

# Roland Wiesendanger

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2620617/roland-wiesendanger-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

625  
papers

25,031  
citations

78  
h-index

138  
g-index

672  
ext. papers

27,946  
ext. citations

5.5  
avg, IF

7.11  
L-index

#	Paper	IF	Citations
625	Spontaneous atomic-scale magnetic skyrmion lattice in two dimensions. <i>Nature Physics</i> , <b>2011</b> , 7, 713-718	16.2	1169
624	Writing and deleting single magnetic skyrmions. <i>Science</i> , <b>2013</b> , 341, 636-9	33.3	973
623	Scanning Probe Microscopy and Spectroscopy: Methods and Applications <b>1994</b> ,		746
622	Direct observation of internal spin structure of magnetic vortex cores. <i>Science</i> , <b>2002</b> , 298, 577-80	33.3	729
621	Chiral magnetic order at surfaces driven by inversion asymmetry. <i>Nature</i> , <b>2007</b> , 447, 190-3	50.4	688
620	Spin mapping at the nanoscale and atomic scale. <i>Reviews of Modern Physics</i> , <b>2009</b> , 81, 1495-1550	40.5	502
619	Observation of vacuum tunneling of spin-polarized electrons with the scanning tunneling microscope. <i>Physical Review Letters</i> , <b>1990</b> , 65, 247-250	7.4	450
618	Nanoscale magnetic skyrmions in metallic films and multilayers: a new twist for spintronics. <i>Nature Reviews Materials</i> , <b>2016</b> , 1,	73.3	342
617	Field-dependent size and shape of single magnetic Skyrmions. <i>Physical Review Letters</i> , <b>2015</b> , 114, 177203	7.4	334
616	Realizing all-spin-based logic operations atom by atom. <i>Science</i> , <b>2011</b> , 332, 1062-4	33.3	302
615	Observation of magnetic forces by the atomic force microscope. <i>Journal of Applied Physics</i> , <b>1987</b> , 62, 4293-4295	2.5	302
614	Real-space imaging of two-dimensional antiferromagnetism on the atomic scale. <i>Science</i> , <b>2000</b> , 288, 1805-8	33.3	300
613	Revealing magnetic interactions from single-atom magnetization curves. <i>Science</i> , <b>2008</b> , 320, 82-6	33.3	287
612	Design of the local spin polarization at the organic-ferromagnetic interface. <i>Physical Review Letters</i> , <b>2010</b> , 105, 066601	7.4	261
611	Quantitative analysis of the frictional properties of solid materials at low loads. I. Carbon compounds. <i>Physical Review B</i> , <b>1997</b> , 56, 6987-6996	3.3	247
610	Spin- and energy-dependent tunneling through a single molecule with intramolecular spatial resolution. <i>Physical Review Letters</i> , <b>2010</b> , 105, 047204	7.4	240
609	Electric-field-driven switching of individual magnetic skyrmions. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 123-128	12.7	212

608	Spin-Polarized Vacuum Tunneling into the Exchange-Split Surface State of Gd(0001). <i>Physical Review Letters</i> , <b>1998</b> , 81, 4256-4259	7.4	204
607	Magnetic exchange force microscopy with atomic resolution. <i>Nature</i> , <b>2007</b> , 446, 522-5	50.4	199
606	Spin-polarized scanning tunneling microscopy with antiferromagnetic probe tips. <i>Physical Review Letters</i> , <b>2002</b> , 88, 057201	7.4	198
605	The properties of isolated chiral skyrmions in thin magnetic films. <i>New Journal of Physics</i> , <b>2016</b> , 18, 065003	10.3	195
604	Strength and directionality of surface Ruderman-Kittel-Kasuya-Yosida interaction mapped on the atomic scale. <i>Nature Physics</i> , <b>2010</b> , 6, 187-191	16.2	194
603	Atomic-scale spin spiral with a unique rotational sense: Mn monolayer on W(001). <i>Physical Review Letters</i> , <b>2008</b> , 101, 027201	7.4	193
602	Local electronic signatures of impurity states in graphene. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	192
601	Current-driven spin dynamics of artificially constructed quantum magnets. <i>Science</i> , <b>2013</b> , 339, 55-9	33.3	181
600	Atom-by-atom engineering and magnetometry of tailored nanomagnets. <i>Nature Physics</i> , <b>2012</b> , 8, 497-503	36.2	177
599	Atom-specific spin mapping and buried topological states in a homologous series of topological insulators. <i>Nature Communications</i> , <b>2012</b> , 3, 635	17.4	168
598	Topographic and magnetic-sensitive scanning tunneling microscope study of magnetite. <i>Science</i> , <b>1992</b> , 255, 583-6	33.3	166
597	Real-space observation of dipolar antiferromagnetism in magnetic nanowires by spin-polarized scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2000</b> , 84, 5212-5	7.4	162
596	Electrical detection of magnetic skyrmions by tunnelling non-collinear magnetoresistance. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 1039-42	28.7	145
595	Adatoms and clusters of 3d transition metals on graphene: electronic and magnetic configurations. <i>Physical Review Letters</i> , <b>2013</b> , 110, 136804	7.4	143
594	Measurement of three-dimensional force fields with atomic resolution using dynamic force spectroscopy. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4428-4430	3.4	143
593	Current-induced magnetization switching with a spin-polarized scanning tunneling microscope. <i>Science</i> , <b>2007</b> , 317, 1537-40	33.3	138
592	Spin-polarized scanning tunneling spectroscopy of nanoscale cobalt islands on Cu(111). <i>Physical Review Letters</i> , <b>2004</b> , 92, 057202	7.4	138
591	Atomic-scale magnetic domain walls in quasi-one-dimensional Fe nanostripes. <i>Physical Review Letters</i> , <b>2001</b> , 87, 127201	7.4	137

590	Toward tailoring Majorana bound states in artificially constructed magnetic atom chains on elemental superconductors. <i>Science Advances</i> , <b>2018</b> , 4, eaar5251	14.3	134
589	In-plane magnetic anisotropy of Fe atoms on Bi <sub>2</sub> Se <sub>3</sub> (111). <i>Physical Review Letters</i> , <b>2012</b> , 108, 256811	7.4	133
588	Quantitative analysis of lateral force microscopy experiments. <i>Review of Scientific Instruments</i> , <b>1996</b> , 67, 2560-2567	1.7	129
587	Atomic-scale magnetism of cobalt-intercalated graphene. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	127
586	Information transfer by vector spin chirality in finite magnetic chains. <i>Physical Review Letters</i> , <b>2012</b> , 108, 197204	7.4	125
585	Real-space observation of spin-split molecular orbitals of adsorbed single-molecule magnets. <i>Nature Communications</i> , <b>2012</b> , 3, 953	17.4	122
584	Itinerant nature of atom-magnetization excitation by tunneling electrons. <i>Physical Review Letters</i> , <b>2011</b> , 106, 037205	7.4	122
583	Determination of Tip-Sample Interaction Potentials by Dynamic Force Spectroscopy. <i>Physical Review Letters</i> , <b>1999</b> , 83, 4780-4783	7.4	122
582	Calculation of the frequency shift in dynamic force microscopy. <i>Applied Surface Science</i> , <b>1999</b> , 140, 344-361	7.4	122
581	Real-space observation of a right-rotating inhomogeneous cycloidal spin spiral by spin-polarized scanning tunneling microscopy in a triple axes vector magnet. <i>Physical Review Letters</i> , <b>2009</b> , 103, 157207	7.4	121
580	Revealing antiferromagnetic order of the Fe monolayer on W(001): spin-polarized scanning tunneling microscopy and first-principles calculations. <i>Physical Review Letters</i> , <b>2005</b> , 94, 087204	7.4	119
579	Measurement of conservative and dissipative tip-sample interaction forces with a dynamic force microscope using the frequency modulation technique. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	116
578	Atomic spin structure of antiferromagnetic domain walls. <i>Nature Materials</i> , <b>2006</b> , 5, 477-81	27	115
577	Quantum Hall transition in real space: from localized to extended states. <i>Physical Review Letters</i> , <b>2008</b> , 101, 256802	7.4	114
576	Imaging and manipulating the spin direction of individual atoms. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 350-357	28.7	113
575	Wave-function mapping of InAs quantum dots by scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2003</b> , 91, 196804	7.4	113
574	Atomic surface structure of Fe <sub>3</sub> O <sub>4</sub> (001) in different preparation stages studied by scanning tunneling microscopy. <i>Surface Science</i> , <b>1993</b> , 285, 1-14	1.8	113
573	Observation of magnetic hysteresis at the nanometer scale by spin-polarized scanning tunneling spectroscopy. <i>Science</i> , <b>2001</b> , 292, 2053-6	33.3	110

572	Consequences of the stick-slip movement for the scanning force microscopy imaging of graphite. <i>Physical Review B</i> , <b>1998</b> , 57, 2477-2481	3.3	109
571	Magnetization-direction-dependent local electronic structure probed by scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2002</b> , 89, 237205	7.4	109
570	Topology-induced spin frustrations at the Cr(001) surface studied by spin-polarized scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2000</b> , 85, 4606-9	7.4	109
569	Tip-induced band bending by scanning tunneling spectroscopy of the states of the tip-induced quantum dot on InAs(110). <i>Physical Review B</i> , <b>1999</b> , 59, 8043-8048	3.3	106
568	A scanning force microscope with atomic resolution in ultrahigh vacuum and at low temperatures. <i>Review of Scientific Instruments</i> , <b>1998</b> , 69, 221-225	1.7	101
567	Stability of single skyrmionic bits. <i>Nature Communications</i> , <b>2015</b> , 6, 8455	17.4	100
566	A low-temperature ultrahigh-vacuum scanning tunneling microscope with rotatable magnetic field. <i>Review of Scientific Instruments</i> , <b>1997</b> , 68, 3806-3810	1.7	94
565	A 300 mK ultra-high vacuum scanning tunneling microscope for spin-resolved spectroscopy at high energy resolution. <i>Review of Scientific Instruments</i> , <b>2004</b> , 75, 4871-4879	1.7	92
564	Controllable magnetic doping of the surface state of a topological insulator. <i>Physical Review Letters</i> , <b>2013</b> , 110, 126804	7.4	90
563	The velocity dependence of frictional forces in point-contact friction. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S263-S267	2.6	90
562	Detecting excitation and magnetization of individual dopants in a semiconductor. <i>Nature</i> , <b>2010</b> , 467, 1084-7	50.4	89
561	Noncontact Atomic Force Microscopy. <i>Nanoscience and Technology</i> , <b>2009</b> ,	0.6	89
560	Shape-dependent thermal switching behavior of superparamagnetic nanoislands. <i>Physical Review Letters</i> , <b>2004</b> , 92, 067201	7.4	88
559	Low-load friction behavior of epitaxial C60 monolayers under Hertzian contact. <i>Physical Review B</i> , <b>1995</b> , 52, 14976-14984	3.3	88
558	Quantitative analysis of dynamic-force-spectroscopy data on graphite(0001) in the contact and noncontact regimes. <i>Physical Review B</i> , <b>2000</b> , 61, 12678-12681	3.3	86
557	Observation of a complex nanoscale magnetic structure in a hexagonal Fe monolayer. <i>Physical Review Letters</i> , <b>2006</b> , 96, 167203	7.4	85
556	Molecular Kondo chain. <i>Nano Letters</i> , <b>2012</b> , 12, 3174-9	11.5	83
555	Symmetry reduction of metal phthalocyanines on metals. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	82

