

# Andreas Ebner

## List of Publications by Year in descending order

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Version: 2024-02-01

113  
papers

3,410  
citations

136885

32  
h-index

149623

56  
g-index

116  
all docs

116  
docs citations

116  
times ranked

3638  
citing authors

#	ARTICLE	IF	CITATIONS
1	DNA building blocks for AFM tip functionalization: An easy, fast and stable strategy. <i>Methods</i> , 2021, , .	1.9	3
2	High-Sensitivity Dual Electrochemical QCM for Reliable Three-Electrode Measurements. <i>Sensors</i> , 2021, 21, 2592.	2.1	1
3	Assessment of lithium ion battery ageing by combined impedance spectroscopy, functional microscopy and finite element modelling. <i>Journal of Power Sources</i> , 2021, 512, 230459.	4.0	17
4	Quantifying biomolecular hydrophobicity: Single molecule force spectroscopy of class II hydrophobins. <i>Journal of Biological Chemistry</i> , 2021, 296, 100728.	1.6	5
5	Single molecule distribution of RhD binding epitopes on ultraflat erythrocyte ghosts. <i>Nanoscale</i> , 2020, 12, 22097-22106.	2.8	0
6	Atomic Force Microscopy Imaging in Turbid Liquids: A Promising Tool in Nanomedicine. <i>Sensors</i> , 2020, 20, 3715.	2.1	7
7	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. <i>Nano Letters</i> , 2020, 20, 4038-4042.	4.5	17
8	Influence of Platelet Lysate on 2D and 3D Amniotic Mesenchymal Stem Cell Cultures. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 338.	2.0	18
9	Molecular Recognition Force Spectroscopy for Probing Cell Targeted Nanoparticles In Vitro. <i>Methods in Molecular Biology</i> , 2019, 1886, 327-341.	0.4	2
10	Molecular AFM imaging of Hsp70-1A association with dipalmitoyl phosphatidylserine reveals membrane blebbing in the presence of cholesterol. <i>Cell Stress and Chaperones</i> , 2018, 23, 673-683.	1.2	20
11	Atomic Force Microscopy (AFM) for Topography and Recognition Imaging at Single-Molecule Level. , 2018, , 1-14.		0
12	Photopicking: In Situ Approach for Site-Specific Attachment of Single Multiprotein Nanoparticles to Atomic Force Microscopy Tips. <i>Advanced Functional Materials</i> , 2017, 27, 1604506.	7.8	2
13	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. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 2767-2776.	1.9	33
14	Biomedical Sensing with the Atomic Force Microscope. , 2017, , 135-173.		0
15	Atomic Force Microscopy as a Tool to Assess the Specificity of Targeted Nanoparticles in Biological Models of High Complexity. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700597.	3.9	6
16	Biomedical Sensing with the Atomic Force Microscope. <i>Springer Handbooks</i> , 2017, , 809-844.	0.3	2
17	Advanced portrayal of SMIL coating by allying CZE performance with in-capillary topographic and charge-related surface characterization. <i>Analytica Chimica Acta</i> , 2017, 951, 1-15.	2.6	9
18	Broadband 120 MHz Impedance Quartz Crystal Microbalance (QCM) with Calibrated Resistance and Quantitative Dissipation for Biosensing Measurements at Higher Harmonic Frequencies. <i>Biosensors</i> , 2016, 6, 23.	2.3	16

