol. A 28, 795 (2010):
"Disposition of the axial ligand in the physical vapor deposition of organometallic complexes".
- (429) K. Lämmle, A. Schwarz, and R. Wiesendanger, Rev. Sci. Instrum. 81, 053902 (2010):
"Miniaturized transportable evaporator for molecule deposition inside cryogenic scanning probe microscopes".
- (428) C. J. Chen, A. Schwarz, R. Wiesendanger, O. Horn, and J. Müller, Rev. Sci. Instrum. 81, 053702 (2010):
"Three-electrode self-actuating self-sensing quartz cantilever: design, analysis, and experimental verification".
- (427) D. Serrate, P. Ferriani, Y. Yoshida, S.-W. Hla, M. Menzel, K. von Bergmann, S. Heinze, A. Kubetzka, and R. Wiesendanger, Nature Nanotechnology 5, 350 (2010):
"Imaging and manipulating the spin direction of individual atoms".

- (426) A. Schwarz, M. Liebmann, U. H. Pi, and R. Wiesendanger, New J. Phys. 12, 033022 (2010):
"Real space visualization of thermal fluctuations in a triangular flux line lattice".
- (425) G. Herzog, S. Krause, and R. Wiesendanger, Appl. Phys. Lett. 96, 102505 (2010):
"Heat assisted spin torque switching of quasistable nanomagnets across a vacuum gap".
- (424) R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. B 81, 024405 (2010):
"Domain wall motion damped by emission of spin waves".
- (423) L. Zhou, J. Wiebe, S. Lounis, E. Vedmedenko, F. Meier, S. Blügel, P. H. Dederichs, and R. Wiesendanger, Nature Physics 6, 187 (2010):
"Strength and directionality of surface RKKY-interaction mapped on the atomic scale".
- (422) L. Berbil-Bautista, S. Krause, M. Bode, A. Badia-Majos, C. de la Fuente, R. Wiesendanger, and J. I. Arnaud, Phys. Rev. B 80, 241408 (2009):
"Nanoscale spin structures dominated by magnetoelastic interactions around dislocation cores as seen via spin-polarized STM".
- (421) S. Meckler, N. Mikuszeit, A. Pressler, E. Vedmedenko, O. Pietzsch, and R. Wiesendanger, Phys. Rev. Lett. 103, 157201 (2009):
"Real-space observation of a right-handed inhomogeneous cycloidal spin spiral by spin-polarized scanning tunneling microscopy in a triple axes vector magnet".
- (420) A. Stupakiewicz, E. Y. Vedmedenko, A. Fleurence, T. Maroutian, P. Beauvillain, A. Maziewski, and R. Wiesendanger, Phys. Rev. Lett. 103, 137202 (2009):
"Atomic-level control of the domain-wall velocity in ultrathin magnets by tuning of exchange interactions".
- (419) S. Modesti, H. Gutzmann, J. Wiebe, and R. Wiesendanger, Phys. Rev. B 80, 125326 (2009):
"Correction of systematic errors in scanning tunneling spectroscopy on semiconductor surfaces".
- (418) S. Krause, G. Herzog, T. Stapelfeldt, L. Berbil-Bautista, M. Bode, E.Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. Lett. 103, 127202 (2009):
"Magnetization reversal of nanoscale islands: How size and shape affect the Arrhenius prefactor".

- (417) S. Fremy, A. Schwarz, K. Lämmle, M. Prosenc, and R. Wiesendanger, *Nanotechnology* 20, 405608 (2009):
"The monomer-to-dimer transition and bimodal growth of Co-salen on NaCl(001): a high-resolution atomic force microscopy study".
- (416) S. Kuck, S.-H. Chang, J.-P. Klöckner, M. H. Prosenc, G. Hoffmann, and R. Wiesendanger, *ChemPhysChem* 10, 2008 (2009):
"Steering two-dimensional molecular growth via dipolar interaction".
- (415) N. Mikuszeit, L. Baraban, E. Y. Vedmedenko, A. Erbe, P. Leiderer, and R. Wiesendanger, *Phys. Rev. B* 80, 014402 (2009):
"Quasi-antiferromagnetic 120° Néel-state in two-dimensional clusters of dipole-quadrupole-interacting particles on a hexagonal lattice".
- (414) J. Brede, S. Kuck, J. Schwöbel, S.-H. Chang, G. Hoffmann, R. Wiesendanger, M. Linares, A. Scarfato, R. Lensen, P. H. J. Kouwer, J. Hoogboom, A. E. Rowan, M. Bröring, M. Funk, S. Stafström, F. Zerbetto, and R. Lazzaroni, *Nanotechnology* 20, 275602 (2009):
"Dynamics of molecular self-ordering in tetraphenyl porphyrin monolayers on metallic substrates".
- (413) A. Schwarz, U. Kaiser, and R. Wiesendanger, *Nanotechnology* 20, 264017 (2009):
"Towards an understanding of the atomic-scale magnetic contrast formation in NC-AFM: a tip material dependent magnetic exchange force microscopy study on NiO(001)".
- (412) R. Schmidt, A. Schwarz, and R. Wiesendanger, *Nanotechnology* 20, 264007 (2009):
"Hydrogen-related contrast in atomic force microscopy".
- (411) M. Ashino, D. Obergfell, M. Haluska, S. Yang, A. N. Khlobystov, S. Roth, and R. Wiesendanger, *Nanotechnology* 20, 264001 (2009):
"Atomic-resolution three-dimensional force and damping maps of carbon nanotube peapods".
- (410) R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, *Phys. Rev. B* 79, 144412 (2009):
"Quantized spin waves in ferro- and antiferromagnetic structures with domain walls".
- (409) R. Wiesendanger, *Rev. Mod. Phys.* 81, 1495 (2009):
"Spin mapping at the nanoscale and atomic scale".

- (408) M. Ashino, R. Wiesendanger, A. N. Khlobystov, S. Berber, and D. Tomanek, Phys. Rev. Lett. 102, 195503 (2009):
"Revealing subsurface vibrational modes by atom-resolved damping force spectroscopy".
- (407) S. Meckler, M. Gyamfi, O. Pietzsch, and R. Wiesendanger, Rev. Sci. Instrum. 80, 023708 (2009):
"A low-temperature spin-polarized scanning tunneling microscope operating in a fully rotatable magnetic field".
- (406) J. Brede, M. Linares, R. Lensen, A. E. Rowan, M. Funk, M. Bröring, G. Hoffmann, and R. Wiesendanger, J. Vac. Sci. Technol. B 27, 799 (2009):
"Adsorption and conformation of porphyrins on metallic surfaces".
- (405) G. Maruccio, Chr. Meyer, T. Matsui, R. Wiesendanger, D. V. Talapin, S. Hickey, and H. Weller, Small 5, 808 (2009):
"Wavefunction mapping of immobilized semiconductor nanocrystals".
- (404) R. Schmidt, C. Lazo, H. Hölscher, U. H. Pi, V. Caciuc, A. Schwarz, R. Wiesendanger, and S. Heinze, Nano Lett. 9, 200 (2009):
"Probing the magnetic exchange forces of iron on the atomic scale".
- (403) S.-H. Chang, S. Kuck, J. Brede, L. Lichtenstein, G. Hoffmann, and R. Wiesendanger, Phys. Rev. B 78, 233409 (2008):
"Symmetry reduction of metal phthalocyanines on metals".
- (402) K. Hashimoto, C. Sohrmann, J. Wiebe, T. Inaoka, F. Meier, Y. Hirayama, R. A. Römer, R. Wiesendanger, and M. Morgenstern, Phys. Rev. Lett. 101, 256802 (2008):
"Quantum Hall transition in real space: From localized to extended states".
- (401) L. Sacharow, R. Wiesendanger, G. Bihlmayer, S. Blügel, and M. Morgenstern, Surf. Sci. 602, 3297 (2008):
"Anisotropic superexchange in one-dimensional Fe-chains on InAs(110)".
- (400) S. Kuck, G. Hoffmann, M. Bröring, M. Fechtel, M. Funk, and R. Wiesendanger, J. Am. Chem. Soc. 130, 14072 (2008):
"Naked iron-5, 10, 15-triphenylcorrole on Cu(111): Observation of chirality on a surface and manipulation of multiple conformational states by STM".
- (399) U. Kaiser, A. Schwarz, and R. Wiesendanger, Phys. Rev. B 78, 104418 (2008):
"Evaluating local properties of magnetic tips utilizing an antiferromagnetic surface".
- (398) R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, Phys. Rev. Lett. 101, 177202 (2008):
"Quantized spin waves in antiferromagnetic Heisenberg chains".

-
- (397) E. Y. Vedmedenko, and R. Wiesendanger, *Phil. Mag.* 88, 2683 (2008):
"Modulated multipolar structures in nanomagnetic arrays".
 - (396) K. von Bergmann, M. Bode, P. Ferriani, S. Heinze, A. Kubetzka, O. Pietzsch, E. Y. Vedmedenko, and R. Wiesendanger, *Phil. Mag.* 88, 2627 (2008):
"Complex magnetic order on the atomic scale revealed by spin-polarized scanning tunneling microscopy".
 - (395) S. Kuck, J. Wienhausen, G. Hoffmann, and R. Wiesendanger, *Rev. Sci. Instrum.* 79, 083903 (2008):
"A versatile variable-temperature scanning tunneling microscope for molecular growth".
 - (394) P. Ferriani, K. von Bergmann, E. Y. Vedmedenko, S. Heinze, M. Bode, M. Heide, G. Bihlmayer, S. Blügel, and R. Wiesendanger, *Phys. Rev. Lett.* 101, 027201 (2008):
"Atomic-scale spin spiral with a unique rotational sense: Mn monolayer on W(001)".
 - (393) M. Ashino, D. Obergfell, M. Haluska, S. Yang, A. N. Khlobystov, S. Roth, and R. Wiesendanger, *Nature Nanotechnol.* 3, 337 (2008):
"Atomically resolved mechanical responses from individual metallofullerene molecules confined inside carbon nanotubes".
 - (392) F. Meier, L. Zhou, J. Wiebe, and R. Wiesendanger, *Science* 320, 82 (2008):
"Revealing magnetic interactions from single-atom magnetization curves".
 - (391) A. Scarfato, S.-H. Chang, S. Kuck, J. Brede, G. Hoffmann, and R. Wiesendanger, *Surf. Sci.* 602, 677 (2008):
"Scanning tunneling microscope study of iron(II) phthalocyanine (FePc) growth on metals and insulating surfaces".
 - (390) A. Schwarz and R. Wiesendanger, *Nano Today* 3, 28 (2008):
"Magnetic sensitive force microscopy: MFM and MExFM".
 - (389) F. Marczinowski, J. Wiebe, F. Meier, K. Hashimoto, and R. Wiesendanger, *Phys. Rev. B* 77, 115318 (2008):
"Effect of charge manipulation on scanning tunneling spectra of single Mn acceptors in InAs".
 - (388) R. Wieser, E. Y. Vedmedenko, and R. Wiesendanger, *Phys. Rev. B* 77, 064410 (2008):
"Entropy driven phase transition in itinerant antiferromagnetic monolayers".

- (387) E. V. Konenkova, D. Grundler, M. Morgenstern, and R. Wiesendanger, *Technical Physics Letters* 34, 30 (2008):
"Metal-insulator transition in graphite: A comparison to heterostructures with high carrier mobility".
- (386) B. Santos, J. M. Puerta, J. I. Cerda, R. Stumpf, K. von Bergmann, R. Wiesendanger, M. Bode, K. F. McCarty, and J. de la Figuera, *New J. of Phys.* 10, 013005 (2008):
"Structure and magnetism of ultra-thin chromium layers on W(110)".
- (385) M. Schult, N. Mikuszeit, E. Y. Vedmedenko, and R. Wiesendanger, *J. Phys. A: Math. Theor.* 40, 14791 (2007):
"Multipole moments of general ellipsoids with two polarised domains".
- (384) K. von Bergmann, S. Heinze, M. Bode, G. Bihlmayer, S. Blügel, and R. Wiesendanger, *New. J. of Phys.* 9, 396 (2007):
"Complex magnetism of the Fe monolayer on Ir(111)".
- (383) F. Marczinowski, J. Wiebe, J.-M. Tang, M. E. Flatté, F. Meier, M. Morgenstern, and R. Wiesendanger, *Phys. Rev. Lett.* 99, 157202 (2007):
"Local electronic structure near Mn acceptors in InAs: Surface-induced symmetry breaking and coupling to host states".
- (382) G. Maruccio, M. Jansen, A. Schramm, Chr. Meyer, T. Matsui, Chr. Heyn, W. Hansen, R. Wiesendanger, M. Rontani, and E. Molinari, *Nano Lett.* 7, 2701 (2007):
"Correlation effects in wave function mapping of molecular beam epitaxy grown quantum dots".
- (381) S. Krause, L. Berbil-Bautista, G. Herzog, M. Bode, and R. Wiesendanger, *Science* 317, 1537 (2007):
"Current-induced magnetization switching with a Spin-Polarized Scanning Tunneling Microscope".
- (380) M. Bode, S. Krause, L. Berbil-Bautista, S. Heinze, and R. Wiesendanger, *Surf. Sci.* 601, 3308 (2007):
"On the preparation and electronic properties of clean W(110) surfaces".
- (379) L. Berbil-Bautista, S. Krause, M. Bode, and R. Wiesendanger, *Phys. Rev. B* 76, 064411 (2007):
"Spin-polarized scanning tunneling microscopy and spectroscopy of ferromagnetic Dy(0001)/W(110) films".
- (378) A. Kubetzka, M. Bode, and R. Wiesendanger, *Appl. Phys. Lett.* 91, 012508 (2007):
"Spin-polarized STM in field emission mode".

