Joost W M Frenken

List of Publications by Year
in descending order

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197 papers	11,449 citations	30047 54 h-index	30894 102 g-index
206 all docs	206 docs citations	206 times ranked	7612 citing authors

#	Article	IF	Citations
1	Superlubricity of Graphite. Physical Review Letters, 2004, 92, 126101.	2.9	1,145
2	Observation of Surface Melting. Physical Review Letters, 1985, 54, 134-137.	2.9	729
3	CO Oxidation on Pt(110): Scanning Tunneling Microscopy Inside a High-Pressure Flow Reactor. Physical Review Letters, 2002, 89, 046101.	2.9	448
4	Structure and Reactivity of Surface Oxides on Pt(110) during Catalytic CO Oxidation. Physical Review Letters, 2005, 95, 255505.	2.9	327
5	Observation of surface-initiated melting. Physical Review B, 1986, 34, 7506-7516.	1.1	303
6	Crystal-Face Dependence of Surface Melting. Physical Review Letters, 1987, 59, 2678-2681.	2.9	292
7	Oscillatory CO oxidation on Pd(100) studied with in situ scanning tunneling microscopy. Surface Science, 2004, 552, 229-242.	0.8	240
8	Scanning probe microscopes go video rate and beyond. Review of Scientific Instruments, 2005, 76, 053710.	0.6	206
9	Surface science under reaction conditions: CO oxidation on Pt and Pd model catalysts. Chemical Society Reviews, 2017, 46, 4347-4374.	18.7	202
10	Torque and Twist against Superlubricity. Physical Review Letters, 2008, 100, 046102.	2.9	190
11	The role of steps in surface catalysis and reaction oscillations. Nature Chemistry, 2010, 2, 730-734.	6.6	184
12	The Active Phase of Palladium during Methane Oxidation. Journal of Physical Chemistry Letters, 2012, 3, 678-682.	2.1	183
13	Model calculations of superlubricity of graphite. Physical Review B, 2004, 70, .	1.1	174
14	Model experiments of superlubricity of graphite. Surface Science, 2005, 576, 197-211.	0.8	169
15	Capillary Condensation in Atomic Scale Friction: How Water Acts like a Glue. Physical Review Letters, 2006, 96, 166103.	2.9	155
16	Relation between Surface Relaxation and Surface Force Constants in Clean and Oxygen-Covered Ni(001). Physical Review Letters, 1983, 51, 1876-1879.	2.9	146
17	Thermally induced suppression of friction at the atomic scale. Physical Review E, 2005, 71, 065101.	0.8	146
18	Theory and simulation of high-energy ion scattering experiments for structure analysis of surfaces and interfaces. Nuclear Instruments & Methods in Physics Research B, 1986, 17, 334-343.	0.6	137

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19	Nothing Moves a Surface: Vacancy Mediated Surface Diffusion. Physical Review Letters, 2001, 86, 1562-1565.	2.9	130
20	Step dynamics on Au(110) studied with a high-temperature, high-speed scanning tunneling microscope. Physical Review Letters, 1993, 71, 3517-3520.	2.9	129
21	Self-diffusion at a melting surface observed by He scattering. Physical Review Letters, 1988, 60, 1727-1730.	2.9	117
22	Grains, Growth, and Grooving. Physical Review Letters, 2003, 91, 026101.	2.9	115
23	Experimental Evidence for Ice Formation at Room Temperature. Physical Review Letters, 2008, 101, 036101.	2.9	115
24	Real-space determination of atomic structure and bond relaxation at theNiSi2-Si(111) interface. Physical Review Letters, 1985, 54, 827-830.	2.9	112
25	Are Vicinal Metal Surfaces Stable?. Physical Review Letters, 1999, 82, 3500-3503.	2.9	112
26	The effect of zirconia and titanium implant abutments on light reflection of the supporting soft tissues. Clinical Oral Implants Research, 2011, 22, 1172-1178.	1.9	111
27	Observing the oxidation of platinum. Nature Communications, 2017, 8, 429.	5.8	109
28	Anisotropic diffusion at a melting surface studied with He-atom scattering. Physical Review B, 1990, 41, 938-946.	1.1	104
29	The Leiden MEMS Tribometer: Real Time Dynamic Friction Loop Measurements With an On-Chip Tribometer. Tribology Letters, 2007, 28, 149-156.	1.2	104
30	Surface structure and reactivity of Pd(100) during CO oxidation near ambient pressures. Physical Chemistry Chemical Physics, 2011, 13, 13167.	1.3	104
31	Superlubric to stick-slip sliding of incommensurate graphene flakes on graphite. Physical Review B, 2013, 88, .	1.1	98
32	Missing-row surface reconstruction of Ag(110) induced by potassium adsorption. Physical Review Letters, 1987, 59, 2307-2310.	2.9	96
33	In situ observation of self-assembled hydrocarbon Fischerâ€“Tropsch products on a cobalt catalyst. Nature Chemistry, 2016, 8, 929-934.	6.6	94
34	Static and dynamic displacements of nickel atoms in clean and oxygen covered Ni(001) surfaces. Surface Science, 1983, 135, 147-163.	0.8	93
35	Jump to contact, neck formation, and surface melting in the scanning tunneling microscope. Physical Review Letters, 1993, 70, 3907-3910.	2.9	93
36	Scanning tunnelling microscopy study of the growth of small palladium particles on TiO2(110). Surface Science, 2000, 457, 295-310.	0.8	92