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19	Mapping molecular adhesion sites inside SMIL coated capillaries using atomic force microscopy recognition imaging. <i>Analytica Chimica Acta</i> , 2016, 930, 39-48.	2.6	9
20	Regenerative biosensor chips based on switchable mutants of avidinâ€”A systematic study. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 646-654.	4.0	8
21	Aptamer-based detection of thrombin by acoustic method using DNA tetrahedrons as immobilisation platform. <i>Chemical Papers</i> , 2015, 69, .	1.0	6
22	pH-Dependent Deformations of the Energy Landscape of Avidin-like Proteins Investigated by Single Molecule Force Spectroscopy. <i>Molecules</i> , 2014, 19, 12531-12546.	1.7	10
23	Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 493-503.	1.9	5
24	Investigating the binding behaviour of two avidinâ€”based testosterone binders using molecular recognition force spectroscopy. <i>Journal of Molecular Recognition</i> , 2014, 27, 92-97.	1.1	4
25	Applications of biosensing atomic force microscopy in monitoring drug and nanoparticle delivery. <i>Expert Opinion on Drug Delivery</i> , 2014, 11, 1237-1253.	2.4	34
26	IgGs are made for walking on bacterial and viral surfaces. <i>Nature Communications</i> , 2014, 5, 4394.	5.8	97
27	A single-molecule approach to explore binding, uptake and transport of cancer cell targeting nanotubes. <i>Nanotechnology</i> , 2014, 25, 125704.	1.3	15
28	Novel Generation of Crosslinkers allows Single Molecule Force Spectroscopy on Oligomeric Receptors. <i>Biophysical Journal</i> , 2014, 106, 387a.	0.2	1
29	Molecular Addressability of Lipid Membrane Embedded Calixarenes towards Cytochrome C. <i>Journal of Nanomedicine &amp; Nanotechnology</i> , 2014, 05, .	1.1	4
30	Antibody Movement on Regular Antigen Clusters: Fab Arms are made for Walking. <i>Biophysical Journal</i> , 2013, 104, 381a.	0.2	0
31	Activation induced morphological changes and integrin $\alpha$ IIb $\beta$ 3 activity of living platelets. <i>Methods</i> , 2013, 60, 179-185.	1.9	18
32	Singleâ€”Molecule Analysis of the Recognition Forces Underlying Nucleoâ€”Cytoplasmic Transport. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10356-10359.	7.2	16
33	Mapping the Nucleotide Binding Site of Uncoupling Protein 1 Using Atomic Force Microscopy. <i>Journal of the American Chemical Society</i> , 2013, 135, 3640-3646.	6.6	41
34	Targeted Delivery of siRNA into Breast Cancer Cells via Phage Fusion Proteins. <i>Molecular Pharmaceutics</i> , 2013, 10, 551-559.	2.3	46
35	Reversible Biofunctionalization of Surfaces with a Switchable Mutant of Avidin. <i>Bioconjugate Chemistry</i> , 2013, 24, 1656-1668.	1.8	14
36	Electrochemical Aptasensor Based on ZnO Modified Gold Electrode. <i>Electroanalysis</i> , 2013, 25, 1855-1863.	1.5	7