554	Magnetic sensitive force microscopy. <i>Nano Today</i> , <b>2008</b> , 3, 28-39	17.9	82
553	Spin-resolved electronic structure of nanoscale cobalt islands on Cu(111). <i>Physical Review Letters</i> , <b>2006</b> , 96, 237203	7.4	82
552	Spin excitations of individual Fe atoms on Pt(111): impact of the site-dependent giant substrate polarization. <i>Physical Review Letters</i> , <b>2013</b> , 111, 157204	7.4	81
551	Magnetization reversal of nanoscale islands: how size and shape affect the arrhenius prefactor. <i>Physical Review Letters</i> , <b>2009</b> , 103, 127202	7.4	81
550	Interpretation of true atomic resolution images of graphite (0001) in noncontact atomic force microscopy. <i>Physical Review B</i> , <b>2000</b> , 62, 6967-6970	3.3	78
549	A low-temperature ultrahigh vacuum scanning tunneling microscope with a split-coil magnet and a rotary motion stepper motor for high spatial resolution studies of surface magnetism. <i>Review of Scientific Instruments</i> , <b>2000</b> , 71, 424-430	1.7	78
548	Scattering States of Ionized Dopants Probed by Low Temperature Scanning Tunneling Spectroscopy. <i>Physical Review Letters</i> , <b>1998</b> , 81, 5616-5619	7.4	78
547	Scanning tunneling microscope study of iron(II) phthalocyanine growth on metals and insulating surfaces. <i>Surface Science</i> , <b>2008</b> , 602, 677-683	1.8	76
546	Dead but highly dynamic--the stratum corneum is divided into three hydration zones. <i>Skin Pharmacology and Physiology</i> , <b>2004</b> , 17, 246-57	3	76
545	Spin-polarized scanning tunneling microscopy study of 360° walls in an external magnetic field. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	75
544	Magnetization switching of submicrometer Co dots induced by a magnetic force microscope tip. <i>Physical Review B</i> , <b>1998</b> , 58, 5563-5567	3.3	75
543	Atomic-resolution dynamic force microscopy and spectroscopy of a single-walled carbon nanotube: characterization of interatomic van der Waals forces. <i>Physical Review Letters</i> , <b>2004</b> , 93, 136101	7.4	74
542	Modification of electrical properties of graphene by substrate-induced nanomodulation. <i>Nano Letters</i> , <b>2013</b> , 13, 3494-500	11.5	73
541	Dynamics of molecular self-ordering in tetraphenyl porphyrin monolayers on metallic substrates. <i>Nanotechnology</i> , <b>2009</b> , 20, 275602	3.4	72
540	Nanometer scale structure fabrication with the scanning tunneling microscope. <i>Applied Physics Letters</i> , <b>1987</b> , 51, 244-246	3.4	71
539	Modelling of the scan process in lateral force microscopy. <i>Surface Science</i> , <b>1997</b> , 375, 395-402	1.8	70
538	STM study of carbon-induced reconstructions on W(110): strong evidence for a surface lattice deformation. <i>Surface Science</i> , <b>1995</b> , 344, 185-191	1.8	68
537	Anisotropy of sliding friction on the triglycine sulfate (010) surface. <i>Applied Physics A: Materials Science and Processing</i> , <b>1995</b> , 61, 525-533	2.6	68

536	Atomic-scale interface engineering of Majorana edge modes in a 2D magnet-superconductor hybrid system. <i>Science Advances</i> , <b>2019</b> , 5, eaav6600	14.3	67
535	Pinning and movement of individual nanoscale magnetic skyrmions via defects. <i>New Journal of Physics</i> , <b>2016</b> , 18, 055009	2.9	66
534	Direct comparison between potential landscape and local density of states in a disordered two-dimensional electron system. <i>Physical Review Letters</i> , <b>2002</b> , 89, 136806	7.4	66
533	Real-space observation of drift States in a two-dimensional electron system at high magnetic fields. <i>Physical Review Letters</i> , <b>2003</b> , 90, 056804	7.4	65
532	Domain wall orientation in magnetic nanowires. <i>Physical Review Letters</i> , <b>2004</b> , 92, 077207	7.4	64
531	Dynamic scanning force microscopy at low temperatures on a van der Waals surface: graphite (0001). <i>Applied Surface Science</i> , <b>1999</b> , 140, 247-252	6.7	64
530	Reversible chiral switching of bis(phthalocyaninato) terbium(III) on a metal surface. <i>Nano Letters</i> , <b>2012</b> , 12, 3931-5	11.5	63
529	Prediction of bias-voltage-dependent corrugation reversal for STM images of bcc (110) surfaces: W(110), Ta(110), and Fe(110). <i>Physical Review B</i> , <b>1998</b> , 58, 16432-16445	3.3	63
528	Local electronic structure near Mn acceptors in InAs: surface-induced symmetry breaking and coupling to host states. <i>Physical Review Letters</i> , <b>2007</b> , 99, 157202	7.4	62
527	Dynamic-mode scanning force microscopy study of n-InAs(110)-(1 $\bar{1}$ ) at low temperatures. <i>Physical Review B</i> , <b>2000</b> , 61, 2837-2845	3.3	62
526	Interface-induced chiral domain walls, spin spirals and skyrmions revealed by spin-polarized scanning tunneling microscopy. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 394002	1.8	61
525	Simulation of a scanned tip on a NaF(001) surface in friction force microscopy. <i>Europhysics Letters</i> , <b>1996</b> , 36, 19-24	1.6	58
524	Assessing the performance of two-dimensional dopant profiling techniques. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 385		58
523	Visualization of the Barkhausen effect by magnetic force microscopy. <i>Physical Review Letters</i> , <b>2004</b> , 92, 077206	7.4	58
522	Simultaneous imaging of the In and As sublattice on InAs(110)-(1 $\bar{1}$ ) with dynamic scanning force microscopy. <i>Applied Surface Science</i> , <b>1999</b> , 140, 293-297	6.7	58
521	Tailoring the chiral magnetic interaction between two individual atoms. <i>Nature Communications</i> , <b>2016</b> , 7, 10620	17.4	56
520	Atomically resolved mechanical response of individual metallofullerene molecules confined inside carbon nanotubes. <i>Nature Nanotechnology</i> , <b>2008</b> , 3, 337-41	28.7	56
519	On the preparation and electronic properties of clean W(110) surfaces. <i>Surface Science</i> , <b>2007</b> , 601, 3308-3314	3.14	56

518	Chiral magnetic ordering in two-dimensional ferromagnets with competing Dzyaloshinsky-Moriya interactions. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	56
517	Robust surface doping of Bi <sub>2</sub> Se <sub>3</sub> by rubidium intercalation. <i>ACS Nano</i> , <b>2012</b> , 6, 7009-15	16.7	54
516	Determination of site specific interatomic forces between an iron coated tip and the NiO(0 0 1) surface by force field spectroscopy. <i>Surface Science</i> , <b>2003</b> , 527, 12-20	1.8	54
515	Chemical resolution at ionic crystal surfaces using dynamic atomic force microscopy with metallic tips. <i>Physical Review Letters</i> , <b>2011</b> , 106, 216102	7.4	52
514	Bulk Cr tips with full spatial magnetic sensitivity for spin-polarized scanning tunneling microscopy. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 083104	3.4	52
513	Conical spin-spiral state in an ultrathin film driven by higher-order spin interactions. <i>Physical Review Letters</i> , <b>2012</b> , 108, 087205	7.4	52
512	Electrostatic force microscopy on ferroelectric crystals in inert gas atmosphere. <i>Physical Review B</i> , <b>1997</b> , 55, 4-7	3.3	52
511	Tuning emergent magnetism in a Hund's impurity. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 958-64	28.7	51
510	Current-driven domain wall motion in cylindrical nanowires. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	51
509	Origin of the ferroelectric domain contrast observed in lateral force microscopy. <i>Physical Review B</i> , <b>1998</b> , 57, 161-169	3.3	51
508	Dynamic scanning force microscopy at low temperatures on a noble-gas crystal: Atomic resolution on the xenon(111) surface. <i>Europhysics Letters</i> , <b>1999</b> , 48, 276-279	1.6	51
507	Progress towards spin-polarized scanning tunneling microscopy. <i>Journal of Applied Physics</i> , <b>1992</b> , 71, 5489-5499	2.5	50
506	Magnetic exchange splitting of the Gd(0001) surface state studied by variable-temperature scanning tunneling spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S121-S124	2.6	49
505	Dynamic low-temperature scanning force microscopy on nickel oxide (001). <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S27-S30	2.6	49
504	Surface modification in the nanometer range by the scanning tunneling microscope. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1988</b> , 6, 537-539	2.9	49
503	Effect of charge manipulation on scanning tunneling spectra of single Mn acceptors in InAs. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	48
502	H-induced plastic deformation of Gd thin films studied by STM. <i>Physical Review B</i> , <b>2000</b> , 61, 9964-9967	3.3	48
501	Spintronics: Skyrmionics gets hot. <i>Nature Materials</i> , <b>2016</b> , 15, 493-4	27	48



500	Isolated zero field sub-10 nm skyrmions in ultrathin Co films. <i>Nature Communications</i> , <b>2019</b> , 10, 3823	17.4	46
499	Tailoring molecular self-assembly of magnetic phthalocyanine molecules on Fe- and Co-intercalated graphene. <i>ACS Nano</i> , <b>2013</b> , 7, 11341-9	16.7	46
498	Multiscale magnetic study of Ni(111) and graphene on Ni(111). <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	46
497	Probing the magnetic exchange forces of iron on the atomic scale. <i>Nano Letters</i> , <b>2009</b> , 9, 200-4	11.5	46
496	Quantitative analysis of the frictional properties of solid materials at low loads. II. Mica and germanium sulfide. <i>Physical Review B</i> , <b>1997</b> , 56, 6997-7000	3.3	46
495	Unoccupied surface state on Pt(111) revealed by scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	46
494	Scanning tunneling spectroscopy of Fe/W(110) using iron covered probe tips. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1997</b> , 15, 1285-1290	2.9	45
493	Noncollinear magnetic order in quasicrystals. <i>Physical Review Letters</i> , <b>2004</b> , 93, 076407	7.4	45
492	Fabrication of nanometer structures using STM. <i>Applied Surface Science</i> , <b>1992</b> , 54, 271-277	6.7	45
491	Spin-Resolved Spectroscopy of the Yu-Shiba-Rusinov States of Individual Atoms. <i>Physical Review Letters</i> , <b>2017</b> , 119, 197002	7.4	44
490	Spin-dependent electronic and magnetic properties of Co nanostructures on Pt(111) studied by spin-resolved scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	44
489	A low-temperature ultrahigh vacuum scanning force microscope with a split-coil magnet. <i>Review of Scientific Instruments</i> , <b>2002</b> , 73, 3508-3514	1.7	43
488	Vertical polarization of quantum magnets in high density arrays of nickel dots with small height-to-diameter ratio. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2168-2170	3.4	43
487	Vacuum tunneling of spin-polarized electrons detected by scanning tunneling microscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1991</b> , 9, 519		43
486	Minimal radius of magnetic skyrmions: statics and dynamics. <i>New Journal of Physics</i> , <b>2016</b> , 18, 045021	2.9	43
485	Absence of a spin-signature from a single Ho adatom as probed by spin-sensitive tunneling. <i>Nature Communications</i> , <b>2016</b> , 7, 10454	17.4	42
484	Structure of cross-tie wall in thin Co films resolved by magnetic force microscopy. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 3635-3637	3.4	42
483	Local structure of the Si(100) surface studied by scanning tunneling microscopy. <i>Surface Science</i> , <b>1990</b> , 232, 1-5	1.8	42