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37	Catalytic Activity of the Rh Surface Oxide: CO Oxidation over Rh(111) under Realistic Conditions. Journal of Physical Chemistry C, 2010, 114, 4580-4583.	1.5	88
38	Evidence for anomalous thermal expansion at a crystal surface. Physical Review Letters, 1987, 58, 401-404.	2.9	86
39	The â€œReactor STMâ€ A scanning tunneling microscope for investigation of catalytic surfaces at semi-industrial reaction conditions. Review of Scientific Instruments, 1998, 69, 3879-3884.	0.6	85
40	Bistability and oscillations in CO oxidation studied with scanning tunnelling microscopy inside a reactor. Catalysis Today, 2005, 105, 234-243.	2.2	85
41	The physics of atomicâ€scale friction: Basic considerations and open questions. Physica Status Solidi (B): Basic Research, 2014, 251, 711-736.	0.7	84
42	Order-disorder transitions at the Ge(111) surface. Surface Science, 1991, 241, 335-345.	0.8	83
43	Monolayer resolution in medium-energy ion-scattering experiments on theNiSi2(111) surface. Physical Review Letters, 1991, 67, 1134-1137.	2.9	81
44	Step and kink dynamics on Au(110) and Pb(111) studied with a high-speed STM. Physical Review B, 1995, 52, 11387-11397.	1.1	80
45	Looking at Heterogeneous Catalysis at Atmospheric Pressure Using Tunnel Vision. Topics in Catalysis, 2005, 36, 43-54.	1.3	74
46	The ReactorSTM: Atomically resolved scanning tunneling microscopy under high-pressure, high-temperature catalytic reaction conditions. Review of Scientific Instruments, 2014, 85, 083703.	0.6	74
47	How Boron Nitride Forms a Regular Nanomesh on Rh(111). Physical Review Letters, 2010, 104, 096102.	2.9	73
48	Microscale Friction Reduction by Normal Force Modulation in MEMS. Journal of Adhesion Science and Technology, 2010, 24, 2669-2680.	1.4	73
49	Oxidation of Pd(553): From ultrahigh vacuum to atmospheric pressure. Physical Review B, 2007, 76, .	1.1	70
50	Ultrahigh vacuum/high-pressure flow reactor for surface x-ray diffraction and grazing incidence small angle x-ray scattering studies close to conditions for industrial catalysis. Review of Scientific Instruments, 2010, 81, 014101.	0.6	69
51	Thermolubricity in atomic-scale friction. Physical Review B, 2008, 78, .	1.1	65
52	Thermal roughening studied by scanning tunneling microscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 293-296.	0.9	58
53	Incomplete melting of Pb(001) and vicinal surfaces. Surface Science, 1992, 275, 383-394.	0.8	56
54	The influence of substrate defects on the growth rate of palladium nanoparticles on a TiO2(110) surface. Surface Science, 2001, 474, 28-36.	0.8	56

