Ernst Meyer

List of Publications by Citations

418 papers	19,298 citations	68 h-index	125 g-index
440 ext. papers	21,292 ext. citations	5.9 avg, IF	6.33 L-index

#	Paper	IF	Citations
418	Translating biomolecular recognition into nanomechanics. *Science*, **2000**, 288, 316-8	33.3	1408
417	Multiple label-free biodetection and quantitative DNA-binding assays on a nanomechanical cantilever array. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 9783-8	11.5	511
416	Velocity dependence of atomic friction. *Physical Review Letters*, **2000**, 84, 1172-5	7.4	483
415	Friction measurements on phase-separated thin films with a modified atomic force microscope. *Nature*, **1992**, 359, 133-135	50.4	479
414	Surface Stress in the Self-Assembly of Alkanethiols on Gold. *Science*, **1997**, 276, 2021-2024	33.3	443
413	Transition from stick-slip to continuous sliding in atomic friction: entering a new regime of ultralow friction. *Physical Review Letters*, **2004**, 92, 134301	7.4	413
412	Observation of a chemical reaction using a micromechanical sensor. *Chemical Physics Letters*, **1994**, 217, 589-594	2.5	403
411	A chemical sensor based on a microfabricated cantilever array with simultaneous resonance-frequency and bending readout. *Sensors and Actuators B: Chemical*, **2001**, 77, 122-131	8.5	352
410	Atomically controlled substitutional boron-doping of graphene nanoribbons. *Nature Communications*, **2015**, 6, 8098	17.4	326
409	Label-free protein assay based on a nanomechanical cantilever array. *Nanotechnology*, **2003**, 14, 86-90	3.4	306
408	Observation of magnetic forces by the atomic force microscope. *Journal of Applied Physics*, **1987**, 62, 4293-4295	2.5	302
407	A cantilever array-based artificial nose. *Ultramicroscopy*, **2000**, 82, 1-9	3.1	286
406	Interaction potential and hopping dynamics governing sliding friction. *Physical Review Letters*, **2003**, 91, 084502	7.4	275
405	Atomic-scale control of friction by actuation of nanometer-sized contacts. *Science*, **2006**, 313, 207-10	33.3	256
404	An artificial nose based on a micromechanical cantilever array. *Analytica Chimica Acta*, **1999**, 393, 59-65	6.6	249
403	Force Microscopy Study of Friction and Elastic Compliance of Phase-Separated Organic Thin Films. *Langmuir*, **1994**, 10, 1281-1286	4	238
402	Friction and wear of Langmuir-Blodgett films observed by friction force microscopy. *Physical Review Letters*, **1992**, 69, 1777-1780	7.4	236

401	Superlubricity of graphene nanoribbons on gold surfaces. *Science*, **2016**, 351, 957-61	33.3	227
400	Probing atomic structure and Majorana wavefunctions in mono-atomic Fe chains on superconducting Pb surface. *Npj Quantum Information*, **2016**, 2,	8.6	213
399	Molecular-resolution images of Langmuir Blodgett films using atomic force microscopy. *Nature*, **1991**, 349, 398-400	50.4	212
398	Structural superlubricity and ultralow friction across the length scales. *Nature*, **2018**, 563, 485-492	50.4	201
397	Atomically resolved edges and kinks of NaCl islands on Cu(111): Experiment and theory. *Physical Review B*, **2000**, 62, 2074-2084	3.3	199
396	Separation of interactions by noncontact force microscopy. *Physical Review B*, **2000**, 61, 11151-11155	3.3	198
395	Atomic force microscopy. *Progress in Surface Science*, **1992**, 41, 3-49	6.6	179
394	A chemical sensor based on a micromechanical cantilever array for the identification of gases and vapors. *Applied Physics A: Materials Science and Processing*, **1998**, 66, S61-S64	2.6	171
393	Sled-type motion on the nanometer scale: determination of dissipation and cohesive energies of c60. *Science*, **1994**, 266, 1979-81	33.3	169
392	Friction force microscopy of mixed Langmuir-Blodgett films. *Thin Solid Films*, **1992**, 220, 132-137	2.2	167
391	Direct determination of the energy required to operate a single molecule switch. *Physical Review Letters*, **2003**, 90, 066107	7.4	163
390	Friction experiments on the nanometre scale. *Journal of Physics Condensed Matter*, **2001**, 13, R619-R642	1.8	159
389	Kelvin Probe Force Microscopy on Surfaces: Investigation of the Surface Potential of Self-Assembled Monolayers on Gold. *Langmuir*, **1999**, 15, 8184-8188	4	157
388	Thermal analysis using a micromechanical calorimeter. *Applied Physics Letters*, **1996**, 69, 40-42	3.4	146
387	Surface and domain structures of ferroelectric crystals studied with scanning force microscopy. *Journal of Applied Physics*, **1993**, 74, 7461-7471	2.5	143
386	Sequential position readout from arrays of micromechanical cantilever sensors. *Applied Physics Letters*, **1998**, 72, 383-385	3.4	140
385	Multifunctional probe microscope for facile operation in ultrahigh vacuum. *Applied Physics Letters*, **1993**, 63, 117-119	3.4	134
384	Tribological Investigations Using Friction Force Microscopy. *MRS Bulletin*, **1993**, 18, 26-34	3.2	127