482	Long-range magnetic coupling between nanoscale organic-metal hybrids mediated by a nanoskyrmion lattice. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 1018-23	28.7	41
481	Quantitative measurement of the magnetic exchange interaction across a vacuum gap. <i>Physical Review Letters</i> , <b>2011</b> , 106, 257202	7.4	41
480	Temperature-dependent exchange splitting of the magnetic Gd(0001) surface state. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1998</b> , 184, 155-165	2.8	41
479	Direct observation of confined states in metallic single-walled carbon nanotubes. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1011-1013	3.4	40
478	Magnetism of nanoscale Fe islands studied by spin-polarized scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	40
477	Charge freezing and surface anisotropy on magnetite (100). <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 6742-6744	4.4	40
476	Local tunneling barrier height images obtained with the scanning tunneling microscope. <i>Surface Science</i> , <b>1987</b> , 189-190, 24-28	1.8	40
475	Interfacial superconductivity in a bi-collinear antiferromagnetically ordered FeTe monolayer on a topological insulator. <i>Nature Communications</i> , <b>2017</b> , 8, 14074	17.4	39
474	Impact of the skyrmion spin texture on magnetoresistance. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	39
473	Multipolar ordering and magnetization reversal in two-dimensional nanomagnet arrays. <i>Physical Review Letters</i> , <b>2005</b> , 95, 207202	7.4	39
472	Structural, electronic, and magnetic properties of a Mn monolayer on W(110). <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	39
471	Influence of the degree of decoupling of graphene on the properties of transition metal adatoms. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	38
470	Domain wall motion damped by the emission of spin waves. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	38
469	Composition-driven change of the magnetic anisotropy of ultrathin Co/Au(111) films studied by means of magnetic-force microscopy in ultrahigh vacuum. <i>Physical Review B</i> , <b>1999</b> , 59, 4273-4278	3.3	38
468	Application of scanning tunneling microscopy to disordered systems. <i>Surface Science</i> , <b>1987</b> , 181, 46-54	1.8	38
467	Electric-field-induced magnetic anisotropy in a nanomagnet investigated on the atomic scale. <i>Physical Review Letters</i> , <b>2014</b> , 112, 017204	7.4	37
466	Thermal stability of an interface-stabilized skyrmion lattice. <i>Physical Review Letters</i> , <b>2014</b> , 113, 077202	7.4	37
465	Investigation of the swelling of human skin cells in liquid media by tapping mode scanning force microscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S125-S128	2.6	36

464	Experimental evidence for intra-atomic noncollinear magnetism at thin film probe tips. <i>Physical Review Letters</i> , <b>2001</b> , 86, 2142-5	7.4	36
463	Using metallic noncontact atomic force microscope tips for imaging insulators and polar molecules: tip characterization and imaging mechanisms. <i>ACS Nano</i> , <b>2014</b> , 8, 5339-51	16.7	35
462	Spin friction observed on the atomic scale. <i>Physical Review Letters</i> , <b>2012</b> , 109, 116102	7.4	35
461	Unambiguous determination of the adsorption geometry of a metal-organic complex on a bulk insulator. <i>Nano Letters</i> , <b>2010</b> , 10, 2965-71	11.5	35
460	Thickness dependent magnetization states of Fe islands on W(110): From single domain to vortex and diamond patterns. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 948-950	3.4	35
459	Nanostructural and local electronic properties of Fe/W(110) correlated by scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>1996</b> , 54, R8385-R8388	3.3	35
458	Comment on "Damping mechanism in dynamic force microscopy". <i>Physical Review Letters</i> , <b>2002</b> , 88, 019601	7.4	34
457	Coverage dependence of the Fe-induced Fermi-level shift and the two-dimensional electron gas on InAs(110). <i>Physical Review B</i> , <b>2000</b> , 61, 13805-13812	3.3	34
456	Temperature-Dependent Exchange Splitting of a Surface State on a Local-Moment Magnet: Tb(0001). <i>Physical Review Letters</i> , <b>1999</b> , 83, 3017-3020	7.4	34
455	Different Response of Atomic Force Microscopy and Scanning Tunnelling Microscopy to Charge Density Waves. <i>Europhysics Letters</i> , <b>1989</b> , 9, 695-700	1.6	34
454	Spin-resolved splitting of Kondo resonances in the presence of RKKY-type coupling. <i>Physical Review Letters</i> , <b>2012</b> , 108, 087203	7.4	33
453	Correlation of dislocation and domain structure of Cr(001) investigated by spin-polarized scanning tunneling microscopy. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	33
452	Low temperature scanning tunneling spectroscopy on InAs(110). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2000</b> , 109, 127-145	1.7	33
451	Growth of C60 thin films on GeS(001) studied by scanning force microscopy. <i>Physical Review B</i> , <b>1995</b> , 52, 5967-5976	3.3	33
450	Surface structure of donor graphite intercalation compounds by scanning tunneling microscopy. <i>Physical Review B</i> , <b>1989</b> , 39, 11135-11138	3.3	33
449	Toward Tailored All-Spin Molecular Devices. <i>Nano Letters</i> , <b>2016</b> , 16, 577-82	11.5	32
448	Tunneling anisotropic magnetoresistance on the atomic scale. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	32
447	Direct measurement of the local density of states of a disordered one-dimensional conductor. <i>Physical Review Letters</i> , <b>2003</b> , 91, 076803	7.4	32

446	Surface structure of ferroelectric domains on the triglycine sulfate (010) surface. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 1180		31
445	Nanoscale magnetic skyrmions and target states in confined geometries. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	30
444	"Naked" iron-5,10,15-triphenylcorrole on Cu(111): observation of chirality on a surface and manipulation of multiple conformational states by STM. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 14072-3	16.4	30
443	Nano- and atomic-scale magnetism studied by spin-polarized scanning tunneling microscopy and spectroscopy. <i>Solid State Communications</i> , <b>2001</b> , 119, 341-355	1.6	30
442	Contributions of scanning probe microscopy and spectroscopy to the investigation and fabrication of nanometer-scale structures. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1994</b> , 12, 515		30
441	Evidence for Selective Imaging of Different Magnetic Ions on the Atomic Scale by Using a Scanning Tunnelling Microscope with a Ferromagnetic Probe Tip. <i>Europhysics Letters</i> , <b>1992</b> , 19, 141-146	1.6	30
440	Guiding Spin Spirals by Local Uniaxial Strain Relief. <i>Physical Review Letters</i> , <b>2016</b> , 116, 017201	7.4	29
439	Fe adatoms on graphene/Ru(0001): Adsorption site and local electronic properties. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	29
438	Atomic and local electronic structure of Gd thin films studied by STM and STS. <i>Physical Review B</i> , <b>1997</b> , 56, 3636-3639	3.3	29
437	Imaging of domain-inverted gratings in LiNbO3 by electrostatic force microscopy. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 146-148	3.4	29
436	Origin of Landau oscillations observed in scanning tunneling spectroscopy on n-InAs(110). <i>Physical Review B</i> , <b>2000</b> , 62, 7257-7263	3.3	29
435	Engineering the spin couplings in atomically crafted spin chains on an elemental superconductor. <i>Nature Communications</i> , <b>2018</b> , 9, 3253	17.4	28
434	Nano-electronics and spintronics with nanoparticles. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012002	0.3	28
433	Atomic resolution in scanning force microscopy: Concepts, requirements, contrast mechanisms, and image interpretation. <i>Physical Review B</i> , <b>2000</b> , 62, 13089-13097	3.3	28
432	Spatial fluctuations of the density of states in magnetic fields observed with scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2000</b> , 84, 5588-91	7.4	28
431	Topography and local modification of the HoBa2Cu3O7 $\delta$ (001) surface using scanning tunneling microscopy. <i>Applied Physics Letters</i> , <b>1988</b> , 53, 2447-2449	3.4	28
430	Influence of the local atom configuration on a hexagonal skyrmion lattice. <i>Nano Letters</i> , <b>2015</b> , 15, 3280-3285	11.5	27
429	Inducing skyrmions in ultrathin Fe films by hydrogen exposure. <i>Nature Communications</i> , <b>2018</b> , 9, 1571	17.4	27

428	Inhomogeneous electronic properties of monolayer graphene on Ru(0001). <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	27
427	Heat assisted spin torque switching of quasistable nanomagnets across a vacuum gap. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 102505	3.4	27
426	Correlation effects in wave function mapping of molecular beam epitaxy grown quantum dots. <i>Nano Letters</i> , <b>2007</b> , 7, 2701-6	11.5	27
425	Three-Dimensional Force Field Spectroscopy. <i>AIP Conference Proceedings</i> , <b>2003</b> ,	0	27
424	Impurity-induced resistivity of ferroelastic domain walls in doped lead phosphate. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, 957-962	1.8	27
423	STM measurements on the InAs(110) surface directly compared with surface electronic structure calculations. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	27
422	Magnetization reversal of a structurally disordered manganite thin film with perpendicular anisotropy. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	27
421	Recent advances in scanning tunneling microscopy involving magnetic probes and samples. <i>Applied Physics A: Solids and Surfaces</i> , <b>1991</b> , 53, 349-355		27
420	Competition of Dzyaloshinskii-Moriya and Higher-Order Exchange Interactions in Rh/Fe Atomic Bilayers on Ir(111). <i>Physical Review Letters</i> , <b>2018</b> , 120, 207201	7.4	27
419	Strong out-of-plane magnetic anisotropy of Fe adatoms on Bi <sub>2</sub> Te <sub>3</sub> . <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	26
418	Probing the Nano-Skyrmion Lattice on Fe/Ir(111) with Magnetic Exchange Force Microscopy. <i>Physical Review Letters</i> , <b>2017</b> , 119, 047205	7.4	26
417	Joule heating and spin-transfer torque investigated on the atomic scale using a spin-polarized scanning tunneling microscope. <i>Physical Review Letters</i> , <b>2011</b> , 107, 186601	7.4	26
416	Indirect control of antiferromagnetic domain walls with spin current. <i>Physical Review Letters</i> , <b>2011</b> , 106, 067204	7.4	26
415	Anomalously large g factor of single atoms adsorbed on a metal substrate. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	26
414	Complex magnetism of the Fe monolayer on Ir(111). <i>New Journal of Physics</i> , <b>2007</b> , 9, 396-396	2.9	26
413	Direct writing of nanometer scale structures on glassy metals by the scanning tunneling microscope. <i>European Physical Journal B</i> , <b>1989</b> , 77, 281-286	1.2	26
412	Large Dzyaloshinskii-Moriya interaction induced by chemisorbed oxygen on a ferromagnet surface. <i>Science Advances</i> , <b>2020</b> , 6, eaba4924	14.3	26
411	Controlled creation and stability of skyrmions on a discrete lattice. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	26

410	Computing with spins and magnets. <i>MRS Bulletin</i> , <b>2014</b> , 39, 696-702	3.2	25
409	Steering two-dimensional molecular growth via dipolar interaction. <i>ChemPhysChem</i> , <b>2009</b> , 10, 2008-11	3.2	25
408	Interpretation of the atomic scale contrast obtained on graphite and single-walled carbon nanotubes in the dynamic mode of atomic force microscopy. <i>Nanotechnology</i> , <b>2005</b> , 16, S134-S137	3.4	25
407	Ammonia synthesis over a supported iron catalyst prepared from an amorphous iron-zirconium precursor II. Surface morphological changes during the genesis of the catalyst. <i>Journal of Catalysis</i> , <b>1987</b> , 108, 452-466	7.3	25
406	Hydrogenated amorphous silicon studied by scanning tunneling microscopy. <i>Journal of Applied Physics</i> , <b>1988</b> , 63, 4515-4517	2.5	25
405	Intra- and interband electron scattering in a hybrid topological insulator: Bismuth bilayer on Bi <sub>2</sub> Se <sub>3</sub> . <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	24
404	Robust nodal structure of Landau level wave functions revealed by Fourier transform scanning tunneling spectroscopy. <i>Physical Review Letters</i> , <b>2012</b> , 109, 116805	7.4	24
403	Local density of states of a three-dimensional conductor in the extreme quantum limit. <i>Physical Review Letters</i> , <b>2001</b> , 86, 1582-5	7.4	24
402	Nb-induced two-dimensional electron gas on nInAs(110): Anomalous coverage dependence. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	24
401	Atomic-resolution surface studies of binary and ternary alkali-metal-graphite intercalation compounds by scanning tunneling microscopy. <i>Physical Review B</i> , <b>1992</b> , 45, 1829-1837	3.3	24
400	Scanning Tunnelling Microscopy Study of Si(111) $\sqrt{7} \times \sqrt{7}$ in the Presence of Multiple-Step Edges. <i>Europhysics Letters</i> , <b>1990</b> , 12, 57-61	1.6	24
399	Non-collinear spin states in bottom-up fabricated atomic chains. <i>Nature Communications</i> , <b>2018</b> , 9, 2853	17.4	23
398	Detecting the dipole moment of a single carbon monoxide molecule. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 011606	3.4	23
397	Orbital selective coupling between Ni adatoms and graphene Dirac electrons. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	23
396	A low-temperature spin-polarized scanning tunneling microscope operating in a fully rotatable magnetic field. <i>Review of Scientific Instruments</i> , <b>2009</b> , 80, 023708	1.7	23
395	Structure and magnetism of ultra-thin chromium layers on W(110). <i>New Journal of Physics</i> , <b>2008</b> , 10, 013005	1.5	23
394	Scanning tunneling spectroscopy on Co(0001): Spectroscopic signature of stacking faults and dislocation lines. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	23
393	Detection of doping atom distributions and individual dopants in InAs(110) by dynamic-mode scanning force microscopy in ultrahigh vacuum. <i>Physical Review B</i> , <b>2000</b> , 62, 13617-13622	3.3	23