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55	Comment on â€œCO Oxidation on Pt-Group Metals from Ultrahigh Vacuum to Near Atmospheric Pressures. 2. Palladium and Platinumâ€. Journal of Physical Chemistry C, 2010, 114, 6875-6876.	1.5	54
56	Dynamics and melting of surfaces. Surface Science, 1986, 178, 382-395.	0.8	53
57	Design and performance of a highâ€temperature, highâ€speed scanning tunneling microscope. Review of Scientific Instruments, 1995, 66, 4557-4565.	0.6	53
58	Niâ€Si(111) interface: Growth of Ni2Si islands at room temperature. Applied Physics Letters, 1984, 45, 41-43.	1.5	52
59	Videoâ€rate scanning probe control challenges: setting the stage for a microscopy revolution. Asian Journal of Control, 2009, 11, 110-129.	1.9	51
60	Multilayer relaxation at the Ag(110) surface. Surface Science, 1987, 188, 335-349.	0.8	50
61	A model system for scandate cathodes. Applied Surface Science, 1997, 111, 35-41.	3.1	50
62	Stick-Slip Motion in Spite of a Slippery Contact: Do We Get What We See in Atomic Friction?. Physical Review Letters, 2006, 97, 166103.	2.9	50
63	BINoculars: data reduction and analysis software for two-dimensional detectors in surface X-ray diffraction. Journal of Applied Crystallography, 2015, 48, 1324-1329.	1.9	50
64	Multilayer relaxation at the Pb(110) surface. Surface Science, 1986, 172, 319-336.	0.8	49
65	Vacancy diffusion in the Cu surface I: an STM study. Surface Science, 2002, 521, 10-25.	0.8	48
66	Structure and reactivity of a model catalyst alloy under realistic conditions. Journal of Physics Condensed Matter, 2008, 20, 184018.	0.7	47
67	Reversible formation of a PdCx phase in Pd nanoparticles upon CO and O2 exposure. Physical Chemistry Chemical Physics, 2012, 14, 4796.	1.3	47
68	In situ observations of an active MoS2 model hydrodesulfurization catalyst. Nature Communications, 2019, 10, 2546.	5.8	47
69	The effect of oxidation and resulfidation on (Ni/Co)MoS2 hydrodesulfurisation catalysts. Applied Catalysis B: Environmental, 2019, 243, 145-150.	10.8	47
70	Design and performance of a programmable-temperature scanning tunneling microscope. Review of Scientific Instruments, 1998, 69, 2072-2080.	0.6	45
71	Formation of epitaxial Î²â€FeSi2films on Si(001) as studied by mediumâ€energy ion scattering. Journal of Applied Physics, 1993, 73, 1104-1109.	1.1	44
72	The Ring Structure and Organization of Light Harvesting 2 Complexes in a Reconstituted Lipid Bilayer, Resolved by Atomic Force Microscopy. Biophysical Journal, 2003, 84, 2483-2491.	0.2	44

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73	The crucial role of temperature in atomic scale friction. Journal of Physics Condensed Matter, 2008, 20, 354003.	0.7	44
74	Silicon strained layers grown on GaP(001) by molecular beam epitaxy. Journal of Applied Physics, 1985, 58, 3097-3103.	1.1	40
75	Surface energetics and thermal roughening of Ag(115) studied with STM movies. Physical Review B, 1996, 53, R13299-R13302.	1.1	40
76	Kinetics of Graphene Formation on Rh(111) Investigated by In Situ Scanning Tunneling Microscopy. ACS Nano, 2013, 7, 7028-7033.	7.3	39
77	Sulfur adatom diffusion on the Cu(111) surface. Surface Science, 1991, 259, 288-300.	0.8	37
78	Calculation of ion scattering yields from simulated crystal surfaces: theory and application to melting and non-melting Al surfaces. Surface Science, 1991, 256, 385-396.	0.8	37
79	Anharmonicity but absence of surface melting on Al(001). Physical Review B, 1994, 50, 11132-11141.	1.1	37
80	Combined (1Ã—2)â†'(1Ã—1) transition and atomic roughening of Ge(001) studied with surface x-ray diffraction. Physical Review B, 1991, 44, 1134-1138.	1.1	36
81	Graphene formation on metal surfaces investigated byin-situscanning tunneling microscopy. New Journal of Physics, 2012, 14, 053033.	1.2	36
82	X-ray reflectivity study of surface-initiated melting: Density profile at the pb(110) surface. Surface Science, 1989, 222, L845-L852.	0.8	35
83	Design and performance of a high-resolution frictional force microscope with quantitative three-dimensional force sensitivity. Review of Scientific Instruments, 2005, 76, 043704.	0.6	35
84	Thermal contact delocalization in atomic scale friction: a multitude of friction regimes. New Journal of Physics, 2007, 9, 398-398.	1.2	35
85	MEMS-based fast scanning probe microscopes. Ultramicroscopy, 2010, 110, 599-604.	0.8	35
86	The Coalescence Behavior of Two-Dimensional Materials Revealed by Multiscale In Situ Imaging during Chemical Vapor Deposition Growth. ACS Nano, 2020, 14, 1902-1918.	7.3	35
87	The oxidation of Ni(100) studied by medium energy ion scattering. Surface Science, 1981, 112, 261-271.	0.8	34
88	Anomalous Shape and Decay of Islands on Au(110). Physical Review Letters, 2000, 84, 1966-1969.	2.9	33
89	The electron conduction of photosynthetic protein complexes embedded in a membrane. FEBS Letters, 2004, 560, 109-114.	1.3	33
90	Observation of Surface-Melting-Induced Faceting. Europhysics Letters, 1993, 21, 43-48.	0.7	32