-
- (377) T. Richter, S. S. Biel, M. Sattler, H. Wenck, K.-P. Wittern, R. Wiesendanger, and R. Wepf, *J. Microsc.* 225 (Pt 2), 201 (2007):
"Pros and cons: cryo-electron microscopic evaluation of block faces versus cryo-sections from frozen-hydrated skin specimens prepared by different techniques".
 - (376) M. Bode, M. Heide, K. von Bergmann, P. Ferriani, S. Heinze, G. Bihlmayer, A. Kubetzka, O. Pietzsch, S. Blügel, and R. Wiesendanger, *Nature* 447, 190 (2007):
"Chiral magnetic order at surfaces driven by inversion asymmetry".
 - (375) M. Rontani, E. Molinari, G. Maruccio, M. Janson, A. Schramm, Chr. Meyer, T. Matsui, Chr. Heyn, W. Hansen, and R. Wiesendanger, *J. Appl. Phys.* 101, 081714 (2007):
"Imaging correlated wave functions of few-electron quantum dots: Theory and STS experiments".
 - (374) T. Matsui, Chr. Meyer, L. Sacharow, J. Wiebe, and R. Wiesendanger, *Phys. Rev. B* 75, 165405 (2007):
"Electronic States of Fe Atoms and Chains on InAs(110) from Scanning Tunneling Spectroscopy".
 - (373) U. Kaiser, A. Schwarz, and R. Wiesendanger, *Nature* 446, 522 (2007):
"Magnetic Exchange Force Microscopy with Atomic Resolution".
 - (372) T. Wehling, A. V. Balatsky, M. I. Katsnelson, A. I. Lichtenstein, K. Scharnberg, and R. Wiesendanger, *Phys. Rev. B* 75, 125425 (2007):
"Local electronic signatures of impurity states in graphene".
 - (371) E. Y. Vedmedenko, L. Udvardi, P. Weinberger, and R. Wiesendanger, *Phys. Rev. B* 75, 104431 (2007):
"Chiral magnetic ordering in two-dimensional ferromagnets with competing Dzyaloshinsky-Moriya interactions".
 - (370) F. Meier, K. von Bergmann, J. Wiebe, M. Bode, and R. Wiesendanger, *Appl. Phys.* 40, 1306 (2007):
"Co double-layer nanostructures on Pt(111) studied by spin-polarized scanning tunneling microscopy".
 - (369) F. Meier, K. von Bergmann, P. Ferriani, J. Wiebe, M. Bode, K. Hashimoto, S. Heinze, and R. Wiesendanger, *Phys. Rev. B* 74, 195411 (2006):
"Spin-dependent electronic and magnetic properties of Co nanostructures on Pt(111) studied by spin-resolved scanning tunneling spectroscopy".
 - (368) S. Krause, L. Berbil-Bautista, T. Hänke, F. Vonau, M. Bode, and R. Wiesendanger, *Europhys. Lett.* 76, 637 (2006):
"Consequences of Line Defects on the Magnetic Structure of High Anisotropy Films: Pinning Centers on Dy/W(110) ".

- (367) C. J. Chen and R. Wiesendanger, Phys. Rev. B 74, 113102 (2006):
"A perturbation theory of exchange interaction".
- (366) K. von Bergmann, M. Bode, and R. Wiesendanger, J. Magn. Magn. Mater. 305, 279 (2006):
"Coverage-dependent spin reorientation transition temperature of the Fe double-layer on W(110) observed by scanning tunneling microscopy".
- (365) O. Pietzsch, A. Kubetzka, M. Bode, S. Heinze, S. Okatov, A. Lichtenstein, and R. Wiesendanger, Phys. Rev. Lett. 96, 237203 (2006):
"Spin-resolved electronic structure of nanometer-scale cobalt islands on Cu(111)".
- (364) K. von Bergmann, S. Heinze, M. Bode, E. Y. Vedmedenko, G. Bihlmayer, S. Blügel, and R. Wiesendanger, Phys. Rev. Lett. 96, 167203 (2006):
"Observation of a complex nano-scale magnetic structure in a hexagonal Fe monolayer".
- (363) M. Bode, E. Y. Vedmedenko, K. von Bergmann, A. Kubetzka, P. Ferriani, S. Heinze, and R. Wiesendanger, Nature Materials 5, 477 (2006):
"Atomic Spin Structure of Antiferromagnetic Domain Walls".
- (362) U. H. Pi, Z. G. Khim, D. H. Kim, A. Schwarz, M. Liebmann, and R. Wiesendanger, Phys. Rev. B 73, 144505 (2006):
"Visualizing flux distribution of superconductors in external magnetic fields with magnetic force microscopy".
- (361) M. Ashino and R. Wiesendanger, Jpn. J. Appl. Phys. 45 (3B), 2286 (2006):
"Atomic-resolution dynamic force microscopy/spectroscopy of an individual single-walled carbon nanotube".
- (360) F. Marczinowski, K. von Bergmann, M. Bode, and R. Wiesendanger, Surf. Sci. 600, 1034 (2006):
"Growth of Cr on Ir(111) studied by scanning tunneling microscopy".
- (359) M. Bode, K. von Bergmann, O. Pietzsch, A. Kubetzka, and R. Wiesendanger, J. Magn. Magn. Mater. 304, 1 (2006):
"Spin-polarized scanning tunneling spectroscopy of dislocation lines in Fe films on W(110)".
- (358) L. Berbil-Bautista, S. Krause, T. Hänke, M. Bode, and R. Wiesendanger, Surf. Sci. 600, L20 (2006):
"Spin-polarized scanning tunneling microscopy through an adsorbate layer: sulfur-covered Fe/W(110)".
- (357) E. Y. Vedmedenko, U. Grimm, and R. Wiesendanger, Phil. Mag. 86, 733 (2006):
"Interplay between magnetic and spatial order in quasicrystals".

- (356) A. Schwarz, M. Liebmann, R. Wiesendanger, U. H. Pi, Z. G. Khim, and D. H. Kim, Appl. Phys. Lett. 88, 012507 (2006):
"Observation of the flux-antiflux boundary propagation during magnetization reversal in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ crystal with single vortex resolution".
- (355) M. Ashino and R. Wiesendanger, J. Investig. Dermatology 125, A30 (2005):
"Cryogenic dynamic force microscopy/spectroscopy of molecular systems: Introduction and application to biological macromolecules".
- (354) J. Wiebe, F. Meier, K. Hashimoto, G. Bihlmayer, S. Blügel, P. Ferriani, S. Heinze, and R. Wiesendanger, Phys. Rev. B 72, 193406 (2005):
"Unoccupied surface state on Pt(111) revealed by scanning tunneling spectroscopy".
- (353) E. Y. Vedmedenko, N. Mikuszeit, H. P. Oepen, and R. Wiesendanger, Phys. Rev. Lett. 95, 207202 (2005):
"Multipolar ordering and magnetization reversal in two-dimensional nanomagnet arrays".
- (352) T. Hänke, M. Bode, S. Krause, L. Berbil-Bautista, and R. Wiesendanger, Phys. Rev. B 72, 085453 (2005):
"Temperature-dependent scanning tunneling spectroscopy of Cr(001): orbital Kondo resonance versus surface state".
- (351) T. Hänke, S. Krause, L. Berbil-Bautista, M. Bode, R. Wiesendanger, D. Lott, and A. Schreyer, Phys. Rev. B 71, 184407 (2005):
"Absence of spin-flip transition at the Cr(001) surface:
A combined spin-polarized scanning tunneling microscopy and neutron scattering study".
- (350) M. Liebmann, A. Schwarz, U. Kaiser, R. Wiesendanger, D.-W. Kim, and T. W. Noh, Phys. Rev. B 71, 104431 (2005):
"Magnetization reversal of a structurally disordered manganite thin film with perpendicular anisotropy".
- (349) N. Mikuszeit, E. Y. Vedmedenko, R. Wiesendanger, and H. P. Oepen, J. Appl. Phys. 97, 10J502 (2005):
"Multipole moments of in-plane magnetized disks".
- (348) M. Bode, A. Kubetzka, K. von Bergmann, O. Pietzsch, and R. Wiesendanger, J. Microsc. Res. & Techn. 66, 117 (2005):
"Imaging the switching behavior of superparamagnetic nanoislands by spin-polarized scanning tunneling microscopy".

-
- (347) K. von Bergmann, M. Bode, A. Kubetzka, O. Pietzsch, and R. Wiesendanger, *J. Microsc. Res. & Techn.* 66, 61 (2005):
"Spin-polarized scanning tunneling microscopy: insight into magnetism from nanostructures to atomic scale spin structures".
 - (346) R. Wiesendanger, *J. Microsc. Res. & Techn.* 66, 59 (2005):
"Fifteen Years of Spin-Polarized Scanning Tunneling Microscopy".
 - (345) E. Y. Vedmedenko, K. von Bergmann, H. P. Oepen, and R. Wiesendanger, *J. Magn. Magn. Mater.* 290-291, 746 (2005):
"Lattice-dependent anisotropy in the orientation of magnetic domain walls".
 - (344) A. Kubetzka, P. Ferriani, M. Bode, S. Heinze, G. Bihlmayer, K. von Bergmann, O. Pietzsch, S. Blügel, and R. Wiesendanger, *Phys. Rev. Lett.* 94, 087204 (2005):
"Revealing Antiferromagnetic Order of the Fe Monolayer on W(001): Spin-Polarized Scanning Tunneling Microscopy and First-Principles Calculations".
 - (343) M. Bode, R. Ravlic, M. Kleiber, and R. Wiesendanger, *Appl. Phys. A* 80, 907 (2005):
"Growth and magnetism of Fe on Cr(001): A spin-polarized scanning tunneling spectroscopy and magnetic force microscopy study".
 - (342) M. Ashino, A. Schwarz, H. Hölscher, U. D. Schwarz, and R. Wiesendanger, *Nanotechnology* 16, S134 (2005):
"Interpretation of the atomic scale contrast obtained on graphite and single-walled carbon nanotubes in the dynamic mode of atomic force microscopy".
 - (340) U. H. Pi, Z. G. Khim, D. H. Kim, A. Schwarz, M. Liebmann, and R. Wiesendanger, *Appl. Phys. Lett.* 85, 5307 (2004):
"Dynamic force spectroscopy across an individual strongly pinned Vortex in a $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ single crystal".
 - (339) M. Getzlaff, R. Pascal, and R. Wiesendanger, *Surf. Sci.* 566, 236 (2004):
"Controlled preparation of a magnetic thin film alloy: GdFe_2 and GdFe_3 ".
 - (338) K. von Bergmann, M. Bode, and R. Wiesendanger, *Phys. Rev. B* 70, 174455 (2004):
"Magnetism of iron on tungsten(001) studied by spin-resolved scanning tunneling microscopy and spectroscopy".
 - (337) L. Berbil-Bautista, T. Hänke, M. Getzlaff, R. Wiesendanger, I. Opahle, K. Koepf, and M. Richter, *Phys. Rev. B* 70, 113401 (2004):
"Observation of 5f-states on U/W(110) films by means of scanning tunneling spectroscopy".

- (336) J. Wiebe, A. Wachowiak, F. Meier, D. Haude, T. Foster, M. Morgenstern, and R. Wiesendanger, *Rev. Sci. Instrum.* 75, 4871 (2004):
"A 300 mK ultra-high vacuum scanning tunneling microscope facility for spin-resolved spectroscopy".
- (335) T. Richter, C. Peuckert, M. Sattler, K. König, I. Riemann, U. Hintze, K.-P. Wittern, R. Wiesendanger, and R. Wepf, *Skin pharmacology and physiology* 17, 246 (2004):
"Dead but highly dynamic - the stratum corneum is divided into three hydration zones".
- (334) M. Ashino, A. Schwarz, T. Behnke, and R. Wiesendanger, *Phys. Rev. Lett.* 93, 136101 (2004):
"Atomic-resolution dynamic force microscopy and spectroscopy of a single walled carbon nanotube: characterization of interatomic van der Waals forces".
- (333) E. Y. Vedmedenko, U. Grimm, and R. Wiesendanger, *Phys. Rev. Lett.* 93, 076407 (2004):
"Noncollinear magnetic order in quasicrystals".
- (332) M. Morgenstern, T. Strasser, R. Adelung, M. Getzlaff, L. Kipp, W. Schattke, M. Skibowski, and R. Wiesendanger, *Phys. Rev. B* 70, 081305 (2004):
"Contributions of escape depth to photoelectron intensity of a well defined initial state".
- (331) J. Wiebe, L. Sacharow, A. Wachowiak, G. Bihlmayer, S. Heinze, S. Blügel, M. Morgenstern, and R. Wiesendanger, *Phys. Rev. B* 70, 035404 (2004):
"Scanning tunneling spectroscopy on cobalt(0001): spectroscopic signature of stacking faults and dislocation lines".
- (330) M. Liebmann, U. Kaiser, A. Schwarz, R. Wiesendanger, U. H. Pi, T. W. Noh, Z. G. Khim, and D.-W. Kim, *J. Magn. Magn. Mater.* 280/1, 51 (2004):
"Tilted magnetization of a $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{LaAlO}_3(001)$ thin film".
- (329) R. Wiesendanger, M. Bode, A. Kubetzka, O. Pietzsch, M. Morgenstern, A. Wachowiak, and J. Wiebe, *J. Magn. Magn. Mater.* 272 - 276, 2115 (2004):
"Fundamental studies of magnetism down to the atomic scale: present status and future perspectives of spin-polarized scanning tunneling microscopy".
- (328) U. H. Pi, Z. G. Khim, D. H. Kim, A. Schwarz, M. Liebmann, and R. Wiesendanger, *Phys. Rev. B* 69, 094518 (2004):
"Direct observation of the vortices trapped in stacking fault dislocations of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ by a low-temperature magnetic force microscope".

-
- (327) J. Klijn, L. Sacharow, Chr. Meyer, S. Blügel, M. Morgenstern, and R. Wiesendanger, Phys. Rev. B 68, 205327 (2004):
"STM measurements on the InAs(110) surface directly compared with surface electronic structure calculations".
 - (326) O. Pietzsch, A. Kubetzka, M. Bode, and R. Wiesendanger, Appl. Phys. A 78, 781 (2004):
"Recent Advances in Spin-Polarized Scanning Tunneling Microscopy".
 - (325) N. Duhayon, P. Eyben, M. Fouchier, T. Clarysse, W. Vandervorst, D. Alvarez, S. Schoemann, M. Ciappa, M. Stangoni, W. Fichtner, P. Formanek, M. Kittler, V. Raineri, F. Giannazzo, D. Goghero, Y. Rosenwaks, R. Shikler, S. Saraf, S. Sadewasser, N. Barreau, T. Glatzel, M. Verheijen, S. A. M. Mentink, M. von Spretkelsen, T. Maltezopoulos, R. Wiesendanger, and L. Hellemans, J. Vac. Sci. Technol. B22, 385 (2004):
"Assessing the performance of two dimensional dopant profiling techniques".
 - (324) E. Y. Vedmedenko, A. Kubetzka, K. von Bergmann, O. Pietzsch, M. Bode, J. Kirschner, H. P. Oepen, and R. Wiesendanger, Phys. Rev. Lett. 92, 077207 (2004):
"Domain Wall Orientation in Magnetic Nanowires".
 - (323) A. Schwarz, M. Liebmann, U. Kaiser, R. Wiesendanger, T. W. Noh, and D. W. Kim, Phys. Rev. Lett. 92, 077206 (2004):
"Visualization of the Barkhausen Effect by Magnetic Force Microscopy".
 - (322) M. Bode, A. Wachowiak, J. Wiebe, A. Kubetzka, M. Morgenstern, and R. Wiesendanger, Appl. Phys. Lett. 84, 948 (2004):
"Thickness dependent magnetization states of Fe islands on W(110): From single domain to vortex and diamond patterns".
 - (321) M. Bode, O. Pietzsch, A. Kubetzka, and R. Wiesendanger, Phys. Rev. Lett. 92, 067201 (2004):
"Shape dependent Thermal Switching Behavior of Superparamagnetic Nanoislands".
 - (320) O. Pietzsch, A. Kubetzka, M. Bode, and R. Wiesendanger, Phys. Rev. Lett. 92, 057202 (2004):
"Spin-polarized scanning tunneling spectroscopy of nano-scale cobalt islands on Cu(111)".
 - (319) K. von Bergmann, M. Bode, A. Kubetzka, M. Heide, S. Blügel, and R. Wiesendanger, Phys. Rev. Lett. 92, 046801 (2004):
"Spin-polarized electron scattering at single oxygen adsorbates on a magnetic surface".