383	Temperature dependence of the force sensitivity of silicon cantilevers. *Physical Review B*, **2004**, 69,	3.3	123
382	Nanoscience: Friction and Rheology on the Nanometer Scale **1998**,		115
381	Abrasive wear on the atomic scale. *Physical Review Letters*, **2002**, 88, 215501	7.4	110
380	Micromechanical thermogravimetry. *Chemical Physics Letters*, **1998**, 294, 363-369	2.5	109
379	Multiple heteroatom substitution to graphene nanoribbon. *Science Advances*, **2018**, 4, eaar7181	14.3	105
378	Experimental aspects of dissipation force microscopy. *Physical Review B*, **2000**, 62, 13674-13679	3.3	104
377	Suppression of electronic friction on Nb films in the superconducting state. *Nature Materials*, **2011**, 10, 119-22	27	101
376	Systematic achievement of improved atomic-scale contrast via bimodal dynamic force microscopy. *Physical Review Letters*, **2009**, 103, 220801	7.4	101
375	Fluctuations and jump dynamics in atomic friction experiments. *Physical Review B*, **2005**, 72,	3.3	100
374	Nanomechanics from atomic resolution to molecular recognition based on atomic force microscopy technology. *Nanotechnology*, **2002**, 13, R29-R36	3.4	100
373	Extended halogen bonding between fully fluorinated aromatic molecules. *ACS Nano*, **2015**, 9, 2574-83	16.7	99
372	Stress at the Solid□iquid Interface of Self-Assembled Monolayers on Gold Investigated with a Nanomechanical Sensor. *Langmuir*, **2000**, 16, 9694-9696	4	98
371	Ultrathin films of NaCl on Cu(111): a LEED and dynamic force microscopy study. *Surface Science*, **1999**, 438, 289-296	1.8	97
370	Site-specific friction force spectroscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1996**, 14, 1285		96
369	Atomic-scale stick-slip processes on Cu(111). *Physical Review B*, **1999**, 60, R11301-R11304	3.3	96
368	Observation of Individual Molecules Trapped on a Nanostructured Insulator. *Nano Letters*, **2004**, 4, 2185-2189	12.3	95
367	Mechanism of Atomic Friction. *Europhysics Letters*, **1995**, 31, 269-274	1.6	95
366	Dynamic force microscopy of copper surfaces: Atomic resolution and distance dependence of tip-sample interaction and tunneling current. *Physical Review B*, **2000**, 62, 16944-16949	3.3	86