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91	Growth mode and interface structure of Ag on the HF-treated Si(111):H surface. Surface Science, 1996, 350, 229-238.	0.8	32
92	Evidence for Contact Delocalization in Atomic Scale Friction. Physical Review Letters, 2007, 99, 166102.	2.9	32
93	Shape and Size of Cobalt Nanoislands Formed Spontaneously on Cobalt Terraces during Fischerâ€“Tropsch Synthesis. Journal of Physical Chemistry Letters, 2016, 7, 1996-2001.	2.1	32
94	High-pressure operando STM studies giving insight in CO oxidation and NO reduction over Pt(110). Catalysis Today, 2015, 244, 85-95.	2.2	31
95	The ReactorAFM: Non-contact atomic force microscope operating under high-pressure and high-temperature catalytic conditions. Review of Scientific Instruments, 2015, 86, 033706.	0.6	31
96	Temperature dependence of surface-melting-induced faceting of surfaces vicinal to Pb(111). Physical Review B, 1994, 49, 13798-13808.	1.1	30
97	The Reactor-STM: A Real-Space Probe forOperandoNanocatalysis. MRS Bulletin, 2007, 32, 1015-1021.	1.7	29
98	In situ TEM observation of the Boudouard reaction: multi-layered graphene formation from CO on cobalt nanoparticles at atmospheric pressure. Faraday Discussions, 2017, 197, 337-351.	1.6	29
99	Fabrication of a novel scanning probe device for quantitative nanotribology. Sensors and Actuators A: Physical, 2000, 84, 18-24.	2.0	28
100	Vacancy diffusion in the Cu() surface II: Random walk theory. Surface Science, 2002, 521, 26-33.	0.8	28
101	Real-Space Measurement of Surface Roughening. Physical Review Letters, 1999, 82, 1728-1731.	2.9	27
102	MEMS-based high speed scanning probe microscopy. Review of Scientific Instruments, 2010, 81, 043702.	0.6	27
103	Order-disorder transitions at surfaces. Surface Science, 1991, 251-252, 1-5.	0.8	25
104	Pushing the limits of SPM. Materials Today, 2005, 8, 20-25.	8.3	25
105	Oxidation of Al(111). Surface Science, 1993, 287-288, 438-442.	0.8	24
106	How Asymmetric Islands Become Symmetric. Physical Review Letters, 2001, 86, 5938-5941.	2.9	24
107	Anisotropy in surface melting of Pb(110). Surface Science, 1991, 244, 259-265.	0.8	23
108	New views on surface melting obtained with STM and ion scattering. Surface Science, 1993, 283, 283-289.	0.8	23