- (318) T. Richter, M. Sattler, R. Wiesendanger, K.-P. Wittern, and R. Wepf, *Microscopy and Microanalysis* 9 (Suppl. 2), p. 1546 (2003):
"Frozen hydrated bloc-face investigation of tissue for Cryo-SEM".
- (317) A. Schwarz, H. Hölscher, S. M. Langkat, and R. Wiesendanger, *Proc. STM'03 Conference, Eindhoven, NL* (eds. P. M. Koenraad and M. Kemerink), *AIP Conf. Proc.*, Vol. 696, p. 68 (2003):
"Three-dimensional force field spectroscopy".
- (316) M. Morgenstern, J. Klijn, Chr. Meyer, D. Haude, and R. Wiesendanger, *Proc. STM'03 Conference, Eindhoven, NL* (eds. P. M. Koenraad and M. Kemerink), *AIP Conf. Proc.*, Vol. 696, p. 11 (2003):
"Visualizing the influence of interactions on the nanoscale: simple electron systems".
- (315) Th. Maltezopoulos, A. Bolz, Chr. Meyer, Ch. Heyn, W. Hansen, M. Morgenstern, and R. Wiesendanger, *Phys. Rev. Lett.* 91, 196804 (2003):
"Wave function mapping of InAs quantum dots by scanning tunneling spectroscopy".
- (314) M. Getzlaff, M. Bode, and R. Wiesendanger, *Acta Phys. Pol. A* 104, 327 (2003):
"Surface electronic properties of Fe nanoparticles on c(2x2)-N/Cu(001)".
- (313) A. Kubetzka, O. Pietzsch, M. Bode, R. Ravlic, and R. Wiesendanger, *Acta Phys. Pol. A* 104, 259 (2003):
"Spin-polarized STM investigation of magnetic domain walls".
- (312) M. Morgenstern, J. Klijn, Chr. Meyer, M. Getzlaff, R. L. Johnson, R. Adelung, L. Kipp, R. A. Römer, and R. Wiesendanger, *Jpn. J. Appl. Phys.* 42, 4809 (2003):
"Low density two-dimensional electron systems studied by scanning tunneling spectroscopy".
- (311) U. H. Pi, D. H. Kim, Z. G. Khim, U. Kaiser, M. Liebmann, A. Schwarz, and R. Wiesendanger, *Proc. Int. Conf. Physics and Chemistry of Molecular and Oxide Superconductors*, *J. Low Temp. Phys.* 131, 993 (2003):
"Vortex dynamics in Bi₂Sr₂CaCu₂O₈ single crystals with low density columnar defects studied by magnetic force microscopy".
- (310) J. Wiebe, Chr. Meyer, J. Klijn, M. Morgenstern, and R. Wiesendanger, *Phys. Rev. B* 68, 041402 (2003):
"From quantized states to percolation: Scanning tunneling spectroscopy of a strongly disordered two-dimensional electron system".

- (309) Chr. Meyer, J. Klijn, M. Morgenstern, and R. Wiesendanger, Phys. Rev. Lett. 91, 076803 (2003):
"Direct measurement of the local density of states of a disordered one-dimensional conductor".
- (308) G. Kuri, G. Materlik, V. Hagen, and R. Wiesendanger, J. Vac. Sci. & Technol. B21, 1134 (2003):
"Comparative study of MeV C⁺ and C⁺⁺ ions implantation in GaAs(100): surface roughness and evaluation of lattice strain".
- (307) R. Ravlic, M. Bode, and R. Wiesendanger, J. Phys.: Condens. Matter 15, S 2513 (2003):
"Correlation of structural, local electronic and magnetic properties of Fe on Cr(001) studied by spin-polarized scanning tunneling spectroscopy".
- (306) Th. Maltezopoulos, A. Kubetzka, M. Morgenstern, R. Wiesendanger, S. G. Lemay, and C. Dekker, Appl. Phys. Lett. 83, 1011 (2003):
"Direct observation of confined states in individual metallic single wall carbon nanotubes".
- (305) M. Liebmann, U. Kaiser, A. Schwarz, R. Wiesendanger, U.H. Pi, T.W. Noh, Z.G. Khim and D.-W. Kim, J. Appl. Phys. 93, 8319 (2003):
"Domain nucleation and growth of La_{0.7}Ca_{0.3}MnO_{3-δ} / LaAlO₃ films studied by low temperature MFM".
- (304) R. Ravlic, M. Bode, A. Kubetzka, and R. Wiesendanger, Phys. Rev. B 67, 174411 (2003):
"Correlation of dislocation and domain structure of Cr(001) investigated by spin-polarized scanning tunneling microscopy".
- (303) J. H. Müller, U. D. Schwarz, R. Wepf, and R. Wiesendanger, Appl. Phys. A76, 893 (2003):
"A cryogenic scanning force microscope for the characterization of frozen biological samples".
- (302) A. Kubetzka, O. Pietzsch, M. Bode, and R. Wiesendanger, Appl. Phys. A76, 873 (2003):
"Determining the spin-polarization of surfaces by spin-polarized scanning tunneling spectroscopy".
- (301) S. M. Langkat, H. Hölscher, A. Schwarz, and R. Wiesendanger, Surf. Sci. 527, 12 (2003):
"Determination of site specific interatomic forces between an iron coated tip and the NiO(001) surface by force field spectroscopy".

-
- (300) M. Morgenstern, J. Klijn, Chr. Meyer, and R. Wiesendanger, Phys. Rev. Lett. 90, 056804 (2003):
"Real-space observation of drift states in a two-dimensional electron system at high magnetic fields".
 - (299) M. Bartels, V. Hagen, M. Burianek, M. Getzlaff, U. Bismayer, and R. Wiesendanger, J. Phys.: Condens. Matter 15, 957 (2003):
"Impurity-induced resistivity of ferroelastic domain walls in doped lead phosphate".
 - (298) M. Bode, A. Kubetzka, S. Heinze, O. Pietzsch, R. Wiesendanger, M. Heide, X. Nie, G. Bihlmayer, and S. Blügel, J. Phys.: Condens. Matter 15, S679 (2003):
"Spin-orbit induced local band structure variations revealed by scanning tunneling spectroscopy".
 - (297) M. Morgenstern, D. Haude, J. Klijn, Chr. Meyer, L. Sacharow, S. Heinze, S. Blügel, and R. Wiesendanger, Physica E 16, 121 (2003):
"Comparing the local density of states of three- and two-dimensional electron systems by low-temperature scanning tunneling spectroscopy".
 - (296) A. Kubetzka, O. Pietzsch, M. Bode, and R. Wiesendanger, Phys. Rev. B 67, 020401 (2003):
"Spin-polarized scanning tunneling microscopy study of 360° walls in an external magnetic field".
 - (295) G. Kuri, Th. Schmidt, V. Hagen, G. Materlik, R. Wiesendanger, and J. Falta, J. Vac. Sci. & Technol. A 20, 1997 (2002):
"Subsurface interstitials as promoters of three-dimensional growth on Ti on Si(111): An X-ray standing wave, X-ray photoelectron spectroscopy, and atomic force microscopy investigation".
 - (294) H. Hölscher, S. M. Langkat, A. Schwarz, and R. Wiesendanger, Appl. Phys. Lett. 81, 4428 (2002):
"Measurement of three-dimensional force fields with atomic resolution using dynamic force spectroscopy".
 - (293) M. Morgenstern, D. Haude, J. Klijn, and R. Wiesendanger, Phys. Rev. B 66, 121102 (2002):
"Coulomb pseudogap caused by partial localization of a three dimensional electron system in the extreme quantum limit".
 - (292) M. Bode, S. Heinze, A. Kubetzka, O. Pietzsch, X. Nie, G. Bihlmayer, S. Blügel, and R. Wiesendanger, Phys. Rev. Lett. 89, 237205 (2002):
"Magnetization-direction dependent local electronic structure probed by scanning tunneling spectroscopy".

- (291) M. Morgenstern, V. Gudmundsson, Chr. Wittneven, R. Dombrowski, and R. Wiesendanger, *J. Vac. Sci. & Technol. A* 20, 2032 (2002):
"The influence of potential fluctuations on Landau quantization and spin splitting studied by Low Temperature Scanning Tunneling Spectroscopy on InAs(110)".
- (290) M. Liebmann, A. Schwarz, S. M. Langkat, and R. Wiesendanger, *Rev. Sci. Instrum.* 73, 3508 (2002):
"A low-temperature ultrahigh vacuum scanning force microscope with a split-coil magnet".
- (289) A. Wachowiak, J. Wiebe, M. Bode, O. Pietzsch, M. Morgenstern, and R. Wiesendanger, *Science* 298, 577 (2002):
"Direct Observation of Internal Spin-Structure of Magnetic Vortex Cores".
- (288) M. Morgenstern, J. Klijn, Chr. Meyer, M. Getzlaff, R. Adelung, K. Roßnagel, L. Kipp, M. Skibowski, and R. Wiesendanger, *Phys. Rev. Lett.* 89, 136806 (2002):
"Direct comparison of potential landscape and resulting local density of states of a disordered two-dimensional electron system".
- (287) M. Bode, S. Heinze, A. Kubetzka, O. Pietzsch, M. Hennefarth, M. Getzlaff, R. Wiesendanger, X. Nie, G. Bihlmayer, and S. Blügel, *Phys. Rev. B* 66, 014425 (2002):
"Structural, electronic, and magnetic properties of a Mn monolayer on W(110)".
- (286) R. Wiesendanger, *Vacuum* 65, 235 (2002):
"Nano-scale studies of quantum phenomena by scanning probe spectroscopy".
- (285) M. Bode, A. Kubetzka, O. Pietzsch, and R. Wiesendanger, *Surf. Sci.* 514, 135 (2002):
"Spin-resolved spectro-microscopy of magnetic nanowire arrays".
- (284) M. Morgenstern, J. Wiebe, A. Wachowiak, M. Getzlaff, J. Klijn, L. Plucinks, R.L. Johnson, and R. Wiesendanger, *Phys. Rev. B* 65, 155325 (2002):
"Co on p-InAs(110): An island induced two-dimensional electron system consisting of electron droplets".
- (283) A. Schwarz, U. D. Schwarz, S. Langkat, H. Hölscher, W. Allers, and R. Wiesendanger, *Appl. Surf. Sci.* 188, 245 (2002):
"Dynamic force microscopy with atomic resolution at low temperatures".
- (282) M. Kleiber, M. Bode, R. Ravlic, N. Tezuka, and R. Wiesendanger, *J. Magn. Magn. Mater.* 240, 64 (2002):
"Magnetic properties of the Cr(001) surface studied by spin-polarized scanning tunneling spectroscopy".

-
- (281) A. Kubetzka, M. Bode, O. Pietzsch, and R. Wiesendanger,
Phys. Rev. Lett. 88, 057201 (2002):
"Spin-Polarized Scanning Tunneling Microscopy with Antiferromagnetic
Probe Tips".
 - (280) H. Hölscher, B. Gotsmann, W. Allers, U. D. Schwarz, H. Fuchs,
and R. Wiesendanger,
Phys. Rev. Lett. 88, 019601 (2002):
Comment on "Damping mechanism in dynamic force microscopy".
 - (279) G. Kuri, G. Materlik, V. Hagen, and R. Wiesendanger,
Appl. Phys. A 73, 265 (2001):
"Surface morphology of MgO(100) crystals implanted with MeV Al^+ and
 Al_2^+ ions".
 - (278) M. Pratzer, H. J. Elmers, M. Bode, O. Pietzsch, A. Kubetzka, and
R. Wiesendanger, Phys. Rev. Lett. 87, 127201 (2001):
"Atomic-scale magnetic domain walls in quasi-one-dimensional Fe
nanostripes".
 - (277) M. Morgenstern, D. Haude, Chr. Meyer, and R. Wiesendanger,
Phys. Rev. B 64, 205104 (2001):
"Experimental evidence for edge-like states in three-dimensional electron
systems".
 - (276) H. Hölscher, B. Gotsmann, W. Allers, U. D. Schwarz, H. Fuchs, and
R. Wiesendanger, Phys. Rev. B 64, 075402 (2001):
"Measurement of conservative and dissipative tip-sample interaction forces with
a dynamic force microscope using the frequency modulation technique".
 - (275) O. Pietzsch, A. Kubetzka, M. Bode, and R. Wiesendanger,
Science 292, 2053 (2001):
"Observation of magnetic hysteresis at the nanometer scale by
spin-polarized scanning tunneling spectroscopy".
 - (274) M. Getzlaff, M. Morgenstern, Chr. Meyer, R. Brochier, R. L. Johnson,
and R. Wiesendanger, Phys. Rev. B 63, 205305 (2001):
"Nb-induced two-dimensional electron gas on n-InAs(110): anomalous
coverage dependence".
 - (273) R. Wiesendanger and M. Bode, Solid State Commun. 119, 341 (2001):
"Nano- and atomic-scale magnetism studied by spin-polarized scanning
tunneling microscopy and spectroscopy".
 - (272) M. Getzlaff, M. Bode, A. Kubetzka, O. Pietzsch, and R. Wiesendanger,
Chin. Phys. 10, S186 (2001):
"Spin-dependent tunneling effects on magnetic nanostructures".

