

Daniel J. Muller

List of Publications by Year in descending order

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312
papers

28,791
citations

3525

90
h-index

7340

152
g-index

328
all docs

328
docs citations

328
times ranked

23043
citing authors

#	ARTICLE	IF	CITATIONS
1	<scp>GSDMD</scp> membrane pore formation constitutes the mechanism of pyroptotic cell death. EMBO Journal, 2016, 35, 1766-1778.	3.5	842
2	Imaging modes of atomic force microscopy for application in molecular and cell biology. Nature Nanotechnology, 2017, 12, 295-307.	15.6	699
3	Tau protein liquidâ€“liquid phase separation can initiate tau aggregation. EMBO Journal, 2018, 37, .	3.5	696
4	Tensile forces govern germ-layer organization in zebrafish. Nature Cell Biology, 2008, 10, 429-436.	4.6	692
5	Atomic force microscopy as a multifunctional molecular toolbox in nanobiotechnology. Nature Nanotechnology, 2008, 3, 261-269.	15.6	678
6	Unfolding Pathways of Individual Bacteriorhodopsins. Science, 2000, 288, 143-146.	6.0	677
7	Hydrostatic pressure and the actomyosin cortex drive mitotic cell rounding. Nature, 2011, 469, 226-230.	13.7	576
8	Observing single biomolecules at work with the atomic force microscope. , 2000, 7, 715-718.		506
9	Atomic force microscopy-based mechanobiology. Nature Reviews Physics, 2019, 1, 41-57.	11.9	500
10	Proton-powered turbine of a plant motor. Nature, 2000, 405, 418-419.	13.7	478
11	Single-cell force spectroscopy. Journal of Cell Science, 2008, 121, 1785-1791.	1.2	443
12	Force probing surfaces of living cells to molecular resolution. Nature Chemical Biology, 2009, 5, 383-390.	3.9	430
13	Multiparametric imaging of biological systems by force-distance curveâ€“based AFM. Nature Methods, 2013, 10, 847-854.	9.0	378
14	Imaging and manipulation of biological structures with the AFM. Micron, 2002, 33, 385-397.	1.1	364
15	Electrostatically Balanced Subnanometer Imaging of Biological Specimens by Atomic Force Microscope. Biophysical Journal, 1999, 76, 1101-1111.	0.2	349
16	Atomic force microscopy: a nanoscopic window on the cell surface. Trends in Cell Biology, 2011, 21, 461-469.	3.6	329
17	Imaging purple membranes in aqueous solutions at sub-nanometer resolution by atomic force microscopy. Biophysical Journal, 1995, 68, 1681-1686.	0.2	326
18	The nucleus acts as a ruler tailoring cell responses to spatial constraints. Science, 2020, 370, .	6.0	299

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19	Adsorption of Biological Molecules to a Solid Support for Scanning Probe Microscopy. <i>Journal of Structural Biology</i> , 1997, 119, 172-188.	1.3	293
20	Neuronal uptake and propagation of a rare phosphorylated high-molecular-weight tau derived from Alzheimer's disease brain. <i>Nature Communications</i> , 2015, 6, 8490.	5.8	283
21	Wnt11 Functions in Gastrulation by Controlling Cell Cohesion through Rab5c and E-Cadherin. <i>Developmental Cell</i> , 2005, 9, 555-564.	3.1	273
22	Tapping-Mode Atomic Force Microscopy Produces Faithful High-Resolution Images of Protein Surfaces. <i>Biophysical Journal</i> , 1999, 77, 1150-1158.	0.2	256
23	Structure of the rhodopsin dimer: a working model for G-protein-coupled receptors. <i>Current Opinion in Structural Biology</i> , 2006, 16, 252-259.	2.6	253
24	The height of biomolecules measured with the atomic force microscope depends on electrostatic interactions. <i>Biophysical Journal</i> , 1997, 73, 1633-1644.	0.2	251
25	Control of Directed Cell Migration In Vivo by Membrane-to-Cortex Attachment. <i>PLoS Biology</i> , 2010, 8, e1000544.	2.6	231
26	AFM: A Nanotool in Membrane Biology. <i>Biochemistry</i> , 2008, 47, 7986-7998.	1.2	227
27	A new technical approach to quantify cell-cell adhesion forces by AFM. <i>Ultramicroscopy</i> , 2006, 106, 637-644.	0.8	225
28	Conformational changes in surface structures of isolated connexin 26 gap junctions. <i>EMBO Journal</i> , 2002, 21, 3598-3607.	3.5	221
29	Voltage and pH-induced channel closure of porin OmpF visualized by atomic force microscopy 1 Edited by W. Baumeister. <i>Journal of Molecular Biology</i> , 1999, 285, 1347-1351.	2.0	220
30	Atomic force microscopy and spectroscopy of native membrane proteins. <i>Nature Protocols</i> , 2007, 2, 2191-2197.	5.5	214
31	Kindlin-2 cooperates with talin to activate integrins and induces cell spreading by directly binding paxillin. <i>ELife</i> , 2016, 5, e10130.	2.8	213
32	Assembly of collagen into microribbons: effects of pH and electrolytes. <i>Journal of Structural Biology</i> , 2004, 148, 268-278.	1.3	208
33	Force-induced conformational change of bacteriorhodopsin. <i>Journal of Molecular Biology</i> , 1995, 249, 239-243.	2.0	188
34	Revealing Early Steps of $\alpha 2 \beta 1$ Integrin-mediated Adhesion to Collagen Type I by Using Single-Cell Force Spectroscopy. <i>Molecular Biology of the Cell</i> , 2007, 18, 1634-1644.	0.9	188
35	Bacterial Na ⁺ ATP synthase has an undecameric rotor. <i>EMBO Reports</i> , 2001, 2, 229-233.	2.0	185
36	Controlled unzipping of a bacterial surface layer with atomic force microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 13170-13174.	3.3	180