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109	Automated detection of particles, clusters and islands in scanning probe microscopy images. Surface Science, 2001, 494, 43-52.	0.8	23
110	A â€˜nano-batteringâ€™ for measuring surface forces: obtaining forceâ€“distance curves and sidewall stiction data with a MEMS device. Journal of Micromechanics and Microengineering, 2007, 17, S91-S97.	1.5	23
111	Jump to contact and neck formation between Pb surfaces and a STM tip. Surface Science, 1995, 340, 231-244.	0.8	22
112	On the smoothing of rough surfaces. Journal of Physics Condensed Matter, 1999, 11, 4349-4365.	0.7	21
113	In Situ Optical Reflectance Difference Observations of CO Oxidation over Pd(100). Journal of Physical Chemistry C, 2017, 121, 11407-11415.	1.5	21
114	He scattering study of diffusion at a melting surface. Surface Science, 1989, 211-212, 21-30.	0.8	20
115	The adsorption of Ba on Ag(111). Journal of Physics Condensed Matter, 1993, 5, 5411-5428.	0.7	20
116	When mica and water meet. Nature, 2010, 464, 38-39.	13.7	19
117	CoSi2/Si(111) interface: Determination of the interfacial metal coordination number. Physical Review B, 1992, 45, 6700-6708.	1.1	18
118	The initial stages of the oxidation of Al(111). I. Surface Science, 1993, 296, 131-140.	0.8	17
119	Direct observation and analysis of kink dynamics. Surface Science, 2000, 447, 25-38.	0.8	17
120	High-pressure STM study of NO reduction by CO on Pt(100). Catalysis Today, 2010, 154, 61-67.	2.2	17
121	Instability of NiMoS₂ and CoMoS₂ Hydrodesulfurization Catalysts at Ambient Conditions: A Quasi in Situ High-Resolution Transmission Electron Microscopy and X-ray Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 19204-19211.	1.5	17
122	Bringing friction to a halt. Nature Nanotechnology, 2006, 1, 20-21.	15.6	16
123	Atomic-scale friction experiments reconsidered in the light of rapid contact dynamics. Physical Review B, 2009, 80, .	1.1	16
124	In situ studies of NO reduction by H₂ over Pt using surface X-ray diffraction and transmission electron microscopy. Physical Chemistry Chemical Physics, 2017, 19, 8485-8495.	1.3	16
125	On the Origin of Frictional Energy Dissipation. Tribology Letters, 2020, 68, 1.	1.2	16
126	Surface melting: dry, slippery, wet and faceted surfaces. Surface Science, 1994, 307-309, 728-734.	0.8	15

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127	From dull to shiny: A novel setup for reflectance difference analysis under catalytic conditions. Review of Scientific Instruments, 2017, 88, 023704.	0.6	15
128	Rutherford Backscattering Investigations of Melting and Premelting Phenomena at Surfaces. Physica Scripta, 1987, T19B, 382-386.	1.2	14
129	Shape and evolution of vacancy islands on a missing row reconstructed surface: Au(). Surface Science, 2002, 518, 21-38.	0.8	14
130	Reply to â€œComment on â€˜Catalytic Activity of the Rh Surface Oxide: CO Oxidation over Rh(111) under Realistic Conditionsâ€â€™. Journal of Physical Chemistry C, 2010, 114, 22372-22373.	1.5	14
131	Two-dimensional position sensitive detection for medium-energy ion scattering. Nuclear Instruments & Methods in Physics Research B, 1994, 94, 137-149.	0.6	13
132	Difference in surface melting between indium (110) and (011). Surface Science, 1996, 365, 103-117.	0.8	13
133	Comment on â€œReal Space Investigation of the Roughening and Deconstruction Transitions of Au(110)â€. Physical Review Letters, 2001, 87, 039603.	2.9	13
134	Surface melting of Pb(110): A compilation of experimental results. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 2147-2151.	0.9	12
135	Shape and decay of two- and three-dimensional islands on Au(). Surface Science, 2002, 515, 344-358.	0.8	12
136	Thermally activated domain boundary formation on a missing row reconstructed surface: Au(110). Surface Science, 2003, 547, 71-84.	0.8	12
137	A general model of metal underpotential deposition in the presence of thiol-based additives based on an in situ STM study. Physical Chemistry Chemical Physics, 2011, 13, 16095.	1.3	12
138	The problem of critical damping in nanofriction. Colloid Journal, 2012, 74, 569-572.	0.5	12
139	Combined scanning probe microscopy and x-ray scattering instrument for in situ catalysis investigations. Review of Scientific Instruments, 2016, 87, 113705.	0.6	12
140	The initial stages of the oxidation of Al(111). II. Surface Science, 1993, 296, 141-148.	0.8	11
141	Structure analysis of the HF-treated Si(111):H surface with medium-energy ion scattering. Surface Science, 1994, 321, 261-266.	0.8	11
142	Asymmetric and symmetric Wulff constructions of island shapes on a missing-row reconstructed surface. Physical Review B, 2002, 65, .	1.1	11
143	The effect of stoichiometry on the stability of steps on TiO2(1 1 0). Applied Surface Science, 2002, 201, 161-170.	3.1	11
144	The description of friction of silicon MEMS with surface roughness: virtues and limitations of a stochastic Prandtlâ€“Tomlinson model and the simulation of vibration-induced friction reduction. Beilstein Journal of Nanotechnology, 2010, 1, 163-171.	1.5	11