- (271) J. Isenbart, A. Born, and R. Wiesendanger, Appl. Phys. A 72, S243 (2001):
"Physical Principles of Scanning Capacitance Microscopy".
- (270) M. Bode, A. Kubetzka, O. Pietzsch, and R. Wiesendanger, Appl. Phys. A 72, S149 (2001):
"Spin-polarized scanning tunneling spectroscopy on Fe-nanowires".
- (269) T. Richter, J. Müller, U.D. Schwarz, R. Wepf, and R. Wiesendanger, Appl. Phys. A 72, S125 (2001):
"Investigation of the swelling of human skin cells in liquid media by tapping mode scanning force microscopy".
- (268) H. Hölscher, W. Allers, U. D. Schwarz, A. Schwarz, and R. Wiesendanger, Appl. Phys. A 72, S35 (2001):
"Simulation of NC-AFM images of Xenon(111)".
- (267) W. Allers, S. Langkat, and R. Wiesendanger, Appl. Phys. A 72, S27 (2001):
"Low-temperature dynamic force microscopy on nickel oxide(001)".
- (266) M. Morgenstern, V. Gudmundsson, R. Dombrowski, Chr. Wittneven, and R. Wiesendanger, Phys. Rev. B 63, 201301 (2001):
"Non-locality of the exchange interaction probed by scanning tunneling spectroscopy".
- (265) A. Kubetzka, O. Pietzsch, M. Bode, and R. Wiesendanger, Phys. Rev. B 63, 140407 (2001):
"Magnetism of Nanoscale Fe Islands studied by Spin-Polarized Scanning Tunneling Spectroscopy".
- (264) M. Bode, O. Pietzsch, A. Kubetzka, and R. Wiesendanger, J. Electr. Spectrosc. & Rel. Phenom. 114-116, 1055 (2001):
"Imaging Magnetic Nanostructures by Spin-Polarized Scanning Tunneling Spectroscopy".
- (263) M. Bode, O. Pietzsch, A. Kubetzka, S. Heinze, and R. Wiesendanger, Phys. Rev. Lett. 86, 2142 (2001):
"Experimental evidence for intra-atomic non-collinear magnetism at thin film probe tips".
- (262) D. Haude, M. Morgenstern, I. Meinel, and R. Wiesendanger, Phys. Rev. Lett. 86, 1582 (2001):
"The local density of states of a three dimensional conductor in the extreme quantum limit".
- (261) R. Wiesendanger, Ann. Phys. 9, 895 (2000):
"Nano-scale studies of quantum phenomena by scanning probe spectroscopy".

-
- (260) A. Pundt, U. Laudahn, U. v. Hülse, U. Geyer, T. Wagner, M. Getzlaff, M. Bode, R. Wiesendanger, and R. Kirchheim, MRS Symp. Proc. 594, 75 (2000):
"Hydrogen induced plastic deformation of thin films".
 - (259) A. Born and R. Wiesendanger, Proc. ISTFA 2000, Bellevue/Washington, p. 521:
"Guidelines for two-dimensional dopant profiling using SCM".
 - (258) A. Kelch, S. Wessel, T. Will, U. Hintze, R. Wepf, and R. Wiesendanger, J. Microsc. 200, 179 (2000):
"Penetration pathways of fluorescent dyes in human hairfibres investigated by scanning near-field optical microscopy".
 - (257) M. Morgenstern, D. Haude, V. Gudmundsson, Chr. Wittneven, R. Dombrowski, and R. Wiesendanger, Phys. Rev. B 62, 7257 (2000) and Phys. Rev. B 63, 079901(E), (2001):
"Origin of Landau oscillations observed in scanning tunneling spectroscopy on n-InAs(110)".
 - (256) W. Allers, A. Schwarz, H. Hölscher, U. D. Schwarz, and R. Wiesendanger, Jpn. J. Appl. Phys. 39, 3701 (2000):
"Dynamic Scanning Force Microscopy at Low Temperatures".
 - (255) U.D. Schwarz, H. Hölscher, and R. Wiesendanger, Phys. Rev. B 62, 13089 (2000):
"Atomic resolution in scanning force microscopy: Concepts, requirements, contrast mechanisms, and image interpretation".
 - (254) A. Schwarz, W. Allers, U. D. Schwarz, and R. Wiesendanger, Phys. Rev. B 62, 13617 (2000):
"Detection of doping atom distributions and individual dopants in InAs(110) by dynamic mode scanning force microscopy in ultrahigh vacuum".
 - (253) M. Kleiber, M. Bode, R. Ravlić, and R. Wiesendanger, Phys. Rev. Lett. 85, 4606 (2000):
"Topology-induced spin frustrations at the Cr(001) surface studied by spin-polarized scanning tunneling spectroscopy".
 - (252) H. Hölscher, W. Allers, A. Schwarz, U. Schwarz, and R. Wiesendanger, Phys. Rev. B 62, 6967 (2000):
"Interpretation of 'true atomic resolution' images of graphite(0001) in non-contact atomic force microscopy".
 - (251) M. Morgenstern, Chr. Wittneven, R. Dombrowski, and R. Wiesendanger, Phys. Rev. Lett. 84, 5588 (2000):
"Spatial fluctuations of the density of states in magnetic fields observed with scanning tunneling spectroscopy".

-
- (250) S. Heinze, M. Bode, O. Pietzsch, A. Kubetzka, X. Nie, S. Blügel, and R. Wiesendanger, *Science* 288, 1805 (2000):
"Real-space imaging of two-dimensional antiferromagnetism on the atomic scale".
 - (249) O. Pietzsch, A. Kubetzka, M. Bode. and R. Wiesendanger, *Phys. Rev. Lett.* 84, 5212 (2000):
"Real-Space Observation of Dipolar Antiferromagnetism in Magnetic Nanowires by Spin-Polarized Scanning Tunneling Spectroscopy".
 - (248) S. A. Nepijko, M. Getzlaff, R. Pascal, Ch. Zarnitz, M. Bode, and R. Wiesendanger, *Surf. Sci.* 466, 89 (2000):
"Lattice relaxation of Gd on W(110)".
 - (247) M. Morgenstern, D. Haude, V. Gudmundsoon, Chr. Wittneven, R. Dombrowski, Chr. Steinebach, and R. Wiesendanger, *J. Electr. Spectr. Rel. Phen.* 109, 127 (2000):
"Low Temperature Scanning Tunneling Spectroscopy on InAs(110)".
 - (246) M. Morgenstern, M. Getzlaff, D. Haude, R. Wiesendanger, and R.L. Johnson, *Phys. Rev. B* 61, 13805 (2000):
"Coverage dependence of the Fe-induced Fermi level shift and the two-dimensional electron gas on InAs(110)".
 - (245) M. Getzlaff and R. Wiesendanger, *European Microscopy and Analysis* 68, 7 (2000):
"STM Study of Hydrogen on and in Gadolinium Films".
 - (244) H. Hölscher, A. Schwarz, W. Allers, U. D. Schwarz, and R. Wiesendanger, *Phys. Rev. B* 61, 12678 (2000):
"Quantitative Analysis of Dynamic-Force-Spectroscopy Data on Graphite (0001) in the Contact and Noncontact Regimes".
 - (243) A. Pundt, M. Getzlaff, M. Bode, R. Kirchheim, and R. Wiesendanger, *Phys. Rev. B* 61, 9964 (2000):
"H-induced plastic deformation of Gd thin films studied by STM".
 - (242) O. Pietzsch, A. Kubetzka, M. Bode, and R. Wiesendanger, *Rev. Sci. Instrum.* 71, 424 (2000):
"A low-temperature UHV scanning tunneling microscope with a split-coil magnet system and a rotary motion stepper motor for high spatial resolution studies of surface magnetism".
 - (241) A. Schwarz, W. Allers, U.D. Schwarz, and R. Wiesendanger, *Phys. Rev. B* 61, 2837 (2000):
"Dynamic mode scanning force microscopy study of n-InAs(110)-(1x1) at low temperatures".

- (240) R. Wiesendanger,
Current Opinion in Solid State & Materials Science 4, 435 (1999):
"Surface magnetism at the nanometer and atomic scale".
- (239) M. Getzlaff, R. Pascal, H. Tödter, M. Bode, and R. Wiesendanger,
Surf. Rev. & Lett. 6, 741 (1999):
"Preparation of highly ordered GdFe₂ alloys".
- (238) M. Getzlaff, M. Bode, and R. Wiesendanger,
Surf. Rev. & Lett. 6, 591 (1999):
"Spin-polarized vacuum tunneling: correlation of electronic and magnetic properties on the nanometer scale".
- (237) S. A. Nepijko and R. Wiesendanger,
Semiconductor Physics (Quantum Electronics and Optoelectronics) 2, 5 (1999):
"Size dependence of magnetic characteristics measured on separate nickel particles".
- (236) M. Bode, M. Dreyer, M. Getzlaff, M. Kleiber, A. Wadas, and R. Wiesendanger,
J. of Physics (Cond. Mat.) 11, 9387 (1999):
"Recent progress in High-resolution magnetic imaging using scanning probe techniques".
- (235) M. Bode, M. Getzlaff, A. Kubetzka, R. Pascal, O. Pietzsch, and R. Wiesendanger, Phys. Rev. Lett. 83, 3017 (1999):
"Temperature-dependent exchange splitting of a surface state on a local-moment magnet: Tb(0001)".
- (234) M. Dreyer, M. Kleiber, and R. Wiesendanger,
Appl. Phys. A 69, 359 (1999)
"Simultaneous observation of atomic step and domain wall structure of ultra-thin Co films by magnetic force microscopy in ultrahigh vacuum".
- (233) R. Pascal, M. Getzlaff, H. Tödter, M. Bode, and R. Wiesendanger,
Phys. Rev. B 60, 16109 (1999):
"GdFe₂ alloy formation studied on the atomic scale by scanning tunneling microscopy".
- (232) H. Hölscher, W. Allers, U.D. Schwarz, A. Schwarz, and R. Wiesendanger,
Phys. Rev. Lett. 83, 4780 (1999):
"Determination of tip-sample interaction potentials by dynamic force spectroscopy".
- (231) R. Wiesendanger, M. Bode, and M. Getzlaff,
Appl. Phys. Lett. 75, 124 (1999):
"Vacuum-tunneling magnetoresistance: the role of spin-polarized surface states".

-
- (230) R. Wiesendanger, M. Bode, and M. Getzlaff,
J. Magn. Soc. Jpn. 23 (S1), 195 (1999):
"Recent advances in spin-polarized scanning tunneling spectroscopy for
imaging of magnetic domains".
 - (229) M. Bode, M. Hennefarth, D. Haude, M. Getzlaff, and R. Wiesendanger,
Surf. Sci. 432, 8 (1999):
"Growth of thin Mn films on W(110) studied by means of in-situ scanning
tunneling microscopy".
 - (228) M. Bode, M. Getzlaff, and R. Wiesendanger,
J. Vac. Sci. Technol. A17, 2228 (1999):
"Quantitative Aspects of Spin-Polarized Scanning Tunneling Spectroscopy of
Gd(0001)".
 - (227) W. Allers, A. Schwarz, U.D. Schwarz, and R. Wiesendanger,
Europhys. Lett. 48, 276 (1999):
"Dynamic scanning force microscopy at low temperatures on a noble gas
crystal: Atomic resolution on the xenon (111) surface".
 - (226) M. Getzlaff, M. Bode, R. Pascal, and R. Wiesendanger,
Phys. Rev. B 59, 8195 (1999):
"Adsorbates on Gadolinium - a combined scanning tunneling microscopy and
photoemission study".
 - (225) R. Dombrowski, Chr. Steinebach, Chr. Wittneven, M. Morgenstern,
and R. Wiesendanger, Phys. Rev. B 59, 8043 (1999):
"Determining the tip induced band bending by scanning tunneling spectroscopy
of the states of the tip induced quantum dot on InAs(110)".
 - (224) M. Getzlaff, M. Bode, S. Heinze, and R. Wiesendanger,
Appl. Surf. Sci. 142, 558 (1999):
"New insight into the surface magnetic properties of Gd(0001)".
 - (223) M. Getzlaff, R. Pascal, H. Tödter, M. Bode, and R. Wiesendanger,
Appl. Surf. Sci. 142, 543 (1999):
"GdFe-2 alloy formation observed by STM".
 - (222) M. Getzlaff, M. Bode, and R. Wiesendanger, Appl. Surf. Sci. 142, 428 (1999):
"Coadsorption of H and CO on Gd(0001)".
 - (221) M. Getzlaff, M. Bode, R. Pascal, and R. Wiesendanger,
Appl. Surf. Sci. 142, 63 (1999):
"The adsorption process of hydrogen on Gd(0001)".
 - (220) H. Hölscher, U.D. Schwarz, and R. Wiesendanger,
Appl. Surf. Sci. 140, 344 (1999):
"Calculation of the frequency shift in dynamic force microscopy".

- (219) A. Schwarz, W. Allers, U.D. Schwarz, and R. Wiesendanger, Appl. Surf. Sci. 140, 293 (1999):
"Simultaneous imaging of the In and As sublattice on InAs(110)-(1x1) with dynamic scanning force microscopy".
- (218) W. Allers, A. Schwarz, U.D. Schwarz, and R. Wiesendanger, Appl. Surf. Sci. 140, 247 (1999):
"Dynamic scanning force microscopy at low temperatures on a van der Waals surface: graphite (0001)".
- (217) M. Dreyer, M. Kleiber, A. Wadas, and R. Wiesendanger, Phys. Rev. B 59, 4273 (1999):
"Composition driven change of magnetic anisotropy of ultrathin Co/Au(111) films studied by magnetic force microscopy under ultrahigh vacuum".
- (216) H. Hölscher, W. Raberg, U.D. Schwarz, A. Hasbach, K. Wandelt, and R. Wiesendanger, Phys. Rev. B 59, 1661 (1999):
"Imaging of sub-unit-cell structures in the contact mode of the scanning force microscope".
- (215) A. Born and R. Wiesendanger, Appl. Phys. A 68, 131 (1999):
"Present and future developments of SPM systems as mass storage devices".
- (214) S. Heinze, S. Blügel, R. Pascal, M. Bode, and R. Wiesendanger, Phys. Rev. B 58, 16432 (1998):
"Prediction of bias-voltage dependent corrugation reversal for STM images of bcc-(110)-surfaces: W(110), Ta(110) and Fe(110)".
- (213) M. Morgenstern, R. Dombrowski, Ch. Wittneven, and R. Wiesendanger, Phys. Stat. Sol. 210, 845 (1998):
"Landau Level Quantization measured by Scanning Tunneling Spectroscopy on n-InAs(110)".
- (212) Ch. Wittneven, R. Dombrowski, M. Morgenstern, and R. Wiesendanger, Phys. Rev. Lett. 81, 5616 (1998):
"Scattering States of Ionized Dopants probed by Low Temperature Scanning Tunneling Spectroscopy".
- (211) M. Bode, M. Getzlaff, and R. Wiesendanger, Phys. Rev. Lett. 81, 4256 (1998):
"Spin-Polarized Vacuum Tunneling into the Exchange-split Surface State of Gd(0001)".
- (210) A. A. Bukharaev, D. V. Ovchinnikov, N. I. Nurgazizov, E. F. Kukovitskii, M. Kleiber, and R. Wiesendanger, Scanning 20, 3 (1998):
"Magnetic force microscopy of Ni nanoparticles formed by coalescence method".

