

Kei Kobayashi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3070309/publications.pdf>

Version: 2024-02-01

49
papers

2,182
citations

331259

21
h-index

214527

47
g-index

50
all docs

50
docs citations

50
times ranked

1745
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanomechanics of self-assembled surfactants revealed by frequency-modulation atomic force microscopy. <i>Nanoscale</i> , 2022, 14, 4626-4634.	2.8	1
2	Structured Water Molecules on Membrane Proteins Resolved by Atomic Force Microscopy. <i>Nano Letters</i> , 2022, 22, 2391-2397.	4.5	6
3	Morphological and functional characterizations of SnO ₂ electron extraction layer on transparent conductive oxides in lead-halide perovskite solar cells. <i>Applied Physics Letters</i> , 2022, 120, 191604.	1.5	1
4	Low-Background Tip-Enhanced Raman Spectroscopy Enabled by a Plasmon Thin-Film Waveguide Probe. <i>Analytical Chemistry</i> , 2021, 93, 7699-7706.	3.2	9
5	Surface charge density measurement of a single protein molecule with a controlled orientation by AFM. <i>Biophysical Journal</i> , 2021, 120, 2490-2497.	0.2	4
6	Molecular-Scale Solvation Structures of Ionic Liquids on a Heterogeneously Charged Surface. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8094-8099.	2.1	5
7	Atomic-Scale Three-Dimensional Local Solvation Structures of Ionic Liquids. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1343-1348.	2.1	21
8	Molecular-scale visualization and surface charge density measurement of Z-DNA in aqueous solution. <i>Scientific Reports</i> , 2019, 9, 6851.	1.6	17
9	Atomic-Level Viscosity Distribution in the Hydration Layer. <i>Physical Review Letters</i> , 2019, 122, 116001.	2.9	23
10	Investigation of Local Hydration Structures of Alkanethiol Self-Assembled Monolayers with Different Molecular Structures by FM-AFM. <i>Langmuir</i> , 2018, 34, 15189-15194.	1.6	11
11	Immunoactivity of self-assembled antibodies investigated by atomic force microscopy. <i>RSC Advances</i> , 2018, 8, 29378-29384.	1.7	10
12	Atomic-Scale 3D Local Hydration Structures Influenced by Water-Restricting Dimensions. <i>Langmuir</i> , 2018, 34, 9114-9121.	1.6	17
13	Visualization of Au Nanoparticles Buried in a Polymer Matrix by Scanning Thermal Noise Microscopy. <i>Scientific Reports</i> , 2017, 7, 42718.	1.6	19
14	Flexible DNA Path in the MCM Double Hexamer Loaded on DNA. <i>Biochemistry</i> , 2017, 56, 2435-2445.	1.2	9
15	Atomic-resolution three-dimensional hydration structures on a heterogeneously charged surface. <i>Nature Communications</i> , 2017, 8, 2111.	5.8	57
16	Surface Potential Measurements of Organic Thin-Film Transistors by Kelvin-Probe Force Microscopy. <i>Journal of the Vacuum Society of Japan</i> , 2017, 60, 392-396.	0.3	0
17	Interlayer Resistance and Edge-Specific Charging in Layered Molecular Crystals Revealed by Kelvin-Probe Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3006-3011.	1.5	20
18	Influence of Al-doped ZnO and Ga-doped ZnO substrates on third harmonic generation of gold nanoparticles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 71, 91-95.	1.3	9

