Andreas Ebner

List of Publications by Year
in descending order

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113	3,410	136950	149698
papers	citations	32	56
		h-index	g-index

116	116	116	3638
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A New, Simple Method for Linking of Antibodies to Atomic Force Microscopy Tips. Bioconjugate Chemistry, 2007, 18, 1176-1184.	3.6	242
2	Simple test system for single molecule recognition force microscopy. Analytica Chimica Acta, 2003, 479, 59-75.	5.4	192
3	Molecular Recognition Imaging and Force Spectroscopy of Single Biomolecules. Accounts of Chemical Research, 2006, 39, 29-36.	15.6	181
4	Comparison of different aminofunctionalization strategies for attachment of single antibodies to AFM cantilevers. Ultramicroscopy, 2007, 107, 922-927.	1.9	172
5	Simultaneous Topography and Recognition Imaging Using Force Microscopy. Biophysical Journal, 2004, 87, 1981-1990.	0.5	169
6	Linking of Sensor Molecules with Amino Groups to Amino-Functionalized AFM Tips. Bioconjugate Chemistry, 2011, 22, 1239-1248.	3.6	145
7	Localization of Single Avidin-Biotin Interactions Using Simultaneous Topography and Molecular Recognition Imaging. ChemPhysChem, 2005, 6, 897-900.	2.1	123
8	Cy3Bâ„¢: Improving the Performance of Cyanine Dyes. Journal of Fluorescence, 2004, 14, 145-150.	2.5	117
9	IgGs are made for walking on bacterial and viral surfaces. Nature Communications, 2014, 5, 4394.	12.8	97
10	The role of oxygen termination of nanocrystalline diamond on immobilisation of BMP-2 and subsequent bone formation. Biomaterials, 2008, 29, 2433-2442.	11.4	90
11	Antibody Linking to Atomic Force Microscope Tips via Disulfide Bond Formation. Bioconjugate Chemistry, 2006, 17, 1473-1481.	3.6	87
12	Heterobifunctional crosslinkers for tethering single ligand molecules to scanning probes. Analytica Chimica Acta, 2003, 497, 101-114.	5.4	82
13	A DNA Nanostructure for the Functional Assembly of Chemical Groups with Tunable Stoichiometry and Defined Nanoscale Geometry. Angewandte Chemie - International Edition, 2009, 48, 525-527.	13.8	78
14	Functionalization of Probe Tips and Supports for Single-Molecule Recognition Force Microscopy. Topics in Current Chemistry, 2008, 285, 29-76.	4.0	75
15	Recognition Imaging and Highly Ordered Molecular Templating of Bacterial S-Layer Nanoarrays Containing Affinity-Tags. Nano Letters, 2008, 8, 4312-4319.	9.1	66
16	Nanomechanical recognition measurements of individual DNA molecules reveal epigenetic methylation patterns. Nature Nanotechnology, 2010, 5, 788-791.	31.5	59
17	Localization of the ergtoxin-1 receptors on the voltage sensing domain of hERG K+ channel by AFM recognition imaging. Pflugers Archiv European Journal of Physiology, 2008, 456, 247-254.	2.8	55
18	Simultaneous topography and recognition imaging: physical aspects and optimal imaging conditions. Nanotechnology, 2009, 20, 215103.	2.6	53