- (209) A. A. Bukharaev, D. V. Ovchinnikov, N. I. Nurgazizov, E. F. Kukovitskii, M. Kleiber, and R. Wiesendanger, *Physics of the Solid State* 40, 1163 (1998): "Investigation of micromagnetism and magnetization reversal of Ni nanoparticles using a magnetic force microscope".
- (208) M. Getzlaff, M. Bode, and R. Wiesendanger, *Phys. Rev. B* 58, 9681 (1998): "Determination of radial matrix elements and phase shifts in the photoemission process using a rotatable electric field vector".
- (207) M. Getzlaff, M. Bode, and R. Wiesendanger, *Surf. Sci.* 410, 189 (1998): "Hydrogen adsorption on Gd(0001)".
- (206) M. Getzlaff, M. Bode, S. Heinze, R. Pascal, and R. Wiesendanger, *J. Magn. Magn. Mat.* 184, 155 (1998): "Temperature-dependent exchange-splitting of the magnetic Gd(0001) surface state".
- (205) M. Bode, R. Pascal, M. Getzlaff, and R. Wiesendanger, *Acta Phys. Pol.* 93, 273 (1998): "Surface state of Gd(0001) films on W(110): Scanning tunneling spectroscopy study".
- (204) R. Wiesendanger, M. Bode, R. Dombrowski, M. Getzlaff, M. Morgenstern, and C. Wittneven, *Jpn. J. Appl. Phys.* 37, 3769 (1998): "Local electronic properties in the presence of internal and external magnetic fields studied by variable-temperature scanning tunneling spectroscopy".
- (203) M. Kleiber, F. Kümmerlin, M. Löhndorf, A. Wadas, D. Weiss, and R. Wiesendanger, *Phys. Rev. B* 58, 5563 (1998): "Local magnetization switching of submicrometer Co dots induced by a magnetic force microscope tip".
- (202) G. Meier, M. Kleiber, D. Grundler, D. Heitmann, and R. Wiesendanger, *Appl. Phys. Lett.* 72, 2168 (1998): "Vertical polarization of quantum magnets in high density arrays of nickel dots with small height-to-diameter ratio".
- (201) W. Allers, A. Schwarz, U. D. Schwarz, and R. Wiesendanger, *Rev. Sci. Instrum.* 69, 221 (1998): "A scanning force microscope with atomic resolution in ultrahigh vacuum and at low temperatures".
- (200) M. Dreyer, M. Löhndorf, A. Wadas, and R. Wiesendanger, *Appl. Phys. A* 66, S1209 (1998): "Ultrahigh vacuum magnetic force microscopy of the domain structure of ultrathin Co films".

- (199) R. Pascal, Ch. Zarnitz, H. Tödter, M. Bode, and R. Wiesendanger, Appl. Phys. A 66, S1121 (1998):
"Electronic structure of Gd(0001) and Tb(0001) on W(110) in the submonolayer coverage regime studied by STM and STS".
- (198) A. Born, A. Olbrich, M. Mayvald, and R. Wiesendanger, Appl. Phys. A 66, S1063 (1998):
"Analysis of electrical breakdown failures by means of SFM-based methods".
- (197) A. Born and R. Wiesendanger, Appl. Phys. A 66, S421 (1998):
"Scanning capacitance microscope as a tool for the characterization of integrated circuits".
- (196) O. Zwörner, H. Hölscher, U.D. Schwarz, and R. Wiesendanger, Appl. Phys. A 66, S263 (1998):
"The velocity dependence of frictional forces in point contact friction".
- (195) R. Dombrowski, Ch. Wittneven, M. Morgenstern, and R. Wiesendanger, Appl. Phys. A 66, S203 (1998):
"Scanning Tunneling Spectroscopy on n-InAs(110): Landau Level Quantization and Scattering of Electron Waves at Dopant Atoms".
- (194) M. Bode, M. Getzlaff, S. Heinze, R. Pascal, and R. Wiesendanger, Appl. Phys. A 66, S121 (1998):
"Magnetic exchange splitting of the Gd(0001) surface state studied by variable-temperature scanning tunneling spectroscopy".
- (193) A. Wadas, M. Dreyer, M. Kleiber, and R. Wiesendanger, Appl. Phys. A 66, 465 (1998):
"Thickness-dependent magnetic domain structures of ultrathin Co/Au(111) films studied by means of magnetic force microscopy in ultrahigh vacuum".
- (192) H. Hölscher, O. Zwörner, U.D. Schwarz, and R. Wiesendanger, Phys. Rev. B 57, 2477 (1998):
"Consequences of the 'stick-slip' movement for the scanning force microscopy imaging of graphite".
- (191) H. Bluhm, U.D. Schwarz, and R. Wiesendanger, Phys. Rev. B 57, 161 (1998):
"Origin of the ferroelectric domain contrast observed in lateral force microscopy".
- (190) U. D. Schwarz, H. Hölscher, H. Bluhm, O. Zwörner, and R. Wiesendanger, PTB-Bericht F - 30, 1 - 9 (1997):
"Tip-sample interaction in contact force microscopy".
- (189) R. Wiesendanger, Proc. Natl. Acad. Sci. USA 94(24), 12749 (1997):
"Scanning-probe-based science and technology".

- (188) M. Löhndorf, A. Wadas, and R. Wiesendanger, Appl. Phys. A 65, 511 (1997):
"Investigation of cross-tie walls and ripple structures of thin polycrystalline Co films by magnetic force microscopy".
- (187) Ch. Wittneven, R. Dombrowski, S. H. Pan, and R. Wiesendanger, Rev. Sci. Instrum. 68, 3806 (1997):
"A low-temperature ultrahigh-vacuum STM/STS-system with rotatable magnetic field".
- (186) A. Wadas, M. Dreyer, M. Löhndorf, and R. Wiesendanger, IEEE Trans. Magn. 33, 4050 (1997):
"Novel writing using magnetic force microscopy in ultrahigh vacuum".
- (185) R. Wiesendanger, MRS Bulletin 22, 31 (1997):
"Correlation between nano-scale structural, electronic and magnetic properties of thin films by scanning probe microscopy and spectroscopy".
- (184) R. Pascal, Ch. Zarnitz, M. Bode, and R. Wiesendanger, Appl. Phys. A 65, 81 (1997):
"Fabrication of atomic gratings based on self-organization of adsorbates with repulsive interaction".
- (183) H. Hölscher, U.D. Schwarz, O. Zwörner, and R. Wiesendanger, Z. Phys. B 104, 295 (1997):
"Stick-slip movement of a scanned tip on a graphite surface in scanning force microscopy".
- (182) U.D. Schwarz, O. Zwörner, P. Köster, and R. Wiesendanger, Phys. Rev. B 56, 6997 (1997):
"The frictional properties of mica and germanium sulfide investigated by means of friction force spectroscopy".
- (181) U.D. Schwarz, O. Zwörner, P. Köster, and R. Wiesendanger, Phys. Rev. B 56, 6987 (1997):
"Quantitative analysis of the frictional properties of carbon compounds at low loads using friction force spectroscopy".
- (180) R. Pascal, C. Zarnitz, M. Bode, and R. Wiesendanger, Surf. Sci. 385, L990 (1997):
"STM-study of the growth of Gd/W(110) at submonolayer coverages".
- (179) R. Pascal, C. Zarnitz, M. Bode, M. Getzlaff, and R. Wiesendanger, Appl. Phys. A 65, 603 (1997):
"Surface electronic structure of Gd(0001) films on W(110)".
- (178) S. A. Nepijko and R. Wiesendanger, Appl. Phys. A 65, 361 (1997):
"Studies of Magnetic Properties of Small Particles by Electron Holography".

- (177) R. Pascal, Ch. Zarnitz, M. Bode, and R. Wiesendanger, Phys. Rev. B 56, 3636 (1997):
"Atomic and local electronic structure of Gd thin films studied by STM and STS".
- (176) M. Bode, R. Pascal and R. Wiesendanger, J. Vac. Sci. Technol. A 15, 1285 (1997):
"Scanning tunneling spectroscopy of Fe/W(110) using iron covered probe tips".
- (175) A. Wadas, M. Dreyer, M. Löhndorf, and R. Wiesendanger, Appl. Phys. A 64, 353 (1997):
"Magnetostatic interaction studied by force microscopy in ultrahigh vacuum".
- (174) H. Bluhm, A. Wadas, R. Wiesendanger, A. Roshko, J.A. Aust, and D. Nam, Appl. Phys. Lett. 71, 146 (1997):
"Imaging of domain-inverted gratings in LiNbO₃ by Electrostatic force microscopy".
- (173) U.D. Schwarz, O. Zwörner, P. Köster, and R. Wiesendanger, J. Vac. Sci. Technol. B 15, 1527 (1997):
"Preparation of probe tips with well-defined spherical apexes for scanning force spectroscopy."
- (172) R. Wiesendanger, M. Bode, M. Kleiber, M. Löhndorf, R. Pascal, A. Wadas, and D. Weiss, J. Vac. Sci. Technol. B 15, 1330 (1997):
"Magnetic nanostructures studied by scanning probe microscopy and spectroscopy".
- (171) H. Bluhm, R. Wiesendanger, and K.-P. Meyer, Ferroelectrics 200, 327 (1997):
"The topographical structure of the domain boundary on the triglycine sulfate (010) surface".
- (170) H. Hölscher, U.D. Schwarz, and R. Wiesendanger, Surf. Sci. 375, 395 (1997):
"Modelling of the scan process in lateral force microscopy".
- (169) Ch. Witt, U. Mick, M. Bode, and R. Wiesendanger, Rev. Sci. Instrum. 68, 1455 (1997):
"An UHV-STM for in-situ studies of thin film growth".
- (168) H. Bluhm, A. Wadas, R. Wiesendanger, K.-P. Meyer, and L. Szczesniak, Phys. Rev. B55, 4 (1997):
"Electrostatic force microscopy on ferroelectric crystals in inert gas atmosphere".
- (167) W. Allers, C. Hahn, M. Löhndorf, S. Lukas, S. Pan, U. D. Schwarz, and R. Wiesendanger, Nanotechnology 7, 346 (1996):
"Nanomechanical investigations and modifications of thin films based on scanning force methods".

- (166) M. Winzer, N. Dix, M. Kleiber, and R. Wiesendanger, Appl. Phys. A 63, 617 (1996):
"Fabrication of Nano-Dot- and Nano-Ring-Arrays by Nanosphere Lithography".
- (165) A. Born, C. Hahn, M. Löhndorf, A. Wadas, Ch. Witt, and R. Wiesendanger, J. Vac. Sci. Technol. B14, 3625 (1996):
"Application of Scanning Probe Methods for Electronic and Magnetic Device Fabrication, Characterization and Testing".
- (164) H. Hölscher, U. D. Schwarz, and R. Wiesendanger, Europhys. Lett. 36, 19 (1996):
"Simulation of a scanned tip on a NaF(001) surface in friction force microscopy".
- (163) Ch. Witt, M. Bode, and R. Wiesendanger, Appl. Phys. A 63, 303 (1996):
"Fabrication of atomic wires by self-organization".
- (162) M. Bode, R. Pascal, and R. Wiesendanger, Appl. Phys. A 62, 571 (1996):
"Chemical-specific imaging of multicomponent metal surfaces on the nanometer scale by scanning tunneling spectroscopy".
- (161) M. Bode, R. Pascal, M. Dreyer, and R. Wiesendanger, Phys. Rev. B 54, R 8385 (1996):
"Nanostructural and local electronic properties of Fe/W(110) correlated by scanning tunneling spectroscopy".
- (160) U. D. Schwarz, P. Köster, and R. Wiesendanger, Rev. Sci. Instrum. 67, 2560 (1996):
"Quantitative analysis of lateral force microscopy experiments".
- (159) C. Hahn, T. Matsuyama, U. Merkt, and R. Wiesendanger, Appl. Phys. A 62, 289 (1996):
"Nanofabrication of weak links based on scanning force methods".
- (158) M. Löhndorf, A. Wadas, H. A. M. van den Berg, and R. Wiesendanger, Appl. Phys. Lett. 68, 3635 (1996):
"Structure of cross-tie wall in thin Co films resolved by magnetic force microscopy".
- (157) M. Seider, U. D. Schwarz, and R. Wiesendanger, Phys. Rev. B 53, R16180 (1996):
"Load-dependent topographic and friction studies of individual ion tracks in layered materials by scanning and lateral force microscopy".
- (156) M. Bode, R. Pascal, and R. Wiesendanger, Z. Phys. B 101, 103 (1996):
"Distance-dependent STM study of the lateral resolution on metal surfaces".

-
- (155) M. Löhndorf, A. Wadas, G. Lütjering, D. Weiss, and R. Wiesendanger, Z. Phys. B 101, 1 (1996):
"Micromagnetic properties and magnetization switching of single domain Co dots studied by magnetic force microscopy".
 - (154) M. Bode, R. Pascal, and R. Wiesendanger, Z. Phys. B 99, 143 (1996):
"Imaging and tunneling spectroscopy of individual iron adsorbates at room temperature".
 - (153) M. Löhndorf, A. Wadas, R. Wiesendanger, and H.W. van Kesteren, J. Vac. Sci. Technol. B 14, 1214 (1996):
"Domain Structure of Co/Pt Multilayers studied by Magnetic Force Microscopy".
 - (152) H. Bluhm, R. Wiesendanger, and K.-P. Meyer, J. Vac. Sci. Technol. B 14, 1180 (1996):
"Surface structure of ferroelectric domains on the triglycine sulfate (010) surface".
 - (151) R. Wiesendanger, M. Bode, R. Pascal, W. Allers, and U.D. Schwarz, J. Vac. Sci. Technol. A 14, 1161 (1996):
"Issues of atomic-resolution structure and chemical analysis by scanning probe microscopy and spectroscopy".
 - (150) A. Wadas, R. Wiesendanger, and P. Novotny, J. Appl. Phys. 78, 6324 (1995):
"Bubble domains in garnet films studied by magnetic force microscopy".
 - (149) M. Bode, R. Pascal, and R. Wiesendanger, Surf. Sci. 344, 185 (1995):
"STM-study of carbon-induced reconstructions on W(110): Strong evidence for a surface lattice deformation".
 - (148) H. Bluhm, U. D. Schwarz, K.-P. Meyer, and R. Wiesendanger, Appl. Phys. A 61, 525 (1995):
"Anisotropy of sliding friction on the triglycine sulfate (010) surface".
 - (147) M. Dreyer and R. Wiesendanger, Appl. Phys. A 61, 357 (1995):
"Scanning capacitance microscopy and spectroscopy: applications in semiconductor device characterization and storage technology".
 - (146) M. Löhndorf and R. Wiesendanger, Appl. Phys. A 61, 93 (1995):
"MFM study of magnetic stray field effects due to mechanical surface modifications of patterned permalloy thin films".
 - (145) S. A. Nepijko and R. Wiesendanger, Europhys. Lett. 31, 567 (1995):
"Size dependence of the Curie temperature of separate nickel particles studied by interference electron microscopy".

