

# Peter Hinterdorfer

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8417922/publications.pdf>

Version: 2024-02-01

232  
papers

10,719  
citations

26630

56  
h-index

38395

95  
g-index

244  
all docs

244  
docs citations

244  
times ranked

9886  
citing authors

#	ARTICLE	IF	CITATIONS
1	Detection and localization of single molecular recognition events using atomic force microscopy. <i>Nature Methods</i> , 2006, 3, 347-355.	19.0	963
2	A New, Simple Method for Linking of Antibodies to Atomic Force Microscopy Tips. <i>Bioconjugate Chemistry</i> , 2007, 18, 1176-1184.	3.6	242
3	Antibody recognition imaging by force microscopy. <i>Nature Biotechnology</i> , 1999, 17, 901-905.	17.5	241
4	Static and Dynamical Properties of Single Poly(Ethylene Glycol) Molecules Investigated by Force Spectroscopy. <i>Single Molecules</i> , 2000, 1, 123-128.	0.9	238
5	Ca <sup>++</sup> -dependent vesicle release from erythrocytes involves stomatin-specific lipid rafts, synexin (annexin VII), and sorcin. <i>Blood</i> , 2002, 99, 2569-2577.	1.4	220
6	Proliferation of aligned mammalian cells on laser-nanostructured polystyrene. <i>Biomaterials</i> , 2008, 29, 1796-1806.	11.4	219
7	Simultaneous Height and Adhesion Imaging of Antibody-Antigen Interactions by Atomic Force Microscopy. <i>Biophysical Journal</i> , 1998, 75, 2220-2228.	0.5	198
8	Simple test system for single molecule recognition force microscopy. <i>Analytica Chimica Acta</i> , 2003, 479, 59-75.	5.4	192
9	Higher Dispersion Efficacy of Functionalized Carbon Nanotubes in Chemical and Biological Environments. <i>ACS Nano</i> , 2010, 4, 2615-2626.	14.6	189
10	Molecular Recognition Imaging and Force Spectroscopy of Single Biomolecules. <i>Accounts of Chemical Research</i> , 2006, 39, 29-36.	15.6	181
11	Detection of HSP60 on the membrane surface of stressed human endothelial cells by atomic force and confocal microscopy. <i>Journal of Cell Science</i> , 2005, 118, 1587-1594.	2.0	177
12	Comparison of different aminofunctionalization strategies for attachment of single antibodies to AFM cantilevers. <i>Ultramicroscopy</i> , 2007, 107, 922-927.	1.9	172
13	Simultaneous Topography and Recognition Imaging Using Force Microscopy. <i>Biophysical Journal</i> , 2004, 87, 1981-1990.	0.5	169
14	Past, present and future of atomic force microscopy in life sciences and medicine. <i>Journal of Molecular Recognition</i> , 2007, 20, 418-431.	2.1	165
15	Multiple receptors involved in human rhinovirus attachment to live cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 17778-17783.	7.1	159
16	Vesicles generated during storage of red cells are rich in the lipid raft marker stomatin. <i>Transfusion</i> , 2008, 48, 451-462.	1.6	152
17	Linking of Sensor Molecules with Amino Groups to Amino-Functionalized AFM Tips. <i>Bioconjugate Chemistry</i> , 2011, 22, 1239-1248.	3.6	145
18	Nano-Scale Dynamic Recognition Imaging on Vascular Endothelial Cells. <i>Biophysical Journal</i> , 2007, 93, L11-L13.	0.5	135