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19	Nanoscale DNA Tetrahedra Improve Biomolecular Recognition on Patterned Surfaces. Small, 2012, 8, 89-97.	10.0	50
20	Imaging morphological details and pathological differences of red blood cells using tapping-mode AFM. Biological Chemistry, 2004, 385, 955-60.	2.5	49
21	High-Affinity Tags Fused to S-Layer Proteins Probed by Atomic Force Microscopy. Langmuir, 2008, 24, 1324-1329.	3.5	47
22	Targeted Delivery of siRNA into Breast Cancer Cells via Phage Fusion Proteins. Molecular Pharmaceutics, 2013, 10, 551-559.	4.6	46
23	AFM imaging of functionalized carbon nanotubes on biological membranes. Nanotechnology, 2009, 20, 434001.	2.6	45
24	Improved localization of cellular membrane receptors using combined fluorescence microscopy and simultaneous topography and recognition imaging. Nanotechnology, 2010, 21, 115504.	2.6	45
25	Mapping the Nucleotide Binding Site of Uncoupling Protein 1 Using Atomic Force Microscopy. Journal of the American Chemical Society, 2013, 135, 3640-3646.	13.7	41
26	Determination of CFTR densities in erythrocyte plasma membranes using recognition imaging. Nanotechnology, 2008, 19, 384017.	2.6	40
27	Reduced number of CFTR molecules in erythrocyte plasma membrane of cystic fibrosis patients. Molecular Membrane Biology, 2006, 23, 317-323.	2.0	38
28	Atomic force microscopy-based antibody recognition imaging of proteins in the pathological deposits in Pseudoexfoliation Syndrome. Ultramicroscopy, 2011, 111, 1055-1061.	1.9	38
29	Non-exponential bleaching of single bioconjugated Cy5 molecules. Chemical Physics Letters, 2005, 404, 13-18.	2.6	37
30	Mapping the intracellular distribution of carbon nanotubes after targeted delivery to carcinoma cells using confocal Raman imaging as a label-free technique. Journal of Physics Condensed Matter, 2012, 24, 164206.	1.8	34
31	Applications of biosensing atomic force microscopy in monitoring drug and nanoparticle delivery. Expert Opinion on Drug Delivery, 2014, 11, 1237-1253.	5.0	34
32	Single-Molecule AFM Characterization of Individual Chemically Tagged DNA Tetrahedra. ACS Nano, 2011, 5, 7048-7054.	14.6	33
33	Characterization of the specific interaction between the DNA aptamer sgc8c and protein tyrosine kinase-7 receptors at the surface of T-cells by biosensing AFM. Analytical and Bioanalytical Chemistry, 2017, 409, 2767-2776.	3.7	33
34	Detection of metal binding sites on functional S-layer nanoarrays using single molecule force spectroscopy. Journal of Structural Biology, 2009, 168, 217-222.	2.8	32
35	Detecting Protein Aggregates on Untreated Human Tissue Samples byÂAtomic Force Microscopy Recognition Imaging. Biophysical Journal, 2010, 99, 1660-1667.	0.5	32
36	Fabrication of Highly Ordered Gold Nanoparticle Arrays Templated by Crystalline Lattices of Bacterial Sâ€Layer Protein. ChemPhysChem, 2008, 9, 2317-2320.	2.1	31