365	Atomic resolution in dynamic force microscopy across steps on Si(1 1 1)7⊠. *Zeitschrift F⊠ Physik B-Condensed Matter*, **1996**, 100, 165-167		82
364	Dynamic SFM with true atomic resolution on alkali halide surfaces. *Applied Physics A: Materials Science and Processing*, **1998**, 66, S293-S294	2.6	81
363	Nanotribology: an UHV-SFM study on thin films of C60 and AgBr. *Surface Science*, **1995**, 338, 247-260	1.8	80
362	Van der Waals interactions and the limits of isolated atom models at interfaces. *Nature Communications*, **2016**, 7, 11559	17.4	79
361	Cu-TBPP and PTCDA molecules on insulating surfaces studied by ultra-high-vacuum non-contact AFM. *Nanotechnology*, **2004**, 15, S91-S96	3.4	79
360	Comparative study of lithium fluoride and graphite by atomic force microscopy (AFM). *Journal of Microscopy*, **1988**, 152, 269-280	1.9	77
359	Nanoscale engineering of molecular porphyrin wires on insulating surfaces. *Small*, **2008**, 4, 1115-8	11	76
358	Lateral-force measurements in dynamic force microscopy. *Physical Review B*, **2002**, 65,	3.3	75
357	Application of atomic force microscopy to magnetic materials. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1988**, 6, 279-282	2.9	73
356	Atomic-force microscopy on the Si(111)7 x 7 surface. *Physical Review B*, **1995**, 51, 5484-5487	3.3	71
355	Atomic resolution on LiF (001) by atomic force microscopy. *European Physical Journal B*, **1990**, 79, 3-4	1.2	69
354	Ultrasensitive detection of lateral atomic-scale interactions on graphite (0001) via bimodal dynamic force measurements. *Physical Review B*, **2010**, 81,	3.3	68
353	Fast digital electronics for application in dynamic force microscopy using high-Q cantilevers. *Applied Physics A: Materials Science and Processing*, **1998**, 66, S215-S218	2.6	68
352	Atomic-resolution images of radiation damage in KBr. *Surface Science*, **2001**, 474, L197-L202	1.8	68
351	Ferroelectric domain characterisation and manipulation : A challenge for scanning probe microscopy. *Ferroelectrics*, **1999**, 222, 153-162	0.6	65
350	Direct quantitative measurement of the C?O???H-C bond by atomic force microscopy. *Science Advances*, **2017**, 3, e1603258	14.3	63
349	Thermal control of sequential on-surface transformation of a hydrocarbon molecule on a copper surface. *Nature Communications*, **2016**, 7, 12711	17.4	63
348	The role of the cantilever in Kelvin probe force microscopy measurements. *Beilstein Journal of Nanotechnology*, **2011**, 2, 252-60	3	63

347	Atomic-scale mechanical properties of orientated C60 molecules revealed by noncontact atomic force microscopy. *ACS Nano*, **2011**, 5, 6349-54	16.7	63
346	Surface stress in the self-assembly of alkanethiols on gold probed .by a force microscopy technique. *Applied Physics A: Materials Science and Processing*, **1998**, 66, S55-S59	2.6	63
345	Scanning Probe Microscopy of Thin Films. *MRS Bulletin*, **1993**, 18, 41-49	3.2	63
344	Functionalized truxenes: adsorption and diffusion of single molecules on the KBr(001) surface. *ACS Nano*, **2010**, 4, 3429-39	16.7	56
343	Two-dimensional simulation of superlubricity on NaCl and highly oriented pyrolytic graphite. *Physical Review B*, **2009**, 79,	3.3	56
342	Manipulation of gold nanoparticles: influence of surface chemistry, temperature, and environment (vacuum versus ambient atmosphere). *Langmuir*, **2008**, 24, 1577-81	4	56
341	Atomic force microscopy for the study of tribology and adhesion. *Thin Solid Films*, **1989**, 181, 527-544	2.2	56
340	Friction on the atomic scale: An ultrahigh vacuum atomic force microscopy study on ionic crystals. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1996**, 14, 1280		55
339	Statics and dynamics of ferroelectric domains studied with scanning force microscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 2451		55
338	Multiscale approach for simulations of Kelvin probe force microscopy with atomic resolution. *Physical Review B*, **2012**, 86,	3.3	54
337	Dynamics of damped cantilevers. *Review of Scientific Instruments*, **2000**, 71, 2772-2775	1.7	54
336	Quantifying the atomic-level mechanics of single long physisorbed molecular chains. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 3968-72	11.5	53
335	Phase variation experiments in non-contact dynamic force microscopy using phase locked loop techniques. *Applied Surface Science*, **1999**, 140, 287-292	6.7	53
334	Obtaining detailed structural information about supramolecular systems on surfaces by combining high-resolution force microscopy with ab initio calculations. *ACS Nano*, **2013**, 7, 9098-105	16.7	50
333	Ubiquitous mechanisms of energy dissipation in noncontact atomic force microscopy. *Physical Review Letters*, **2008**, 100, 236106	7.4	50
332	Surface chemistry of rare-earth oxide surfaces at ambient conditions: reactions with water and hydrocarbons. *Scientific Reports*, **2017**, 7, 43369	4.9	49
331	Water interaction with hydrogenated and oxidized detonation nanodiamonds Microscopic and spectroscopic analyses. *Diamond and Related Materials*, **2016**, 63, 97-102	3.5	48
330	Atomic friction studies on well-defined surfaces. *Tribology Letters*, **2001**, 10, 51-56	2.8	48