#	ARTICLE	IF	CITATIONS
19	Biomolecular force measurements and the atomic force microscope. <i>Current Opinion in Biotechnology</i> , 2002, 13, 47-51.	6.6	127
20	Localization of Single Avidin-Biotin Interactions Using Simultaneous Topography and Molecular Recognition Imaging. <i>ChemPhysChem</i> , 2005, 6, 897-900.	2.1	123
21	Influenza virus binds its host cell using multiple dynamic interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13626-13631.	7.1	119
22	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. <i>Single Molecules</i> , 2000, 1, 59-65.	0.9	111
23	Interlaboratory round robin on cantilever calibration for AFM force spectroscopy. <i>Ultramicroscopy</i> , 2011, 111, 1659-1669.	1.9	110
24	Atomic Force Microscopy-Based Force Spectroscopy and Multiparametric Imaging of Biomolecular and Cellular Systems. <i>Chemical Reviews</i> , 2021, 121, 11701-11725.	47.7	109
25	Glass Surfaces Grafted with High-Density Poly(ethylene glycol) as Substrates for DNA Oligonucleotide Microarrays. <i>Langmuir</i> , 2006, 22, 277-285.	3.5	108
26	Desmocollin 3-mediated Binding Is Crucial for Keratinocyte Cohesion and Is Impaired in Pemphigus. <i>Journal of Biological Chemistry</i> , 2009, 284, 30556-30564.	3.4	108
27	A molecular switch between alternative conformational states in the complex of Ran and importin $\beta$ 1. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 553-557.	8.2	107
28	Single Molecule Studies of Antibody-Antigen Interaction Strength Versus Intra-molecular Antigen Stability. <i>Journal of Molecular Biology</i> , 2005, 347, 597-606.	4.2	106
29	Age determination of blood spots in forensic medicine by force spectroscopy. <i>Forensic Science International</i> , 2007, 170, 8-14.	2.2	105
30	Direct measurement of protein energy landscape roughness. <i>EMBO Reports</i> , 2005, 6, 482-486.	4.5	99
31	IgGs are made for walking on bacterial and viral surfaces. <i>Nature Communications</i> , 2014, 5, 4394.	12.8	97
32	The surface properties of nanocrystalline diamond and nanoparticulate diamond powder and their suitability as cell growth support surfaces. <i>Biomaterials</i> , 2008, 29, 4275-4284.	11.4	96
33	Higher Harmonic Atomic Force Microscopy: Imaging of Biological Membranes in Liquid. <i>Physical Review Letters</i> , 2007, 99, 046102.	7.8	93
34	Recent progress in AFM molecular recognition studies. <i>Pflügers Archiv European Journal of Physiology</i> , 2008, 456, 237-245.	2.8	92
35	Ligands on the string: single-molecule AFM studies on the interaction of antibodies and substrates with the Na <sup>+</sup> -glucose co-transporter SGLT1 in living cells. <i>Journal of Cell Science</i> , 2006, 119, 2960-2967.	2.0	91
36	The role of oxygen termination of nanocrystalline diamond on immobilisation of BMP-2 and subsequent bone formation. <i>Biomaterials</i> , 2008, 29, 2433-2442.	11.4	90

#	ARTICLE	IF	CITATIONS
37	Antibody Linking to Atomic Force Microscope Tips via Disulfide Bond Formation. <i>Bioconjugate Chemistry</i> , 2006, 17, 1473-1481.	3.6	87
38	Cohesin mediates DNA loop extrusion by a $\alpha$ -swinging and clamp-mechanism. <i>Cell</i> , 2021, 184, 5448-5464.e22.	28.9	87
39	Poly(Ethylene Glycol): An Ideal Spacer for Molecular Recognition Force Microscopy/Spectroscopy.. <i>Single Molecules</i> , 2000, 1, 99-103.	0.9	83
40	Directed Assembly of Au Nanoparticles onto Planar Surfaces via Multiple Hydrogen Bonds. <i>Langmuir</i> , 2005, 21, 8414-8421.	3.5	83
41	Heterobifunctional crosslinkers for tethering single ligand molecules to scanning probes. <i>Analytica Chimica Acta</i> , 2003, 497, 101-114.	5.4	82
42	Single-Molecule Imaging of Cell Surfaces Using Near-Field Nanoscopy. <i>Accounts of Chemical Research</i> , 2012, 45, 327-336.	15.6	80
43	Unraveling the Macromolecular Pathways of IgG Oligomerization and Complement Activation on Antigenic Surfaces. <i>Nano Letters</i> , 2019, 19, 4787-4796.	9.1	79
44	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.	13.8	78
45	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
46	Single HA2 Mutation Increases the Infectivity and Immunogenicity of a Live Attenuated H5N1 Intranasal Influenza Vaccine Candidate Lacking NS1. <i>PLoS ONE</i> , 2011, 6, e18577.	2.5	75
47	Atomic force microscopy in bionanotechnology. <i>Nano Today</i> , 2008, 3, 12-19.	11.9	74
48	Single Molecule Recognition of Protein Binding Epitopes in Brush Border Membranes by Force Microscopy. <i>Biophysical Journal</i> , 2002, 82, 2767-2774.	0.5	68
49	Recognition Imaging and Highly Ordered Molecular Templating of Bacterial S-Layer Nanoarrays Containing Affinity-Tags. <i>Nano Letters</i> , 2008, 8, 4312-4319.	9.1	66
50	Surface attachment of ligands and receptors for molecular recognition force microscopy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2002, 23, 115-123.	5.0	64
51	Force-Sensitive Autoinhibition of the von Willebrand Factor Is Mediated by Interdomain Interactions. <i>Biophysical Journal</i> , 2015, 108, 2312-2321.	0.5	64
52	Single molecule microscopy of biomembranes (Review). <i>Molecular Membrane Biology</i> , 2000, 17, 17-29.	2.0	63
53	A combined optical and atomic force microscope for live cell investigations. <i>Ultramicroscopy</i> , 2006, 106, 645-651.	1.9	63
54	Probing Binding Pocket of Serotonin Transporter by Single Molecular Force Spectroscopy on Living Cells. <i>Journal of Biological Chemistry</i> , 2012, 287, 105-113.	3.4	63