-
- (144) U. D. Schwarz, W. Allers, G. Gensterblum, and R. Wiesendanger, Phys. Rev. B 52, 14976 (1995):
"Low-load friction behaviour of epitaxial C₆₀ monolayers under Hertzian contact".
 - (143) W. Allers, U. D. Schwarz, G. Gensterblum, and R. Wiesendanger, Z. Phys. B 99, 1 (1995):
"Low-load friction behavior of epitaxial C₆₀ monolayers".
 - (142) U. D. Schwarz, W. Allers, G. Gensterblum, J.-J. Pireaux, and R. Wiesendanger, Phys. Rev. B 52, 5967 (1995):
"Growth of C₆₀ thin films on GeS(001) studied by scanning force microscopy".
 - (141) A. Schwarz, U. D. Schwarz, H. Bluhm, and R. Wiesendanger, Surf. and Interf. Anal. 23, 409 (1995):
"Determination of small crystallites from scanning force microscopy angle measurements".
 - (140) R. Wiesendanger, Jpn. J. Appl. Phys. 34, 3388 (1995):
"Recent Advances in Nano-Structural Investigations and Modifications of Solid Surfaces by Scanning Probe Methods".
 - (139) H. P. Lang, R. Wiesendanger, V. Thommen-Geiser, R. Hofer, and H.-J. Güntherodt, J. Vac. Sci. Technol. B 12, 2136 (1994):
"Local transformation of C₆₀ fullerite into a new amorphous phase of carbon using a STM".
 - (138) M. Löhndorf, F. Goerke, U. Merkt, and R. Wiesendanger, Appl. Phys. A 59, 57 (1994):
"Growth stages of YSZ buffer layers and YBa₂Cu₃O_{7-x} thin films on silicon substrates studied by scanning probe microscopy".
 - (137) W. Allers, U. D. Schwarz, G. Gensterblum, and R. Wiesendanger, Appl. Phys. A 59, 11 (1994):
"Scanning and friction force microscopy of thin C₆₀ films on GeS(001)".
 - (136) R. Wiesendanger, Appl. Phys. A 59, 1 (1994):
"Scanning Probe Methods in Materials Science".
 - (137) R. Wiesendanger, I.V. Shvets, and J.M.D. Coey, J. Vac. Sci. Technol. B 12, 2118 (1994):
"Wigner glass on the magnetite (001) surface observed by scanning tunneling microscopy with a ferromagnetic tip".
 - (136) R. Wiesendanger, J. Magn. Soc. Jpn. 18, 4 (1994):
"Spin-polarized scanning tunneling microscopy: gateway to imaging and modification of surface spin configurations at the atomic level".

-
- (135) R. Wiesendanger, Solid State Phenom. 35-36, 281 (1994):
"Contributions of scanning probe microscopy and spectroscopy to the investigation of microstructures and their physical properties".
 - (134) R. Wiesendanger, J. Vac. Sci. Technol. B12, 515 (1994):
"Contributions of Scanning Probe Microscopy and Spectroscopy to the Investigation and Fabrication of Nanometer-Scale Structures".
 - (133) R. Wiesendanger, Acta Physica Polonica A 84, 419 (1993):
"Recent developments in scanning tunneling microscopy".
 - (132) R. Wiesendanger, J. Appl. Phys. 73, 5816 (1993):
"Magnetic imaging of surfaces on the atomic scale by spin-polarized scanning tunneling microscopy".
 - (131) J. M. D. Coey, I. V. Shvets, R. Wiesendanger, and H.-J. Güntherodt
J. Appl. Phys. 73, 6742 (1993):
"Charge Freezing and Surface Anisotropy on Magnetite (100)".
 - (130) H. P. Lang, V. Thommen-Geiser, C. Bolm, M. Felder, J. Frommer,
R. Wiesendanger, R. Schlögl A. Zahab, P. Bernier, G. Gerth, D. Anselmetti,
and H.-J. Güntherodt, Appl. Phys. A 56, 197 (1993):
"Determination of C₆₀/C₇₀ ratios in fullerene mixtures and film characterization
by scanning tunneling microscopy".
 - (129) G. Tarrach, D. Bürgler, T. Schaub, R. Wiesendanger, and H.-J. Güntherodt,
Surf. Sci. 285, 1 (1993):
"Atomic structure of the Fe₃O₄(001) surface in different preparation stages
studied by scanning tunneling microscopy".
 - (128) D. Bürgler, G. Tarrach, T. Schaub, R. Wiesendanger, and H.-J. Güntherodt,
Phys. Rev. B 47, 9963 (1993):
"Local Structure and Dynamics of a segregated c(2x2) sulfur layer on Pd(001)
studied by scanning tunneling microscopy".
 - (127) T. Schaub, R. Wiesendanger, and H.-J. Güntherodt,
Nanotechnology 3, 7 (1992):
"Comparative study of different tip materials for surface modification by the
scanning tunneling microscope".
 - (126) H. P. Lang, K. Lüders, R. Wiesendanger, M. Kraus, S. Gärtner,
W. Krätschmer, and H.-J. Güntherodt, Physica B 182, 223 (1992):
"Scanning tunneling microscopy study of granular C₆₀ and
(MTl_{1,5})₃C₆₀ (M=K,Rb)".

- (125) H. Haefke, D. Bürgler, G. Gerth, L. Howald, E. Meyer, U. D. Schwarz, R. Steiger, G. Tarrach, and R. Wiesendanger, *Helv. Phys. Acta* 65, 872 (1992): "Micro-and nanostructures on silver halide surfaces: I. Preparation and Characterization of AgBr samples".
- (124) R. Wiesendanger, D. Bürgler, G. Tarrach, H.-J. Güntherodt, I. V. Shvets, and J. M. D. Coey, *Surf. Sci.* 274, 93 (1992): "Scanning tunneling microscopy study of the dimer asymmetry on the Si(001) 2x1 surface".
- (123) H. P. Lang, V. Thommen-Geiser, and R. Wiesendanger, *Ultramicroscopy* 42-44, 624 (1992): "Scanning tunneling microscopy study of ternary alkali-metal graphite intercalation compounds".
- (122) R. Wiesendanger, I. V. Shvets, D. Bürgler, G. Tarrach, H.-J. Güntherodt, J. M. D. Coey, *Ultramicroscopy* 42-44, 388 (1992): "Recent advances in spin-polarized scanning tunneling microscopy".
- (121) W. Zimmermann-Edling, R. Wiesendanger, F. Finger, K. Prasad, and A. Shah, *Ultramicroscopy* 42-44, 1398 (1992): "STM on doped and undoped hydrogenated amorphous and microcrystalline silicon films".
- (120) H.G. Maguire, M. Kamo, H. P. Lang, E. Meyer, R. Wiesendanger, and H.-J. Güntherodt, *Diamond and Related Materials* 1, 634 (1992): "The structure of conducting and non-conducting homoepitaxial diamond films".
- (119) I. V. Shvets, R. Wiesendanger, D. Bürgler, G. Tarrach, H.-J. Güntherodt and J. M. D. Coey: *J. Appl. Phys.*, 71, 5489 (1992): "Progress towards spin-polarized STM".
- (118) R. Wiesendanger, I. V. Shvets, D. Bürgler, G. Tarrach, H.-J. Güntherodt and J. M. D. Coey, *Europhys. Lett.* 19, 141 (1992): "Evidence for selective imaging of different magnetic ions on the atomic scale by using a scanning tunneling microscope with a ferromagnetic probe tip".
- (117) R. Wiesendanger, I. V. Shvets, D. Bürgler, G. Tarrach, H.-J. Güntherodt, J. M. D. Coey, and S. Gräser, *Science* 255, 583 (1992): "Topographic and magnetic-sensitive scanning tunneling microscopy study of magnetite".
- (116) R. Wiesendanger, I. V. Shvets, D. Bürgler, G. Tarrach, H.-J. Güntherodt, J. M. D. Coey, *Z. Phys. B* 86, 1 (1992): "Magnetic imaging at the atomic level".

-
- (115) H. P. Lang, R. Wiesendanger, V. Thommen-Geiser, and H.-J. Güntherodt, Phys. Rev. B45, 1829 (1992):
"Atomic resolution surface studies of binary and ternary alkali-metal- graphite intercalation compounds by scanning tunneling microscopy".
 - (114) R. Wiesendanger, Appl. Surf. Sci. 54, 271 (1992):
"Fabrication of nanometer structures using STM".
 - (113) R. Wiesendanger, D. Bürgler, G. Tarrach, T. Schaub, U. Hartmann, H.-J. Güntherodt, I.V. Shvets, and J.M.D. Coey, Appl. Phys. A 53, 349 (1991):
"Recent advances in scanning tunneling microscopy involving magnetic probes and samples".
 - (112) G. Tarrach, R. Wiesendanger, D. Bürgler, L. Scandella, and H.-J. Güntherodt, J. Vac. Sci. Technol. B9, 677 (1991):
"Laser and thermal annealed Si(111) and Si(001) surfaces studied by scanning tunneling microscopy".
 - (111) R. Wiesendanger, D. Bürgler, G. Tarrach, A. Wadas, D. Brodbeck, H.-J. Güntherodt, G. Güntherodt, R. J. Gambino, and R. Ruf, J. Vac. Sci. Technol. B9, 519 (1991):
"Vacuum tunneling of spin-polarized electrons detected by scanning tunneling microscopy".
 - (110) R. Wiesendanger, H.-J. Güntherodt, G. Güntherodt, R. J. Gambino, and R. Ruf, Helv. Phys. Acta 63(6), 778 (1990):
"Measurement of the local electron spin polarization by the scanning tunneling microscope".
 - (109) R. Wiesendanger, H.-J. Güntherodt, G. Güntherodt, R. J. Gambino, and R. Ruf, Z. Phys. B 80, 5 (1990):
"Scanning tunneling microscopy with spin-polarized electrons".
 - (108) R. Wiesendanger, H.-J. Güntherodt, G. Güntherordt, R. J. Gambino, and R. Ruf, Phys. Rev. Lett. 65, 247 (1990):
"Observation of vacuum tunneling of spin-polarized electrons with the scanning tunneling microscope".
 - (107) R. Wiesendanger and H.-J. Güntherodt, Surf. Sci. 235, 1, (1990):
"Surface step and defect structure of Cr(001) studied by scanning tunneling microscopy".
 - (106) D. Anselmetti, V. Geiser, D. Brodbeck, G. Overney, R. Wiesendanger, and H.-J. Güntherodt, Synth. Met. 38, 157 (1990):
"Hexagonal and nonhexagonal superlattice structures on stage 1 alkali metal graphite intercalation compounds studied by scanning tunneling microscopy".

- (105) D. Anselmetti, V. Geiser, G. Overney, R. Wiesendanger, and H.-J. Güntherodt, Phys. Rev. B 42, 1848 (1990):
"Local symmetry breaking in diluted alkali graphite intercalation compounds studied by scanning tunneling microscopy".
- (104) D. Anselmetti, R. Wiesendanger, H.-J. Güntherodt, and G. Grüner, Europhys. Lett. 12, 241 (1990):
"Atomic scale surface investigations of $K_{0.3}MoO_3$ ("blue bronze") by scanning tunneling microscopy".
- (103) R. Wiesendanger, D. Bürgler, G. Tarrach, and H.-J. Güntherodt, Surf. Sci. 232, 1 (1990):
"Local structure of the Si(100) surface studied by scanning tunneling microscopy".
- (102) R. Wiesendanger, G. Tarrach, L. Scandella, and H.-J. Güntherodt, Ultramicroscopy 32, 291 (1990):
"Scanning tunneling microscopy on laser and thermal annealed Si(111): Transitions from 7x7 reconstructed to disordered surface structures".
- (101) R. Wiesendanger, G. Tarrach, D. Bürgler, and H.-J. Güntherodt, Europhys. Lett. 12, 57 (1990):
"Scanning tunneling microscopy study of Si(111)7x7 in the presence of multiple step edges".
- (100) R. Wiesendanger, D. Bürgler, G. Tarrach, D. Anselmetti, H. R. Hidber, and H.-J. Güntherodt, J. Vac. Sci. & Technol. A 8, 339 (1990):
"An ultrahigh vacuum scanning tunneling microscope for the investigation of clean surfaces".
- (99) E. Meyer, R. Wiesendanger, D. Anselmetti, H. R. Hidber, H.-J. Güntherodt, F. Levy, and H. Berger, J. Vac. Sci. & Technol. A8, 495 (1990):
"Different response of atomic force microscopy and scanning tunneling microscopy to charge density waves".
- (98) U. Staufer, L. Scandella and R. Wiesendanger, Z. Phys. B 77, 281 (1989):
"Direct writing of nanometer scale structures on glassy metals by the scanning tunneling microscope".
- (97) R. Wiesendanger, D. Anselmetti, V. Geiser, H. R. Hidber, and H.-J. Güntherodt, Synth. Met. 34, 175 (1989):
"Surface structure of graphite intercalation compounds resolved in real space by scanning tunneling microscopy".
- (96) E. Meyer, D. Anselmetti, R. Wiesendanger, H.-J. Güntherodt, F. Levy, and H. Berger, Europhys. Lett. 9, 695 (1989):
"Different response of atomic force microscopy and scanning tunneling microscopy to charge density waves".

- (95) D. Anselmetti, R. Wiesendanger, and H.-J. Güntherodt, Phys. Rev. B 39, 11135 (1989):
"Surface Structure of Donor Graphite Intercalation Compounds by Scanning Tunneling Microscopy".
- (94) D. Anselmetti, R. Wiesendanger, V. Geiser, H. R. Hidber, and H.-J. Güntherodt, J. Microsc. 152(2), 509 (1988):
"Donor Graphite Intercalation Compounds studied with a high stability STM".
- (93) H. Heinzelmann, D. Anselmetti, R. Wiesendanger, H. R. Hidber, H.-J. Güntherodt, M. Düggelin, R. Guggenheim, H. Schmidt, and G. Güntherodt, J. Microsc. 152(2), 399 (1988):
"STM and AFM Investigations of High-Tc Superconductors".
- (92) H. Heinzelmann, D. Anselmetti, R. Wiesendanger, H.-J. Güntherodt, E. Kaldis, and A. Wisard, Appl. Phys. Lett. 53, 2447 (1988):
"Topography and local modification of the HoBaCuO(001) surface using scanning tunneling microscopy".
- (91) R. Wiesendanger and H.-J. Güntherodt, Non-Equilibrium Solid Phases of Metals and Alloys, Suppl. Trans. JIM, Vol. 29, 117 (1988):
"Non-Equilibrium Solid Phases Viewed by Scanning Tunneling Microscopy".
- (90) D. Anselmetti, H. Heinzelmann, R. Wiesendanger, H. Jenny, H.-J. Güntherodt, M. Düggelin, and R. Guggenheim, Physica C 153-155, 1000 (1988):
"Scanning Tunneling and Scanning Electron Microscopy on High-Tc Superconductors".
- (89) R. Wiesendanger, L. Rosenthaler, H. R. Hidber, H.-J. Güntherodt, A.W. McKinnon, and W.E. Spear, J. Appl. Phys. 63, 4515 (1988):
"Hydrogenated Amorphous Silicon studied by Scanning Tunneling Microscopy".
- (88) R. Wiesendanger, D. Anselmetti, L. Eng, H. Heinzelmann, H. R. Hidber, L. Rosenthaler, U. Staufer, H.-J. Güntherodt, M. Düggelin, and R. Guggenheim, Ultramicroscopy 25, 129, (1988):
"Scanning Tunneling and Scanning Electron Microscopy Investigations of Nonuniform Surfaces".
- (87) P. Grütter, H. Bretscher, G. Indlekofer, H. Jenny, R. Lapka, P. Oelhafen, R. Wiesendanger, T. Zingg, H.-J. Güntherodt, and J.-B. Suck, Mat. Sci. & Eng. 99, 357 (1988):
"Physical Properties of Icosahedral and Glassy Pd-U-Si Alloys".
- (86) B. Walz, R. Wiesendanger, L. Rosenthaler, H.-J. Güntherodt, M. Düggelin, and R. Guggenheim, Mat. Sci. & Eng. 99, 501 (1988):
"Investigation of the Microstructure of a Fe₉₁ Zr₉ Catalyst prepared from the Amorphous Alloy".