329	The noise of cantilevers. *Nanotechnology*, **2000**, 11, 169-172	3.4	48
328	ULTRAHIGH VACUUM ATOMIC FORCE MICROSCOPY: TRUE ATOMIC RESOLUTION. *Surface Review and Letters*, **1997**, 04, 1025-1029	1.1	47
327	Aspects of dynamic force microscopy on NaCl/Cu(111): resolution, tip–sample interactions and cantilever oscillation characteristics **1999**, 27, 462-466		47
326	Influence of humidity on friction measurements of supported MoS2 single layers. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1996**, 14, 1264		47
325	Attractive-mode imaging of biological materials with dynamic force microscopy. *Nanotechnology*, **1994**, 5, 87-94	3.4	46
324	Friction and wear on the atomic scale. *Wear*, **2003**, 254, 859-862	3.5	45
323	Molecular dynamics simulations of dynamic force microscopy: applications to the Si(111)-7×7 surface. *Applied Surface Science*, **2000**, 157, 355-360	6.7	45
322	An atomic force microscopy study of corona-treated polypropylene films. *Applied Surface Science*, **1993**, 64, 197-203	6.7	45
321	10-nm resolution by magnetic force microscopy on FeNdB. *Journal of Applied Physics*, **1990**, 67, 1437-1441	2.5	45
320	A Two-Dimensional Polymer Synthesized at the Air/Water Interface. *Angewandte Chemie - International Edition*, **2018**, 57, 10584-10588	16.4	44
319	Atomic-scale friction on stepped surfaces of ionic crystals. *Physical Review Letters*, **2011**, 106, 186104	7.4	44
318	Dynamic force microscopy across steps on the Si(111)-(7×7) surface. *Surface Science*, **2000**, 461, 255-265	1.8	44
317	Surface science at the PEARL beamline of the Swiss Light Source. *Journal of Synchrotron Radiation*, **2017**, 24, 354-366	2.4	43
316	Quantum Dots Embedded in Graphene Nanoribbons by Chemical Substitution. *Nano Letters*, **2017**, 17, 50-56	11.5	43
315	Can aluminium or magnesium be a surrogate for beryllium: A critical investigation of their chemistry. *Fusion Engineering and Design*, **2013**, 88, 1718-1721	1.7	43
314	Ultrahigh-vacuum scanning force microscopy: Atomic-scale resolution at monatomic cleavage steps. *Physical Review B*, **1994**, 49, 5651-5656	3.3	43
313	Organometallic Bonding in an Ullmann-Type On-Surface Chemical Reaction Studied by High-Resolution Atomic Force Microscopy. *Small*, **2016**, 12, 5303-5311	11	42
312	Atom manipulation on an insulating surface at room temperature. *Nature Communications*, **2014**, 5, 4403	17.4	42