#	ARTICLE	IF	CITATIONS
55	Dynamic force microscopy imaging of native membranes. <i>Ultramicroscopy</i> , 2003, 97, 229-237.	1.9	62
56	Force spectroscopy of single cells using atomic force microscopy. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	21.2	61
57	Nanomechanical recognition measurements of individual DNA molecules reveal epigenetic methylation patterns. <i>Nature Nanotechnology</i> , 2010, 5, 788-791.	31.5	59
58	Following single antibody binding to purple membranes in real time. <i>EMBO Reports</i> , 2004, 5, 579-583.	4.5	57
59	Localization of the ergtoxin-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.	2.8	55
60	Simultaneous topography and recognition imaging: physical aspects and optimal imaging conditions. <i>Nanotechnology</i> , 2009, 20, 215103.	2.6	53
61	Hydrodynamic damping of a magnetically oscillated cantilever close to a surface. <i>Ultramicroscopy</i> , 2004, 100, 301-308.	1.9	52
62	Designing of dynamic polyethyleneimine (PEI) brushes on polyurethane (PU) ureteral stents to prevent infections. <i>Acta Biomaterialia</i> , 2015, 21, 44-54.	8.3	52
63	Self-Assembled Monolayers with Latent Aldehydes for Protein Immobilization. <i>Bioconjugate Chemistry</i> , 2007, 18, 247-253.	3.6	51
64	Single-molecule recognition force spectroscopy of transmembrane transporters on living cells. <i>Nature Protocols</i> , 2011, 6, 1443-1452.	12.0	50
65	Nanoscale DNA Tetrahedra Improve Biomolecular Recognition on Patterned Surfaces. <i>Small</i> , 2012, 8, 89-97.	10.0	50
66	Curli mediate bacterial adhesion to fibronectin via tensile multiple bonds. <i>Scientific Reports</i> , 2016, 6, 33909.	3.3	50
67	Imaging morphological details and pathological differences of red blood cells using tapping-mode AFM. <i>Biological Chemistry</i> , 2004, 385, 955-60.	2.5	49
68	High-Speed AFM Images of Thermal Motion Provide Stiffness Map of Interfacial Membrane Protein Moieties. <i>Nano Letters</i> , 2015, 15, 759-763.	9.1	49
69	Nanoscale Characteristics and Antimicrobial Properties of (SI-ATRP)-Seeded Polymer Brush Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 29312-29319.	8.0	49
70	Membrane binding of $\hat{1}^{22}$ -glycoprotein I can be described by a two-state reaction model: an atomic force microscopy and surface plasmon resonance study. <i>Biochemical Journal</i> , 2005, 389, 665-673.	3.7	48
71	High-Affinity Tags Fused to S-Layer Proteins Probed by Atomic Force Microscopy. <i>Langmuir</i> , 2008, 24, 1324-1329.	3.5	47
72	Quantitative sub-surface and non-contact imaging using scanning microwave microscopy. <i>Nanotechnology</i> , 2015, 26, 135701.	2.6	47

#	ARTICLE	IF	CITATIONS
73	Targeted Delivery of siRNA into Breast Cancer Cells via Phage Fusion Proteins. <i>Molecular Pharmaceutics</i> , 2013, 10, 551-559.	4.6	46
74	Mutual A domain interactions in the force sensing protein von Willebrand factor. <i>Journal of Structural Biology</i> , 2017, 197, 57-64.	2.8	46
75	Free Energy of Membrane Protein Unfolding Derived from Single-Molecule Force Measurements. <i>Biophysical Journal</i> , 2007, 93, 930-937.	0.5	45
76	Communication between N terminus and loop2 tunes Orai activation. <i>Journal of Biological Chemistry</i> , 2018, 293, 1271-1285.	3.4	44
77	Identification of lectin receptors for conserved SARS-CoV-2 glycosylation sites. <i>EMBO Journal</i> , 2021, 40, e108375.	7.8	44
78	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.	13.7	41
79	Determination of CFTR densities in erythrocyte plasma membranes using recognition imaging. <i>Nanotechnology</i> , 2008, 19, 384017.	2.6	40
80	Dynamic force microscopy imaging of plasmid DNA and viral RNA. <i>Biomaterials</i> , 2007, 28, 2403-2411.	11.4	39
81	AFM functional imaging on vascular endothelial cells. <i>Journal of Molecular Recognition</i> , 2010, 23, 589-596.	2.1	39
82	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
83	Atomic force microscopy-based antibody recognition imaging of proteins in the pathological deposits in Pseudoexfoliation Syndrome. <i>Ultramicroscopy</i> , 2011, 111, 1055-1061.	1.9	38
84	Painting with Biomolecules at the Nanoscale: Biofunctionalization with Tunable Surface Densities. <i>Nano Letters</i> , 2012, 12, 1983-1989.	9.1	38
85	Analysis of the cell surface layer ultrastructure of the oral pathogen <i>Tannerella forsythia</i> . <i>Archives of Microbiology</i> , 2012, 194, 525-539.	2.2	37
86	Cell surface localised Hsp70 is a cancer specific regulator of clathrin-independent endocytosis. <i>FEBS Letters</i> , 2015, 589, 2747-2753.	2.8	37
87	Calibrated complex impedance of CHO cells and <i>E. coli</i> bacteria at GHz frequencies using scanning microwave microscopy. <i>Nanotechnology</i> , 2016, 27, 135702.	2.6	36
88	Inhibition of mitochondrial UCP1 and UCP3 by purine nucleotides and phosphate. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 664-672.	2.6	36
89	Weak Fragment Crystallizable (Fc) Domain Interactions Drive the Dynamic Assembly of IgG Oligomers upon Antigen Recognition. <i>ACS Nano</i> , 2020, 14, 2739-2750.	14.6	36
90	Monitoring RNA Release from Human Rhinovirus by Dynamic Force Microscopy. <i>Journal of Virology</i> , 2004, 78, 3203-3209.	3.4	35