#	ARTICLE	IF	CITATIONS
19	Molecular-scale quantitative charge density measurement of biological molecule by frequency modulation atomic force microscopy in aqueous solutions. <i>Nanotechnology</i> , 2015, 26, 285103.	1.3	29
20	Molecular-scale investigations of structures and surface charge distribution of surfactant aggregates by three-dimensional force mapping. <i>Journal of Chemical Physics</i> , 2014, 140, 054704.	1.2	19
21	Photothermal excitation setup for a modified commercial atomic force microscope. <i>Review of Scientific Instruments</i> , 2014, 85, 023703.	0.6	19
22	Immunoactive two-dimensional self-assembly of monoclonal antibodies in aqueous solution revealed by atomic force microscopy. <i>Nature Materials</i> , 2014, 13, 264-270.	13.3	104
23	Visualization of hydration layers on muscovite mica in aqueous solution by frequency-modulation atomic force microscopy. <i>Journal of Chemical Physics</i> , 2013, 138, 184704.	1.2	107
24	Monotonic Damping in Nanoscopic Hydration Experiments. <i>Physical Review Letters</i> , 2013, 110, 066102.	2.9	37
25	Influence of grain boundary on electrical properties of organic crystalline grains investigated by dual-probe atomic force microscopy. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	13
26	Reduction of frequency noise and frequency shift by phase shifting elements in frequency modulation atomic force microscopy. <i>Review of Scientific Instruments</i> , 2011, 82, 033702.	0.6	32
27	Atomic-Resolution Imaging of Graphiteâ€™s Water Interface by Frequency Modulation Atomic Force Microscopy. <i>Applied Physics Express</i> , 2011, 4, 125102.	1.1	77
28	Electrospray induced ferroelectricity in poly(vinylidene fluoride) thin films. <i>Journal of Materials Chemistry</i> , 2010, 20, 8272.	6.7	20
29	Visualization of anisotropic conductance in polydiacetylene crystal by dual-probe frequency-modulation atomic force microscopy/Kelvin-probe force microscopy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C4D24-C4D28.	0.6	7
30	Visualizing water molecule distribution by atomic force microscopy. <i>Journal of Chemical Physics</i> , 2010, 132, 194705.	1.2	153
31	Electrospray deposition producing ultra-thin polymer films with a regular surface structure. <i>Soft Matter</i> , 2009, 5, 593-598.	1.2	25
32	Molecular Resolution Imaging of Protein Molecules in Liquid Using Frequency Modulation Atomic Force Microscopy. <i>Applied Physics Express</i> , 2009, 2, 095007.	1.1	50
33	Improving sensitivity in electrostatic force detection utilizing cantilever with tailored resonance modes. <i>Applied Physics Letters</i> , 2007, 90, 053113.	1.5	7
34	Noncontact-mode scanning capacitance force microscopy towards quantitative two-dimensional carrier profiling on semiconductor devices. <i>Applied Physics Letters</i> , 2007, 90, 083101.	1.5	13
35	Model Supported Morphology Control of Electrospray Deposited Poly(vinylidene fluoride) Film. <i>Macromolecular Symposia</i> , 2007, 249-250, 322-329.	0.4	3
36	Increase in carrier mobility of organic ultrathin-film transistor with increasing molecular layers investigated by Kelvin probe force microscopy. <i>Journal of Applied Physics</i> , 2005, 97, 124503.	1.1	15

#	ARTICLE	IF	CITATIONS
37	Development of low noise cantilever deflection sensor for multienvironment frequency-modulation atomic force microscopy. <i>Review of Scientific Instruments</i> , 2005, 76, 053704.	0.6	325
38	Frequency-modulation atomic force microscopy at high cantilever resonance frequencies using the heterodyne optical beam deflection method. <i>Review of Scientific Instruments</i> , 2005, 76, 126110.	0.6	20
39	True molecular resolution in liquid by frequency-modulation atomic force microscopy. <i>Applied Physics Letters</i> , 2005, 86, 193108.	1.5	125
40	True-molecular resolution imaging by frequency modulation atomic force microscopy in various environments. <i>Applied Physics Letters</i> , 2005, 86, 034103.	1.5	56
41	True atomic resolution in liquid by frequency-modulation atomic force microscopy. <i>Applied Physics Letters</i> , 2005, 87, 034101.	1.5	316
42	Molecular-scale noncontact atomic force microscopy contrasts in topography and energy dissipation on $c(4\text{\AA}-2)$ superlattice structures of alkanethiol self-assembled monolayers. <i>Journal of Applied Physics</i> , 2004, 95, 1222-1226.	1.1	44
43	Dynamic force microscopy at high cantilever resonance frequencies using heterodyne optical beam deflection method. <i>Applied Physics Letters</i> , 2004, 85, 6287-6289.	1.5	13
44	Surface potential measurements by the dissipative force modulation method. <i>Review of Scientific Instruments</i> , 2004, 75, 4589-4594.	0.6	26
45	Orientation control of poly(vinylidene fluoride-trifluoroethylene) crystals and molecules using atomic force microscopy. <i>Applied Physics Letters</i> , 2003, 82, 4050-4052.	1.5	42
46	Effect of water adsorption on microscopic friction force on SrTiO ₃ (001). <i>Journal of Applied Physics</i> , 2003, 93, 3223-3227.	1.1	39
47	Dopant profiling on semiconducting sample by scanning capacitance force microscopy. <i>Applied Physics Letters</i> , 2002, 81, 2629-2631.	1.5	71
48	Analog frequency modulation detector for dynamic force microscopy. <i>Review of Scientific Instruments</i> , 2001, 72, 4383-4387.	0.6	135
49	Structures and Electrical Properties of Self-Assembled Monolayers of Alkanethiol and Alkanedithiol. <i>Molecular Crystals and Liquid Crystals</i> , 1998, 316, 167-170.	0.3	0