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37	Atomic force microscopy imaging and single molecule recognition force spectroscopy of coat proteins on the surface of Bacillus subtilis spore. Journal of Molecular Recognition, 2007, 20, 483-489.	2.1	29
38	Characterization of Enhanced Monovalent and Bivalent Thrombin DNA Aptamer Binding Using Single Molecule Force Spectroscopy. Biophysical Journal, 2011, 101, 1781-1787.	0.5	29
39	Improving the contrast of topographical AFM images by a simple averaging filter. Ultramicroscopy, 2006, 106, 822-828.	1.9	28
40	AFM imaging of functionalized double-walled carbon nanotubes. Ultramicroscopy, 2009, 109, 899-906.	1.9	28
41	Unbinding Molecular Recognition Force Maps of Localized Single Receptor Molecules by Atomic Force Microscopy. ChemPhysChem, 2008, 9, 590-599.	2.1	27
42	Atomic-Force-Microscopy Imaging and Molecular-Recognition-Force Microscopy of Recrystallized Heterotetramers Comprising an S-Layer-Streptavidin Fusion Protein. ChemBioChem, 2006, 7, 588-591.	2.6	22
43	Molecular recognition imaging using tuning fork-based transverse dynamic force microscopy. Ultramicroscopy, 2010, 110, 605-611.	1.9	21
44	Molecular AFM imaging of Hsp70-1A association with dipalmitoyl phosphatidylserine reveals membrane blebbing in the presence of cholesterol. Cell Stress and Chaperones, 2018, 23, 673-683.	2.9	20
45	Nanopatterning of Biomolecules with Microscale Beads. ChemPhysChem, 2005, 6, 900-903.	2.1	19
46	Increased imaging speed and force sensitivity for bio-applications with small cantilevers using a conventional AFM setup. Micron, 2012, 43, 1399-1407.	2.2	19
47	Activation induced morphological changes and integrin Î±IIbÎ²3 activity of living platelets. Methods, 2013, 60, 179-185.	3.8	18
48	Influence of Platelet Lysate on 2D and 3D Amniotic Mesenchymal Stem Cell Cultures. Frontiers in Bioengineering and Biotechnology, 2019, 7, 338.	4.1	18
49	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. Nano Letters, 2020, 20, 4038-4042.	9.1	17
50	Assessment of lithium ion battery ageing by combined impedance spectroscopy, functional microscopy and finite element modelling. Journal of Power Sources, 2021, 512, 230459.	7.8	17
51	Singleâ€Molecule Analysis of the Recognition Forces Underlying Nucleoâ€Cytoplasmic Transport. Angewandte Chemie - International Edition, 2013, 52, 10356-10359.	13.8	16
52	Broadband 120 MHz Impedance Quartz Crystal Microbalance (QCM) with Calibrated Resistance and Quantitative Dissipation for Biosensing Measurements at Higher Harmonic Frequencies. Biosensors, 2016, 6, 23.	4.7	16
53	Molecular Recognition Force Spectroscopy: A New Tool to Tailor Targeted Nanoparticles. Small, 2011, 7, 1236-1241.	10.0	15
54	A single-molecule approach to explore binding, uptake and transport of cancer cell targeting nanotubes. Nanotechnology, 2014, 25, 125704.	2.6	15

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55	Single Molecule Force Microscopy on Cells and Biological Membranes. Current Nanoscience, 2007, 3, 49-56.	1.2	14
56	Reversible Biofunctionalization of Surfaces with a Switchable Mutant of Avidin. Bioconjugate Chemistry, 2013, 24, 1656-1668.	3.6	14
57	Chemical Tags Mediate the Orthogonal Selfâ€Assembly of DNA Duplexes into Supramolecular Structures. Small, 2010, 6, 1732-1735.	10.0	12
58	Topography and Recognition Imaging of Proteinâ€Patterned Surfaces Generated by AFM Nanolithography. ChemPhysChem, 2009, 10, 1478-1481.	2.1	11
59	pH-Dependent Deformations of the Energy Landscape of Avidin-like Proteins Investigated by Single Molecule Force Spectroscopy. Molecules, 2014, 19, 12531-12546.	3.8	10
60	Stable, Nonâ€Destructive Immobilization of Native Nuclear Membranes to Microâ€Structured PDMS for Singleâ€Molecule Force Spectroscopy. ChemPhysChem, 2009, 10, 1553-1558.	2.1	9
61	Modification of the loops in the ligand-binding site turns avidin into a steroid-binding protein. BMC Biotechnology, 2011, 11, 64.	3.3	9
62	Mapping molecular adhesion sites inside SMIL coated capillaries using atomic force microscopy recognition imaging. Analytica Chimica Acta, 2016, 930, 39-48.	5.4	9
63	Advanced portrayal of SMIL coating by allying CZE performance with in-capillary topographic and charge-related surface characterization. Analytica Chimica Acta, 2017, 951, 1-15.	5.4	9
64	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles. Bioconjugate Chemistry, 2009, 20, 466-475.	3.6	8
65	Examination of Native and Carbamide Peroxide-bleached Human Tooth Enamel by Atomic Force Microscopy. Ultrastructural Pathology, 2009, 33, 189-196.	0.9	8
66	Mapping Short Affinity Tags on Bacterial Sâ€Layer with an Antibody. ChemPhysChem, 2010, 11, 2323-2326.	2.1	8
67	Regenerative biosensor chips based on switchable mutants of avidinâ€”A systematic study. Sensors and Actuators B: Chemical, 2016, 229, 646-654.	7.8	8
68	Micropatterned atmospheric pressure discharge surface modification of fluorinated polymer films for mammalian cell adhesion and protein binding. Applied Physics A: Materials Science and Processing, 2008, 92, 547-555.	2.3	7
69	Normal and Pathological Erythrocytes Studied by Atomic Force Microscopy. Methods in Molecular Biology, 2011, 736, 223-241.	0.9	7
70	Time-resolved chloroquine-induced relaxation of supercoiled plasmid DNA. Analytical and Bioanalytical Chemistry, 2012, 402, 373-380.	3.7	7
71	Electrochemical Aptasensor Based on ZnO Modified Gold Electrode. Electroanalysis, 2013, 25, 1855-1863.	2.9	7
72	Singleâ€Molecule Analysis of the Recognition Forces Underlying Nucleoâ€Cytoplasmic Transport. Angewandte Chemie, 2013, 125, 10546-10549.	2.0	7