#	ARTICLE	IF	CITATIONS
91	Structure and distribution of the <i>Bacillus thuringiensis</i> Cry4Ba toxin in lipid membranes. <i>Ultramicroscopy</i> , 2005, 105, 115-124.	1.9	34
92	Single Molecular Recognition Force Spectroscopy Study of a Luteinizing Hormone-Releasing Hormone Analogue as a Carcinoma Target Drug. <i>Journal of Physical Chemistry B</i> , 2012, 116, 13331-13337.	2.6	34
93	Applications of biosensing atomic force microscopy in monitoring drug and nanoparticle delivery. <i>Expert Opinion on Drug Delivery</i> , 2014, 11, 1237-1253.	5.0	34
94	Oriented Binding of the His6-Tagged Carboxyl-Tail of the L-type Ca <sup>2+</sup> Channel $\alpha_1$ -Subunit to a New NTA-Functionalized Self-Assembled Monolayer. <i>Langmuir</i> , 2004, 20, 5885-5890.	3.5	33
95	Single-Molecule AFM Characterization of Individual Chemically Tagged DNA Tetrahedra. <i>ACS Nano</i> , 2011, 5, 7048-7054.	14.6	33
96	Substrate Specificity of Sugar Transport by Rabbit SGLT1: A Single-Molecule Atomic Force Microscopy versus Transport Studies. <i>Biochemistry</i> , 2007, 46, 2797-2804.	2.5	32
97	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.	2.8	32
98	Detecting Protein Aggregates on Untreated Human Tissue Samples by Atomic Force Microscopy Recognition Imaging. <i>Biophysical Journal</i> , 2010, 99, 1660-1667.	0.5	32
99	Simultaneous AFM topography and recognition imaging at the plasma membrane of mammalian cells. <i>Seminars in Cell and Developmental Biology</i> , 2018, 73, 45-56.	5.0	32
100	Direct Discrimination between Models of Protein Activation by Single-Molecule Force Measurements. <i>Biophysical Journal</i> , 2004, 87, 2630-2634.	0.5	31
101	Fabrication of Highly Ordered Gold Nanoparticle Arrays Templated by Crystalline Lattices of Bacterial S-layer Protein. <i>ChemPhysChem</i> , 2008, 9, 2317-2320.	2.1	31
102	Molecular Recognition Studies Using the Atomic Force Microscope. <i>Methods in Cell Biology</i> , 2002, 68, 115-139.	1.1	30
103	Visualization of Single Receptor Molecules Bound to Human Rhinovirus under Physiological Conditions. <i>Structure</i> , 2005, 13, 1247-1253.	3.3	30
104	Covalent Immobilization of Single Proteins on Mica for Molecular Recognition Force Microscopy. <i>ChemPhysChem</i> , 2003, 4, 1367-1371.	2.1	29
105	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.	2.1	29
106	Characterization of Enhanced Monovalent and Bivalent Thrombin DNA Aptamer Binding Using Single Molecule Force Spectroscopy. <i>Biophysical Journal</i> , 2011, 101, 1781-1787.	0.5	29
107	Nanoscale Organization of Human GnRH-R on Human Bladder Cancer Cells. <i>Analytical Chemistry</i> , 2014, 86, 2458-2464.	6.5	29
108	Nanopharmacological Force Sensing to Reveal Allosteric Coupling in Transporter Binding Sites. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1719-1722.	13.8	29