392	Vacuum-tunneling magnetoresistance: The role of spin-polarized surface states. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 124-126	3.4	23
391	Band-gap engineering by Bi intercalation of graphene on Ir(111). <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	22
390	Spin-resolved characterization of single cobalt phthalocyanine molecules on a ferromagnetic support. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	22
389	Spin-polarized scanning tunneling microscopy and spectroscopy of ferromagnetic Dy(0001)/W(110) films. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	22
388	Magnetism of iron on tungsten (001) studied by spin-resolved scanning tunneling microscopy and spectroscopy. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	22
387	Temperature-dependent scanning tunneling spectroscopy of Cr(001): Orbital Kondo resonance versus surface state. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	22
386	Absence of spin-flip transition at the Cr(001) surface: A combined spin-polarized scanning tunneling microscopy and neutron scattering study. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	22
385	Growth of thin Mn films on W(110) studied by means of in-situ scanning tunnelling microscopy. <i>Surface Science</i> , <b>1999</b> , 432, 8-20	1.8	22
384	Magnetic imaging at the atomic level. <i>European Physical Journal B</i> , <b>1992</b> , 86, 1-2	1.2	22
383	Adsorption and conformation of porphyrins on metallic surfaces. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2009</b> , 27, 799		21
382	Scanning tunneling spectroscopy on n-InAs(110): Landau-level quantization and scattering of electron waves at dopant atoms. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S203-S206 <sup>2.6</sup>		21
381	Pros and cons: cryo-electron microscopic evaluation of block faces versus cryo-sections from frozen-hydrated skin specimens prepared by different techniques. <i>Journal of Microscopy</i> , <b>2007</b> , 225, 201 <sup>1.79</sup>		21
380	Spin-polarized electron scattering at single oxygen adsorbates on a magnetic surface. <i>Physical Review Letters</i> , <b>2004</b> , 92, 046801	7.4	21
379	Dynamic force microscopy with atomic resolution at low temperatures. <i>Applied Surface Science</i> , <b>2002</b> , 188, 245-251	6.7	21
378	Penetration pathways of fluorescent dyes in human hair fibres investigated by scanning near-field optical microscopy. <i>Journal of Microscopy</i> , <b>2000</b> , 200, 179-86	1.9	21
377	Present and future developments of SPM systems as mass storage devices. <i>Applied Physics A: Materials Science and Processing</i> , <b>1999</b> , 68, 131-135	2.6	21
376	Issues of atomic-resolution structure and chemical analysis by scanning probe microscopy and spectroscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1996</b> , 14, 1161-1167 <sup>2.9</sup>		21
375	Different response of atomic force microscopy and scanning tunneling microscopy to charge density waves. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1990</b> , 8, 495-499 <sup>2.9</sup>		21

374	Local symmetry breaking in stage-1 alkali-metal-graphite intercalation compounds studied by scanning tunneling microscopy. <i>Physical Review B</i> , <b>1990</b> , 42, 1848-1851	3.3	21
373	Quantum technology: from research to application. <i>Applied Physics B: Lasers and Optics</i> , <b>2016</b> , 122, 1	1.9	21
372	Reorientation of the diagonal double-stripe spin structure at FeTe bulk and thin-film surfaces. <i>Nature Communications</i> , <b>2017</b> , 8, 13939	17.4	20
371	Spin polarization of platinum (111) induced by the proximity to cobalt nanostripes. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	20
370	Hydrogen adsorption on Gd(0001). <i>Surface Science</i> , <b>1998</b> , 410, 189-199	1.8	20
369	Spin-polarized scanning tunneling microscopy in field emission mode. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 012508	3.4	20
368	Magnetic properties of the Cr(001) surface studied by spin-polarized scanning tunneling spectroscopy. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2002</b> , 240, 64-69	2.8	20
367	Simulation of NC-AFM images of xenon(111). <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S35-S38	2.6	20
366	Adsorbates on Gd(0001): A combined scanning tunneling microscopy and photoemission study. <i>Physical Review B</i> , <b>1999</b> , 59, 8195-8208	3.3	20
365	Size Dependence of the Curie Temperature of Separate Nickel Particles Studied by Interference Electron Microscopy. <i>Europhysics Letters</i> , <b>1995</b> , 31, 567-572	1.6	20
364	Enhanced atomic-scale spin contrast due to spin friction. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076102	7.4	19
363	LSMO growing opportunities by PLD and applications in spintronics. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012003	0.3	19
362	Atomic magnetism revealed by spin-resolved scanning tunnelling spectroscopy. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 464009	3	19
361	Quantized spin waves in ferromagnetic and antiferromagnetic structures with domain walls. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	19
360	Interplay between magnetic and spatial order in quasicrystals. <i>Philosophical Magazine</i> , <b>2006</b> , 86, 733-739	1.6	19
359	Correlation of structural and local electronic and magnetic properties of Fe/Cr(001) studied by spin-polarized scanning tunnelling microscopy. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S2513-S2531	1.8	19
358	Micromagnetic properties and magnetization switching of single domain Co dots studied by magnetic force microscopy. <i>Zeitschrift für Physik B-Condensed Matter</i> , <b>1996</b> , 101, 1-2		19
357	Hexagonal and nonhexagonal superlattice structures on stage-1 alkali metal graphite intercalation compounds studied by scanning tunnelling microscopy. <i>Synthetic Metals</i> , <b>1990</b> , 38, 157-167	3.6	19



356	Physical properties of icosahedral and glassy Pd <sub>43</sub> Si alloys. <i>European Physical Journal B</i> , <b>1987</b> , 68, 313-324.	4.2	19
355	Pattern formation in skyrmionic materials with anisotropic environments. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	19
354	Domain walls and Dzyaloshinskii-Moriya interaction in epitaxial Co/Ir(111) and Pt/Co/Ir(111). <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	19
353	Local tunnel magnetoresistance of an iron intercalated graphene-based heterostructure. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 394004	1.8	18
352	Determining Adsorption Geometry, Bonding, and Translational Pathways of a Metal-Organic Complex on an Oxide Surface: Co-Salen on NiO(001). <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 1105-1112	3.8	18
351	On-Surface Oligomerization of Self-Terminating Molecular Chains for the Design of Spintronic Devices. <i>ACS Nano</i> , <b>2017</b> , 11, 9200-9206	16.7	18
350	Single-atom magnetometry. <i>Current Opinion in Solid State and Materials Science</i> , <b>2011</b> , 15, 1-7	12	18
349	A versatile variable-temperature scanning tunneling microscope for molecular growth. <i>Review of Scientific Instruments</i> , <b>2008</b> , 79, 083903	1.7	18
348	Imaging correlated wave functions of few-electron quantum dots: Theory and scanning tunneling spectroscopy experiments). <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 081714	2.5	18
347	Determining the spin polarization of surfaces by spin-polarized scanning tunneling spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2003</b> , 76, 873-877	2.6	18
346	From quantized states to percolation: Scanning tunneling spectroscopy of a strongly disordered two-dimensional electron system. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	18
345	Donor graphite intercalation compounds studied with a high stability STM. <i>Journal of Microscopy</i> , <b>1988</b> , 152, 509-514	1.9	18
344	A gateway towards non-collinear spin processing using three-atom magnets with strong substrate coupling. <i>Nature Communications</i> , <b>2017</b> , 8, 642	17.4	17
343	Response of the topological surface state to surface disorder in TlBiSe <sub>2</sub> . <i>New Journal of Physics</i> , <b>2015</b> , 17, 023067	2.9	17
342	Magnetic Nano-skyrmion Lattice Observed in a Si-Wafer-Based Multilayer System. <i>ACS Nano</i> , <b>2015</b> , 9, 5908-12	16.7	17
341	Magnetic properties of monolayer Co islands on Ir(111) probed by spin-resolved scanning tunneling microscopy. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	17
340	Nonlocality of the exchange interaction probed by scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	17
339	Wigner glass on the magnetite (001) surface observed by scanning tunneling microscopy with a ferromagnetic tip. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1994</b> , 12, 2118		17

338	Scanning and friction-force microscopy of thin C60 films on GeS(001). <i>Applied Physics A: Solids and Surfaces</i> , <b>1994</b> , 59, 11-15		17
337	Investigation of the microstructure of an Fe <sub>91</sub> Zr <sub>9</sub> catalyst prepared from the amorphous alloy. <i>Materials Science and Engineering</i> , <b>1988</b> , 99, 501-505		17
336	Long Spin-Relaxation Times in a Transition-Metal Atom in Direct Contact to a Metal Substrate. <i>Nano Letters</i> , <b>2018</b> , 18, 1978-1983	11.5	16
335	Formation and structural analysis of twisted bilayer graphene on Ni(111) thin films. <i>Surface Science</i> , <b>2014</b> , 625, 44-49	1.8	16
334	Co atoms on Bi <sub>2</sub> Se <sub>3</sub> revealing a coverage dependent spin reorientation transition. <i>New Journal of Physics</i> , <b>2013</b> , 15, 113026	2.9	16
333	Inversion of spin polarization above individual magnetic adatoms. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	16
332	Magnetic nanostructures studied by scanning probe microscopy and spectroscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1997</b> , 15, 1330		16
331	Spin-polarized scanning tunneling microscopy through an adsorbate layer: Sulfur-covered Fe/W(1 1 0). <i>Surface Science</i> , <b>2006</b> , 600, L20-L24	1.8	16
330	Imaging of sub-unit-cell structures in the contact mode of the scanning force microscope. <i>Physical Review B</i> , <b>1999</b> , 59, 1661-1664	3.3	16
329	Hydrogen Induced Plastic Deformation of Thin Films. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 594, 75		16
328	Summary Abstract: Dipalmitoylphosphatidylcholine Langmuir-Blodgett films on various substrates [Si(111), Au, Sn] studied by scanning tunneling microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1988</b> , 6, 358-359	2.9	16
327	Exploring the Relation Between Intramolecular Conjugation and Band Dispersion in One-Dimensional Polymers. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 27118-27125	3.8	15
326	Magnetism and in-gap states of 3d transition metal atoms on superconducting Re. <i>Npj Quantum Materials</i> , <b>2019</b> , 4,	5	15
325	Stabilizing spin systems via symmetrically tailored RKKY interactions. <i>Nature Communications</i> , <b>2019</b> , 10, 2565	17.4	15
324	Magneto-Seebeck tunneling on the atomic scale. <i>Science</i> , <b>2019</b> , 363, 1065-1067	33.3	15
323	Impact of intercalated cobalt on the electronic properties of graphene on Pt(111). <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	15
322	Controlled sequential dehydrogenation of single molecules by scanning tunneling microscopy. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	15
321	STM-study of GdW(110) at submonolayer coverages. <i>Surface Science</i> , <b>1997</b> , 385, L990-L996	1.8	15