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145	Fabrication of high-aspect ratio silicon nanopillars for tribological experiments. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2015, 14, 044506.	1.0	11
146	Structure determination of the NiSi2(111) surface with medium-energy ion backscattering from individual monolayers. Surface Science, 1993, 290, 255-266.	0.8	10
147	Oxygen dissociation on Ag(110): a ruin game. Surface Science, 1997, 375, 141-149.	0.8	10
148	Spontaneous breaking of nanowires between a STM tip and the Pb(110) surface. Physical Review B, 1998, 58, 2185-2190.	1.1	9
149	Oxidation of CO on Pd(1ÂOÂ0): on the structural evolution of the PdO layer during the self sustained oscillation regime. Journal of Lithic Studies, 2017, 3, 89-94.	0.1	9
150	On the Non-trivial Origin of Atomic-Scale Patterns in Friction Force Microscopy. Tribology Letters, 2019, 67, 15.	1.2	9
151	An experimental verification of the theory of surface roughening from a quantitative STM study. Surface Science, 2000, 448, 142-154.	0.8	8
152	Diffusion and incorporation of a surfactant: In on (vicinal) Cu(001). Surface Science, 2004, 555, 11-19.	0.8	8
153	Simultaneous scanning tunneling microscopy and synchrotron X-ray measurements in a gas environment. Ultramicroscopy, 2017, 182, 233-242.	0.8	8
154	Domain boundary formation on Au(110). Europhysics Letters, 2002, 59, 559-565.	0.7	7
155	Tuning the Properties of Molybdenum Oxide on Al₂O₃/NiAl(110): Metal versus Oxide Deposition. Journal of Physical Chemistry C, 2016, 120, 19737-19743.	1.5	7
156	The Pressure Gap for Thiols: Methanethiol Self-Assembly on Au(111) from Vacuum to 1 bar. Journal of Physical Chemistry C, 2019, 123, 12382-12389.	1.5	7
157	On the displacement statistics of an individual step edge in a vicinal surface. Surface Science, 1992, 275, 142-155.	0.8	6
158	The return of the kink. Surface Science, 2007, 601, 13-23.	0.8	6
159	A continuous-flow helium cryostat and sample holder with unrestricted manipulation for ion-scattering experiments in uhv. Vacuum, 1986, 36, 259-262.	1.6	5
160	Surface-melting induced faceting of aluminium. Surface Science, 1996, 366, 587-596.	0.8	5
161	Seeing dynamic phenomena with live scanning tunneling microscopy. MRS Bulletin, 2017, 42, 834-841.	1.7	5
162	Structural Dynamics of Al₂O₃/NiAl(110) During Film Growth in NO₂. Journal of Physical Chemistry B, 2018, 122, 788-793.	1.2	5