#	ARTICLE	IF	CITATIONS
109	HDL particles incorporate into lipid bilayers – a combined AFM and single molecule fluorescence microscopy study. <i>Scientific Reports</i> , 2017, 7, 15886.	3.3	29
110	Identification of novel insulin mimetic drugs by quantitative total internal reflection fluorescence (TIRF) microscopy. <i>British Journal of Pharmacology</i> , 2014, 171, 5237-5251.	5.4	28
111	Probing drug-cell interactions. <i>Nano Today</i> , 2006, 1, 18-25.	11.9	27
112	Unbinding Molecular Recognition Force Maps of Localized Single Receptor Molecules by Atomic Force Microscopy. <i>ChemPhysChem</i> , 2008, 9, 590-599.	2.1	27
113	Characterization of Curli A Production on Living Bacterial Surfaces by Scanning Probe Microscopy. <i>Biophysical Journal</i> , 2012, 103, 1666-1671.	0.5	25
114	Second harmonic atomic force microscopy imaging of live and fixed mammalian cells. <i>Ultramicroscopy</i> , 2009, 109, 1056-1060.	1.9	24
115	Characterizing the effect of polymyxin B antibiotics to lipopolysaccharide on <i>Escherichia coli</i> surface using atomic force microscopy. <i>Journal of Molecular Recognition</i> , 2017, 30, e2605.	2.1	24
116	High-frequency electromagnetic dynamics properties of THP1 cells using scanning microwave microscopy. <i>Ultramicroscopy</i> , 2011, 111, 1625-1629.	1.9	23
117	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.	2.6	22
118	Three Surface Subdomains Form the Vestibule of the Na <sup>+</sup> /Glucose Cotransporter SGLT1. <i>Journal of Biological Chemistry</i> , 2007, 282, 25222-25230.	3.4	22
119	Molecular recognition imaging using tuning fork-based transverse dynamic force microscopy. <i>Ultramicroscopy</i> , 2010, 110, 605-611.	1.9	21
120	Nanosensing of Fc $\gamma$ 3 receptors on macrophages. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2359-2367.	3.7	20
121	Binding Strength and Dynamics of Invariant Natural Killer Cell T Cell Receptor/CD1d-Glycosphingolipid Interaction on Living Cells by Single Molecule Force Spectroscopy. <i>Journal of Biological Chemistry</i> , 2011, 286, 15973-15979.	3.4	20
122	Nanopatterning of Biomolecules with Microscale Beads. <i>ChemPhysChem</i> , 2005, 6, 900-903.	2.1	19
123	Increased imaging speed and force sensitivity for bio-applications with small cantilevers using a conventional AFM setup. <i>Micron</i> , 2012, 43, 1399-1407.	2.2	19
124	Activation induced morphological changes and integrin $\alpha$ IIb $\beta$ 3 activity of living platelets. <i>Methods</i> , 2013, 60, 179-185.	3.8	18
125	Dithio-Phospholipids for Biospecific Immobilization of Proteins on Gold Surfaces. <i>Single Molecules</i> , 2002, 3, 119-125.	0.9	17
126	Atomic Force Microscopy-Derived Nanoscale Chip for the Detection of Human Pathogenic Viruses. <i>Small</i> , 2008, 4, 847-854.	10.0	17



#	ARTICLE	IF	CITATIONS
127	Forces and Dynamics of Glucose and Inhibitor Binding to Sodium Glucose Co-transporter SGLT1 Studied by Single Molecule Force Spectroscopy. <i>Journal of Biological Chemistry</i> , 2014, 289, 21673-21683.	3.4	17
128	3D multiphoton lithography using biocompatible polymers with specific mechanical properties. <i>Nanoscale Advances</i> , 2020, 2, 2422-2428.	4.6	17
129	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. <i>Nano Letters</i> , 2020, 20, 4038-4042.	9.1	17
130	Single-Molecule Analysis of the Recognition Forces Underlying Nucleocytoplasmic Transport. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10356-10359.	13.8	16
131	Characterizing the S-layer structure and anti-S-layer antibody recognition on intact <i>Tannerella forsythia</i> cells by scanning probe microscopy and small angle X-ray scattering. <i>Journal of Molecular Recognition</i> , 2013, 26, 542-549.	2.1	16
132	Lipoteichoic acid mediates binding of a <i>Lactobacillus</i> S-layer protein. <i>Glycobiology</i> , 2018, 28, 148-158.	2.5	16
133	Determination of the Kinetic On- and Off-Rate of Single Virus-Cell Interactions. <i>Methods in Molecular Biology</i> , 2011, 736, 197-210.	0.9	16
134	Quasi-crystalline Arrangement of Human Rhinovirus 2 on Model Cell Membranes. <i>Single Molecules</i> , 2001, 2, 99-103.	0.9	15
135	Detection of corneodesmosin on the surface of stratum corneum using atomic force microscopy. <i>Experimental Dermatology</i> , 2010, 19, 1014-1019.	2.9	15
136	Molecular Recognition Force Spectroscopy: A New Tool to Tailor Targeted Nanoparticles. <i>Small</i> , 2011, 7, 1236-1241.	10.0	15
137	Nano-characterization of two closely related melanoma cell lines with different metastatic potential. <i>European Biophysics Journal</i> , 2015, 44, 49-55.	2.2	15
138	Combined Recognition Imaging and Force Spectroscopy: A New Mode for Mapping and Studying Interaction Sites at Low Lateral Density. <i>Science of Advanced Materials</i> , 2017, 9, 128-134.	0.7	15
139	Identification of the Human Rhinovirus Serotype 1A Binding Site on the Murine Low-Density Lipoprotein Receptor by Using Human-Mouse Receptor Chimeras. <i>Journal of Virology</i> , 2004, 78, 6766-6774.	3.4	14
140	Dynamic force microscopy for imaging of viruses under physiological conditions. <i>Biological Procedures Online</i> , 2004, 6, 120-128.	2.9	14
141	Single Molecule Force Microscopy on Cells and Biological Membranes. <i>Current Nanoscience</i> , 2007, 3, 49-56.	1.2	14
142	SLC5 and SLC2 Transporters in Epithelia—Cellular Role and Molecular Mechanisms. <i>Current Topics in Membranes</i> , 2012, 70, 29-76.	0.9	14
143	Ultra-Sensitive and Label-Free Probing of Binding Affinity Using Recognition Imaging. <i>Nano Letters</i> , 2019, 19, 612-617.	9.1	14
144	Detection and characterization of single biomolecules at surfaces. <i>Reviews in Molecular Biotechnology</i> , 2001, 82, 25-35.	2.8	13