311	Chladni figures revisited based on nanomechanics. *Physical Review Letters*, **2007**, 98, 026102	7.4	42
310	Characterization of nanoparticles using Atomic Force Microscopy. *Journal of Physics: Conference Series*, **2007**, 61, 971-976	0.3	42
309	A comparative atomic force microscopic study of liquid crystal films: transferred freely-suspended vs. Langmuir-Blodgett. Morphology, lattice, and manipulation. *Langmuir*, **1993**, 9, 341-346	4	42
308	Elasticity, wear, and friction properties of thin organic films observed with atomic force microscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 1973		42
307	Wear, friction and sliding speed correlations on Langmuir-Blodgett films observed by atomic force microscopy. *Thin Solid Films*, **1994**, 240, 105-109	2.2	42
306	Atomic resolution on the surface of LiF(100) by atomic force microscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1991**, 9, 1329		42
305	Precise engineering of quantum dot array coupling through their barrier widths. *Nature Communications*, **2017**, 8, 787	17.4	41
304	Ripple formation induced in localized abrasion. *Physical Review B*, **2003**, 68,	3.3	41
303	Competing Annulene and Radialene Structures in a Single Anti-Aromatic Molecule Studied by High-Resolution Atomic Force Microscopy. *ACS Nano*, **2017**, 11, 8122-8130	16.7	40
302	Atomic-scale friction modulated by a buried interface: Combined atomic and friction force microscopy experiments. *Physical Review B*, **2008**, 78,	3.3	40
301	Giant frictional dissipation peaks and charge-density-wave slips at the NbSe2 surface. *Nature Materials*, **2014**, 13, 173-7	27	39
300	Kelvin probe force microscopy of nanocrystalline TiO2 photoelectrodes. *Beilstein Journal of Nanotechnology*, **2013**, 4, 418-28	3	39
299	Directed rotations of single porphyrin molecules controlled by localized force spectroscopy. *ACS Nano*, **2012**, 6, 6318-24	16.7	38
298	Molecular assemblies grown between metallic contacts on insulating surfaces. *Applied Physics Letters*, **2009**, 94, 063303	3.4	38
297	Interaction-induced atomic displacements revealed by drift-corrected dynamic force spectroscopy. *Physical Review B*, **2011**, 83,	3.3	38
296	Noncontact atomic force microscopy simulator with phase-locked-loop controlled frequency detection and excitation. *Physical Review B*, **2006**, 74,	3.3	38
295	Design and Characterization of an Electrically Powered Single Molecule on Gold. *ACS Nano*, **2017**, 11, 9930-9940	16.7	37
294	Atomic contact potential variations of Si(111)-7 x 7 analyzed by Kelvin probe force microscopy. *Nanotechnology*, **2010**, 21, 245704	3.4	37

293	Frictional and atomic-scale study of C60 thin films by scanning force microscopy. *European Physical Journal B*, **1994**, 95, 1-3	1.2	37
292	Towards plasma cleaning of ITER first mirrors. *Nuclear Fusion*, **2015**, 55, 063020	3.3	36
291	Atomic-scale dissipation processes in dynamic force spectroscopy. *Physical Review B*, **2011**, 84,	3.3	36
290	Surface morphology, chemical contrast, and ferroelectric domains in TGS bulk single crystals differentiated with UHV non-contact force microscopy. *Applied Surface Science*, **1999**, 140, 253-258	6.7	36
289	Carbon nanotubes as tips in non-contact SFM. *Applied Surface Science*, **2000**, 157, 269-273	6.7	35
288	Progress in noncontact dynamic force microscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 1673		35
287	Bottom-up Synthesis of Nitrogen-Doped Porous Graphene Nanoribbons. *Journal of the American Chemical Society*, **2020**, 142, 12568-12573	16.4	34
286	Determination of effective tip geometries in Kelvin probe force microscopy on thin insulating films on metals. *Nanotechnology*, **2009**, 20, 264016	3.4	34
285	Different Response of Atomic Force Microscopy and Scanning Tunnelling Microscopy to Charge Density Waves. *Europhysics Letters*, **1989**, 9, 695-700	1.6	34
284	Multiple Slips in Atomic-Scale Friction: An Indicator for the Lateral Contact Damping. *Tribology Letters*, **2010**, 39, 63-69	2.8	33
283	Self-assembling of Zn porphyrins on a (110) face of rutile TiO2 The anchoring role of carboxyl groups. *Applied Surface Science*, **2016**, 379, 277-281	6.7	33
282	Single-Molecule Tribology: Force Microscopy Manipulation of a Porphyrin Derivative on a Copper Surface. *ACS Nano*, **2016**, 10, 713-22	16.7	32
281	The effect of low temperature deuterium plasma on molybdenum reflectivity. *Nuclear Fusion*, **2011**, 51, 103025	3.3	32
280	Atomic corrugation in nc-AFM of alkali halides. *Applied Surface Science*, **2002**, 188, 232-237	6.7	32
279	Using higher flexural modes in non-contact force microscopy. *Applied Surface Science*, **2000**, 157, 337-342	6.7	32
278	Biological materials studied with dynamic force microscopy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 1500		32
277	Atomic-scale contrast mechanism in atomic force microscopy. *European Physical Journal B*, **1992**, 88, 321-326	1.2	32
276	Morphological changes of tungsten surfaces by low-flux helium plasma treatment and helium incorporation via magnetron sputtering. *ACS Applied Materials & Interfaces*, **2014**, 6, 11609-16	9.5	30