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37	Straight GDP-Tubulin Protofilaments Form in the Presence of Taxol. <i>Current Biology</i> , 2007, 17, 1765-1770.	1.8	179
38	Mechanism of membrane pore formation by human gasdermin α . <i>EMBO Journal</i> , 2018, 37, .	3.5	178
39	High resolution AFM topographs of the Escherichia coli water channel aquaporin Z. <i>EMBO Journal</i> , 1999, 18, 4981-4987.	3.5	176
40	The c 15 ring of the Spirulina platensis F α -ATP synthase: F 1 /F 0 symmetry mismatch is not obligatory. <i>EMBO Reports</i> , 2005, 6, 1040-1044.	2.0	173
41	Quantifying cellular adhesion to extracellular matrix components by single-cell force spectroscopy. <i>Nature Protocols</i> , 2010, 5, 1353-1361.	5.5	172
42	Nanomechanical mapping of first binding steps of a virus to animal cells. <i>Nature Nanotechnology</i> , 2017, 12, 177-183.	15.6	170
43	High resolution imaging of native biological sample surfaces using scanning probe microscopy. <i>Current Opinion in Structural Biology</i> , 1997, 7, 279-284.	2.6	163
44	Stability of Bacteriorhodopsin α -Helices and Loops Analyzed by Single-Molecule Force Spectroscopy. <i>Biophysical Journal</i> , 2002, 83, 3578-3588.	0.2	163
45	Measuring cell adhesion forces of primary gastrulating cells from zebrafish using atomic force microscopy. <i>Journal of Cell Science</i> , 2005, 118, 4199-4206.	1.2	161
46	A practical guide to quantify cell adhesion using single-cell force spectroscopy. <i>Methods</i> , 2013, 60, 169-178.	1.9	161
47	From Images to Interactions: High-Resolution Phase Imaging in Tapping-Mode Atomic Force Microscopy. <i>Biophysical Journal</i> , 2001, 80, 3009-3018.	0.2	160
48	Observing structure, function and assembly of single proteins by AFM. <i>Progress in Biophysics and Molecular Biology</i> , 2002, 79, 1-43.	1.4	155
49	Five challenges to bringing single-molecule force spectroscopy into living cells. <i>Nature Methods</i> , 2011, 8, 123-127.	9.0	155
50	Quantification of surface tension and internal pressure generated by single mitotic cells. <i>Scientific Reports</i> , 2014, 4, 6213.	1.6	151
51	A glucose-starvation response regulates the diffusion of macromolecules. <i>ELife</i> , 2016, 5, .	2.8	151
52	Surface Tongue-and-groove Contours on Lens MIP Facilitate Cell-to-cell Adherence. <i>Journal of Molecular Biology</i> , 2000, 300, 779-789.	2.0	149
53	The fuzzy coat of pathological human Tau fibrils is a two-layered polyelectrolyte brush. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E313-21.	3.3	148
54	Observing growth steps of collagen self-assembly by time-lapse high-resolution atomic force microscopy. <i>Journal of Structural Biology</i> , 2006, 154, 232-245.	1.3	145

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55	Atomic force microscopy-based characterization and design of biointerfaces. Nature Reviews Materials, 2017, 2, .	23.3	145
56	Conformational change of the hexagonally packed intermediate layer of <i>Deinococcus radiodurans</i> monitored by atomic force microscopy. Journal of Bacteriology, 1996, 178, 3025-3030.	1.0	143
57	Surface structures of native bacteriorhodopsin depend on the molecular packing arrangement in the membrane 1 Edited by W. Baumeister. Journal of Molecular Biology, 1999, 285, 1903-1909.	2.0	142
58	Cholesterol increases kinetic, energetic, and mechanical stability of the human β_2 -adrenergic receptor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3463-72.	3.3	142
59	Oligomer Formation of Tau Protein Hyperphosphorylated in Cells. Journal of Biological Chemistry, 2014, 289, 34389-34407.	1.6	132
60	Atomic force microscopy: a powerful tool to observe biomolecules at work. Trends in Cell Biology, 1999, 9, 77-80.	3.6	131
61	Cdk1-dependent mitotic enrichment of cortical myosin II promotes cell rounding against confinement. Nature Cell Biology, 2015, 17, 148-159.	4.6	131
62	Analyzing focal adhesion structure by atomic force microscopy. Journal of Cell Science, 2005, 118, 5315-5323.	1.2	129
63	Deciphering Molecular Interactions of Native Membrane Proteins by Single-Molecule Force Spectroscopy. Annual Review of Biophysics and Biomolecular Structure, 2007, 36, 233-260.	18.3	124
64	Electrostatic Cell-Surface Repulsion Initiates Lumen Formation in Developing Blood Vessels. Current Biology, 2010, 20, 2003-2009.	1.8	124
65	Atomic force microscopy of native purple membrane. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1460, 27-38.	0.5	121
66	The effect of unlocking RGD-motifs in collagen I on pre-osteoblast adhesion and differentiation. Biomaterials, 2010, 31, 2827-2835.	5.7	121
67	Rheology of the Active Cell Cortex in Mitosis. Biophysical Journal, 2016, 111, 589-600.	0.2	119
68	Molecular-scale Topographic Cues Induce the Orientation and Directional Movement of Fibroblasts on Two-dimensional Collagen Surfaces. Journal of Molecular Biology, 2005, 349, 380-386.	2.0	118
69	High-resolution atomic force microscopy and spectroscopy of native membrane proteins. Reports on Progress in Physics, 2011, 74, 086601.	8.1	118
70	Mechanism of allosteric regulation of β_2 -adrenergic receptor by cholesterol. ELife, 2016, 5, .	2.8	115
71	Unfolding pathways of native bacteriorhodopsin depend on temperature. EMBO Journal, 2003, 22, 5220-5229.	3.5	111
72	Hydrodynamic effects in fast AFM single-molecule force measurements. European Biophysics Journal, 2005, 34, 91-96.	1.2	111

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73	Movement Directionality in Collective Migration of Germ Layer Progenitors. <i>Current Biology</i> , 2010, 20, 161-169.	1.8	111
74	Fibronectin-bound $\beta 1$ integrins sense load and signal to reinforce adhesion in less than a second. <i>Nature Materials</i> , 2017, 16, 1262-1270.	13.3	109
75	Atomic Force Microscopy-Based Force Spectroscopy and Multiparametric Imaging of Biomolecular and Cellular Systems. <i>Chemical Reviews</i> , 2021, 121, 11701-11725.	23.0	109
76	Impact of holdase chaperones Skp and SurA on the folding of β -barrel outer-membrane proteins. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 795-802.	3.6	108
77	Mapping flexible protein domains at subnanometer resolution with the atomic force microscope. <i>FEBS Letters</i> , 1998, 430, 105-111.	1.3	107
78	The Oligomeric State of c Rings from Cyanobacterial F-ATP Synthases Varies from 13 to 15. <i>Journal of Bacteriology</i> , 2007, 189, 5895-5902.	1.0	106
79	Imaging G protein-coupled receptors while quantifying their ligand-binding free-energy landscape. <i>Nature Methods</i> , 2015, 12, 845-851.	9.0	106
80	Cellular Remodelling of Individual Collagen Fibrils Visualized by Time-lapse AFM. <i>Journal of Molecular Biology</i> , 2007, 372, 594-607.	2.0	105
81	A Size Barrier Limits Protein Diffusion at the Cell Surface to Generate Lipid-Rich Myelin-Membrane Sheets. <i>Developmental Cell</i> , 2011, 21, 445-456.	3.1	105
82	Scanning probe microscopy. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	103
83	Imaging streptavidin 2D crystals on biotinylated lipid monolayers at high resolution with the atomic force microscope. <i>Journal of Microscopy</i> , 1999, 193, 28-35.	0.8	102
84	Single-molecule studies of membrane proteins. <i>Current Opinion in Structural Biology</i> , 2006, 16, 489-495.	2.6	102
85	Mechanical Stimulation of Piezo1 Receptors Depends on Extracellular Matrix Proteins and Directionality of Force. <i>Nano Letters</i> , 2017, 17, 2064-2072.	4.5	100
86	Inertial picobalance reveals fast mass fluctuations in mammalian cells. <i>Nature</i> , 2017, 550, 500-505.	13.7	100
87	Controlled Unfolding and Refolding of a Single Sodium-proton Antiporter using Atomic Force Microscopy. <i>Journal of Molecular Biology</i> , 2004, 340, 1143-1152.	2.0	99
88	Surface and Subsurface Morphology of Bovine Humeral Articular Cartilage as Assessed by Atomic Force and Transmission Electron Microscopy. <i>Journal of Structural Biology</i> , 1996, 117, 45-54.	1.3	98
89	Folding and Assembly of Proteorhodopsin. <i>Journal of Molecular Biology</i> , 2008, 376, 35-41.	2.0	96
90	Human Tau Isoforms Assemble into Ribbon-like Fibrils That Display Polymorphic Structure and Stability. <i>Journal of Biological Chemistry</i> , 2010, 285, 27302-27313.	1.6	96