- (85) L. Eng, H. R. Hidber, L. Rosenthaler, U. Staufer, R. Wiesendanger, H.-J. Güntherodt, and L. Tamm, J. Vac. Sci. & Technol. A 6, 358 (1988): "DPPC-Langmuir-Blodgett-Films on Various Substrates (Si(111), Au, Sn) studied by STM".
- (84) L. Rosenthaler, H. R. Hidber, A. Tonin, L. Eng, U. Staufer, R. Wiesendanger, and H.-J. Güntherodt, J. Vac. Sci. & Technol. A 6, 393 (1988): "Dataprocessing for STM".
- (83) U. Staufer, R. Wiesendanger, L. Eng, L. Rosenthaler, H. R. Hidber, H.-J. Güntherodt and N. Garcia, J. Vac. Sci. & Technol. A 6, 537 (1988): "Surface Modification in the Nanometer Range by the Scanning Tunneling Microscope".
- (82) R. Wiesendanger, L. Rosenthaler, H. R. Hidber, L. Eng, U. Staufer, H.-J. Güntherodt, M. Düggelin, and R. Guggenheim, J. Vac. Sci. & Technol. A 6, 529 (1988): "Icosahedral Alloys studied by Scanning Tunneling Microscopy".
- (81) R. Schlögl, R. Wiesendanger, and A. Baiker, J. Catalysis 108, 452 (1987): "Ammonia Synthesis over a Supported Iron Catalyst Prepared from an Amorphous Iron-Zirconium Precursor".
- (80) R. Wiesendanger, L. Eng, H. R. Hidber, P. Oelhafen, L. Rosenthaler, U. Staufer, H.-J. Güntherodt, Surf. Sci. 189/190, 24 (1987): "Local Tunneling Barrier Height Images obtained with the Scanning Tunneling Microscope".
- (79) H. Bretscher, P. Grütter, G. Indlekofer, H. Jenny, R. Lapka, P. Oelhafen, R. Wiesendanger, T. Zingg, and H.-J. Güntherodt, Z. Phys. B 68, 313 (1987): "Physical Properties of Icosahedral and Glassy Pd-U-Si Alloys".
- (78) J. J. Saenz, N. Garcia, P. Grütter, E. Meyer, H. Heinzelmann, R. Wiesendanger, L. Rosenthaler, H. R. Hidber, and H.-J. Güntherodt, J. Appl. Phys. 62, 4293 (1987): "Observation of Magnetic Forces by the Atomic Force Microscope".
- (77) U. Staufer, R. Wiesendanger, L. Eng, L. Rosenthaler, H. R. Hidber, H.-J. Güntherodt, and N. Garcia, Appl. Phys. Lett. 51, 244 (1987): "Nanometer Scale Structure Fabrication with the Scanning Tunneling Microscope".
- (76) R. Wiesendanger, M. Ringger, L. Rosenthaler, H. R. Hidber, P. Oelhafen, and H.-J. Güntherodt, Zeitschrift für Physikalische Chemie Neue Folge 157, 139, (1988): "The Structure of Rapidly Quenched Metals as studied by Scanning Tunneling Microscopy".

PUBLICATION LIST

(Prof. Dr. Dr. h.c. Roland Wiesendanger)

Status as of: 13.02.2025

- (75) A. J. Brunner, A. Stemmer, L. Rosenthaler, R. Wiesendanger, M. Ringger, P. Oelhafen, and H.-J. Güntherodt, Surf. Sci. 181, 313 (1987):
"Scanning Tunneling Microscopy of a Thin Film of Pd₂Si on a Si(100) Substrate".

- (74) R. Wiesendanger, M. Ringger, L. Rosenthaler, H. R. Hidber, P. Oelhafen, H. Rudin and H.-J. Güntherodt, Surf. Sci. 181, 46 (1987):
"Application of Scanning Tunneling Microscopy to Disordered Systems".

- (73) A.J. Brunner, M. Ringger, L. Rosenthaler, A. Stemmer, R. Wiesendanger, R. Riedinger, P. Oelhafen, and H.-J. Güntherodt, Nucl. Instr. & Meth. B 18, 644 (1987):
"The Effect of Argon Ion Sputtering on a Polycrystalline Film of Pd₂ Si on a Si Substrate studied by Scanning Tunneling Microscopy and Photoelectron Spectroscopy".

Book contributions:

- (72) E. Y. Vedmedenko and R. Wiesendanger, in: Spintronics Handbook, 2nd edition, Spin Transport and Magnetism, Vol. 3, eds. E. Y. Tsybal and I. Zutic, CRC Press, Taylor & Francis (2019): "Magnetic skyrmions on discrete lattices".
- (71) J. Wiebe, A.A. Khajetoorians, and R. Wiesendanger, in: Atomic- and Nano-Scale Magnetism, ed.: R. Wiesendanger, Springer Series in Nano Science and Technology, Springer Nature Switzerland (2018), p. 3: "Magnetic spectroscopy of individual atoms, chains and nanostructures".
- (70) K. von Bergmann, A. Kubetzka, O. Pietzsch, and R. Wiesendanger, in: Atomic- and Nano-Scale Magnetism, ed.: R. Wiesendanger, Springer Series in Nano Science and Technology, Springer Nature Switzerland (2018), p. 163: "Non-collinear magnetism studied by spin-polarized scanning tunneling microscopy".
- (69) S. Krause and R. Wiesendanger, in: Atomic- and Nano-Scale Magnetism, ed.: R. Wiesendanger, Springer Series in Nano Science and Technology, Springer Nature Switzerland (2018), p. 221: "Magnetization dynamics on the atomic scale".
- (68) J. Brede, B. Chilian, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger, in: Handbook of Spintronics, eds. Y. Xu, D. Awschalom, and J. Nitta, Springer (2016), p. 757: "Atomic-Scale Spintronics".
- (67) M. Ashino and R. Wiesendanger, in: Non-Contact Atomic Force Microscopy Vol. 3, eds. S. Morita, F. J. Giessibl, E. Meyer, and R. Wiesendanger, Springer (2015), p. 127: "Revealing Subsurface Vibrational Modes by Atomic-Resolution Damping Force Spectroscopy".
- (66) O. Pietzsch and R. Wiesendanger, in: Fundamentals of Picoscience, ed. by K. D. Sattler, CRC Press, Taylor & Francis (2013), p. 413: "Atomic-Scale Magnetism Studied by Spin-Polarized Scanning Tunneling Microscopy".
- (65) M. Morgenstern, J. Wiebe, F. Marczinowski, and R. Wiesendanger, in: Quantum Materials, ed. D. Heitmann, Springer (2010), p. 217: "Scanning tunneling spectroscopy on III-V materials: Effects of dimensionality, magnetic field, and magnetic impurities".

-
- (64) G. Maruccio and R. Wiesendanger,
in: Quantum Materials, ed. D. Heitmann, Springer (2010), p. 183:
"Scanning tunneling spectroscopy of semiconductor quantum dots and nanocrystals".
 - (63) A. Schwarz, U. Kaiser, R. Schmidt, and R. Wiesendanger,
in: Non-Contact Atomic Force Microscopy II,
eds. S. Morita, F. J. Giessibl, and R. Wiesendanger, Springer (2009), p. 275:
"Magnetic Exchange Force Microscopy".
 - (62) A. Schwarz, M. Bode, and R. Wiesendanger, in: Handbook of Magnetism and
Advanced Magnetic Materials (eds.: H. Kronmüller and S. S. P. Parkin),
J. Wiley & Sons, Volume 3 (Vol. eds.: R. Wiesendanger and G. Güntherodt),
p. 1687 (2007): "Scanning Probe Techniques: MFM and SP-STM".
 - (61) E. Y. Vedmedenko and R. Wiesendanger, in:
New Topics in Condens. Matter Res. (ed. J.V. Chang),
Nova Publishers, New York (2006), p. 147:
"Anisotropic domain walls in magnetic nanostructures".
 - (60) M. Bode, A. Kubetzka, O. Pietzsch, and R. Wiesendanger,
in: Modern Techniques for Characterizing Magnetic Materials, ed. Y. Zhu,
Kluwer Academic Publisher (2005), p. 383:
"Spin-polarized scanning tunneling microscopy".
 - (59) M. Bode and R. Wiesendanger, in: Magnetic Microscopy of Nanostructures
(eds. H. Hopster and H. P. Oepen), Springer Berlin, Heidelberg (2005), p. 203:
"Spin-Polarized Scanning Tunneling Spectroscopy".
 - (58) U. D. Schwarz, H. Hölscher, W. Allers, A. Schwarz, and R. Wiesendanger, in:
Fundamentals of Tribology and Bridging the Gap between Macro- and
Micro-/Nanoscales, ed. B. Bhushan, Series II. Vol. 10, Kluwer
Academic Publishers, Dordrecht, p. 151, (2001):
"Investigation of the mechanics of nanocontacts using a vibrating cantilever
technique".
 - (57) R. Wiesendanger, in: Encyclopedia of Analytical Chemistry,
eds. R.A. Meyers et al., John Wiley & Sons Ltd, Chichester (2000), p. 9232:
"Proximal Probe Techniques".
 - (56) R. Wiesendanger, in: Procedures in Scanning Probe Microscopies,
eds. R. Colton, A. Engel, J. Frommer, H. Gaub, A. Gewirth, R. Guckenberger,
W. Heckl, B. Parkinson, and J. Rabe, John Wiley & Sons Ltd. (1998), p. 558:
"Thermal Surface Modification".

- (55) R. Wiesendanger, in: Procedures in Scanning Probe Microscopies, eds. R. Colton, A. Engel, J. Frommer, H. Gaub, A. Gewirth, R. Guckenberger, W. Heckl, B. Parkinson, and J. Rabe, John Wiley & Sons Ltd. (1998), p. 555: "Mechanical Surface Modification".
- (54) M. Bode, M. Getzlaff, R. Pascal, S. Heinze, and R. Wiesendanger, in: Magnetism and Electronic Correlations in Local-Moment Systems: Rare-Earth Elements and Compounds, eds. M. Donath, P.A. Dowben, and W. Nolting, World Scientific, Singapore (1998), p. 235: "Surface electronic structure of Gd(0001): studies on the thickness and temperature dependence of the exchange splitting".
- (53) R. Wiesendanger, in: Analytical Methods in Scanning Probe Microscopy, Springer Series in Nano Science and Technology, Springer Berlin, Heidelberg, New York (1998), p. 71: "Spin-Polarized Scanning Tunneling Microscopy".
- (52) A. A. Bukharaev, D. V. Ovchinnikov, N. I. Nurgazizov, E. F. Kukovitskii, M. Kleiber, and R. Wiesendanger, Proc. 6th Int. Symp. Nanostructures: Physics and Technology, St. Petersburg, Russia, p. 428 (1998): "Micromagnetic properties and magnetization reversal of Ni nanoparticles studied by magnetic force microscopy".
- (51) M. Getzlaff, M. Bode, and R. Wiesendanger, Proc. ICEM14, Cancun (Mexico), Electron Microscopy Vol. III, 173 (1998): "Visualization of heterogeneously catalytic processes".
- (50) M. Getzlaff, M. Bode, R. Pascal, and R. Wiesendanger, Proc. ICEM14, Cancun (Mexico), Electron Microscopy Vol. III, 171 (1998): "Adsorption of hydrogen on structured gadolinium".
- (49) M. Getzlaff, M. Bode, A. Wadas, and R. Wiesendanger, Proc. ICEM14, Cancun (Mexico), Electron Microscopy Vol. III, 143 (1998): "Recent developments in scanning probe microscopy and spectroscopy for imaging of magnetic domains".
- (48) H. Hölscher, U. D. Schwarz, and R. Wiesendanger, in: Micro-/Nanotribology and Its Applications, ed. B. Bhushan, NATO ASI Series Vol. 330, Kluwer Academic Publishers, Dordrecht, p. 379, (1997): "Simulation of the scan process in friction force microscopy".
- (47) U. D. Schwarz, O. Zwörner, P. Köster, and R. Wiesendanger: Micro-/Nanotribology and Its Applications, ed. B. Bhushan, Series Vol. 330, Kluwer Academic Publishers, Dordrecht, p. 233, (1997): "Friction force spectroscopy in the low-load regime with well-defined tips".

-
- (46) R. Wiesendanger, in:
Handbook of Microscopy, eds. S. Amelinckx, D. Van Dyck, J. Van Landuyt
and G. Van Tendeloo, VCH Weinheim (1997) p. 807:
"Scanning Tunneling Microscopy".
 - (45) A. Born and R. Wiesendanger, Proc. MIDEM'97, Slovenia, in:
Informacije MIDEM 27(4), 246 (1997):
"Scanning Probe Microscopy and Spectroscopy: From Basic Research to
Industrial Applications".
 - (44) U. D. Schwarz, H. Bluhm, H. Hölscher, W. Allers, and R. Wiesendanger, in:
The Physics of Sliding Friction, eds. B.N.J. Persson and E. Tosatti,
NATO ASI Series Vol. 311, Kluwer, Dordrecht, p. 369, (1996):
"Friction in the low-load regime: Studies on the pressure and direction
dependence of frictional forces by means of friction force microscopy".
 - (43) R. Wiesendanger, in: Physics and Chemistry of Low Dimensional Inorganic
Conductors, eds. C. Schlenker, J. Dumas, M. Greenblatt, and
S. Van Smaalen, NATO ASI Series B Vol. 354: Physics, Plenum Press,
New York, p. 229, (1996):
"STM and AFM on CDW and related materials".
 - (42) M. Bode, R. Pascal, and R. Wiesendanger,
Proc. 1st Int. Symp. Advanced Physical Fields, ed. K. Yoshihara,
National Research Inst. for Metals, p. 1 (1996):
"Local and Scanning Tunneling Spectroscopy of 0D - 3D Metallic
Nanostructures".
 - (41) R. Wiesendanger, in:
Scanning Tunneling Microscopy II,
eds. R. Wiesendanger and H.-J. Güntherodt, Springer Series in Surface
Sciences Vol.28, 2nd edition, Springer Berlin, Heidelberg, 1995, p. 324:
"Surface Modifications by Scanning Probe Methods".
 - (40) R. Wiesendanger, in: Trends in Sensor Technology/Sensor Market,
Sensors Vol. 8, eds. H. Meixner and R. Jones, VCH, p. 337, (1995):
"Future Nanosensors".
 - (39) R. Wiesendanger, in: The Technology of Proximal Probe Lithography,
ed. C.R.K Marrian, SPIE Optical Engineering Press, Bellingham,
p. 162, (1993):
"Nanofabrication by Scanning Probe Instruments: Methods, Potential
Applications and Key Issues".

