

# Andreas Ebner

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/294542/publications.pdf>

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	A New, Simple Method for Linking of Antibodies to Atomic Force Microscopy Tips. <i>Bioconjugate Chemistry</i> , 2007, 18, 1176-1184.	1.8	242
2	Simple test system for single molecule recognition force microscopy. <i>Analytica Chimica Acta</i> , 2003, 479, 59-75.	2.6	192
3	Molecular Recognition Imaging and Force Spectroscopy of Single Biomolecules. <i>Accounts of Chemical Research</i> , 2006, 39, 29-36.	7.6	181
4	Comparison of different aminofunctionalization strategies for attachment of single antibodies to AFM cantilevers. <i>Ultramicroscopy</i> , 2007, 107, 922-927.	0.8	172
5	Simultaneous Topography and Recognition Imaging Using Force Microscopy. <i>Biophysical Journal</i> , 2004, 87, 1981-1990.	0.2	169
6	Linking of Sensor Molecules with Amino Groups to Amino-Functionalized AFM Tips. <i>Bioconjugate Chemistry</i> , 2011, 22, 1239-1248.	1.8	145
7	Localization of Single Avidin-Biotin Interactions Using Simultaneous Topography and Molecular Recognition Imaging. <i>ChemPhysChem</i> , 2005, 6, 897-900.	1.0	123
8	Cy3Bâ„ƒ: Improving the Performance of Cyanine Dyes. <i>Journal of Fluorescence</i> , 2004, 14, 145-150.	1.3	117
9	IgGs are made for walking on bacterial and viral surfaces. <i>Nature Communications</i> , 2014, 5, 4394.	5.8	97
10	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
11	Antibody Linking to Atomic Force Microscope Tips via Disulfide Bond Formation. <i>Bioconjugate Chemistry</i> , 2006, 17, 1473-1481.	1.8	87
12	Heterobifunctional crosslinkers for tethering single ligand molecules to scanning probes. <i>Analytica Chimica Acta</i> , 2003, 497, 101-114.	2.6	82
13	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, 525-527.	7.2	78
14	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
15	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
16	Nanomechanical recognition measurements of individual DNA molecules reveal epigenetic methylation patterns. <i>Nature Nanotechnology</i> , 2010, 5, 788-791.	15.6	59
17	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
18	Simultaneous topography and recognition imaging: physical aspects and optimal imaging conditions. <i>Nanotechnology</i> , 2009, 20, 215103.	1.3	53

#	ARTICLE	IF	CITATIONS
19	Nanoscale DNA Tetrahedra Improve Biomolecular Recognition on Patterned Surfaces. <i>Small</i> , 2012, 8, 89-97.	5.2	50
20	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
21	High-Affinity Tags Fused to S-Layer Proteins Probed by Atomic Force Microscopy. <i>Langmuir</i> , 2008, 24, 1324-1329.	1.6	47
22	Targeted Delivery of siRNA into Breast Cancer Cells via Phage Fusion Proteins. <i>Molecular Pharmaceutics</i> , 2013, 10, 551-559.	2.3	46
23	AFM imaging of functionalized carbon nanotubes on biological membranes. <i>Nanotechnology</i> , 2009, 20, 434001.	1.3	45
24	Improved localization of cellular membrane receptors using combined fluorescence microscopy and simultaneous topography and recognition imaging. <i>Nanotechnology</i> , 2010, 21, 115504.	1.3	45
25	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
26	Determination of CFTR densities in erythrocyte plasma membranes using recognition imaging. <i>Nanotechnology</i> , 2008, 19, 384017.	1.3	40
27	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
28	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
29	Non-exponential bleaching of single bioconjugated Cy5 molecules. <i>Chemical Physics Letters</i> , 2005, 404, 13-18.	1.2	37
30	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
31	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
32	Single-Molecule AFM Characterization of Individual Chemically Tagged DNA Tetrahedra. <i>ACS Nano</i> , 2011, 5, 7048-7054.	7.3	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. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 2767-2776.	1.9	33
34	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
35	Detecting Protein Aggregates on Untreated Human Tissue Samples by Atomic Force Microscopy Recognition Imaging. <i>Biophysical Journal</i> , 2010, 99, 1660-1667.	0.2	32
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	Improving the contrast of topographical AFM images by a simple averaging filter. <i>Ultramicroscopy</i> , 2006, 106, 822-828.	0.8	28
40	AFM imaging of functionalized double-walled carbon nanotubes. <i>Ultramicroscopy</i> , 2009, 109, 899-906.	0.8	28
41	Unbinding Molecular Recognition Force Maps of Localized Single Receptor Molecules by Atomic Force Microscopy. <i>ChemPhysChem</i> , 2008, 9, 590-599.	1.0	27
42	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
43	Molecular recognition imaging using tuning fork-based transverse dynamic force microscopy. <i>Ultramicroscopy</i> , 2010, 110, 605-611.	0.8	21
44	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
45	Nanopatterning of Biomolecules with Microscale Beads. <i>ChemPhysChem</i> , 2005, 6, 900-903.	1.0	19
46	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
47	Activation induced morphological changes and integrin $\alpha$ IIb $\beta$ 3 activity of living platelets. <i>Methods</i> , 2013, 60, 179-185.	1.9	18
48	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
49	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. <i>Nano Letters</i> , 2020, 20, 4038-4042.	4.5	17
50	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
51	Single-Molecule Analysis of the Recognition Forces Underlying Nucleo-Cytoplasmic Transport. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10356-10359.	7.2	16
52	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
53	Molecular Recognition Force Spectroscopy: A New Tool to Tailor Targeted Nanoparticles. <i>Small</i> , 2011, 7, 1236-1241.	5.2	15
54	A single-molecule approach to explore binding, uptake and transport of cancer cell targeting nanotubes. <i>Nanotechnology</i> , 2014, 25, 125704.	1.3	15