#	ARTICLE	IF	CITATIONS
145	Nanoscale characteristics of antibacterial cationic polymeric brushes and single bacterium interactions probed by force microscopy. <i>RSC Advances</i> , 2016, 6, 17092-17099.	3.6	13
146	Static and Dynamical Properties of Single Poly(Ethylene Glycol) Molecules Investigated by Force Spectroscopy. <i>Single Molecules</i> , 2000, 1, 123-128.	0.9	13
147	C-terminal Loop 13 of Na <sup>+</sup> /Glucose Cotransporter 1 Contains Both Stereospecific and Non-stereospecific Sugar Interaction Sites. <i>Journal of Biological Chemistry</i> , 2009, 284, 983-991.	3.4	12
148	Chemical Tags Mediate the Orthogonal Self-Assembly of DNA Duplexes into Supramolecular Structures. <i>Small</i> , 2010, 6, 1732-1735.	10.0	12
149	Influence of Surface Morphology on the Antimicrobial Effect of Transition Metal Oxides in Polymer Surface. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 7853-7859.	0.9	12
150	Detailed Evidence for an Unparalleled Interaction Mode between Calmodulin and Orai Proteins. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15755-15759.	13.8	12
151	Interaction of von Willebrand factor domains with collagen investigated by single molecule force spectroscopy. <i>Journal of Chemical Physics</i> , 2018, 148, 123310.	3.0	12
152	Correlations Between AFM and SEM Imaging of Acid-Etched Tooth Enamel. <i>Ultrastructural Pathology</i> , 2008, 32, 1-4.	0.9	11
153	Topography and Recognition Imaging of Protein-Patterned Surfaces Generated by AFM Nanolithography. <i>ChemPhysChem</i> , 2009, 10, 1478-1481.	2.1	11
154	Green fluorescent protein " Tagged HCV non-enveloped capsid like particles: Development of a new tool for tracking HCV core uptake. <i>Biochimie</i> , 2009, 91, 903-915.	2.6	11
155	Two-Dimensional Kinetics of Inter-Connexin Interactions from Single-Molecule Force Spectroscopy. <i>Journal of Molecular Biology</i> , 2011, 412, 72-79.	4.2	11
156	AFM-Based Force Spectroscopy Guided by Recognition Imaging: A New Mode for Mapping and Studying Interaction Sites at Low Lateral Density. <i>Methods and Protocols</i> , 2019, 2, 6.	2.0	11
157	Accuracy Estimation in Force Spectroscopy Experiments. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 5536.	1.5	10
158	pH-Dependent Deformations of the Energy Landscape of Avidin-like Proteins Investigated by Single Molecule Force Spectroscopy. <i>Molecules</i> , 2014, 19, 12531-12546.	3.8	10
159	Analysis of Membrane Protein Self-Association in Lipid Systems by Fluorescence Particle Counting: Application to the Dihydropyridine Receptor. <i>Biochemistry</i> , 1997, 36, 4497-4504.	2.5	9
160	Stable, Non-Destructive Immobilization of Native Nuclear Membranes to Micro-Structured PDMS for Single-Molecule Force Spectroscopy. <i>ChemPhysChem</i> , 2009, 10, 1553-1558.	2.1	9
161	A biophysical glance at the outer surface of the membrane transporter SGLT1. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 1-18.	2.6	9
162	Modification of the loops in the ligand-binding site turns avidin into a steroid-binding protein. <i>BMC Biotechnology</i> , 2011, 11, 64.	3.3	9