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91	Multiparametric high-resolution imaging of native proteins by force-distance curve-based AFM. <i>Nature Protocols</i> , 2014, 9, 1113-1130.	5.5	95
92	Atomic force microscopy: A forceful way with single molecules. <i>Current Biology</i> , 1999, 9, R133-R136.	1.8	94
93	Surface Topographies at Subnanometer-resolution Reveal Asymmetry and Sidedness of Aquaporin-1. <i>Journal of Molecular Biology</i> , 1996, 264, 907-918.	2.0	93
94	Characterizing Molecular Interactions in Different Bacteriorhodopsin Assemblies by Single-molecule Force Spectroscopy. <i>Journal of Molecular Biology</i> , 2006, 355, 640-650.	2.0	93
95	Bacteriorhodopsin Folds into the Membrane against an External Force. <i>Journal of Molecular Biology</i> , 2006, 357, 644-654.	2.0	93
96	Vertebrate Membrane Proteins: Structure, Function, and Insights from Biophysical Approaches. <i>Pharmacological Reviews</i> , 2008, 60, 43-78.	7.1	92
97	β -V-class integrins exert dual roles on β 1 integrins to strengthen adhesion to fibronectin. <i>Nature Communications</i> , 2017, 8, 14348.	5.8	92
98	Imaging the Electrostatic Potential of Transmembrane Channels: Atomic Probe Microscopy of OmpF Porin. <i>Biophysical Journal</i> , 2002, 82, 1667-1676.	0.2	90
99	Imaging and Quantifying Chemical and Physical Properties of Native Proteins at Molecular Resolution by Force-Volume AFM. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 12103-12108.	7.2	90
100	The bacteriophage phi 29 head-tail connector imaged at high resolution with the atomic force microscope in buffer solution. <i>EMBO Journal</i> , 1997, 16, 2547-2553.	3.5	89
101	Engineering rotor ring stoichiometries in the ATP synthase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E1599-608.	3.3	89
102	Fourteen Protomers Compose the Oligomer III of the Proton-rotor in Spinach Chloroplast ATP Synthase. <i>Journal of Molecular Biology</i> , 2003, 333, 337-344.	2.0	88
103	Ligand-Specific Interactions Modulate Kinetic, Energetic, and Mechanical Properties of the Human β 2 Adrenergic Receptor. <i>Structure</i> , 2012, 20, 1391-1402.	1.6	87
104	Galectin-3 Regulates Integrin β 1-mediated Adhesion to Collagen-I and -IV. <i>Journal of Biological Chemistry</i> , 2008, 283, 32264-32272.	1.6	86
105	Locating ligand binding and activation of a single antiporter. <i>EMBO Reports</i> , 2005, 6, 668-674.	2.0	85
106	Immuno-atomic force microscopy of purple membrane. <i>Biophysical Journal</i> , 1996, 70, 1796-1802.	0.2	82
107	Probing the Energy Landscape of the Membrane Protein Bacteriorhodopsin. <i>Structure</i> , 2004, 12, 871-879.	1.6	80
108	Structural Changes in Native Membrane Proteins Monitored at Subnanometer Resolution with the Atomic Force Microscope: A Review. <i>Journal of Structural Biology</i> , 1997, 119, 149-157.	1.3	79

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109	The c13 Ring from a Thermoalkaliphilic ATP Synthase Reveals an Extended Diameter Due to a Special Structural Region. <i>Journal of Molecular Biology</i> , 2009, 388, 611-618.	2.0	79
110	Mitotic cells contract actomyosin cortex and generate pressure to round against or escape epithelial confinement. <i>Nature Communications</i> , 2015, 6, 8872.	5.8	79
111	Observing Membrane Protein Diffusion at Subnanometer Resolution. <i>Journal of Molecular Biology</i> , 2003, 327, 925-930.	2.0	78
112	Stages and Conformations of the Tau Repeat Domain during Aggregation and Its Effect on Neuronal Toxicity. <i>Journal of Biological Chemistry</i> , 2014, 289, 20318-20332.	1.6	77
113	ATP synthase: constrained stoichiometry of the transmembrane rotor. <i>FEBS Letters</i> , 2001, 504, 219-222.	1.3	76
114	Contributions of Galectin-3 and -9 to Epithelial Cell Adhesion Analyzed by Single Cell Force Spectroscopy. <i>Journal of Biological Chemistry</i> , 2007, 282, 29375-29383.	1.6	76
115	Single-Cell Force Spectroscopy, an Emerging Tool to Quantify Cell Adhesion to Biomaterials. <i>Tissue Engineering - Part B: Reviews</i> , 2014, 20, 40-55.	2.5	76
116	Mechanical control of mitotic progression in single animal cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11258-11263.	3.3	76
117	The central plug in the reconstituted undecameric c cylinder of a bacterial ATP synthase consists of phospholipids. <i>FEBS Letters</i> , 2001, 505, 353-356.	1.3	75
118	The effect of raft lipid depletion on microvilli formation in MDCK cells, visualized by atomic force microscopy. <i>FEBS Letters</i> , 2004, 565, 53-58.	1.3	75
119	Membrane perforation by the pore-forming toxin pneumolysin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13352-13357.	3.3	75
120	Directly Observing the Lipid-Dependent Self-Assembly and Pore-Forming Mechanism of the Cytolytic Toxin Listeriolysin O. <i>Nano Letters</i> , 2015, 15, 6965-6973.	4.5	74
121	Conformational Adaptability of Red β during DNA Annealing and Implications for Its Structural Relationship with Rad52. <i>Journal of Molecular Biology</i> , 2009, 391, 586-598.	2.0	73
122	SAS-6 engineering reveals interdependence between cartwheel and microtubules in determining centriole Architecture. <i>Nature Cell Biology</i> , 2016, 18, 393-403.	4.6	73
123	Vaccinia virus hijacks EGFR signalling to enhance virus spread through rapid and directed infected cell motility. <i>Nature Microbiology</i> , 2019, 4, 216-225.	5.9	73
124	Studying Integrin-Mediated Cell Adhesion at the Single-Molecule Level Using AFM Force Spectroscopy. <i>Science's STKE: Signal Transduction Knowledge Environment</i> , 2007, 2007, pl5.	4.1	72
125	New frontiers in atomic force microscopy: analyzing interactions from single-molecules to cells. <i>Current Opinion in Biotechnology</i> , 2009, 20, 4-13.	3.3	72
126	Detecting Molecular Interactions that Stabilize Native Bovine Rhodopsin. <i>Journal of Molecular Biology</i> , 2006, 358, 255-269.	2.0	71