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163	Effect of rubidium incorporation on the optical properties and intermixing in Mo/Si multilayer mirrors for EUV lithography applications. Applied Surface Science, 2020, 507, 144951.	3.1	5
164	Structure analysis of crystal surfaces and interfaces with medium-energy ion beams. Nuclear Instruments & Methods in Physics Research B, 1988, 33, 884-890.	0.6	4
165	X-ray intensity oscillations occurring during growth of Ge on Ge(111)-a comparison with RHEED. Journal of Physics Condensed Matter, 1989, 1, SB213-SB214.	0.7	4
166	The step distance dependence of the kink creation energy determined on vicinal silver surfaces. Surface Science, 1999, 432, 21-26.	0.8	4
167	Monte Carlo simulation on the roughening of vicinal surfaces. Surface Science, 2000, 448, 155-163.	0.8	4
168	Diffusion in a surface: the atomic slide puzzle. Applied Physics A: Materials Science and Processing, 2002, 75, 11-15.	1.1	4
169	Why do we â€œfeelâ€•atoms in nano-scale friction?. Colloid Journal, 2017, 79, 81-86.	0.5	4
170	Live Observations of Catalysts Using High-Pressure Scanning Probe Microscopy. Springer Series in Chemical Physics, 2017, , 1-30.	0.2	4
171	Formation of a monolayer h-BN nanomesh on Rh (111) studied using in-situ STM. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	4
172	Erratum to â€œHigh-pressure operando STM studies giving insight in CO oxidation and NO reduction over Pt(1 1 0)â€•[Catal. Today 244 (2015) 85â€“95]. Catalysis Today, 2015, 256, 384.	2.2	3
173	In situ TEM Observation of MultiLayer Graphene Formation from CO on Cobalt Nanoparticles at Atmospheric Pressure. Microscopy and Microanalysis, 2017, 23, 896-897.	0.2	3
174	Nucleation, Alloying, and Stability of Coâ€“Re Bimetallic Nanoparticles on Al2O3/NiAl(110). Journal of Physical Chemistry C, 2018, 122, 8967-8975.	1.5	3
175	Tunable superlubricity of 2-dimensional materials. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24386-24387.	3.3	3
176	Thermal roughening investigated by scanning tunnelling microscopy. Faraday Discussions, 1993, 95, 27.	1.6	2
177	Response to â€œComment on â€˜MEMS-based high speed scanning probe microscopyâ€™â€•[Rev. Sci. Instrum. 81, 117101 (2010)]. Review of Scientific Instruments, 2010, 81, 117102.	0.6	2
178	Atomistic mechanisms for frictional energy dissipation during continuous sliding. Scientific Reports, 2021, 11, 19964.	1.6	2
179	Slippery Nanoworld. Europhysics News, 2005, 36, 6-8.	0.1	1
180	Energy dissipation accompanying atomic-scale friction: Nonlocality and memory. Colloid Journal, 2017, 79, 341-345.	0.5	1

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181	Experimental Observations of Superlubricity and Thermolubricity. Nanoscience and Technology, 2015, , 139-156.	1.5	1
182	Scanning Tunneling Microscopy at Elevated Pressure. Springer Series in Materials Science, 2014, , 181-206.	0.4	1
183	Surface Melting: An Experimental Overview. Chemical Physics of Solid Surfaces, 1994, 7, 259-290.	0.3	1
184	Ion beam crystallography of solid and molten surfaces. FestkÃ¶rperprobleme, 1985, , 523-530.	0.7	0
185	Multilayer relaxation at the Pb(110) surface. Surface Science Letters, 1986, 172, A342.	0.1	0
186	X-ray reflectivity study of surface-initiated melting: Density profile at the Pb(110) surface. Surface Science Letters, 1989, 222, L845-L852.	0.1	0
187	Superlubricity between Graphite Surfaces. , 2007, , 199-206.		0
188	The Physics of Atomic-scale Friction: Basic Considerations andâ€‰â€‰Open Questions. , 0, , 913-962.		0
189	Graphene/Rh(111) Structure Studied Using In-Situ Scanning Tunneling Microscopy. Chinese Physics Letters, 2016, 33, 116101.	1.3	0
190	Frenken to receive MRS Innovation in Materials Characterization Award. MRS Bulletin, 2017, 42, 320.	1.7	0
191	Response to Comment on â€œOn the Origin of Frictional Energy Dissipationâ€ by B.N.J. Persson. Tribology Letters, 2020, 68, 1.	1.2	0
192	Towards the Ideal Nano-Friction Experiment. , 2001, , 137-150.		0
193	A Novel Frictional Force Microscope with 3-Dimensional Force Detection. , 2003, , 115-122.		0
194	Microscale Friction Reduction by Normal Force Modulation in MEMS. , 2011, , 339-350.		0
195	Surface Energetics and Dynamics Measured from STM Movies. NATO ASI Series Series B: Physics, 1997, , 463-474.	0.2	0
196	Non-Local and Memory Character of Frictional Energy Dissipation on Atomic Scale. Engineering, 2017, 09, 14-21.	0.4	0
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