#	ARTICLE	IF	CITATIONS
163	Nanomapping of CD1d-glycolipid complexes on THP1 cells by using simultaneous topography and recognition imaging. <i>Journal of Molecular Recognition</i> , 2013, 26, 408-414.	2.1	9
164	Nanomechanical mechanisms of Lyme disease spirochete motility enhancement in extracellular matrix. <i>Communications Biology</i> , 2021, 4, 268.	4.4	9
165	Effects of Viscoelastic Cantilever - Sample Interaction on Laser Beam Deflection in MAC Mode MRFM. <i>Single Molecules</i> , 2000, 1, 165-170.	0.9	8
166	Receptor Arrays for the Selective and Efficient Capturing of Viral Particles. <i>Bioconjugate Chemistry</i> , 2009, 20, 466-475.	3.6	8
167	Examination of Native and Carbamide Peroxide-bleached Human Tooth Enamel by Atomic Force Microscopy. <i>Ultrastructural Pathology</i> , 2009, 33, 189-196.	0.9	8
168	Mapping Short Affinity Tags on Bacterial Surface Layer with an Antibody. <i>ChemPhysChem</i> , 2010, 11, 2323-2326.	2.1	8
169	Force-Induced Lysozyme-HyHEL5 Antibody Dissociation and Its Analysis by Means of a Cooperative Binding Model. <i>Biophysical Journal</i> , 2010, 99, 323-332.	0.5	8
170	Single molecular dissection of the ligand binding property of epidermal growth factor receptor. <i>Analyst</i> , 2013, 138, 5325.	3.5	8
171	Genetic characterization of an adapted pandemic 2009 H1N1 influenza virus that reveals improved replication rates in human lung epithelial cells. <i>Virology</i> , 2016, 492, 118-129.	2.4	8
172	Contributions of the Hydrophobic Helix 2 of the Bordetella pertussis CyaA-hemolysin to Membrane Permeabilization. <i>Protein and Peptide Letters</i> , 2018, 25, 236-243.	0.9	8
173	Normal and Pathological Erythrocytes Studied by Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2011, 736, 223-241.	0.9	7
174	Time-resolved chloroquine-induced relaxation of supercoiled plasmid DNA. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 373-380.	3.7	7
175	Single-Molecule Analysis of the Recognition Forces Underlying Nucleocytoplasmic Transport. <i>Angewandte Chemie</i> , 2013, 125, 10546-10549.	2.0	7
176	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.	13.8	6
177	Single molecule binding dynamics measured with atomic force microscopy. <i>Ultramicroscopy</i> , 2014, 140, 32-36.	1.9	6
178	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.	7.6	6
179	Two Ligand Binding Sites in Serotonin Transporter Revealed by Nanopharmacological Force Sensing. <i>Methods in Molecular Biology</i> , 2018, 1814, 19-33.	0.9	6
180	Monitoring of glass derivatization with pulsed force mode atomic force microscopy. <i>Microscopy Research and Technique</i> , 2004, 65, 246-251.	2.2	5

#	ARTICLE	IF	CITATIONS
181	Selective binding of nanoparticles on surfaces and into polymeric matrices via directed hydrogen bonding interactions. <i>Polymers for Advanced Technologies</i> , 2006, 17, 754-757.	3.2	5
182	Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 493-503.	3.7	5
183	Single molecule force spectroscopy data and BD- and MD simulations on the blood protein von Willebrand factor. <i>Data in Brief</i> , 2016, 8, 1080-1087.	1.0	5
184	Probing the Energy Landscape of Protein-Binding Reactions by Dynamic Force Spectroscopy. , 2009, , 407-447.		5
185	Single-Molecule AFM Studies of Substrate Transport by Using the Sodium-Glucose Cotransporter SGLT1. <i>Journal of the Korean Physical Society</i> , 2008, 52, 1336-1340.	0.7	5
186	Atomic Force Microscopy Studies of Human Rhinovirus. <i>Methods in Enzymology</i> , 2010, 475, 515-539.	1.0	4
187	Atomic Force Microscopy Functional Imaging on Vascular Endothelial Cells. <i>Methods in Molecular Biology</i> , 2012, 931, 331-344.	0.9	4
188	Functional AFM Imaging of Cellular Membranes Using Functionalized Tips. <i>Methods in Molecular Biology</i> , 2013, 950, 359-371.	0.9	4
189	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.	2.1	4
190	Allosterically Linked Binding Sites in Serotonin Transporter Revealed by Single Molecule Force Spectroscopy. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 99.	3.5	4
191	Atomic Force Microscopy in Nanomedicine. <i>Nanoscience and Technology</i> , 2006, , 1-26.	1.5	3
192	Nanopharmacological Force Sensing to Reveal Allosteric Coupling in Transporter Binding Sites. <i>Angewandte Chemie</i> , 2016, 128, 1751-1754.	2.0	3
193	Sensing the Ultrastructure of Bacterial Surfaces and Their Molecular Binding Forces Using AFM. <i>Methods in Molecular Biology</i> , 2018, 1814, 363-372.	0.9	3
194	Localizing Binding Sites on Bioconjugated Hydrogen-Bonded Organic Semiconductors at the Nanoscale. <i>ChemPhysChem</i> , 2020, 21, 659-666.	2.1	3
195	Nanosopic Approach to Study the Early Stages of Epithelial to Mesenchymal Transition (EMT) of Human Retinal Pigment Epithelial (RPE) Cells In Vitro. <i>Life</i> , 2020, 10, 128.	2.4	3
196	Molecular Recognition Force Microscopy. , 2005, , 283-312.		3
197	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2010, , 763-785.		3
198	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.	14.9	2