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73	Atomic Force Microscopy Imaging in Turbid Liquids: A Promising Tool in Nanomedicine. Sensors, 2020, 20, 3715.	3.8	7
74	Topologyâ€Selective Chromatography Reveals Plasmid Supercoiling Shifts during Fermentation and Allows Rapid and Efficient Preparation of Topoisomers. Angewandte Chemie - International Edition, 2012, 51, 267-270.	13.8	6
75	Aptamer-based detection of thrombin by acoustic method using DNA tetrahedrons as immobilisation platform. Chemical Papers, 2015, 69, .	2.2	6
76	Atomic Force Microscopy as a Tool to Assess the Specificity of Targeted Nanoparticles in Biological Models of High Complexity. Advanced Healthcare Materials, 2017, 6, 1700597.	7.6	6
77	Monitoring of glass derivatization with pulsed force mode atomic force microscopy. Microscopy Research and Technique, 2004, 65, 246-251.	2.2	5
78	Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. Analytical and Bioanalytical Chemistry, 2014, 406, 493-503.	3.7	5
79	Quantifying biomolecular hydrophobicity: Single molecule force spectroscopy of class II hydrophobins. Journal of Biological Chemistry, 2021, 296, 100728.	3.4	5
80	Probing the Energy Landscape of Protein-Binding Reactions by Dynamic Force Spectroscopy. , 2009, , 407-447.		5
81	Investigating the binding behaviour of two avidinâ€based testosterone binders using molecular recognition force spectroscopy. Journal of Molecular Recognition, 2014, 27, 92-97.	2.1	4
82	Molecular Addressability of Lipid Membrane Embedded Calixarenes towards Cytochrome C. Journal of Nanomedicine & Nanotechnology, 2014, 05, .	1.1	4
83	Atomic Force Microscopy in Nanomedicine. Nanoscience and Technology, 2006, , 1-26.	1.5	3
84	DNA building blocks for AFM tip functionalization: An easy, fast and stable strategy. Methods, 2021, , .	3.8	3
85	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2010, , 763-785.		3
86	Photopicking: In Situ Approach for Siteâ€Specific Attachment of Single Multiprotein Nanoparticles to Atomic Force Microscopy Tips. Advanced Functional Materials, 2017, 27, 1604506.	14.9	2
87	Biomedical Sensing with the Atomic Force Microscope. Springer Handbooks, 2017, , 809-844.	0.6	2
88	Molecular Recognition Force Spectroscopy for Probing Cell Targeted Nanoparticles In Vitro. Methods in Molecular Biology, 2019, 1886, 327-341.	0.9	2
89	Recognition Imaging Using Atomic Force Microscopy. , 2009, , 525-554.		2
90	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2011, , 355-387.		2