320	The physical principles of scanning capacitance spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S243-S251	2.6	15
319	Imaging magnetic nanostructures by spin-polarized scanning tunneling spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2001</b> , 114-116, 1055-1062	1.7	15
318	Scanning tunneling microscopy study of the degree of dimer asymmetry on the Si(001)-(2 × 1) surface. <i>Surface Science</i> , <b>1992</b> , 274, 93-98	1.8	15
317	Surface step and defect structure of Cr(001) studied by scanning tunneling microscopy. <i>Surface Science</i> , <b>1990</b> , 235, 1-4	1.8	15
316	STM on Layered Materials. <i>Springer Series in Surface Sciences</i> , <b>1992</b> , 131-179	0.4	15
315	Friction Force Spectroscopy in the Low-Load Regime with Well-Defined Tips <b>1997</b> , 233-238		15
314	Giant magnetization canting due to symmetry breaking in zigzag Co chains on Ir(001). <i>New Journal of Physics</i> , <b>2015</b> , 17, 023014	2.9	14
313	Superconductivity of lanthanum revisited: enhanced critical temperature in the clean limit. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 425703	1.8	14
312	A theoretical study of the dynamical switching of a single spin by exchange forces. <i>New Journal of Physics</i> , <b>2013</b> , 15, 013011	2.9	14
311	The monomer-to-dimer transition and bimodal growth of Co-salen on NaCl(001): a high resolution atomic force microscopy study. <i>Nanotechnology</i> , <b>2009</b> , 20, 405608	3.4	14
310	Spin-orbit induced local band structure variations revealed by scanning tunnelling spectroscopy. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S679-S692	1.8	14
309	Quantitative aspects of spin-polarized scanning tunneling spectroscopy of Gd(0001). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1999</b> , 17, 2228-2232	2.9	14
308	Local structure and dynamics of a segregated c(2 × 2) sulfur layer on Pd(001) studied by scanning tunneling microscopy. <i>Physical Review B</i> , <b>1993</b> , 47, 9963-9966	3.3	14
307	STM activity at the University of Basel. <i>IBM Journal of Research and Development</i> , <b>1986</b> , 30, 500-508	2.5	14
306	Localized spin waves in isolated k <sub>B</sub> skyrmions. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	14
305	A millikelvin all-fiber cavity optomechanical apparatus for merging with ultra-cold atoms in a hybrid quantum system. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 023115	1.7	13
304	Skyrmions at the Edge: Confinement Effects in Fe/Ir(111). <i>Physical Review Letters</i> , <b>2016</b> , 117, 207202	7.4	13
303	Spin torque and critical currents for magnetic vortex nano-oscillator in nanopillars. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012006	0.3	13

302	Scanning capacitance microscope as a tool for the characterization of integrated circuits. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S421-S426	2.6	13
301	Spin-polarized scanning tunneling spectroscopy of dislocation lines in Fe films on W(110). <i>Journal of Magnetism and Magnetic Materials</i> , <b>2006</b> , 304, 1-5	2.8	13
300	Coverage-dependent spin reorientation transition temperature of the Fe double-layer on W(110) observed by scanning tunneling microscopy. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2006</b> , 305, 279-283	2.8	13
299	Domain nucleation and growth of La <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> /LaAlO <sub>3</sub> films studied by low temperature magnetic force microscopy. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 8319-8321	2.5	13
298	Observation of 5f states in U/W(110) films by means of scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	13
297	Recent progress in high-resolution magnetic imaging using scanning probe techniques. <i>Journal of Physics Condensed Matter</i> , <b>1999</b> , 11, 9387-9402	1.8	13
296	Scanning tunneling and scanning electron microscopy on high-T <sub>c</sub> superconductors. <i>Physica C: Superconductivity and Its Applications</i> , <b>1988</b> , 153-155, 1000-1001	1.3	13
295	Multi-layer and multi-component intercalation at the graphene/Ir(111) interface. <i>Surface Science</i> , <b>2015</b> , 639, 70-74	1.8	12
294	Discovery of Magnetic Single- and Triple-q States in Mn/Re(0001). <i>Physical Review Letters</i> , <b>2020</b> , 124, 227203	7.4	12
293	Screening and atomic-scale engineering of the potential at a topological insulator surface. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	12
292	Scanning tunneling microscopy study of Fe, Co and Cr growth on Re(0001). <i>Surface Science</i> , <b>2014</b> , 630, 280-285	1.8	12
291	Domain wall manipulation with a magnetic tip. <i>Physical Review Letters</i> , <b>2011</b> , 107, 027203	7.4	12
290	Towards an understanding of the atomic scale magnetic contrast formation in NC-AFM: a tip material dependent MExFM study on NiO(001). <i>Nanotechnology</i> , <b>2009</b> , 20, 264017	3.4	12
289	Preparation of probe tips with well-defined spherical apices for quantitative scanning force spectroscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1997</b> , 15, 1527		12
288	Consequences of line defects on the magnetic structure of high anisotropy films: Pinning centers on Dy/W(110). <i>Europhysics Letters</i> , <b>2006</b> , 76, 637-643	1.6	12
287	Electronic states of Fe atoms and chains on InAs(110) from scanning tunneling spectroscopy. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	12
286	Direct observation of vortices trapped at stacking fault dislocations in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> by a low-temperature magnetic force microscope. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	12
285	Fundamental studies of magnetism down to the atomic scale: present status and future perspectives of spin-polarized scanning tunneling microscopy. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2004</b> , 272-276, 2115-2120	2.8	12

284	Vortex Dynamics in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> Single Crystal with Low Density Columnar Defects Studied by Magnetic Force Microscope. <i>Journal of Low Temperature Physics</i> , <b>2003</b> , 131, 993-1002	1.3	12
283	Experimental evidence for edge-like states in three-dimensional electron systems. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	12
282	Recent Advances in Nanostructural Investigations and Modifications of Solid Surfaces by Scanning Probe Methods. <i>Japanese Journal of Applied Physics</i> , <b>1995</b> , 34, 3388	1.4	12
281	Laser and thermal annealed Si(111) and Si(001) surfaces studied by scanning tunneling microscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1991</b> , 9, 677		12
280	Atomic-Scale Surface Investigations of K <sub>0.3</sub> MoO <sub>3</sub> (Blue Bronze) by Scanning Tunneling Microscopy. <i>Europhysics Letters</i> , <b>1990</b> , 12, 241-245	1.6	12
279	Combined feedback and sympathetic cooling of a mechanical oscillator coupled to ultracold atoms. <i>New Journal of Physics</i> , <b>2018</b> , 20, 093020	2.9	12
278	Stochastic dynamics and pattern formation of geometrically confined skyrmions. <i>Communications Physics</i> , <b>2019</b> , 2,	5.4	11
277	Coupling of Coexisting Noncollinear Spin States in the Fe Monolayer on Re(0001). <i>Nano Letters</i> , <b>2016</b> , 16, 6252-6256	11.5	11
276	Symmetry breaking in spin spirals and skyrmions by in-plane and canted magnetic fields. <i>New Journal of Physics</i> , <b>2016</b> , 18, 075007	2.9	11
275	Parity effects in 120° spin spirals. <i>Physical Review Letters</i> , <b>2014</b> , 112, 047204	7.4	11
274	Magnetization switching utilizing the magnetic exchange interaction. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	11
273	Atomic-level control of the domain wall velocity in ultrathin magnets by tuning of exchange interactions. <i>Physical Review Letters</i> , <b>2009</b> , 103, 137202	7.4	11
272	Correction of systematic errors in scanning tunneling spectra on semiconductor surfaces: The energy gap of Si(111)-7 $\times$ 7 at 0.3 K. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	11
271	Quasiantiferromagnetic 120° Néel state in two-dimensional clusters of dipole-quadrupole-interacting particles on a hexagonal lattice. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	11
270	Revealing subsurface vibrational modes by atom-resolved damping force spectroscopy. <i>Physical Review Letters</i> , <b>2009</b> , 102, 195503	7.4	11
269	Wavefunction mapping of immobilized InP semiconductor nanocrystals. <i>Small</i> , <b>2009</b> , 5, 808-12	11	11
268	Electronic structure of Gd and Tb on W(110) in the submonolayer coverage regime studied by STM and STS. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S1121-S1123	2.6	11
267	Coulomb pseudogap caused by partial localization of a three-dimensional electron system in the extreme quantum limit. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	11

266	Lattice relaxation of Gd on W(110). <i>Surface Science</i> , <b>2000</b> , 466, 89-96	1.8	11
265	Observation of Hydrogen-Induced Dzyaloshinskii-Moriya Interaction and Reversible Switching of Magnetic Chirality. <i>Physical Review X</i> , <b>2021</b> , 11,	9.1	11
264	Plumbene on a Magnetic Substrate: A Combined Scanning Tunneling Microscopy and Density Functional Theory Study. <i>Physical Review Letters</i> , <b>2020</b> , 124, 126401	7.4	10
263	Structural and magnetic properties of Ni/Fe nanostructures on Ir(111). <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	10
262	Individual atomic-scale magnets interacting with spin-polarized field-emitted electrons. <i>Physical Review Letters</i> , <b>2012</b> , 109, 097602	7.4	10
261	Strain effects in spinel ferrite thin films from first principles calculations. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012014	0.3	10
260	Chemical and electronic properties of Fe/MgO/Ge heterostructures for spin electronics. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012010	0.3	10
259	Disposition of the axial ligand in the physical vapor deposition of organometallic complexes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2010</b> , 28, 795-798	2.9	10
258	Atomic-resolution three-dimensional force and damping maps of carbon nanotube peapods. <i>Nanotechnology</i> , <b>2009</b> , 20, 264001	3.4	10
257	An ultrahigh vacuum scanning tunneling microscope for in situ studies of thin-film growth. <i>Review of Scientific Instruments</i> , <b>1997</b> , 68, 1455-1457	1.7	10
256	Landau Level Quantization Measured by Scanning Tunneling Spectroscopy on n-InAs(110). <i>Physica Status Solidi (B): Basic Research</i> , <b>1998</b> , 210, 845-851	1.3	10
255	Imaging the switching behavior of superparamagnetic nanoislands by spin-polarized scanning tunneling microscopy. <i>Microscopy Research and Technique</i> , <b>2005</b> , 66, 117-25	2.8	10
254	Spin-polarized scanning tunneling spectroscopy on Fe nanowires. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S149-S153	2.6	10
253	Co on p-InAs(110): An island-induced two-dimensional electron system consisting of electron droplets. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	10
252	Distance-dependent STM-study of the W(110)/C-R(15B) surface. <i>Zeitschrift für Physik B-Condensed Matter</i> , <b>1996</b> , 101, 103-107		10
251	Determination of C60/C70 ratios in fullerene mixtures and film characterization by scanning tunneling microscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1993</b> , 56, 197-205	2.6	10
250	Controlling in-gap end states by linking nonmagnetic atoms and artificially-constructed spin chains on superconductors. <i>Nature Communications</i> , <b>2020</b> , 11, 4707	17.4	10
249	Atomic-scale spin-polarization maps using functionalized superconducting probes. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	10

248	Spatial variation of the two-fold anisotropic superconducting gap in a monolayer of FeSe <sub>0.5</sub> Te <sub>0.5</sub> on a topological insulator. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	9
247	Miniaturized transportable evaporator for molecule deposition inside cryogenic scanning probe microscopes. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 053902	1.7	9
246	Role of hybridization in the Rashba splitting of noble metal monolayers on W(110). <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	9
245	Nanomechanical investigations and modifications of thin films based on scanning force methods. <i>Nanotechnology</i> , <b>1996</b> , 7, 346-350	3.4	9
244	Surface electronic structure of Gd(0001) films on W(110). <i>Applied Physics A: Materials Science and Processing</i> , <b>1997</b> , 65, 603-606	2.6	9
243	Stick-slip movement of a scanned tip on a graphite surface in scanning force microscopy. <i>Zeitschrift für Physik B-Condensed Matter</i> , <b>1997</b> , 104, 295-297		9
242	Investigation of micromagnetism and magnetic reversal of Ni nanoparticles using a magnetic force microscope. <i>Physics of the Solid State</i> , <b>1998</b> , 40, 1163-1168	0.8	9
241	Multipole moments of in-plane magnetized disks. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 10J502	2.5	9
240	Low-load friction behavior of epitaxial C60 monolayers. <i>Zeitschrift für Physik B-Condensed Matter</i> , <b>1995</b> , 99, 1-2		9
239	Chemical-specific imaging of multicomponent metal surfaces on the nanometer scale by scanning tunneling spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1996</b> , 62, 571-573	2.6	9
238	Imaging and tunneling spectroscopy of individual iron adsorbates at room temperature. <i>Zeitschrift für Physik B-Condensed Matter</i> , <b>1995</b> , 99, 143-144		9
237	Friction in the Low-Load Regime: Studies on the Pressure and Direction Dependence of Frictional Forces by Means of Friction Force Microscopy <b>1996</b> , 369-402		9
236	Spin-orbit coupling induced splitting of Yu-Shiba-Rusinov states in antiferromagnetic dimers. <i>Nature Communications</i> , <b>2021</b> , 12, 2040	17.4	9
235	Topological Shiba bands in artificial spin chains on superconductors. <i>Nature Physics</i> , <b>2021</b> , 17, 943-948	16.2	9
234	Spin-Polarized Yu-Shiba-Rusinov States in an Iron-Based Superconductor. <i>Physical Review Letters</i> , <b>2021</b> , 126, 076802	7.4	9
233	High-frequency magnetization dynamics of individual atomic-scale magnets. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	8
232	Temperature-Induced Increase of Spin Spiral Periods. <i>Physical Review Letters</i> , <b>2017</b> , 119, 037202	7.4	8
231	Micromagnetic description of the spin spiral in Fe double-layer stripes on W(110). <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	8