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37	Single-Molecule Analysis of the Recognition Forces Underlying Nucleo-Cytoplasmic Transport. <i>Angewandte Chemie</i> , 2013, 125, 10546-10549.	1.6	7
38	Atomic Force Microscopy (AFM) for Topography and Recognition Imaging at Single Molecule Level. , 2013, , 102-112.		0
39	Characterization of Enhanced Monovalent and Bivalent Thrombin DNA Aptamer Binding using Single Molecule Force Spectroscopy. <i>Biophysical Journal</i> , 2012, 102, 588a.	0.2	0
40	Study of Nucleotide Binding to the Uncoupling Protein 1 using Atomic Force Microscopy. <i>Biophysical Journal</i> , 2012, 102, 607a.	0.2	0
41	Mapping the intracellular distribution of carbon nanotubes after targeted delivery to carcinoma cells using confocal Raman imaging as a label-free technique. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 164206.	0.7	34
42	2.7 Atomic Force Microscopy. , 2012, , 111-143.		0
43	Single-Molecule Analysis of the Recognition Forces Underlying Nucleo-Cytoplasmic Transport. <i>Biophysical Journal</i> , 2012, 102, 12a.	0.2	0
44	Increased imaging speed and force sensitivity for bio-applications with small cantilevers using a conventional AFM setup. <i>Micron</i> , 2012, 43, 1399-1407.	1.1	19
45	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles, Proteins and Nanoparticles. <i>Biophysical Journal</i> , 2012, 102, 588a.	0.2	0
46	Nanoscale DNA Tetrahedra Improve Biomolecular Recognition on Patterned Surfaces. <i>Small</i> , 2012, 8, 89-97.	5.2	50
47	Topology-Selective Chromatography Reveals Plasmid Supercoiling Shifts during Fermentation and Allows Rapid and Efficient Preparation of Topoisomers. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 267-270.	7.2	6
48	Time-resolved chloroquine-induced relaxation of supercoiled plasmid DNA. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 373-380.	1.9	7
49	Linking of Sensor Molecules with Amino Groups to Amino-Functionalized AFM Tips. <i>Bioconjugate Chemistry</i> , 2011, 22, 1239-1248.	1.8	145
50	Characterization of Enhanced Monovalent and Bivalent Thrombin DNA Aptamer Binding Using Single Molecule Force Spectroscopy. <i>Biophysical Journal</i> , 2011, 101, 1781-1787.	0.2	29
51	Exploring Carbon Nanotubes and Their Interaction with Cells Using Atomic Force Microscopy. , 2011, , 1-16.		0
52	Normal and Pathological Erythrocytes Studied by Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2011, 736, 223-241.	0.4	7
53	Atomic force microscopy-based antibody recognition imaging of proteins in the pathological deposits in Pseudoexfoliation Syndrome. <i>Ultramicroscopy</i> , 2011, 111, 1055-1061.	0.8	38
54	Single-Molecule AFM Characterization of Individual Chemically Tagged DNA Tetrahedra. <i>ACS Nano</i> , 2011, 5, 7048-7054.	7.3	33

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55	Modification of the loops in the ligand-binding site turns avidin into a steroid-binding protein. BMC Biotechnology, 2011, 11, 64.	1.7	9
56	Molecular Recognition Force Spectroscopy: A New Tool to Tailor Targeted Nanoparticles. Small, 2011, 7, 1236-1241.	5.2	15
57	Nanoimaging, Molecular Interaction, and Nanotemplating of Human Rhinovirus. Nanoscience and Technology, 2011, , 589-643.	1.5	0
58	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2011, , 355-387.		2
59	Mapping Short Affinity Tags on Bacterial Sâ€Layer with an Antibody. ChemPhysChem, 2010, 11, 2323-2326.	1.0	8
60	Molecular recognition imaging using tuning fork-based transverse dynamic force microscopy. Ultramicroscopy, 2010, 110, 605-611.	0.8	21
61	Chemical Tags Mediate the Orthogonal Selfâ€Assembly of DNA Duplexes into Supramolecular Structures. Small, 2010, 6, 1732-1735.	5.2	12
62	Nanomechanical recognition measurements of individual DNA molecules reveal epigenetic methylation patterns. Nature Nanotechnology, 2010, 5, 788-791.	15.6	59
63	Improved localization of cellular membrane receptors using combined fluorescence microscopy and simultaneous topography and recognition imaging. Nanotechnology, 2010, 21, 115504.	1.3	45
64	Detecting Protein Aggregates on Untreated Human Tissue Samples byâ€Atomic Force Microscopy Recognition Imaging. Biophysical Journal, 2010, 99, 1660-1667.	0.2	32
65	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2010, , 763-785.		3
66	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. , 2010, , 479-503.		0
67	Atomic Force Microscopy in Nanomedicine. , 2010, , 713-738.		0
68	Stable, Nonâ€Destructive Immobilization of Native Nuclear Membranes to Microâ€Structured PDMS for Singleâ€Molecule Force Spectroscopy. ChemPhysChem, 2009, 10, 1553-1558.	1.0	9
69	Topography and Recognition Imaging of Proteinâ€Patterned Surfaces Generated by AFM Nanolithography. ChemPhysChem, 2009, 10, 1478-1481.	1.0	11
70	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.	1.0	0
71	A DNA Nanostructure for the Functional Assembly of Chemical Groups with Tunable Stoichiometry and Defined Nanoscale Geometry. Angewandte Chemie, 2009, 121, 9178-9178.	1.6	0
72	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.	7.2	78

