Ã–zgÃœr ÅahÄ°n

List of Publications by Year
in descending order

37 papers	2,352 citations	304602 22 h-index	454834 30 g-index
39 all docs	39 docs citations	39 times ranked	2929 citing authors

#	Article	IF	Citations
1	An atomic force microscope tip designed to measure time-varying nanomechanical forces. Nature Nanotechnology, 2007, 2, 507-514.	15.6	452
2	Scaling up nanoscale water-driven energy conversion into evaporation-driven engines and generators. Nature Communications, 2015, 6, 7346.	5.8	189
3	Bacillus spores as building blocks for stimuli-responsive materials and nanogenerators. Nature Nanotechnology, 2014, 9, 137-141.	15.6	166
4	High-resolution and large dynamic range nanomechanical mapping in tapping-mode atomic force microscopy. Nanotechnology, 2008, 19, 445717.	1.3	146
5	DNA nanomechanics allows direct digital detection of complementary DNA and microRNA targets. Nature, 2009, 462, 1075-1078.	13.7	141
6	Potential for natural evaporation as a reliable renewable energy resource. Nature Communications, 2017, 8, 617.	5.8	141
7	Determination of protein structural flexibility by microsecond force spectroscopy. Nature Nanotechnology, 2009, 4, 514-517.	15.6	139
8	Resonant harmonic response in tapping-mode atomic force microscopy. Physical Review B, 2004, 69, .	1.1	131
9	High-resolution imaging of elastic properties using harmonic cantilevers. Sensors and Actuators A: Physical, 2004, 114, 183-190.	2.0	108
10	Targeted intracellular voltage recordings from dendritic spines using quantum-dot-coated nanopipettes. Nature Nanotechnology, 2017, 12, 335-342.	15.6	107
11	A nanomechanical interface to rapid single-molecule interactions. Nature Communications, 2011, 2, 247.	5.8	69
12	Cellular nanoscale stiffness patterns governed by intracellular forces. Nature Materials, 2019, 18, 1071-1077.	13.3	60
13	Phase Diagram of Water Confined by Graphene. Scientific Reports, 2018, 8, 6228.	1.6	55
14	Flexible Nanopipettes for Minimally Invasive Intracellular Electrophysiology InÂVivo. Cell Reports, 2019, 26, 266-278.e5.	2.9	52
15	Micromachined silicon force sensor based on diffractive optical encoders for characterization of microinjection. Sensors and Actuators A: Physical, 2004, 114, 197-203.	2.0	49
16	Harnessing bifurcations in tapping-mode atomic force microscopy to calibrate time-varying tip-sample force measurements. Review of Scientific Instruments, 2007, 78, 103707.	0.6	49
17	Simulation of higher harmonics generation in tapping-mode atomic force microscopy. Applied Physics Letters, 2001, 79, 4455-4457.	1.5	40
18	Design and operation of a microfluidic sorter for Drosophila embryos. Sensors and Actuators B: Chemical, 2004, 102, 59-66.	4.0	40

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19	Physical basis for the adaptive flexibility of Bacillus spore coats. Journal of the Royal Society Interface, 2012, 9, 3156-3160.	1.5	35
20	Time-varying tip-sample force measurements and steady-state dynamics in tapping-mode atomic force microscopy. Physical Review B, 2008, 77, .	1.1	34
21	Imaging and three-dimensional reconstruction of chemical groups inside a protein complex using atomic force microscopy. Nature Nanotechnology, 2015, 10, 264-269.	15.6	33
22	Large and reversible myosin-dependent forces in rigidity sensing. Nature Physics, 2019, 15, 689-695.	6.5	31
23	Sporeâ€Based Waterâ€Resistant Waterâ€Responsive Actuators with High Power Density. Advanced Materials Technologies, 2019, 4, 1800596.	3.0	20
24	Analysis of tipâ€“sample interaction in tapping-mode atomic force microscope using an electrical circuit simulator. Applied Physics Letters, 2001, 78, 2973-2975.	1.5	14
25	High-resolution nanomechanical analysis of suspended electrospun silk fibers with the torsional harmonic atomic force microscope. Beilstein Journal of Nanotechnology, 2013, 4, 243-248.	1.5	10
26	Higher Harmonics and Time-Varying Forces in Dynamic Force Microscopy. , 2010, , 711-729.		10
27	Accessing Timeâ€Varying Forces on the Vibrating Tip of the Dynamic Atomic Force Microscope to Map Material Composition. Israel Journal of Chemistry, 2008, 48, 55-63.	1.0	9
28	Scanning below the cell surface. Nature Nanotechnology, 2008, 3, 461-462.	15.6	7
29	Nanomechanical spectroscopy of synthetic and biological membranes. Nanoscale, 2014, 6, 7604-7608.	2.8	5
30	Calibration of T-shaped atomic force microscope cantilevers using the thermal noise method. Review of Scientific Instruments, 2020, 91, 083703.	0.6	3
31	Higher-Harmonic Force Detection in Dynamic Force Microscopy. , 2007, , 717-736.		3
32	Genetically Intact Bioengineered Spores of Bacillus subtilis. ACS Synthetic Biology, 2021, 10, 778-785.	1.9	2
33	High throughput nanomechanical measurements on proteins DNA and RNA with a T-shaped cantilever. , 2009, , .		0
34	Strength of Non-Covalent Biomolecular Interactions Probed at the Microsecond Timescale. Biophysical Journal, 2010, 98, 618a.	0.2	0
35	Dynamic Nanomechanical Characterization Using Multiple-Frequency Method. , 2010, , 153-178.		0
36	Angstrom-Scale Chemical Microscopy: Multicolor Single-Molecule Imaging with Energy Landscape Engineering. Biophysical Journal, 2013, 104, 381a.	0.2	0

#	Article	IF	Citations
37	Using Spores of Bacillus to Create Evaporation-Driven Engines. Biophysical Journal, 2015, 108, 488a.	0.2	0