230	New advances in organic spintronics. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012001	0.3	8
229	Magnetostatics and the rotational sense of cycloidal spin spirals. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	8
228	Correlation Between Nanoscale Structural, Electronic, and Magnetic Properties of Thin Films by Scanning-Probe Microscopy and Spectroscopy. <i>MRS Bulletin</i> , <b>1997</b> , 22, 31-35	3.2	8
227	Quantized spin waves in antiferromagnetic Heisenberg chains. <i>Physical Review Letters</i> , <b>2008</b> , 101, 177202	7.4	8
226	Complex magnetic order on the atomic scale revealed by spin-polarized scanning tunnelling microscopy. <i>Philosophical Magazine</i> , <b>2008</b> , 88, 2627-2642	1.6	8
225	Evaluating local properties of magnetic tips utilizing an antiferromagnetic surface. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	8
224	Spin-resolved spectro-microscopy of magnetic nanowire arrays. <i>Surface Science</i> , <b>2002</b> , 514, 135-144	1.8	8
223	Spin-polarized scanning tunneling microscopy: insight into magnetism from nanostructures to atomic scale spin structures. <i>Microscopy Research and Technique</i> , <b>2005</b> , 66, 61-71	2.8	8
222	Simultaneous observation of atomic step and domain wall structure of ultrathin Co films by magnetic force microscopy in ultrahigh vacuum. <i>Applied Physics A: Materials Science and Processing</i> , <b>1999</b> , 69, 359-361	2.6	8
221	Surface magnetism at the nanometer and atomic scale. <i>Current Opinion in Solid State and Materials Science</i> , <b>1999</b> , 4, 435-440	12	8
220	Scanning tunneling microscopy with spin-polarized electrons. <i>European Physical Journal B</i> , <b>1990</b> , 80, 5-6	1.2	8
219	An ultrahigh vacuum scanning tunneling microscope for surface science studies. <i>Vacuum</i> , <b>1990</b> , 41, 386-388	3.8	8
218	An ultrahigh vacuum scanning tunneling microscope for the investigation of clean surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1990</b> , 8, 339-344	2.9	8
217	The Structure of Rapidly Quenched Metals as Studied by Scanning Tunneling Microscopy*. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>1988</b> , 157, 139-143	3.1	8
216	Electrical Detection of Domain Walls and Skyrmions in Co Films Using Noncollinear Magnetoresistance. <i>Physical Review Letters</i> , <b>2019</b> , 123, 237205	7.4	8
215	Nickel: The time-reversal symmetry conserving partner of iron on a chalcogenide topological insulator. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	7
214	Scanning Seebeck tunneling microscopy. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 324001	3	7
213	Non-equilibrium finite temperature dynamics of magnetic quantum systems: applications to spin-polarized scanning tunneling microscopy. <i>New Journal of Physics</i> , <b>2013</b> , 15, 013009	2.9	7



212	Spin-spin correlations in ferromagnetic nanosystems. <i>European Physical Journal B</i> , <b>2011</b> , 80, 331-336	1.2	7
211	Topographical structure of the domain boundary on the triglycine sulfate (010) surface. <i>Ferroelectrics</i> , <b>1997</b> , 200, 327-341	0.6	7
210	Magnetostatic interaction studied by force microscopy in ultrahigh vacuum. <i>Applied Physics A: Materials Science and Processing</i> , <b>1997</b> , 64, 353-355	2.6	7
209	Thickness-dependent magnetic domain structures of ultrathin Co/Au(111) films studied by means of magnetic force microscopy in ultrahigh vacuum. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, 465-467	2.6	7
208	Local Electronic Properties in the Presence of Internal and External Magnetic Fields Studied by Variable-Temperature Scanning Tunneling Spectroscopy. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, 3769-3773	1.4	7
207	GdFe <sub>2</sub> alloy formation studied on the atomic scale by scanning tunneling microscopy. <i>Physical Review B</i> , <b>1999</b> , 60, 16109-16113	3.3	7
206	Rapid communication Fabrication of nano-dot- and nano-ring-arrays by nanosphere lithography. <i>Applied Physics A: Materials Science and Processing</i> , <b>1996</b> , 63, 617-619	2.6	7
205	Surface structure of graphite intercalation compounds resolved in real space by scanning tunneling microscopy. <i>Synthetic Metals</i> , <b>1989</b> , 34, 175-185	3.6	7
204	Towards skyrmion-superconductor hybrid systems. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	7
203	Surface State of Gd(0001) Films on W(110): Scanning Tunneling Spectroscopy Study. <i>Acta Physica Polonica A</i> , <b>1998</b> , 93, 273-280	0.6	7
202	A radio-frequency spin-polarized scanning tunneling microscope. <i>Review of Scientific Instruments</i> , <b>2019</b> , 90, 123705	1.7	7
201	Temperature and magnetic field dependent behavior of atomic-scale skyrmions in Pd/Fe/Ir(111) nanoislands. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	6
200	Electronic structure of FeTe bulk crystals and epitaxial FeTe thin films on BiTe. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 065502	1.8	6
199	Spin-sensitive shape asymmetry of adatoms on noncollinear magnetic substrates. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	6
198	Structural and electronic properties of ultrathin FeSe films grown on BiSe(0 0 0 1) studied by STM/STS. <i>Journal of Physics Condensed Matter</i> , <b>2017</b> , 29, 025004	1.8	6
197	Spin-resolved imaging and spectroscopy of individual molecules with sub-molecular spatial resolution. <i>MRS Bulletin</i> , <b>2014</b> , 39, 608-613	3.2	6
196	Manipulation of domain walls using a spin-polarized STM. <i>Europhysics Letters</i> , <b>2012</b> , 97, 17009	1.6	6
195	Atomic-scale magnetic dissipation from spin-dependent adhesion hysteresis. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	6

194	The effects of Mn concentration on structural and magnetic properties of Ge <sub>1-x</sub> Mn <sub>x</sub> diluted magnetic semiconductors. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012012	0.3	6
193	Experimental variation and theoretical analysis of the inelastic contribution to atomic spin excitation spectroscopy. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	6
192	Principles and Applications of the qPlus Sensor. <i>Nanoscience and Technology</i> , <b>2009</b> , 121-142	0.6	6
191	Application of scanning probe methods for electronic and magnetic device fabrication, characterization, and testing. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 3625		6
190	Co double-layer nanostructures on Pt(111) studied by spin-polarized scanning tunnelling microscopy. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 1306-1311	3	6
189	Comparative study of MeV C <sup>+</sup> and C <sup>2+</sup> ion implantation in GaAs(100): Surface roughness and evaluation of lattice strain. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2003</b> , 21, 1134		6
188	Dynamic force spectroscopy across an individual strongly pinned vortex in a Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ single crystal. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5307-5309	3.4	6
187	Recent advances in spin-polarized scanning tunneling microscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 78, 781-785	2.6	6
186	Tilted magnetization of a La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> /LaAlO <sub>3</sub> (001) thin film. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2004</b> , 280, 51-59	2.8	6
185	Physik in unserer Zeit auf der Nanometerskala. <i>Physik in Unserer Zeit</i> , <b>1995</b> , 26, 206-216	0.1	6
184	Comparative study of different tip materials for surface modification by the scanning tunneling microscope. <i>Nanotechnology</i> , <b>1992</b> , 3, 77-83	3.4	6
183	Physical properties of icosahedral and glassy Pd <sub>2</sub> U <sub>2</sub> Si alloys. <i>Materials Science and Engineering</i> , <b>1988</b> , 99, 357-360		6
182	Data processing for scanning tunneling microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1988</b> , 6, 393-397	2.9	6
181	Tailoring noncollinear magnetism by misfit dislocation lines. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	6
180	Effective damping enhancement in noncollinear spin structures. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	6
179	Tunneling into thin superconducting films: Interface-induced quasiparticle lifetime reduction. <i>Surface Science</i> , <b>2016</b> , 643, 6-9	1.8	5
178	Tuning the Properties of Zero-Field Room Temperature Ferromagnetic Skyrmions by Interlayer Exchange Coupling. <i>Nano Letters</i> , <b>2020</b> , 20, 4739-4747	11.5	5
177	Domain imaging across the magneto-structural phase transitions in Fe <sub>1+y</sub> Te. <i>Npj Quantum Materials</i> , <b>2018</b> , 3,	5	5

176	Quantum revivals and magnetization tunneling in effective spin systems. <i>New Journal of Physics</i> , <b>2016</b> , 18, 033029	2.9	5
175	Probing Weakly Hybridized Magnetic Molecules by Single-Atom Magnetometry. <i>Nano Letters</i> , <b>2019</b> , 19, 9013-9018	11.5	5
174	Nanoscale spin structures dominated by magnetoelastic interactions around dislocation cores as seen via spin-polarized STM. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	5
173	Studies of magnetic properties of small particles by electron holography. <i>Applied Physics A: Materials Science and Processing</i> , <b>1997</b> , 65, 361-366	2.6	5
172	Observation of the flux-antiflux boundary propagation during magnetization reversal in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ with single vortex resolution. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 012507	3.4	5
171	Multipole moments of general ellipsoids with two polarized domains. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2007</b> , 40, 14791-14802	2	5
170	GdFe <sub>2</sub> alloy formation observed by STM. <i>Applied Surface Science</i> , <b>1999</b> , 142, 543-548	6.7	5
169	Bubble domains in garnet films studied by magnetic force microscopy. <i>Journal of Applied Physics</i> , <b>1995</b> , 78, 6324-6326	2.5	5
168	Tunnelspektroskopie vom Einzelatom zum Festkörper. <i>Physik Journal</i> , <b>1996</b> , 52, 551-554		5
167	Load-dependent topographic and friction studies of individual ion tracks in layered materials by scanning force microscopy and lateral force microscopy. <i>Physical Review B</i> , <b>1996</b> , 53, R16180-R16183	3.3	5
166	Recent advances in spin-polarized scanning tunneling microscopy. <i>Ultramicroscopy</i> , <b>1992</b> , 42-44, 338-344	3.1	5
165	Scanning tunneling microscopy study of ternary alkali-metal graphite intercalation compounds. <i>Ultramicroscopy</i> , <b>1992</b> , 42-44, 624-629	3.1	5
164	Scanning tunneling microscopy of a thin film of Pd <sub>2</sub> Si on a Si(100) substrate. <i>Surface Science</i> , <b>1987</b> , 181, 313-323	1.8	5
163	STM and AFM investigations of high-T <sub>c</sub> superconductors. <i>Journal of Microscopy</i> , <b>1988</b> , 152, 399-405	1.9	5
162	Long-range focusing of magnetic bound states in superconducting lanthanum. <i>Nature Communications</i> , <b>2020</b> , 11, 4573	17.4	5
161	Perturbative calculations of quantum spin tunneling in effective spin systems with a transversal magnetic field and transversal anisotropy. <i>New Journal of Physics</i> , <b>2017</b> , 19, 013032	2.9	4
160	Attractive force-driven superhardening of graphene membranes as a pin-point breaking of continuum mechanics. <i>Scientific Reports</i> , <b>2017</b> , 7, 46083	4.9	4
159	Atomically resolved magnetic structure of a Gd-Au surface alloy. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	4