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73	A DNA Nanostructure for the Functional Assembly of Chemical Groups with Tunable Stoichiometry and Defined Nanoscale Geometry. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9016-9016.	7.2	0
74	AFM imaging of functionalized double-walled carbon nanotubes. <i>Ultramicroscopy</i> , 2009, 109, 899-906.	0.8	28
75	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles. <i>Bioconjugate Chemistry</i> , 2009, 20, 466-475.	1.8	8
76	Simultaneous topography and recognition imaging: physical aspects and optimal imaging conditions. <i>Nanotechnology</i> , 2009, 20, 215103.	1.3	53
77	Detection of metal binding sites on functional S-layer nanoarrays using single molecule force spectroscopy. <i>Journal of Structural Biology</i> , 2009, 168, 217-222.	1.3	32
78	AFM imaging of functionalized carbon nanotubes on biological membranes. <i>Nanotechnology</i> , 2009, 20, 434001.	1.3	45
79	Examination of Native and Carbamide Peroxide-bleached Human Tooth Enamel by Atomic Force Microscopy. <i>Ultrastructural Pathology</i> , 2009, 33, 189-196.	0.4	8
80	Probing the Energy Landscape of Protein-Binding Reactions by Dynamic Force Spectroscopy. , 2009, , 407-447.		5
81	Recognition Imaging Using Atomic Force Microscopy. , 2009, , 525-554.		2
82	Localization of the ergtotoxin-1 receptors on the voltage sensing domain of hERG K <sup>+</sup> channel by AFM recognition imaging. <i>Pflügers Archiv European Journal of Physiology</i> , 2008, 456, 247-254.	1.3	55
83	Unbinding Molecular Recognition Force Maps of Localized Single Receptor Molecules by Atomic Force Microscopy. <i>ChemPhysChem</i> , 2008, 9, 590-599.	1.0	27
84	Fabrication of Highly Ordered Gold Nanoparticle Arrays Templated by Crystalline Lattices of Bacterial S-Layer Protein. <i>ChemPhysChem</i> , 2008, 9, 2317-2320.	1.0	31
85	The role of oxygen termination of nanocrystalline diamond on immobilisation of BMP-2 and subsequent bone formation. <i>Biomaterials</i> , 2008, 29, 2433-2442.	5.7	90
86	Micropatterned atmospheric pressure discharge surface modification of fluorinated polymer films for mammalian cell adhesion and protein binding. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 92, 547-555.	1.1	7
87	High-Affinity Tags Fused to S-Layer Proteins Probed by Atomic Force Microscopy. <i>Langmuir</i> , 2008, 24, 1324-1329.	1.6	47
88	Determination of CFTR densities in erythrocyte plasma membranes using recognition imaging. <i>Nanotechnology</i> , 2008, 19, 384017.	1.3	40
89	Functionalization of Probe Tips and Supports for Single-Molecule Recognition Force Microscopy. <i>Topics in Current Chemistry</i> , 2008, 285, 29-76.	4.0	75
90	Recognition Imaging and Highly Ordered Molecular Templating of Bacterial S-Layer Nanoarrays Containing Affinity-Tags. <i>Nano Letters</i> , 2008, 8, 4312-4319.	4.5	66