-
- (38) R. Wiesendanger, in: Atomic and Nanoscale Modification of Materials: Fundamentals and Applications, ed. P. Avouris, NATO ASI Series , Kluwer Acad. Publ., Dordrecht, p. 65, (1993):
"Atomic-scale Imaging and Modification of Spins using a Magnetic-sensitive Scanning Tunneling Microscope".
 - (37) R. Wiesendanger, in: Magnetism and Structure in Systems of Reduced Dimensions, ed. R.F.C. Farrow, B. Dieny, M. Donath, B.D. Hermsmeier, and A. Fert. NATO ASI Series, Plenum Press, New York, p. 45, (1993):
"Magnetic-sensitive Scanning Probe Microscopy".
 - (36) R. Wiesendanger, in: New Concepts for Low-Dimensional Electronic Systems, eds. G. Bauer, F. Kuchar, and H. Heinrich, Springer Series in Solid State Sciences. Vol. 111, Springer Berlin, Heidelberg, New York, p.97, (1992):
"Contributions of scanning tunneling microscopy for probing and manipulating electronic properties in low dimensions".
 - (35) R. Wiesendanger and D. Anselmetti, in: Surface Properties of Layered Structures, ed. G. Benedek, Kluwer Academic Publ., Dordrecht, p. 1, (1992):
"STM and AFM Studies of Layered Materials: General".
 - (34) R. Wiesendanger and D. Anselmetti, in: Scanning Tunneling Microscopy I, ed. by H.-J. Güntherodt and R. Wiesendanger, Springer Series in Surface Sciences, Vol. 20, Springer Heidelberg, Berlin, New York, p. 131, (1992):
"STM on Layered Materials".
 - (33) R. Wiesendanger, D. Bürgler, G. Tarrach, I.V. Shvets, and H.-J. Güntherodt, Mat. Res. Soc. Symp. Proc. Vol. 231, p. 37 (1992):
"Spin-polarized scanning tunneling microscopy (SPSTM)".
 - (32) R. Wiesendanger, D. Bürgler, G. Tarrach, H.-J. Güntherodt, and G. Güntherodt, in: Scanned Probe Microscopy, ed. H. K. Wickramasinghe, AIP Conf. Proc. 241, AIP, New York, p. 504 (1992):
"Tunneling of spin-polarized electrons".
 - (31) R. Wiesendanger, D. Bürgler, G. Tarrach, H.-J. Güntherodt, and G. Güntherodt, Proc. Symp. Surf. Sci. 3S'91, Obertraun (Austria), p. 77 (1991):
"Scanning tunneling microscopy with spin-polarized electrons".
 - (30) R. Wiesendanger, Proc. EPS-8, Trends in Physics, Amsterdam, The Netherlands, Sept. 4-8, 1990, part II, p. 567 (1991):
"Recent progress in scanning tunneling microscopy".
 - (29) R. Wiesendanger, G. Tarrach, D. Bürgler, L. Scandella, and H.-J. Güntherodt, Mat. Res. Soc. Symp. Proc. Vol. 183, 237 (1990):
"From point defects to amorphous structures: atomic resolution studies of semiconductor surfaces by scanning tunneling microscopy".

- (28) R. Wiesendanger, G. Tarrach, D. Bürgler, T. Jung, L. Eng, and H.-J. Güntherodt, Proc. IVC-11/ICSS-7, Köln, Vacuum 41, 386 (1990): "An ultrahigh vacuum scanning tunneling microscope for surface science studies".
- (27) D. Anselmetti, E. Meyer, R. Wiesendanger, H.-J. Güntherodt, F. Levy, and H. Berger, Proc. 3rd Europ. Conf. on Low-Dim. Cond. and Supercond., Dubrovnik (Yugoslavia), Fizika 21, 155 (1989): "Atomic scale investigations of transition metal dichalcogenides by scanning tunneling microscopy and atomic force microscopy".
- (26) H. Jenny, B. Walz, G. Leemann, H. Bretscher, T. Frey, D. Anselmetti, H. Heinzelmann, R. Wiesendanger, V. Geiser, H. Schlüter, P. Reimann, T. Gabriel, H. Breitenstein, and H.-J. Güntherodt, Proc. MRS'87 Boston, "Magnetism, Specific Heat and Surface Topography of Oxide Superconductors".
- (25) R. Wiesendanger, L. Eng, H. R. Hidber, L. Rosenthaler, L. Scandella, U. Staufer, H.-J. Güntherodt, N. Koch, and M. von Allmen, Proc. of ICSOS-II, in "The Structure of Surfaces II", ed. by van der Veen and Van Hove, Springer Series in Surface Sciences 11, p. 595, Springer-Verlag 1988: "Surface Structure of Metallic Glasses studied by Scanning Tunneling Microscopy".
- (24) J. J. Saenz, N. Garcia, P. Grütter, E. Meyer, H. Heinzelmann, R. Wiesendanger, L. Rosenthaler, H. R. Hidber, and H.-J. Güntherodt, In: Magnetic Properties of Amorphous Metals, ed. by A. Hernando, V. Madurga, M.C. Sanchez-Trujillo and M. Vazquez, p. 83, Elsevier 1987: "Magnetic Domain Structure by Measuring Magnetic Forces".
- (23) R. Wiesendanger, R. Schlögl, and H.-J. Güntherodt, Proc. of 4th Int. Conf. Carbon '86, p. 207 (1986): "The Micromorphology of Graphite Surfaces as studied by SEM and the novel Scanning Tunneling Microscope (STM)".
- (22) M. Ringger, B.W. Corb, H.R. Hidber, R. Schlögl, R. Wiesendanger, A. Stemmer, L. Rosenthaler, A.J. Brunner, P.C. Oelhafen, and H.-J. Güntherodt, IBM J. Res. & Dev. Vol. 30(5), p. 500 (1986): "The STM Activity at the University of Basel".

Public outreach articles:

- (21) H. Fuchs and R. Wiesendanger,
GIT Laborfachzeitschrift 4, 47 (2017):
"Mit Skyrmionen in die Zukunft: Neue digitale Datenspeicher".
- (20) H. Fuchs and R. Wiesendanger, in: Wirtschaftsstandort Hamburg /
Schleswig-Holstein, Europäischer Wirtschafts-Verlag (2016), p. 130:
"Nanotechnologie in Hamburg: neue Impulse für die Datenspeicherung der
Zukunft".
- (19) H. Fuchs and R. Wiesendanger,
Nanotechnologie Aktuell 8, 28 (2014):
"Neuartige Konzepte für die Informationstechnologie".
- (18) H. Fuchs and R. Wiesendanger,
Nanotechnologie Aktuell 5, 54 (2012):
"Rechnen mit magnetischen Atomen".
- (17) J. Wiebe, A. A. Khajetoorians, B. Chilian, and R. Wiesendanger,
Physik in unserer Zeit 42, 162 (2011):
"Logik aus atomaren Spins".
- (16) H. Fuchs and R. Wiesendanger,
Nanotechnologie Aktuell 2, 10 (2009):
"Magnetismus im Nanokosmos".
- (15) K. von Bergmann, M. Bode, and R. Wiesendanger,
Physik in unserer Zeit 2/2008, 93 (2008):
"Magnetismus mit Dreh".
- (14) R. Wiesendanger, GIT Laborfachzeitschrift 51, 647 (2007):
"Abbildung von Spinstrukturen auf atomarer Ebene".
- (13) R. Wiesendanger, Imaging & Microscopy Vol. 02, 21 (2007):
"Imaging atomic-scale spin structures".
- (12) R. Wiesendanger, Europhys. News 38, No. 2, 16 (2007):
"Mapping spin structures on the atomic scale".
- (11) R. Wiesendanger,
Leopoldina Reihe 3, Jahrgang 50, Jahrbuch 2004, Halle/Saale (2005), p. 369:
„Nanotechnologie – Aufbruch in neue Welten“.
- (10) H. Fuchs and R. Wiesendanger,
Industrie Management 21 (6), 17 (2005):
"Die Festplatte von Übermorgen".

- (09) M. Bode, R. Ravlic, M. Kleiber, and R. Wiesendanger, Nova Acta Leopoldina NF92, Nr. 340, 61 (2005):
"Spin-polarized scanning tunneling microscopy of antiferromagnetic surfaces".
- (08) K. Schoepe and R. Wiesendanger in: ...und Er würfelt doch!, eds. H. Müller-Krumbhaar, H. F. Wagner, Wiley-VCH, Berlin 2001, p. 521:
"Faszinierende Einblicke in den Nanokosmos".
- (07) M. Getzlaff, M. Bode, and R. Wiesendanger, Physik in unserer Zeit No. 3, 110 (2000):
"Nanomagnetische Domänen mit dem Rastertunnelmikroskop".
- (06) M. Morgenstern, R. Dombrowski, Ch. Wittneven, and R. Wiesendanger, Phys. Bl. 54, 423 (1998):
"Tieftemperatur-Rastertunnelspektroskopie an InAs(110): Streuung von Elektronenwellen an Dotieratomen und Spektroskopie an Landauniveaus".
- (05) R. Wiesendanger, Phys. Bl. 54, 417 (1998):
"Neue Perspektiven der Tieftemperatur-Rastersonden-Spektroskopie".
- (04) M. Bode, R. Pascal and R. Wiesendanger, Phys. Bl. 52, 551 (1996):
"Tunnelspektroskopie vom Einzelatom zum Festkörper".
- (03) R. Wiesendanger, Physik in unserer Zeit, No. 5, 206 (1995):
"Physik in unserer Zeit auf der Nanometerskala".
- (02) R. Wiesendanger, D. Anselmetti, and H.-J. Güntherodt, Europhys. News 21, 72 (1990):
"Advances in STM design and instrumentation".
- (01) R. Wiesendanger and H.-J. Güntherodt, Chimia 40, 384 (1986):
"Scanning Tunneling Microscopy - Novel Insight into the World of Atoms".

Books:

- (11) R. Wiesendanger (ed.),
Atomic- and Nano-Scale Magnetism,
Springer Series in Nano Science and Technology,
Springer Nature Switzerland (2018).
- (10) S. Morita, F. J. Giessibl, E. Meyer and R. Wiesendanger (eds.),
Non-Contact Atomic Force Microscopy Vol. 3,
Springer Series in Nano Science and Technology,
Springer Berlin, Heidelberg (2014).
- (09) S. Morita, F. J. Giessibl, and R. Wiesendanger (eds.),
Non-Contact Atomic Force Microscopy Vol. 2,
Springer Series in Nano Science and Technology,
Springer Berlin, Heidelberg (2009).
- (08) R. Wiesendanger and G. Güntherodt (Vol. eds.),
Handbook of Magnetism and Advanced Magnetic Materials,
Vol. 3: Novel Techniques for Characterizing and Preparing Samples,
J. Wiley & Sons (2007).
- (07) J. K. Bielein and R. Wiesendanger,
Einführung in die Struktur der Materie,
Teubner-Studienbuch, Stuttgart (2003).
- (06) S. Morita, R. Wiesendanger, and E. Meyer (eds.),
Non-Contact Atomic Force Microscopy,
Springer Series in Nano Science and Technology,
Springer Berlin, Heidelberg (2002).
- (05) R. Wiesendanger,
Analytical Methods in Scanning Probe Microscopy,
Springer Series in Nano Science and Technology,
Springer Berlin, Heidelberg, New York (1998).
- (04) R. Wiesendanger,
"Scanning Probe Microscopy and Spectroscopy: Methods and Applications",
Cambridge University Press, Cambridge (1994).
- (03) R. Wiesendanger and H.-J. Güntherodt, Scanning Tunneling Microscopy III,
Springer Series in Surface Sciences Vol. 29,
Springer Heidelberg, Berlin, New York (1993); 2nd edition (1996).
- (02) R. Wiesendanger and H.-J. Güntherodt, Scanning Tunneling Microscopy II,
Springer Series in Surface Sciences, Vol. 28,
Springer Heidelberg, Berlin, New York (1992); 2nd edition (1995).

PUBLICATION LIST

(Prof. Dr. Dr. h.c. Roland Wiesendanger)

Status as of: 13.02.2025

- (01) H.-J. Güntherodt and R. Wiesendanger, Scanning Tunneling Microscopy I, Springer Series in Surface Sciences, Vol. 20, Springer Heidelberg, Berlin, New York (1992); 2nd edition (1994).

Proceedings:

- (08) H. Gleiter and R. Wiesendanger (eds.), Proc. Leopoldina Symposium "From Nanoscience to Nanotechnology", Wissenschaftl. Verlagsges. (2006).
- (07) A. Benninghoven, J. J. Pireaux, R. Wiesendanger, and K. Jousten (eds.), Proc. 8th European Vacuum Congress, Elsevier (2004).
- (06) J. Kirschner, H. Oechsner, and R. Wiesendanger (eds.), Proc. 1st DVG-Symposium "Vacuum Based Science and Technology", Springer (2004).
- (05) R. Wiesendanger (ed.), Proc. Workshop on "Highlights of Research in Nano-Scale Analysis in Germany", Springer (2003).
- (04) M. Getzlaff, M. Morgenstern, and R. Wiesendanger (eds.), Proc. 2nd International Conference on Scanning Probe Spectroscopy, Springer (2001).
- (03) U.D. Schwarz, H. Hölscher, and R. Wiesendanger (eds.), Proc. 3rd International Conference on Non-Contact Atomic Force Microscopy, Springer (2001).
- (02) J. K. H. Hörber, H. Fuchs, R.J. Behm, and R. Wiesendanger (eds.), Proc. 9th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Re-lated Techniques, Vol. 1, Springer Berlin, Heidelberg (1998).
- (01) J. K. H. Hörber, H. Fuchs, R.J. Behm, and R. Wiesendanger (eds.), Proc. 9th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Re-lated Techniques, Vol. 2, Springer Berlin, Heidelberg (1998).