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127	Aminosulfonate Modulated pH-induced Conformational Changes in Connexin26 Hemichannels. <i>Journal of Biological Chemistry</i> , 2007, 282, 8895-8904.	1.6	71
128	Surface analysis of the photosystem I complex by electron and atomic force microscopy. <i>Journal of Molecular Biology</i> , 1998, 283, 83-94.	2.0	70
129	Sampling the conformational space of membrane protein surfaces with the AFM. <i>European Biophysics Journal</i> , 2002, 31, 172-178.	1.2	70
130	A Bond for a Lifetime: Employing Membrane Nanotubes from Living Cells to Determine Receptor-Ligand Kinetics. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 9775-9777.	7.2	70
131	YidC assists the stepwise and stochastic folding of membrane proteins. <i>Nature Chemical Biology</i> , 2016, 12, 911-917.	3.9	70
132	Atomic force bio-analytics. <i>Current Opinion in Chemical Biology</i> , 2003, 7, 641-647.	2.8	69
133	Molecular Force Modulation Spectroscopy Revealing the Dynamic Response of Single Bacteriorhodopsins. <i>Biophysical Journal</i> , 2005, 88, 1423-1431.	0.2	69
134	Multiparametric Atomic Force Microscopy Imaging of Biomolecular and Cellular Systems. <i>Accounts of Chemical Research</i> , 2017, 50, 924-931.	7.6	68
135	Single Proteins Observed by Atomic Force Microscopy. <i>Single Molecules</i> , 2001, 2, 59-67.	1.6	65
136	Creating Ultrathin Nanoscopic Collagen Matrices For Biological And Biotechnological Applications. <i>Small</i> , 2007, 3, 956-963.	5.2	65
137	Force nanoscopy of living cells. <i>Current Biology</i> , 2011, 21, R212-R216.	1.8	65
138	Wedged AFM-cantilevers for parallel plate cell mechanics. <i>Methods</i> , 2013, 60, 186-194.	1.9	65
139	The fibronectin synergy site re-enforces cell adhesion and mediates a crosstalk between integrin classes. <i>ELife</i> , 2017, 6, .	2.8	65
140	Identification and Structure of a Putative Ca ²⁺ -binding Domain at the C Terminus of AQP1. <i>Journal of Molecular Biology</i> , 2002, 318, 1381-1394.	2.0	64
141	Determining molecular forces that stabilize human aquaporin-1. <i>Journal of Structural Biology</i> , 2003, 142, 369-378.	1.3	64
142	Identifying and quantifying two ligand-binding sites while imaging native human membrane receptors by AFM. <i>Nature Communications</i> , 2015, 6, 8857.	5.8	64
143	Protein-enriched outer membrane vesicles as a native platform for outer membrane protein studies. <i>Communications Biology</i> , 2018, 1, 23.	2.0	63
144	Stabilizing Effect of Zn ²⁺ in Native Bovine Rhodopsin. <i>Journal of Biological Chemistry</i> , 2007, 282, 11377-11385.	1.6	61

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145	Deciphering Teneurin Domains That Facilitate Cellular Recognition, Cell–Cell Adhesion, and Neurite Outgrowth Using Atomic Force Microscopy-Based Single-Cell Force Spectroscopy. <i>Nano Letters</i> , 2013, 13, 2937-2946.	4.5	61
146	Force spectroscopy of single cells using atomic force microscopy. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	61
147	Charting the Surfaces of the Purple Membrane. <i>Journal of Structural Biology</i> , 1999, 128, 243-249.	1.3	60
148	Action of the Hsp70 chaperone system observed with single proteins. <i>Nature Communications</i> , 2015, 6, 6307.	5.8	58
149	Combining confocal and atomic force microscopy to quantify single-virus binding to mammalian cell surfaces. <i>Nature Protocols</i> , 2017, 12, 2275-2292.	5.5	58
150	Neurons differentiate magnitude and location of mechanical stimuli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 848-856.	3.3	58
151	Biomolecular imaging using atomic force microscopy. <i>Trends in Biotechnology</i> , 2002, 20, S45-S49.	4.9	55
152	Probing Origins of Molecular Interactions Stabilizing the Membrane Proteins Halorhodopsin and Bacteriorhodopsin. <i>Structure</i> , 2005, 13, 235-242.	1.6	54
153	Nanomechanical Properties of Proteins and Membranes Depend on Loading Rate and Electrostatic Interactions. <i>ACS Nano</i> , 2013, 7, 2642-2650.	7.3	54
154	Point Mutations in Membrane Proteins Reshape Energy Landscape and Populate Different Unfolding Pathways. <i>Journal of Molecular Biology</i> , 2008, 376, 1076-1090.	2.0	52
155	Genome-scale single-cell mechanical phenotyping reveals disease-related genes involved in mitotic rounding. <i>Nature Communications</i> , 2017, 8, 1266.	5.8	52
156	Structural evidence for a constant c11 ring stoichiometry in the sodium F-ATP synthase. <i>FEBS Journal</i> , 2005, 272, 5474-5483.	2.2	51
157	Transmembrane Helices Have Rough Energy Surfaces. <i>Journal of the American Chemical Society</i> , 2007, 129, 246-247.	6.6	50
158	Preparation techniques for the observation of native biological systems with the atomic force microscope. <i>Biosensors and Bioelectronics</i> , 1997, 12, 867-877.	5.3	49
159	Products of the Parkinson's disease-related glyoxalase DJ-1, D-lactate and glycolate, support mitochondrial membrane potential and neuronal survival. <i>Biology Open</i> , 2014, 3, 777-784.	0.6	49
160	Observing Folding Pathways and Kinetics of a Single Sodium-proton Antiporter from <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 2006, 355, 2-8.	2.0	48
161	Strategies to prepare and characterize native membrane proteins and protein membranes by AFM. <i>Current Opinion in Colloid and Interface Science</i> , 2008, 13, 338-350.	3.4	48
162	An intermediate step in the evolution of ATPases – a hybrid F ₀ –V ₀ rotor in a bacterial Na ⁺ F ₁ F ₀ ATP synthase. <i>FEBS Journal</i> , 2008, 275, 1999-2007.	2.2	48