275	Scanning force microscopy on the Si(111)7⁄7 surface reconstruction. *European Physical Journal B*, **1994**, 93, 267-268	1.2	30
274	High resolution magnetic force microscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1990**, 8, 406-410	2.9	30
273	Atomic force microscopy: General aspects and application to insulators. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1988**, 6, 275-278	2.9	30
272	Elastic response of graphene nanodomes. *ACS Nano*, **2013**, 7, 2927-34	16.7	29
271	Atomic Resolution on the AgBr(001) Surface by Atomic Force Microscopy. *Europhysics Letters*, **1991**, 15, 319-323	1.6	29
270	Plasma cleaning of ITER First Mirrors in magnetic field. *Journal of Nuclear Materials*, **2015**, 463, 940-943	3.3	28
269	Diacetylene Linked Anthracene Oligomers Synthesized by One-Shot Homocoupling of Trimethylsilyl on Cu(111). *ACS Nano*, **2018**, 12, 8791-8797	16.7	28
268	Comparison of dynamic lever STM and noncontact AFM. *Applied Physics A: Materials Science and Processing*, **1998**, 66, S245-S248	2.6	28
267	Frenkel defect interactions at surfaces of irradiated alkali halides studied by non-contact atomic-force microscopy. *Surface Science*, **2001**, 482-485, 903-909	1.8	28
266	Surface potential studies of self-assembling monolayers using Kelvin probe force microscopy **1999**, 27, 368-373		28
265	Combined SIMS-SPM instrument for high sensitivity and high-resolution elemental 3D analysis. *Surface and Interface Analysis*, **2013**, 45, 513-516	1.5	27
264	Pure hydrogen low-temperature plasma exposure of HOPG and graphene: Graphane formation?. *Beilstein Journal of Nanotechnology*, **2012**, 3, 852-9	3	27
263	The analytical relations between particles and probe trajectories in atomic force microscope nanomanipulation. *Nanotechnology*, **2009**, 20, 115706	3.4	27
262	Cleavage faces of alkaline earth fluorides studied by atomic force microscopy. *Surface Science*, **1992** , 277, L29-L33	1.8	27
261	Cleaning of first mirrors in ITER by means of radio frequency discharges. *Review of Scientific Instruments*, **2016**, 87, 11D439	1.7	27
260	Probing the spatial and momentum distribution of confined surface states in a metal coordination network. *Chemical Communications*, **2014**, 50, 12289-92	5.8	26
259	Tribology of ultra-thin MoS2 platelets on mica: studies by scanning force microscopy. *Thin Solid Films*, **1994**, 240, 101-104	2.2	26
258	Interplay of weak interactions in the atom-by-atom condensation of xenon within quantum boxes. *Nature Communications*, **2015**, 6, 6071	17.4	25