158	Enhanced spin-ordering temperature in ultrathin FeTe films grown on a topological insulator. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	4
157	Set-up of a high-resolution 300 mK atomic force microscope in an ultra-high vacuum compatible (3)He/10 T cryostat. <i>Review of Scientific Instruments</i> , <b>2016</b> , 87, 073702	1.7	4
156	Investigating the differences between Co adatoms states on surfaces of selected bismuth chalcogenides. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	4
155	Bounds on expectation values of quantum subsystems and perturbation theory. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2015</b> , 48, 075301	2	4
154	Real space visualization of thermal fluctuations in a triangular flux-line lattice. <i>New Journal of Physics</i> , <b>2010</b> , 12, 033022	2.9	4
153	Three-electrode self-actuating self-sensing quartz cantilever: design, analysis, and experimental verification. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 053702	1.7	4
152	A multi-scale model of domain wall velocities based on ab initio parameters. <i>Philosophical Magazine</i> , <b>2011</b> , 91, 2248-2262	1.6	4
151	Magnetic coupling of single Co adatoms to a Co underlayer through a Pd spacer of variable thickness. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	4
150	Scanning-probe-based science and technology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1997</b> , 94, 12749-50	11.5	4
149	Investigation of ripple structures of thin polycrystalline Co films by magnetic force microscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1997</b> , 65, 511-515	2.6	4
148	Ultra-high-vacuum magnetic force microscopy of the domain structure of ultra-thin Co films. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S1209-S1212	2.6	4
147	Entropy driven phase transition in itinerant antiferromagnetic monolayers. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	4
146	Mapping spin structures on the atomic scale. <i>Europhysics News</i> , <b>2007</b> , 38, 16-21	0.2	4
145	Atomic-Resolution Dynamic Force Microscopy/Spectroscopy of Individual Single-Walled Carbon Nanotube. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 2286-2289	1.4	4
144	Visualizing flux distribution of superconductors in external magnetic fields with magnetic force microscopy. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	4
143	Growth of Cr on Ir(1 1 1) studied by scanning tunneling microscopy. <i>Surface Science</i> , <b>2006</b> , 600, 1034-1039	3.8	4
142	Controlled preparation of a magnetic thin film alloy: GdFe <sub>2</sub> and GdFe <sub>3</sub> . <i>Surface Science</i> , <b>2004</b> , 566-568, 236-240	1.8	4
141	Growth and magnetism of Fe on Cr(001): a spin-polarized scanning tunneling spectroscopy and magnetic force microscopy study. <i>Applied Physics A: Materials Science and Processing</i> , <b>2005</b> , 80, 907-912	2.6	4

140	Lattice-dependent anisotropy in the orientation of magnetic domain walls. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 290-291, 746-749	2.8	4
139	Surface morphology of MgO (100) crystals implanted with MeV Al <sup>+</sup> and Al <sup>2+</sup> ions. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 73, 265-271	2.6	4
138	The adsorption process of hydrogen on Gd(0001). <i>Applied Surface Science</i> , <b>1999</b> , 142, 63-67	6.7	4
137	Coadsorption of H and CO on Gd(0001). <i>Applied Surface Science</i> , <b>1999</b> , 142, 428-432	6.7	4
136	New insight into the surface magnetic properties of Gd(0001). <i>Applied Surface Science</i> , <b>1999</b> , 142, 558-563	6.7	4
135	SPIN-POLARIZED VACUUM TUNNELING: CORRELATION OF ELECTRONIC AND MAGNETIC PROPERTIES ON THE NANOMETER SCALE. <i>Surface Review and Letters</i> , <b>1999</b> , 06, 591-597	1.1	4
134	Scanning capacitance microscopy and spectroscopy applied to local charge modifications and characterization of nitride-oxide-silicon heterostructures. <i>Applied Physics A: Materials Science and Processing</i> , <b>1995</b> , 61, 357-362	2.6	4
133	Fabrication of nano-dot- and nano-ring-arrays by nanosphere lithography. <i>Applied Physics A: Materials Science and Processing</i> , <b>1996</b> , 63, 617-619	2.6	4
132	Growth stages of YSZ-buffer layers and YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> thin films on silicon substrates studied by scanning probe microscopy. <i>Applied Physics A: Solids and Surfaces</i> , <b>1994</b> , 59, 57-62		4
131	Scanning tunneling microscopy on laser- and thermal-annealed Si(111): transitions from 7 × 7 reconstructed to disordered surface structures. <i>Ultramicroscopy</i> , <b>1990</b> , 32, 291-295	3.1	4
130	Spin-Polarized STM Investigation of Magnetic Domain Walls. <i>Acta Physica Polonica A</i> , <b>2003</b> , 104, 259-268	0.6	4
129	STM on Layered Materials. <i>Springer Series in Surface Sciences</i> , <b>1994</b> , 131-179	0.4	4
128	Scanning capacitance microscopy and spectroscopy applied to local charge modifications and characterization of nitride-oxide-silicon heterostructures. <i>Applied Physics A: Materials Science and Processing</i> , <b>1995</b> , 61, 357-362	2.6	4
127	Temperature and non-linear response of cantilever-type mechanical oscillators used in atomic force microscopes with interferometric detection. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 123102	3.4	3
126	Topological superconductivity induced by a triple-q magnetic structure. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	3
125	Two dimensional electron gas confined over a spherical surface: Magnetic moment. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012005	0.3	3
124	Hydrogen-related contrast in atomic force microscopy. <i>Nanotechnology</i> , <b>2009</b> , 20, 264007	3.4	3
123	Novel 'writing' using magnetic force microscopy in ultrahigh vacuum. <i>IEEE Transactions on Magnetics</i> , <b>1997</b> , 33, 4050-4052	2	3

122	Fabrication of atomic gratings based on self-organization of adsorbates with repulsive interaction. <i>Applied Physics A: Materials Science and Processing</i> , <b>1997</b> , 65, 81-83	2.6	3
121	Determination of miller indices of side faces of small crystallites from scanning force microscopy angle measurements. <i>Surface and Interface Analysis</i> , <b>1995</b> , 23, 409-415	1.5	3
120	Nanofabrication of weak links based on scanning force methods. <i>Applied Physics A: Materials Science and Processing</i> , <b>1996</b> , 62, 289-292	2.6	3
119	Spin-Polarized Scanning Tunneling Microscopy (SPSTM). <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 231, 37		3
118	Icosahedral alloys studied by scanning tunneling microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1988</b> , 6, 529-530	2.9	3
117	Atomic-Scale Magnetism Studied by Spin-Polarized Scanning Tunneling Microscopy <b>2013</b> , 413-446		3
116	Force Spectroscopy on Semiconductor Surfaces. <i>Nanoscience and Technology</i> , <b>2009</b> , 31-68	0.6	3
115	A cavity optomechanical locking scheme based on the optical spring effect. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 103102	1.7	3
114	Pb-induced skyrmions in a double layer of Fe on Ir(111). <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	3
113	Atomic-Site-Specific Analysis on Out-of-Plane Elasticity of Convexly Curved Graphene and Its Relationship to $s p^2$ to $s p^3$ Re-Hybridization. <i>Crystals</i> , <b>2018</b> , 8, 102	2.3	2
112	Miniaturized high-precision piezo driven two axes stepper goniometer. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 045006	1.7	2
111	Collective magnetism in arrays of spinor Bose-Einstein condensates. <i>New Journal of Physics</i> , <b>2013</b> , 15, 063033	2.9	2
110	One-pot synthesis of Fe-Co nanospheres by modified polyol process and their structural, magnetic studies. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012015	0.3	2
109	The Effect of a Pulsed Magnetic Field on Domain Wall Resistance in Magnetic Nanowires. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012009	0.3	2
108	Scanning Tunneling Spectroscopy of Semiconductor Quantum Dots and Nanocrystals. <i>Nanoscience and Technology</i> , <b>2010</b> , 183-216	0.6	2
107	Adsorption behavior of asymmetric Pd pincer complexes on a Cu(111) surface. <i>Langmuir</i> , <b>2010</b> , 26, 10868-71		2
106	Heat treatment of mechano-chemically produced BaFe <sub>12</sub> O <sub>19</sub> /Fe <sub>3</sub> O <sub>4</sub> magnetic nano-composites. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012016	0.3	2
105	Domain structure of Co/Pt multilayers studied by magnetic force microscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1996</b> , 14, 1214		2

104	Anisotropic superexchange in one-dimensional Fe-chains on InAs(110). <i>Surface Science</i> , <b>2008</b> , 602, 3297-3302	3.3	2
103	Perturbation theory of exchange interaction. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	2
102	A cryogenic scanning force microscope for the characterization of frozen biological samples. <i>Applied Physics A: Materials Science and Processing</i> , <b>2003</b> , 76, 893-898	2.6	2
101	Spin-Polarized Scanning Tunneling Spectroscopy. <i>Nanoscience and Technology</i> , <b>2005</b> , 203-223	0.6	2
100	Subsurface interstitials as promoters of three-dimensional growth of Ti on Si(111): An x-ray standing wave, x-ray photoelectron spectroscopy, and atomic force microscopy investigation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2002</b> , 20, 1997	2.9	2
99	Nanomagnetische Domänen mit dem Rastertunnelmikroskop. <i>Physik in Unserer Zeit</i> , <b>2000</b> , 31, 110-114	0.1	2
98	Determination of radial matrix elements and phase shifts in photoemission with a rotatable electric-field vector. <i>Physical Review B</i> , <b>1998</b> , 58, 9681-9684	3.3	2
97	PREPARATION OF HIGHLY ORDERED GdFe <sub>2</sub> ALLOYS. <i>Surface Review and Letters</i> , <b>1999</b> , 06, 741-745	1.1	2
96	Fabrication of atomic wires based on self-organization. <i>Applied Physics A: Materials Science and Processing</i> , <b>1996</b> , 63, 303-304	2.6	2
95	Local transformation of C <sub>60</sub> fullerite into a new amorphous phase of carbon using a scanning tunneling microscope. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1994</b> , 12, 2136		2
94	Advances in STM Design and Instrumentation. <i>Europhysics News</i> , <b>1990</b> , 21, 72-73	0.2	2
93	Biological Applications of FM-AFM in Liquid Environment. <i>Nanoscience and Technology</i> , <b>2009</b> , 329-345	0.6	2
92	Tip-Sample Interactions as a Function of Distance on Insulating Surfaces. <i>Nanoscience and Technology</i> , <b>2009</b> , 69-94	0.6	2
91	Scanning Tunneling Spectroscopy on III-V Materials: Effects of Dimensionality, Magnetic Field, and Magnetic Impurities. <i>Nanoscience and Technology</i> , <b>2010</b> , 217-243	0.6	2
90	STM and AFM Studies of Layered Materials: General. <i>Physics and Chemistry of Materials With Low-dimensional Structures</i> , <b>1992</b> , 1-26		2
89	Anisotropy of sliding friction on the triglycine sulfate (010) surface <b>1995</b> , 61, 525		2
88	Characterizing tips suitable for atomic force microscopy and spectroscopy with atomic resolution and spin sensitivity. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 061601	3.4	1
87	Vacuum Resonance States as Atomic-Scale Probes of Noncollinear Surface Magnetism. <i>Physical Review Letters</i> , <b>2019</b> , 123, 087202	7.4	1