#	ARTICLE	IF	CITATIONS
55	Single Molecule Force Microscopy on Cells and Biological Membranes. <i>Current Nanoscience</i> , 2007, 3, 49-56.	0.7	14
56	Reversible Biofunctionalization of Surfaces with a Switchable Mutant of Avidin. <i>Bioconjugate Chemistry</i> , 2013, 24, 1656-1668.	1.8	14
57	Chemical Tags Mediate the Orthogonal Self-Assembly of DNA Duplexes into Supramolecular Structures. <i>Small</i> , 2010, 6, 1732-1735.	5.2	12
58	Topography and Recognition Imaging of Protein-Patterned Surfaces Generated by AFM Nanolithography. <i>ChemPhysChem</i> , 2009, 10, 1478-1481.	1.0	11
59	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
60	Stable, Non-Destructive Immobilization of Native Nuclear Membranes to Microstructured PDMS for Single-Molecule Force Spectroscopy. <i>ChemPhysChem</i> , 2009, 10, 1553-1558.	1.0	9
61	Modification of the loops in the ligand-binding site turns avidin into a steroid-binding protein. <i>BMC Biotechnology</i> , 2011, 11, 64.	1.7	9
62	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
63	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
64	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles. <i>Bioconjugate Chemistry</i> , 2009, 20, 466-475.	1.8	8
65	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
66	Mapping Short Affinity Tags on Bacterial Layer with an Antibody. <i>ChemPhysChem</i> , 2010, 11, 2323-2326.	1.0	8
67	Regenerative biosensor chips based on switchable mutants of avidin-A systematic study. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 646-654.	4.0	8
68	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
69	Normal and Pathological Erythrocytes Studied by Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2011, 736, 223-241.	0.4	7
70	Time-resolved chloroquine-induced relaxation of supercoiled plasmid DNA. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 373-380.	1.9	7
71	Electrochemical Aptasensor Based on ZnO Modified Gold Electrode. <i>Electroanalysis</i> , 2013, 25, 1855-1863.	1.5	7
72	Single-Molecule Analysis of the Recognition Forces Underlying Nucleo-Cytoplasmic Transport. <i>Angewandte Chemie</i> , 2013, 125, 10546-10549.	1.6	7

#	ARTICLE	IF	CITATIONS
73	Atomic Force Microscopy Imaging in Turbid Liquids: A Promising Tool in Nanomedicine. <i>Sensors</i> , 2020, 20, 3715.	2.1	7
74	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
75	Aptamer-based detection of thrombin by acoustic method using DNA tetrahedrons as immobilisation platform. <i>Chemical Papers</i> , 2015, 69, .	1.0	6
76	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
77	Monitoring of glass derivatization with pulsed force mode atomic force microscopy. <i>Microscopy Research and Technique</i> , 2004, 65, 246-251.	1.2	5
78	Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 493-503.	1.9	5
79	Quantifying biomolecular hydrophobicity: Single molecule force spectroscopy of class II hydrophobins. <i>Journal of Biological Chemistry</i> , 2021, 296, 100728.	1.6	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 avidin-based testosterone binders using molecular recognition force spectroscopy. <i>Journal of Molecular Recognition</i> , 2014, 27, 92-97.	1.1	4
82	Molecular Addressability of Lipid Membrane Embedded Calixarenes towards Cytochrome C. <i>Journal of Nanomedicine &amp; Nanotechnology</i> , 2014, 05, .	1.1	4
83	Atomic Force Microscopy in Nanomedicine. <i>Nanoscience and Technology</i> , 2006, , 1-26.	1.5	3
84	DNA building blocks for AFM tip functionalization: An easy, fast and stable strategy. <i>Methods</i> , 2021, , .	1.9	3
85	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2010, , 763-785.		3
86	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
87	Biomedical Sensing with the Atomic Force Microscope. <i>Springer Handbooks</i> , 2017, , 809-844.	0.3	2
88	Molecular Recognition Force Spectroscopy for Probing Cell Targeted Nanoparticles In Vitro. <i>Methods in Molecular Biology</i> , 2019, 1886, 327-341.	0.4	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

#	ARTICLE	IF	CITATIONS
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	Novel Generation of Crosslinkers allows Single Molecule Force Spectroscopy on Oligomeric Receptors. Biophysical Journal, 2014, 106, 387a.	0.2	1
93	High-Sensitivity Dual Electrochemical QCM for Reliable Three-Electrode Measurements. Sensors, 2021, 21, 2592.	2.1	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.	1.0	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.	1.6	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.	7.2	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.	0.2	0
101	Study of Nucleotide Binding to the Uncoupling Protein 1 using Atomic Force Microscopy. Biophysical Journal, 2012, 102, 607a.	0.2	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.	0.2	0
104	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles, Proteins and Nanoparticles. Biophysical Journal, 2012, 102, 588a.	0.2	0
105	Antibody Movement on Regular Antigen Clusters: Fab Arms are made for Walking. Biophysical Journal, 2013, 104, 381a.	0.2	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.	2.8	0

#	ARTICLE	IF	CITATIONS
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