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163	pH-Induced Conformational Change of the β -Barrel-Forming Protein OmpG Reconstituted into Native E. coli Lipids. <i>Journal of Molecular Biology</i> , 2010, 396, 610-616.	2.0	48
164	Localizing Chemical Groups while Imaging Single Native Proteins by High-Resolution Atomic Force Microscopy. <i>Nano Letters</i> , 2014, 14, 2957-2964.	4.5	48
165	Gating of the MlotiK1 potassium channel involves large rearrangements of the cyclic nucleotide-binding domains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 20802-20807.	3.3	47
166	Single-Molecule Force Spectroscopy from Nanodiscs: An Assay to Quantify Folding, Stability, and Interactions of Native Membrane Proteins. <i>ACS Nano</i> , 2012, 6, 961-971.	7.3	47
167	Out but Not In: The Large Transmembrane β -Barrel Protein FhuA Unfolds but Cannot Refold via β -Hairpins. <i>Structure</i> , 2012, 20, 2185-2190.	1.6	47
168	Kinetic, Energetic, and Mechanical Differences between Dark-State Rhodopsin and Opsin. <i>Structure</i> , 2013, 21, 426-437.	1.6	47
169	Free Energy of Membrane Protein Unfolding Derived from Single-Molecule Force Measurements. <i>Biophysical Journal</i> , 2007, 93, 930-937.	0.2	45
170	Tracking mechanics and volume of globular cells with atomic force microscopy using a constant-height clamp. <i>Nature Protocols</i> , 2012, 7, 143-154.	5.5	45
171	Isolation and characterization of gap junctions from tissue culture cells 1 Edited by W. Baumeister. <i>Journal of Molecular Biology</i> , 2002, 315, 587-600.	2.0	44
172	Competing Interactions Stabilize Pro- and Anti-aggregant Conformations of Human Tau. <i>Journal of Biological Chemistry</i> , 2011, 286, 20512-20524.	1.6	44
173	Creating nanoscopic collagen matrices using atomic force microscopy. <i>Microscopy Research and Technique</i> , 2004, 64, 435-440.	1.2	43
174	From Valleys to Ridges: Exploring the Dynamic Energy Landscape of Single Membrane Proteins. <i>ChemPhysChem</i> , 2008, 9, 954-966.	1.0	43
175	Mechanical Properties of Bovine Rhodopsin and Bacteriorhodopsin: Possible Roles in Folding and Function. <i>Langmuir</i> , 2008, 24, 1330-1337.	1.6	43
176	Probing the Interactions of Carboxy-atractyloside and Attractyloside with the Yeast Mitochondrial ADP/ATP Carrier. <i>Structure</i> , 2010, 18, 39-46.	1.6	42
177	Differentiating Ligand and Inhibitor Interactions of a Single Antiporter. <i>Journal of Molecular Biology</i> , 2006, 362, 925-932.	2.0	41
178	Substrate-induced changes in the structural properties of LacY. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E1571-80.	3.3	40
179	Nonlinear mechanics of lamin filaments and the meshwork topology build an emergent nuclear lamina. <i>Nature Communications</i> , 2020, 11, 6205.	5.8	40
180	Actin microridges characterized by laser scanning confocal and atomic force microscopy. <i>FEBS Letters</i> , 2005, 579, 2001-2008.	1.3	39

#	ARTICLE	IF	CITATIONS
181	Dynamic coupling of ALCAM to the actin cortex strengthens cell adhesion to CD6. <i>Journal of Cell Science</i> , 2014, 127, 1595-606.	1.2	39
182	Unraveling the Pore-Forming Steps of Pneumolysin from <i>Streptococcus pneumoniae</i> . <i>Nano Letters</i> , 2016, 16, 7915-7924.	4.5	39
183	Virus stamping for targeted single-cell infection in vitro and in vivo. <i>Nature Biotechnology</i> , 2018, 36, 81-88.	9.4	39
184	Imaging and detecting molecular interactions of single transmembrane proteins. <i>Neurobiology of Aging</i> , 2006, 27, 546-561.	1.5	38
185	One Hairpin after the Other: Exploring Mechanical Unfolding Pathways of the Transmembrane Barrel Protein OmpC. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8306-8308.	7.2	38
186	The Transmembrane Protein KpOmpA Anchoring the Outer Membrane of <i>Klebsiella pneumoniae</i> Unfolds and Refolds in Response to Tensile Load. <i>Structure</i> , 2012, 20, 121-127.	1.6	38
187	Optimized reconstitution of membrane proteins into synthetic membranes. <i>Communications Chemistry</i> , 2018, 1, .	2.0	38
188	Electron and atomic force microscopy of membrane proteins. <i>Current Opinion in Structural Biology</i> , 1997, 7, 543-549.	2.6	37
189	BCR/ABL Expression of Myeloid Progenitors Increases β 1-Integrin Mediated Adhesion to Stromal Cells. <i>Journal of Molecular Biology</i> , 2008, 377, 1082-1093.	2.0	37
190	pH-Dependent Interactions Guide the Folding and Gate the Transmembrane Pore of the β -Barrel Membrane Protein OmpC. <i>Journal of Molecular Biology</i> , 2010, 397, 878-882.	2.0	37
191	Reversible loss of crystallinity on photobleaching purple membrane in the presence of hydroxylamine 1 Edited by W. Baumeister. <i>Journal of Molecular Biology</i> , 2000, 301, 869-879.	2.0	36
192	Substrate Binding Tunes Conformational Flexibility and Kinetic Stability of an Amino Acid Antiporter. <i>Journal of Biological Chemistry</i> , 2009, 284, 18651-18663.	1.6	36
193	Molecular Plasticity of the Human Voltage-Dependent Anion Channel Embedded Into a Membrane. <i>Structure</i> , 2016, 24, 585-594.	1.6	36
194	Stimulated single-cell force spectroscopy to quantify cell adhesion receptor crosstalk. <i>Proteomics</i> , 2010, 10, 1455-1462.	1.3	35
195	Assessing the structure and function of single biomolecules with scanning transmission electron and atomic force microscopes. <i>Micron</i> , 2011, 42, 186-195.	1.1	34
196	Quantitative Imaging of the Electrostatic Field and Potential Generated by a Transmembrane Protein Pore at Subnanometer Resolution. <i>Nano Letters</i> , 2013, 13, 5585-5593.	4.5	34
197	Automated alignment and pattern recognition of single-molecule force spectroscopy data. <i>Journal of Microscopy</i> , 2005, 218, 125-132.	0.8	33
198	Alignment and Cell-Matrix Interactions of Human Corneal Endothelial Cells on Nanostructured Collagen Type I Matrices. , 2010, 51, 6303.		33