86	Tuning noncollinear magnetic states by hydrogenation. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	1
85	Real-space imaging of atomic-scale spin textures at nanometer distances. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 122406	3.4	1
84	In Situ Synthesis of MetalSalophene Complexes on Intercalated Graphene. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 4279-4287	3.8	1
83	STM study of the preparation of clean Ta(110) and the subsequent growth of two-dimensional Fe islands. <i>Surface Science</i> , <b>2016</b> , 653, 113-117	1.8	1
82	Reply to Comment on Perturbative calculations of quantum spin tunneling in effective spin systems with a transversal magnetic field and transversal anisotropy. <i>New Journal of Physics</i> , <b>2017</b> , 19, 078001	2.9	1
81	Understanding the Room Temperature Ferromagnetism in GaN Nanowires with Pd Doping. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012013	0.3	1
80	Critical current density of domain wall oscillation due to spin-transfer torque. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012007	0.3	1
79	Real-space mapping of a disordered two-dimensional electron system in the quantum Hall regime. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 334, 012008	0.3	1
78	Non-collinear magnetic order in nanostructures investigated by spin-polarized scanning tunneling microscopy. <i>Pure and Applied Chemistry</i> , <b>2011</b> , 83, 1981-1988	2.1	1
77	Method for Precise Force Measurements. <i>Nanoscience and Technology</i> , <b>2009</b> , 15-30	0.6	1
76	Analysis of electrical breakdown failures by means of SFM-based methods. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S1063-S1065	2.6	1
75	Future Nanosensors <b>2008</b> , 337-356		1
74	Imaging Atomic-Scale Spin Structures. <i>Imaging &amp; Microscopy</i> , <b>2007</b> , 9, 21-24		1
73	Magnetismus mit Dreh. Spinspiralen an Oberflächen. <i>Physik in Unserer Zeit</i> , <b>2008</b> , 39, 93-97	0.1	1
72	Metal-insulator transition in graphite: A comparison to heterostructures with high carrier mobility. <i>Technical Physics Letters</i> , <b>2008</b> , 34, 30-33	0.7	1
71	Visualizing the Influence of Interactions on the Nanoscale: Simple Electron Systems. <i>AIP Conference Proceedings</i> , <b>2003</b> ,	0	1
70	Low Density Two-Dimensional Electron Systems Studied by Scanning Tunneling Spectroscopy. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 4809-4815	1.4	1
69	Contributions of the escape depth to the photoelectron intensity of a well-defined initial state. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	1



68	Comparing the local density of states of three- and two-dimensional electron systems by low-temperature scanning tunneling spectroscopy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2003</b> , 16, 121-128	3	1
67	Influence of potential fluctuations on Landau quantization and spin splitting studied by low temperature scanning tunneling spectroscopy on InAs(110). <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2002</b> , 20, 2032		1
66	Nano-scale studies of quantum phenomena by scanning probe spectroscopy. <i>Annalen Der Physik</i> , <b>2000</b> , 9, 895-904	2.6	1
65	Magnetic force microscopy study of magnetic stray-field effects due to mechanical surface modifications of patterned Permalloy thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>1995</b> , 61, 93-97	2.6	1
64	Scanning tunneling microscopy study of granular (MT1.5)3C60 (M = K, Rb). <i>Physica B: Condensed Matter</i> , <b>1992</b> , 182, 223-226	2.8	1
63	STM on doped and undoped hydrogenated amorphous and microcrystalline silicon films. <i>Ultramicroscopy</i> , <b>1992</b> , 42-44, 1398-1402	3.1	1
62	Scanning tunneling and scanning electron microscopy investigations of nonuniform surfaces. <i>Ultramicroscopy</i> , <b>1988</b> , 25, 129-133	3.1	1
61	Zero-field skyrmionic states and in-field edge-skyrmions induced by boundary tuning. <i>Communications Physics</i> , <b>2022</b> , 5,	5.4	1
60	Atomically thin oxide layer on the elemental superconductor Ta(001) surface. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	1
59	Surface Electronic Properties of Fe Nanoparticles on c(2x2)-N/Cu(001). <i>Acta Physica Polonica A</i> , <b>2003</b> , 104, 327-335	0.6	1
58	Contributions of Scanning Tunneling Microscopy for Probing and Manipulating Electronic Properties in Low Dimensions. <i>Springer Series in Solid-state Sciences</i> , <b>1992</b> , 97-107	0.4	1
57	Force Field Spectroscopy in Three Dimensions. <i>Nanoscience and Technology</i> , <b>2009</b> , 95-119	0.6	1
56	Basic Mechanisms for Single Atom Manipulation in Semiconductor Systems with the FM-AFM. <i>Nanoscience and Technology</i> , <b>2009</b> , 227-249	0.6	1
55	Discovery and characterization of a new type of domain wall in a row-wise antiferromagnet. <i>Nature Communications</i> , <b>2021</b> , 12, 3488	17.4	1
54	Magnetic domain walls in strain-patterned ultrathin films. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	1
53	Correlation of Yu-Shiba-Rusinov States and Kondo Resonances in Artificial Spin Arrays on an s-Wave Superconductor. <i>Nano Letters</i> , <b>2021</b> , 21, 6748-6755	11.5	1
52	Anisotropic non-split zero-energy vortex bound states in a conventional superconductor. <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 031417	17.3	1
51	Spin-Polarized Scanning Tunneling Microscopy. <i>Nanoscience and Technology</i> , <b>1998</b> , 71-95	0.6	0

50	Stacking-Dependent Spin Interactions in Pd/Fe Bilayers on Re(0001). <i>Physical Review Letters</i> , <b>2020</b> , 125, 227205	7.4	○
49	Magnetic Skyrmions on Discrete Lattices <b>2019</b> , 323-357		○
48	Magnetic-Sensitive Scanning Probe Microscopy. <i>NATO ASI Series Series B: Physics</i> , <b>1993</b> , 45-54		○
47	Rotating edge-field driven processing of chiral spin textures in racetrack devices. <i>Scientific Reports</i> , <b>2020</b> , 10, 20400	4.9	○
46	Anomalous Flexural Elasticities of Graphene Membranes Unveiled by Manipulating Topology. <i>Physical Review Letters</i> , <b>2021</b> , 126, 146101	7.4	○
45	Step-Edge-Induced Anisotropic Chiral Spin Coupling in Ultrathin Magnetic Films. <i>Physical Review Letters</i> , <b>2019</b> , 123, 037201	7.4	
44	Atomic-Scale Spintronics <b>2013</b> , 1-24		
43	Revealing Subsurface Vibrational Modes by Atomic-Resolution Damping Force Spectroscopy. <i>Nanoscience and Technology</i> , <b>2015</b> , 127-145	0.6	
42	Modeling thermally activated domain wall dynamics in thin magnetic strips with disorder. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012008	0.3	
41	Logik aus atomaren Spins. <i>Physik in Unserer Zeit</i> , <b>2011</b> , 42, 162-163	0.1	
40	Magnetoelastic Effects in Nanostructures. <i>Solid State Phenomena</i> , <b>2010</b> , 168-169, 177-184	0.4	
39	Cantilever Dynamics and Nonlinear Effects in Atomic Force Microscopy. <i>Nanoscience and Technology</i> , <b>2009</b> , 361-395	0.6	
38	Magnetic anisotropy of (Ge,Mn) nanostructures. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 292, 012011	0.3	
37	Modulated multipolar structures in magnetic arrays. <i>Philosophical Magazine</i> , <b>2008</b> , 88, 2683-2697	1.6	
36	Frozen hydrated bloc-face investigation of tissue for Cryo SEM. <i>Microscopy and Microanalysis</i> , <b>2003</b> , 9, 504-505	0.5	
35	Frozen hydrated bloc-face investigation of tissue for Cryo SEM. <i>Microscopy and Microanalysis</i> , <b>2003</b> , 9, 1546-1547	0.5	
34	Nano-scale studies of quantum phenomena by scanning probe spectroscopy. <i>Vacuum</i> , <b>2002</b> , 65, 235-236	3.7	
33	Tiefemperatur-Rastertunnelspektroskopie an InAs(110): Streuung von Elektronenwellen an Dotieratomen und Spektroskopie an Landau-Niveaus. <i>Physik Journal</i> , <b>1998</b> , 54, 423-426		

32 Neue Perspektiven: Die Tieftemperatur-Rastersonden-Spektroskopie eröffnet den direkten Zugang zu mikroskopischen Festkörpereigenschaften. *Physik Journal*, **1998**, 54, 417-417

31 Future Nanosensors 337-356

30 Müller, Florath: Die Entlassung [Robert Havemann und die Akademie der Wissenschaften 1965/66/Whitaker: Einstein, Bohr and the Quantum Dilemma/Wick: The Infamous Boundary/Hartnagel, Dawar: Semiconducting Transparent Thin Films/Atkins: Physikalische Chemie/Atkins, Trapp: Arbeitsbuch Physikalische Chemie/Magonov, Whangbo: Surface Analysis with STM and AFM/Lehn: Supramolecular Chemistry/Wrahn, Kalnowski, Berger, Jull and More Basic NMR Experiments. A Practical Course/Brandes: Die relativistischen Paradoxien etc. *Physik Journal*, **1990**, 183, 237

29 Surfaces by Scanning Tunneling Microscopy (STM). *Materials Research Society Symposia Proceedings*, **1990**, 183, 237

28 The effect of argon ion sputtering on a polycrystalline film of Pd<sub>2</sub>Si on a Si substrate studied by scanning tunneling microscopy and photoelectron spectroscopy. *Nuclear Instruments & Methods in Physics Research B*, **1986**, 18, 644-650 1.2

27 Spin mapping on the atomic scale **2008**, 711-712

26 Spectroscopic signature of the Stark-shifted Tamm-type surface state of La(0001). *New Journal of Physics*, **2020**, 22, 093013 2.9

25 Investigation of the Mechanics of Nanocontacts Using a Vibrating Cantilever Technique **2001**, 151-169

24 Physical Properties of Icosahedral and Glassy Pd<sub>47</sub>Bi Alloys **1988**, 357-360

23 Surface modification in the nanometer range by the scanning tunneling microscope. *Perspectives in Condensed Matter Physics*, **1988**, 258-260

22 Surface Structure of Metallic Glasses Studied by Scanning Tunneling Microscopy. *Springer Series in Surface Sciences*, **1988**, 595-600 0.4

21 Investigation of the Microstructure of an Fe<sub>91</sub>Zr<sub>9</sub> Catalyst Prepared from the Amorphous Alloy **1988**, 501-505

20 Atomic-Scale Imaging and Modification of Spins Using a Magnetic-Sensitive Scanning Tunneling Microscope **1993**, 65-73

19 Recent Developments in Scanning Tunneling Microscopy. *Acta Physica Polonica A*, **1993**, 84, 419-421 0.6

18 Scanning Tunneling Microscopy and Atomic Force Microscopy on Charge Density Wave and Related Materials. *NATO ASI Series Series B: Physics*, **1996**, 229-239

17 Simulation of the Scan Process in Friction Force Microscopy **1997**, 379-384

16 Recent Advances in Spin-Polarized Scanning Tunneling Spectroscopy for Imaging of Magnetic Domains. *Journal of the Magnetism Society of Japan*, **1999**, 23, S1\_195-200

15 Atomic-Scale Spintronics **2016**, 757-784

- 14 Atomic Manipulation on Metal Surfaces. *Nanoscience and Technology*, **2009**, 191-215 0.6
- 13 Atomic Manipulation on an Insulator Surface. *Nanoscience and Technology*, **2009**, 217-226 0.6
- 12 High-Frequency Low Amplitude Atomic Force Microscopy. *Nanoscience and Technology*, **2009**, 347-360 0.6
- 11 Magnetic Exchange Force Microscopy. *Nanoscience and Technology*, **2009**, 275-286 0.6
- 10 Atom Manipulation on Semiconductor Surfaces. *Nanoscience and Technology*, **2009**, 169-190 0.6
- 9 Multi-Scale Modelling of NC-AFM Imaging and Manipulation at Insulating Surfaces. *Nanoscience and Technology*, **2009**, 251-273 0.6
- 8 Study of Thin Oxide Films with NC-AFM: Atomically Resolved Imaging and Beyond. *Nanoscience and Technology*, **2009**, 143-167 0.6
- 7 First-Principles Simulation of Magnetic Exchange Force Microscopy on Fe/W(001). *Nanoscience and Technology*, **2009**, 287-301 0.6
- 6 Frequency Modulation Atomic Force Microscopy in Liquids. *Nanoscience and Technology*, **2009**, 303-328 0.6
- 5 Metal-insulator transition in graphite: A comparison to heterostructures with high carrier mobility **2010**, 34, 30
- 4 Magnetic Spectroscopy of Individual Atoms, Chains and Nanostructures. *Nanoscience and Technology*, **2018**, 3-24 0.6
- 3 Non-collinear Magnetism Studied with Spin-Polarized Scanning Tunneling Microscopy. *Nanoscience and Technology*, **2018**, 163-182 0.6
- 2 Magnetization Dynamics on the Atomic Scale. *Nanoscience and Technology*, **2018**, 221-248 0.6
- 1 Disorder-induced time effect in the antiferromagnetic domain state of Fe<sub>1+Te</sub>. *Journal of Magnetism and Magnetic Materials*, **2021**, 540, 168426 2.8