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254	Superlubricity on the nanometer scale. *Friction*, **2014**, 2, 106-113	5.6	24
253	Friction force microscopy studies on SiO2 supported pristine and hydrogenated graphene. *Applied Physics Letters*, **2014**, 104, 041910	3.4	24
252	High-resolution imaging of C60 molecules using tuning-fork-based non-contact atomic force microscopy. *Journal of Physics Condensed Matter*, **2012**, 24, 084005	1.8	24
251	Three dimensional imaging using secondary ion mass spectrometry and atomic force microscopy. *Applied Surface Science*, **2011**, 258, 1322-1327	6.7	24
250	Structure and dynamics of solid surfaces observed by atomic force microscopy. *Ultramicroscopy*, **1992**, 42-44, 274-280	3.1	24
249	Scanning Force Microscopy (SFM). *Springer Series in Surface Sciences*, **1992**, 99-149	0.4	24
248	Characterization of individual molecular adsorption geometries by atomic force microscopy: Cu-TCPP on rutile TiO2 (110). *Journal of Chemical Physics*, **2015**, 143, 094202	3.9	23
247	Orientation dependent molecular friction on organic layer compound crystals. *Applied Physics Letters*, **2011**, 98, 083119	3.4	23
246	Three-dimensional dynamic force spectroscopy measurements on KBr(001): atomic deformations at small tip-sample separations. *Nanotechnology*, **2012**, 23, 055401	3.4	23
245	Design and performance of a combined secondary ion mass spectrometry-scanning probe microscopy instrument for high sensitivity and high-resolution elemental three-dimensional analysis. *Review of Scientific Instruments*, **2012**, 83, 063702	1.7	23
244	Donor-Acceptor Properties of a Single-Molecule Altered by On-Surface Complex Formation. *ACS Nano*, **2017**, 11, 8413-8420	16.7	22
243	Interplay of the tip-sample junction stability and image contrast reversal on a Cu(111) surface revealed by the 3D force field. *Nanotechnology*, **2012**, 23, 045705	3.4	22
242	Systematic measurement of pentacene assembled on Cu(111) by bimodal dynamic force microscopy at room temperature. *Physical Review B*, **2011**, 84,	3.3	22
241	Switchable cantilever for a time-of-flight scanning force microscope. *Applied Physics Letters*, **2004**, 84, 1558-1560	3.4	22
240	Plasma cleaning of ITER first mirrors. *Physica Scripta*, **2017**, T170, 014047	2.6	21

239	Laser-assisted cleaning of beryllium-containing mirror samples from JET and PISCES-B. *Fusion Engineering and Design*, **2014**, 89, 122-130	1.7	21
238	Three-dimensional force spectroscopy of KBr(001) by tuning fork-based cryogenic noncontact atomic force microscopy. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C4B1-C4B5	1.3	21
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236	Applied physics. Novel probes for molecular electronics. *Science*, **2009**, 324, 1397-8	33.3	21
235	Finite element calculations and fabrication of cantilever sensors for nanoscale detection. *Ultramicroscopy*, **2000**, 82, 69-77	3.1	21
234	Different response of atomic force microscopy and scanning tunneling microscopy to charge density waves. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1990**, 8, 495-499	2.9	21
233	Hydroxyl-Induced Partial Charge States of Single Porphyrins on Titania Rutile. *Journal of Physical Chemistry C*, **2017**, 121, 3607-3614	3.8	20
232	Single-molecule manipulation experiments to explore friction and adhesion. *Journal Physics D: Applied Physics*, **2017**, 50, 113003	3	20
231	Conformations and cryo-force spectroscopy of spray-deposited single-strand DNA on gold. *Nature Communications*, **2019**, 10, 685	17.4	20
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229	Reflective metallic coatings for first mirrors on ITER. *Fusion Engineering and Design*, **2011**, 86, 2593-2596	1.7	20
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227	Atomic Friction Investigations on Ordered Superstructures. *Tribology Letters*, **2010**, 39, 321-327	2.8	20
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