#	ARTICLE	IF	CITATIONS
199	Biomedical Sensing with the Atomic Force Microscope. Springer Handbooks, 2017, , 809-844.	0.6	2
200	Molecular Recognition Force Spectroscopy for Probing Cell Targeted Nanoparticles In Vitro. Methods in Molecular Biology, 2019, 1886, 327-341.	0.9	2
201	Investigation of Bacterial Curli Production and Adhesion Using AFM. Methods in Molecular Biology, 2019, 1886, 221-231.	0.9	2
202	Catching Common Cold Virus with a Net: Pyridostatin Forms Filaments in Tris Buffer That Trap Virusesâ€”A Novel Antiviral Strategy?. Viruses, 2020, 12, 723.	3.3	2
203	Poly(Ethylene Glycol): An Ideal Spacer for Molecular Recognition Force Microscopy/Spectroscopy.. Single Molecules, 2000, 1, 99-103.	0.9	2
204	Recognition Imaging Using Atomic Force Microscopy. , 2009, , 525-554.		2
205	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2011, , 355-387.		2
206	Molecular Recognition Force Microscopy: From Simple Bonds to Complex Energy Landscapes. , 2008, , 279-308.		2
207	Self-Assembled Growth of Highly Oriented Para- Sexiphenyl Thin Films Controlled by Elastic Strain. Materials Research Society Symposia Proceedings, 2001, 665, C5.24.1.	0.1	1
208	Signalverarbeitungsalgorithmen fÃ¼r ein Rasterkraftmikroskop, betrieben im TREC-Modus (Signal) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Messen, 2007, 74, 196-203.	0.7	1
209	Molecular Recognition Force Spectroscopy. , 2011, , 3-46.		1
210	Quantitative measurement of electric properties on the nanometer scale using atomic force microscopy. , 2011, , .		1
211	Mutual a Domain Interactions in the Force Sensing Protein von Willebrand Factor (VWF). Biophysical Journal, 2016, 110, 496a.	0.5	1
212	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. , 2000, 1, 59.		1
213	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. , 2000, 1, 59.		1
214	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. Single Molecules, 2000, 1, 59-65.	0.9	1
215	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. Nanoscience and Technology, 2007, , 101-125.	1.5	1
216	Molecular Recognition Force Microscopy. , 2004, , 475-494.		1

#	ARTICLE	IF	CITATIONS
217	Editorial: The Linz Winter-Workshop: Past and Future. <i>Single Molecules</i> , 2002, 3, 181-181.	0.9	0
218	Digital signal processing in AFM topography and recognition imaging. , 2005, 5965, 134.		0
219	Dynamic Force Microscopy and Spectroscopy. <i>Nanoscience and Technology</i> , 2006, , 143-164.	1.5	0
220	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.	13.8	0
221	High Speed Bio-AFM Reveals Motion of Membrane Proteins Driven by Hydrophobic Mismatch with nm Precision in Label-Free Fashion. <i>Biophysical Journal</i> , 2010, 99, 2017.	0.5	0
222	Exploring Carbon Nanotubes and Their Interaction with Cells Using Atomic Force Microscopy. , 2011, , 1-16.		0
223	Biomedical Sensing with the Atomic Force Microscope. , 2017, , 135-173.		0
224	Multiple Evidenz für einen ungewöhnlichen Wechselwirkungsmodus zwischen Calmodulin und Orain-Proteinen. <i>Angewandte Chemie</i> , 2017, 129, 15962-15967.	2.0	0
225	Atomic Force Microscopy (AFM) for Topography and Recognition Imaging at Single-Molecule Level. , 2018, , 1-14.		0
226	Molecular Recognition Force Microscopy. , 2004, , 475-494.		0
227	Molecular Recognition Force Microscopy: From Simple Bonds to Complex Energy Landscapes. , 2007, , 767-790.		0
228	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. , 2010, , 479-503.		0
229	Atomic Force Microscopy in Nanomedicine. , 2010, , 713-738.		0
230	Nanoimaging, Molecular Interaction, and Nanotemplating of Human Rhinovirus. <i>Nanoscience and Technology</i> , 2011, , 589-643.	1.5	0
231	Topography and Recognition Imaging of Cells. , 2011, , 145-161.		0
232	Force Spectroscopy and Recognition Imaging of Cells from the Immune System. , 2012, , 49-75.		0