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91	Signalverarbeitungsalgorithmen für ein Rasterkraftmikroskop, betrieben im TREC-Modus (Signal) Tj ETQq1 1 0.784314 rgBT /Overlock Messen, 2007, 74, 196-203.	0.3	1
92	Single Molecule Force Microscopy on Cells and Biological Membranes. <i>Current Nanoscience</i> , 2007, 3, 49-56.	0.7	14
93	A New, Simple Method for Linking of Antibodies to Atomic Force Microscopy Tips. <i>Bioconjugate Chemistry</i> , 2007, 18, 1176-1184.	1.8	242
94	Atomic force microscopy imaging and single molecule recognition force spectroscopy of coat proteins on the surface of <i>Bacillus subtilis</i> spore. <i>Journal of Molecular Recognition</i> , 2007, 20, 483-489.	1.1	29
95	Comparison of different aminofunctionalization strategies for attachment of single antibodies to AFM cantilevers. <i>Ultramicroscopy</i> , 2007, 107, 922-927.	0.8	172
96	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. <i>Nanoscience and Technology</i> , 2007, , 101-125.	1.5	1
97	Antibody Linking to Atomic Force Microscope Tips via Disulfide Bond Formation. <i>Bioconjugate Chemistry</i> , 2006, 17, 1473-1481.	1.8	87
98	Molecular Recognition Imaging and Force Spectroscopy of Single Biomolecules. <i>Accounts of Chemical Research</i> , 2006, 39, 29-36.	7.6	181
99	Reduced number of CFTR molecules in erythrocyte plasma membrane of cystic fibrosis patients. <i>Molecular Membrane Biology</i> , 2006, 23, 317-323.	2.0	38
100	Improving the contrast of topographical AFM images by a simple averaging filter. <i>Ultramicroscopy</i> , 2006, 106, 822-828.	0.8	28
101	Atomic-Force-Microscopy Imaging and Molecular-Recognition-Force Microscopy of Recrystallized Heterotetramers Comprising an S-Layer-Streptavidin Fusion Protein. <i>ChemBioChem</i> , 2006, 7, 588-591.	1.3	22
102	Atomic Force Microscopy in Nanomedicine. <i>Nanoscience and Technology</i> , 2006, , 1-26.	1.5	3
103	Non-exponential bleaching of single bioconjugated Cy5 molecules. <i>Chemical Physics Letters</i> , 2005, 404, 13-18.	1.2	37
104	Nanopatterning of Biomolecules with Microscale Beads. <i>ChemPhysChem</i> , 2005, 6, 900-903.	1.0	19
105	Localization of Single Avidin-Biotin Interactions Using Simultaneous Topography and Molecular Recognition Imaging. <i>ChemPhysChem</i> , 2005, 6, 897-900.	1.0	123
106	Digital signal processing in AFM topography and recognition imaging. , 2005, 5965, 134.		0
107	Cy3Bâ,ç: Improving the Performance of Cyanine Dyes. <i>Journal of Fluorescence</i> , 2004, 14, 145-150.	1.3	117
108	Monitoring of glass derivatization with pulsed force mode atomic force microscopy. <i>Microscopy Research and Technique</i> , 2004, 65, 246-251.	1.2	5

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109	Imaging morphological details and pathological differences of red blood cells using tapping-mode AFM. <i>Biological Chemistry</i> , 2004, 385, 955-60.	1.2	49
110	Simultaneous Topography and Recognition Imaging Using Force Microscopy. <i>Biophysical Journal</i> , 2004, 87, 1981-1990.	0.2	169
111	Heterobifunctional crosslinkers for tethering single ligand molecules to scanning probes. <i>Analytica Chimica Acta</i> , 2003, 497, 101-114.	2.6	82
112	Simple test system for single molecule recognition force microscopy. <i>Analytica Chimica Acta</i> , 2003, 479, 59-75.	2.6	192
113	Application of Biotin-4-Fluorescein in Homogeneous Fluorescence Assays for Avidin, Streptavidin, and Biotin or Biotin Derivatives. , 0, , 73-88.		0