#	ARTICLE	IF	CITATIONS
199	Locating an extracellular K ⁺ -dependent interaction site that modulates betaine-binding of the Na ⁺ -coupled betaine symporter BetP. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E890-8.	3.3	33
200	Insertion and folding pathways of single membrane proteins guided by translocases and insertases. Science Advances, 2019, 5, eaau6824.	4.7	33
201	Fully automated single-molecule force spectroscopy for screening applications. Nanotechnology, 2008, 19, 384020.	1.3	32
202	One Î ² Hairpin Follows the Other: Exploring Refolding Pathways and Kinetics of the Transmembrane Î ² -Barrel Protein OmpG. Angewandte Chemie - International Edition, 2011, 50, 7422-7424.	7.2	32
203	Observing a Lipid-Dependent Alteration in Single Lactose Permeases. Structure, 2015, 23, 754-761.	1.6	32
204	Proton gradients from light-harvesting E. coli control DNA assemblies for synthetic cells. Nature Communications, 2021, 12, 3967.	5.8	32
205	Modulation of Molecular Interactions and Function by Rhodopsin Palmitylation. Biochemistry, 2009, 48, 4294-4304.	1.2	31
206	Reversible Cation-Selective Attachment and Self-Assembly of Human Tau on Supported Brain Lipid Membranes. Nano Letters, 2018, 18, 3271-3281.	4.5	31
207	Imaging in Biologically-Relevant Environments with AFM Using Stiff qPlus Sensors. Scientific Reports, 2018, 8, 9330.	1.6	31
208	An Approach To Prepare Membrane Proteins for Single-Molecule Imaging. Angewandte Chemie - International Edition, 2006, 45, 3252-3256.	7.2	30
209	A novel pattern recognition algorithm to classify membrane protein unfolding pathways with high-throughput single-molecule force spectroscopy. Bioinformatics, 2007, 23, e231-e236.	1.8	30
210	Transducer Binding Establishes Localized Interactions to Tune Sensory Rhodopsin II. Structure, 2008, 16, 1206-1213.	1.6	30
211	Examining the Dynamic Energy Landscape of an Antiporter upon Inhibitor Binding. Journal of Molecular Biology, 2008, 375, 1258-1266.	2.0	30
212	Single-Molecule Force Spectroscopy of Membrane Proteins from Membranes Freely Spanning Across Nanoscopic Pores. Nano Letters, 2015, 15, 3624-3633.	4.5	30
213	Kin discrimination in social yeast is mediated by cell surface receptors of the Flo11 adhesin family. ELife, 2020, 9, .	2.8	30
214	High-throughput single-molecule force spectroscopy for membrane proteins. Nanotechnology, 2008, 19, 384014.	1.3	29
215	Flexible, actin-based ridges colocalise with the Î ²¹ integrin on the surface of melanoma cells. British Journal of Cancer, 2005, 92, 1499-1505.	2.9	28
216	TPA primes Î ²¹ integrins for cell adhesion. FEBS Letters, 2008, 582, 3520-3524.	1.3	28

#	ARTICLE	IF	CITATIONS
217	Assay for characterizing the recovery of vertebrate cells for adhesion measurements by single-cell force spectroscopy. <i>FEBS Letters</i> , 2014, 588, 3639-3648.	1.3	28
218	Detecting Ligand-Binding Events and Free Energy Landscape while Imaging Membrane Receptors at Subnanometer Resolution. <i>Nano Letters</i> , 2017, 17, 3261-3269.	4.5	28
219	Force probing cell shape changes to molecular resolution. <i>Trends in Biochemical Sciences</i> , 2011, 36, 444-450.	3.7	27
220	Seeing a Molecular Motor at Work. <i>Science</i> , 2011, 333, 704-705.	6.0	27
221	Single-molecule force spectroscopy of G-protein-coupled receptors. <i>Chemical Society Reviews</i> , 2013, 42, 7801.	18.7	27
222	Monitoring Backbone Hydrogen Bond Formation in β -Barrel Membrane Protein Folding. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5952-5955.	7.2	27
223	Narrow-band UVB-induced Externalization of Selected Nuclear Antigens in Keratinocytes: Implications for Lupus Erythematosus Pathogenesis. <i>Photochemistry and Photobiology</i> , 2009, 85, 1-7.	1.3	26
224	Conservation of Molecular Interactions Stabilizing Bovine and Mouse Rhodopsin. <i>Biochemistry</i> , 2010, 49, 10412-10420.	1.2	26
225	Structural, Energetic, and Mechanical Perturbations in Rhodopsin Mutant That Causes Congenital Stationary Night Blindness. <i>Journal of Biological Chemistry</i> , 2012, 287, 21826-21835.	1.6	26
226	Peptide transporter DtpA has two alternate conformations, one of which is promoted by inhibitor binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E3978-86.	3.3	25
227	Increasing throughput of AFM-based single cell adhesion measurements through multisubstrate surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 157-166.	1.5	25
228	Gasdermin-A3 pore formation propagates along variable pathways. <i>Nature Communications</i> , 2022, 13, 2609.	5.8	25
229	Direct measurement of single-molecule visco-elasticity in atomic force microscope force-extension experiments. <i>European Biophysics Journal</i> , 2006, 35, 287-292.	1.2	24
230	Monitoring the antibiotic darobactin modulating the β -barrel assembly factor BamA. <i>Structure</i> , 2022, 30, 350-359.e3.	1.6	24
231	Conformations of the rhodopsin third cytoplasmic loop grafted onto bacteriorhodopsin. <i>Structure</i> , 2000, 8, 643-653.	1.6	23
232	Role of Extracellular Glutamic Acids in the Stability and Energy Landscape of Bacteriorhodopsin. <i>Biophysical Journal</i> , 2008, 95, 3407-3418.	0.2	23
233	A Force Buffer-Protecting Immunoglobulin Titin. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 3528-3531.	7.2	23
234	High-Resolution Imaging and Multiparametric Characterization of Native Membranes by Combining Confocal Microscopy and an Atomic Force Microscopy-Based Toolbox. <i>ACS Nano</i> , 2017, 11, 8292-8301.	7.3	23