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91	Signalverarbeitungsalgorithmen fÃ¼r ein Rasterkraftmikroskop, betrieben im TREC-Modus (Signal) Tj ETQq1 1 0.784314 rgBT /Overlock Messen, 2007, 74, 196-203.	0.7	1
92	Novel Generation of Crosslinkers allows Single Molecule Force Spectroscopy on Oligomeric Receptors. Biophysical Journal, 2014, 106, 387a.	0.5	1
93	High-Sensitivity Dual Electrochemical QCM for Reliable Three-Electrode Measurements. Sensors, 2021, 21, 2592.	3.8	1
94	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. Nanoscience and Technology, 2007, , 101-125.	1.5	1
95	Digital signal processing in AFM topography and recognition imaging. , 2005, 5965, 134.		0
96	Inside Cover: Stable, Non-Destructive Immobilization of Native Nuclear Membranes to Micro-Structured PDMS for Single-Molecule Force Spectroscopy (ChemPhysChem 9-10/2009). ChemPhysChem, 2009, 10, 1322-1322.	2.1	0
97	A DNA Nanostructure for the Functional Assembly of Chemical Groups with Tunable Stoichiometry and Defined Nanoscale Geometry. Angewandte Chemie, 2009, 121, 9178-9178.	2.0	0
98	A DNA Nanostructure for the Functional Assembly of Chemical Groups with Tunable Stoichiometry and Defined Nanoscale Geometry. Angewandte Chemie - International Edition, 2009, 48, 9016-9016.	13.8	0
99	Exploring Carbon Nanotubes and Their Interaction with Cells Using Atomic Force Microscopy. , 2011, , 1-16.		0
100	Characterization of Enhanced Monovalent and Bivalent Thrombin DNA APTamer Binding using Single Molecule Force Spectroscopy. Biophysical Journal, 2012, 102, 588a.	0.5	0
101	Study of Nucleotide Binding to the Uncoupling Protein 1 using Atomic Force Microscopy. Biophysical Journal, 2012, 102, 607a.	0.5	0
102	2.7 Atomic Force Microscopy. , 2012, , 111-143.		0
103	Single-Molecule Analysis of the Recognition Forces Underlying Nucleo-Cytoplasmic Transport. Biophysical Journal, 2012, 102, 12a.	0.5	0
104	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles, Proteins and Nanoparticles. Biophysical Journal, 2012, 102, 588a.	0.5	0
105	Antibody Movement on Regular Antigen Clusters: Fab Arms are made for Walking. Biophysical Journal, 2013, 104, 381a.	0.5	0
106	Biomedical Sensing with the Atomic Force Microscope. , 2017, , 135-173.		0
107	Atomic Force Microscopy (AFM) for Topography and Recognition Imaging at Single-Molecule Level. , 2018, , 1-14.		0
108	Single molecule distribution of RhD binding epitopes on ultraflat erythrocyte ghosts. Nanoscale, 2020, 12, 22097-22106.	5.6	0

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109	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. , 2010, , 479-503.		0
110	Atomic Force Microscopy in Nanomedicine. , 2010, , 713-738.		0
111	Nanoimaging, Molecular Interaction, and Nanotemplating of Human Rhinovirus. Nanoscience and Technology, 2011, , 589-643.	1.5	0
112	Atomic Force Microscopy (AFM) for Topography and Recognition Imaging at Single Molecule Level. , 2013, , 102-112.		0
113	Application of Biotin-4-Fluorescein in Homogeneous Fluorescence Assays for Avidin, Streptavidin, and Biotin or Biotin Derivatives. , 0, , 73-88.		0