#	ARTICLE	IF	CITATIONS
235	Fusion Domains Guide the Oriented Insertion of Light-Driven Proton Pumps into Liposomes. <i>Biophysical Journal</i> , 2017, 113, 1181-1186.	0.2	23
236	Scanning tunnelling microscopy observations of biomolecules on layered materials. <i>Faraday Discussions</i> , 1992, 94, 183-197.	1.6	22
237	Surface morphology and mechanical properties of fibroblasts from scleroderma patients. <i>Journal of Cellular and Molecular Medicine</i> , 2009, 13, 1644-1652.	1.6	22
238	α -V-Integrins Are Required for Mechanotransduction in MDCK Epithelial Cells. <i>PLoS ONE</i> , 2013, 8, e71485.	1.1	22
239	Maltoporin LamB Unfolds β Hairpins along Mechanical Stress-Dependent Unfolding Pathways. <i>Structure</i> , 2017, 25, 1139-1144.e2.	1.6	22
240	Structure and function of the glucose PTS transporter from <i>Escherichia coli</i> . <i>Journal of Structural Biology</i> , 2011, 176, 395-403.	1.3	21
241	Engineering a Chemical Switch into the Light-Driven Proton Pump Proton Rhodopsin by Cysteine Mutagenesis and Thiol Modification. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8846-8849.	7.2	21
242	Single-Molecule Force Spectroscopy of Transmembrane β -Barrel Proteins. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 375-395.	2.8	21
243	Detecting molecular interactions that stabilize, activate and guide ligand-binding of the sodium/proton antiporter MjNhaP1 from <i>Methanococcus jannaschii</i> . <i>Journal of Structural Biology</i> , 2007, 159, 290-301.	1.3	20
244	The biomechanical properties of an epithelial tissue determine the location of its vasculature. <i>Nature Communications</i> , 2016, 7, 13560.	5.8	20
245	Protease-activated receptor signalling initiates α 5 β 1-integrin-mediated adhesion in non-haematopoietic cells. <i>Nature Materials</i> , 2020, 19, 218-226.	13.3	20
246	Atomic Force Microscopy of Biological Samples. <i>MRS Bulletin</i> , 2004, 29, 449-455.	1.7	19
247	Rheology of rounded mammalian cells over continuous high-frequencies. <i>Nature Communications</i> , 2021, 12, 2922.	5.8	19
248	In PC3 prostate cancer cells ephrin receptors crosstalk to β 1-integrins to strengthen adhesion to collagen type I. <i>Scientific Reports</i> , 2015, 5, 8206.	1.6	18
249	Seeing and sensing single G protein-coupled receptors by atomic force microscopy. <i>Current Opinion in Cell Biology</i> , 2019, 57, 25-32.	2.6	18
250	Pull-and-Paste of Single Transmembrane Proteins. <i>Nano Letters</i> , 2017, 17, 4478-4488.	4.5	17
251	α -v-Class integrin binding to fibronectin is solely mediated by RGD and unaffected by an RGE mutation. <i>Journal of Cell Biology</i> , 2020, 219, .	2.3	17
252	Conformations, Flexibility, and Interactions Observed on Individual Membrane Proteins by Atomic Force Microscopy. <i>Methods in Cell Biology</i> , 2002, 68, 257-299.	0.5	16

#	ARTICLE	IF	CITATIONS
253	Observing the growth of individual actin filaments in cell extracts by time-lapse atomic force microscopy. <i>FEBS Letters</i> , 2003, 551, 25-28.	1.3	16
254	Structural alterations provoked by narrow-band ultraviolet B in immortalized keratinocytes: assessment by atomic force microscopy. <i>Experimental Dermatology</i> , 2007, 16, 1007-1015.	1.4	16
255	Observing fibrillar assemblies on scrapie-infected cells. <i>Pflugers Archiv European Journal of Physiology</i> , 2008, 456, 83-93.	1.3	16
256	Dual energy landscape: The functional state of the β -barrel outer membrane protein G molds its unfolding energy landscape. <i>Proteomics</i> , 2010, 10, 4151-4162.	1.3	16
257	How To Minimize Artifacts in Atomistic Simulations of Membrane Proteins, Whose Crystal Structure Is Heavily Engineered: β -Adrenergic Receptor in the Spotlight. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 3432-3445.	2.3	16
258	Spatiotemporally Controlled Myosin Relocalization and Internal Pressure Generate Sibling Cell Size Asymmetry. <i>IScience</i> , 2019, 13, 9-19.	1.9	16
259	Monitoring the binding and insertion of a single transmembrane protein by an insertase. <i>Nature Communications</i> , 2021, 12, 7082.	5.8	16
260	DNA annealing by Red β is insufficient for homologous recombination and the additional requirements involve intra- and inter-molecular interactions. <i>Scientific Reports</i> , 2016, 6, 34525.	1.6	15
261	Mechanistic Explanation of Different Unfolding Behaviors Observed for Transmembrane and Soluble β -Barrel Proteins. <i>Structure</i> , 2013, 21, 1317-1324.	1.6	14
262	Sampling effects influence heights measured with atomic force microscopy. <i>Journal of Microscopy</i> , 2002, 207, 43-51.	0.8	13
263	Membrane proteins scrambling through a folding landscape. <i>Science</i> , 2017, 355, 907-908.	6.0	13
264	Structural Properties of the Human Protease-Activated Receptor 1 Changing by a Strong Antagonist. <i>Structure</i> , 2018, 26, 829-838.e4.	1.6	13
265	Lipids and Phosphorylation Conjointly Modulate Complex Formation of β -Adrenergic Receptor and β -arrestin2. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 807913.	1.8	13
266	Direct Observation of Reverse Transcriptases by Scanning Tunneling Microscopy. <i>AIDS Research and Human Retroviruses</i> , 1992, 8, 1663-1667.	0.5	12
267	Out and In: Simplifying Membrane Protein Studies by AFM. <i>Biophysical Journal</i> , 2006, 91, 3133-3134.	0.2	11
268	Oscillatory Switches of Dorso-Ventral Polarity in Cells Confined between Two Surfaces. <i>Biophysical Journal</i> , 2018, 115, 150-162.	0.2	11
269	Dynamic Single-Molecule Force Spectroscopy of Rhodopsin in Native Membranes. <i>Methods in Molecular Biology</i> , 2015, 1271, 173-185.	0.4	11
270	Digital force-feedback for protein unfolding experiments using atomic force microscopy. <i>Nanotechnology</i> , 2007, 18, 044022.	1.3	10

#	ARTICLE	IF	CITATIONS
271	Engineering and Assembly of Protein Modules into Functional Molecular Systems. <i>Chimia</i> , 2016, 70, 398.	0.3	10
272	Studying Collagen Self-Assembly by Time-Lapse High-Resolution Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2011, 736, 97-107.	0.4	10
273	Retinal Pigment Epithelium Cell Alignment on Nanostructured Collagen Matrices. <i>Cells Tissues Organs</i> , 2011, 194, 443-456.	1.3	9
274	Toward high-throughput biomechanical phenotyping of single molecules. <i>Nature Methods</i> , 2015, 12, 45-46.	9.0	9
275	POTRA Domains, Extracellular Lid, and Membrane Composition Modulate the Conformational Stability of the I ² Barrel Assembly Factor BamA. <i>Structure</i> , 2018, 26, 987-996.e3.	1.6	9
276	Atomic force microscopy as a multifunctional molecular toolbox in nanobiotechnology. , 2009, , 269-277.		8
277	High-Resolution Imaging of Maltoporin LamB while Quantifying the Free-Energy Landscape and Asymmetry of Sugar Binding. <i>Nano Letters</i> , 2019, 19, 6442-6453.	4.5	8
278	Conformational Plasticity of Human Protease-Activated Receptor 1 upon Antagonist- and Agonist-Binding. <i>Structure</i> , 2019, 27, 1517-1526.e3.	1.6	8
279	Design and assembly of a chemically switchable and fluorescently traceable light-driven proton pump system for bionanotechnological applications. <i>Scientific Reports</i> , 2019, 9, 1046.	1.6	8
280	High-resolution mass measurements of single budding yeast reveal linear growth segments. <i>Nature Communications</i> , 2022, 13, .	5.8	8
281	A cholesterol analog stabilizes the human I ² -adrenergic receptor nonlinearly with temperature. <i>Science Signaling</i> , 2022, 15, .	1.6	8
282	Investigating Fibrillar Aggregates of Tau Protein by Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2012, 849, 169-183.	0.4	7
283	Magnetically guided virus stamping for the targeted infection of single cells or groups of cells. <i>Nature Protocols</i> , 2019, 14, 3205-3219.	5.5	7
284	Analysis assistant for single-molecule force spectroscopy data on membrane proteins--MPTV. <i>Bioinformatics</i> , 2006, 22, 1796-1799.	1.8	6
285	Scanning tunnelling microscopy observation of atomic structures on silicon (100) surface in air. <i>Electrochimica Acta</i> , 1993, 38, 1367-1371.	2.6	5
286	Complex Stability of Single Proteins Explored by Forced Unfolding Experiments. <i>Biophysical Journal</i> , 2005, 88, L37-L39.	0.2	5
287	Quantifying Cellular Adhesion to Covalently Immobilized Extracellular Matrix Proteins by Single-Cell Force Spectroscopy. <i>Methods in Molecular Biology</i> , 2013, 1046, 19-37.	0.4	5
288	Use of molybdenum telluride as a substrate for the imaging of biological molecules during scanning tunnelling microscopy. <i>Analyst, The</i> , 1994, 119, 727-734.	1.7	4

#	ARTICLE	IF	CITATIONS
289	High-Resolution Imaging of 2D Outer Membrane Protein F Crystals by Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2013, 955, 461-474.	0.4	4
290	Monitoring Backbone Hydrogen-Bond Formation in β -Barrel Membrane Protein Folding. <i>Angewandte Chemie</i> , 2016, 128, 6056-6059.	1.6	4
291	Conformational Changes, Flexibilities and Intramolecular Forces Observed on Individual Proteins Using AFM. <i>Single Molecules</i> , 2000, 1, 115-118.	1.6	3
292	Engineering a Chemical Switch into the Light-driven Proton Pump Proteorhodopsin by Cysteine Mutagenesis and Thiol Modification. <i>Angewandte Chemie</i> , 2016, 128, 8992-8995.	1.6	3
293	Atomic Force Microscopy to Study Mechanics of Living Mitotic Mammalian Cells. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 08LA01.	0.8	3
294	Microbial Surfaces Investigated Using Atomic Force Microscopy. <i>Methods in Microbiology</i> , 2004, 34, 163-197.	0.4	2
295	Characterizing folding, structure, molecular interactions and ligand gated activation of single sodium/proton antiporters. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2006, 372, 400-412.	1.4	2
296	Force Generation: ATP-Powered Proteasomes Pull the Rope. <i>Current Biology</i> , 2011, 21, R427-R430.	1.8	2
297	Folding, Structure and Function of Biological Nanomachines Examined by AFM. <i>AIP Conference Proceedings</i> , 2003, , .	0.3	1
298	Corrigendum to "TPA primes β 1 integrins for cell adhesion" [FEBS Lett. 582 (2009) 3520-3524]. <i>FEBS Letters</i> , 2008, 582, 3966-3966.	1.3	1
299	Atomic Force Microscopy to Study Mechanics of Living Mitotic Mammalian Cells. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 08LA01.	0.8	1
300	Cells Stiffen for Cytokines. <i>Cell Chemical Biology</i> , 2018, 25, 495-496.	2.5	1
301	Reply to Desikan et al.: Micelle formation among various mechanisms of toxin pore formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 5109-5110.	3.3	1
302	Atomic Force Microscopy Provides Molecular Details of Cell Surfaces. <i>Principles and Practice</i> , 1998, , 1-31.	0.3	1
303	A Novel Preparation Method for High Resolution AFM Introduced With 2d-Streptavidin Crystals Grown on a Biotinlipid Monolayer. <i>Microscopy and Microanalysis</i> , 1998, 4, 312-313.	0.2	0
304	Structure, Flexibility and Intramolecular Forces Observed on Individual Proteins Using Afm. <i>Microscopy and Microanalysis</i> , 1999, 5, 996-997.	0.2	0
305	Cellular dynamics observed at sub-nanometer resolution using atomic force microscopy. <i>Microscopy and Microanalysis</i> , 2002, 8, 892-893.	0.2	0
306	Author Response: Effects of Fibroblastic and Endothelial Extracellular Matrices on Corneal Endothelial Cells. , 2010, 51, 6906.		0

#	ARTICLE	IF	CITATIONS
307	Biofunctionalization of Surfaces Using Ultrathin Nanoscopic Collagen Matrices. , 2012, , 427-441.		0
308	Editorial: Scanning Probe Microscopies and Related Methods in Biology. Frontiers in Molecular Biosciences, 2021, 8, 657939.	1.6	0
309	A Structure-Based Analysis of Single Molecule Force Spectroscopy (SMFS) Data for Bacteriorhodopsin and Four Mutants. Lecture Notes in Computer Science, 2006, , 162-172.	1.0	0
310	Single-Molecule Microscopy and Force Spectroscopy of Membrane Proteins. Springer Series in Biophysics, 2008, , 279-311.	0.4	0
311	Probing Single Membrane Proteins by Atomic Force Microscopy. , 2009, , 449-485.		0
312	Rasterkraftmikroskopie. , 2022, , 601-610.		0