

Hermann J Gruber

List of Publications by Year in descending order

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70
papers

4,030
citations

136950

32
h-index

114465

63
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71
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71
docs citations

71
times ranked

4445
citing authors

#	ARTICLE	IF	CITATIONS
1	Quick measurement of protein sulfhydryls with Ellman's reagent and with 4,4'-dithiodipyridine. <i>Analytical and Bioanalytical Chemistry</i> , 2002, 373, 266-276.	3.7	482
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	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
4	Simultaneous Height and Adhesion Imaging of Antibody-Antigen Interactions by Atomic Force Microscopy. <i>Biophysical Journal</i> , 1998, 75, 2220-2228.	0.5	198
5	Simple test system for single molecule recognition force microscopy. <i>Analytica Chimica Acta</i> , 2003, 479, 59-75.	5.4	192
6	Molecular Recognition Imaging and Force Spectroscopy of Single Biomolecules. <i>Accounts of Chemical Research</i> , 2006, 39, 29-36.	15.6	181
7	Comparison of different aminofunctionalization strategies for attachment of single antibodies to AFM cantilevers. <i>Ultramicroscopy</i> , 2007, 107, 922-927.	1.9	172
8	Simultaneous Topography and Recognition Imaging Using Force Microscopy. <i>Biophysical Journal</i> , 2004, 87, 1981-1990.	0.5	169
9	Sodium citrate: A universal reducing agent for reduction / decoration of graphene oxide with Au nanoparticles. <i>Nano Research</i> , 2011, 4, 599-611.	10.4	160
10	Linking of Sensor Molecules with Amino Groups to Amino-Functionalized AFM Tips. <i>Bioconjugate Chemistry</i> , 2011, 22, 1239-1248.	3.6	145
11	Immobilizing the Moving Parts of Voltage-Gated Ion Channels. <i>Journal of General Physiology</i> , 2000, 116, 461-476.	1.9	129
12	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. <i>Single Molecules</i> , 2000, 1, 59-65.	0.9	111
13	Local Stoichiometries Determined by Counting Individual Molecules. <i>Analytical Chemistry</i> , 1996, 68, 4397-4401.	6.5	106
14	IgGs are made for walking on bacterial and viral surfaces. <i>Nature Communications</i> , 2014, 5, 4394.	12.8	97
15	Synthesis and Applications of a New Poly(ethylene glycol) Derivative for the Crosslinking of Amines with Thiols. <i>Bioconjugate Chemistry</i> , 1995, 6, 242-248.	3.6	93
16	Antibody Linking to Atomic Force Microscope Tips via Disulfide Bond Formation. <i>Bioconjugate Chemistry</i> , 2006, 17, 1473-1481.	3.6	87
17	Poly(Ethylene Glycol): An Ideal Spacer for Molecular Recognition Force Microscopy/Spectroscopy.. <i>Single Molecules</i> , 2000, 1, 99-103.	0.9	83
18	Heterobifunctional crosslinkers for tethering single ligand molecules to scanning probes. <i>Analytica Chimica Acta</i> , 2003, 497, 101-114.	5.4	82

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19	3D Imaging of Individual Ion Channels in Live Cells at 40nm Resolution. <i>Single Molecules</i> , 2000, 1, 25-31.	0.9	79
20	Structure, cell wall elasticity and polysaccharide properties of living yeast cells, as probed by AFM. <i>Nanotechnology</i> , 2008, 19, 384005.	2.6	76
21	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
22	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
23	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
24	Curli mediate bacterial adhesion to fibronectin via tensile multiple bonds. <i>Scientific Reports</i> , 2016, 6, 33909.	3.3	50
25	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
26	Molecular Determinants within N Terminus of Orai3 Protein That Control Channel Activation and Gating. <i>Journal of Biological Chemistry</i> , 2011, 286, 31565-31575.	3.4	44
27	Communication between N terminus and loop2 tunes Orai activation. <i>Journal of Biological Chemistry</i> , 2018, 293, 1271-1285.	3.4	44
28	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
29	Preparation of Thiol-Reactive Cy5 Derivatives from Commercial Cy5 Succinimidyl Ester. <i>Bioconjugate Chemistry</i> , 2000, 11, 161-166.	3.6	36
30	Basic Studies on Heterobifunctional Biotin-PEG Conjugates with a 3-(4-Pyridyldithio)propionyl Marker on the Second Terminus. <i>Bioconjugate Chemistry</i> , 1997, 8, 545-551.	3.6	35
31	Oriented Binding of the His6-Tagged Carboxyl-Tail of the L-type Ca ²⁺ Channel α_1 -Subunit to a New NTA-Functionalized Self-Assembled Monolayer. <i>Langmuir</i> , 2004, 20, 5885-5890.	3.5	33
32	Protein-Resistant Self-Assembled Monolayers on Gold with Latent Aldehyde Functions. <i>Langmuir</i> , 2007, 23, 5571-5577.	3.5	32
33	Nanopharmacological Force Sensing to Reveal Allosteric Coupling in Transporter Binding Sites. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1719-1722.	13.8	29
34	Switchavidin: Reversible Biotin-Avidin Biotin Bridges with High Affinity and Specificity. <i>Bioconjugate Chemistry</i> , 2014, 25, 2233-2243.	3.6	28
35	Unbinding Molecular Recognition Force Maps of Localized Single Receptor Molecules by Atomic Force Microscopy. <i>ChemPhysChem</i> , 2008, 9, 590-599.	2.1	27
36	Action of calpastatin in prevention of cardiac L-type Ca ²⁺ channel run-down cannot be mimicked by synthetic calpain inhibitors. <i>Pflugers Archiv European Journal of Physiology</i> , 1995, 429, 503-510.	2.8	25

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37	The relaxational behavior of self-associated 6-methylpurine. <i>Journal of the American Chemical Society</i> , 1984, 106, 2239-2242.	13.7	17
38	Dithio-Phospholipids for Biospecific Immobilization of Proteins on Gold Surfaces. <i>Single Molecules</i> , 2002, 3, 119-125.	0.9	17
39	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
40	Control of Ligand-Binding Specificity Using Photocleavable Linkers in AFM Force Spectroscopy. <i>Nano Letters</i> , 2020, 20, 4038-4042.	9.1	17
41	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
42	Reversible Biofunctionalization of Surfaces with a Switchable Mutant of Avidin. <i>Bioconjugate Chemistry</i> , 2013, 24, 1656-1668.	3.6	14
43	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
44	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
45	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
46	Accuracy Estimation in Force Spectroscopy Experiments. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 5536.	1.5	10
47	Regenerative biosensor chips based on switchable mutants of avidin – A systematic study. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 646-654.	7.8	8
48	Pragmatic Studies on Protein-Resistant Self-Assembled Monolayers. <i>Monatshefte für Chemie</i> , 2007, 138, 245-252.	1.8	7
49	Single-Molecule Analysis of the Recognition Forces Underlying Nucleocytoplasmic Transport. <i>Angewandte Chemie</i> , 2013, 125, 10546-10549.	2.0	7
50	Stable Europium(III) Complexes with Short Linkers for Site-Specific Labeling of Biomolecules. <i>ChemistryOpen</i> , 2017, 6, 721-732.	1.9	7
51	Regenerative biosensor for use with biotinylated bait molecules. <i>Biosensors and Bioelectronics</i> , 2018, 99, 684-690.	10.1	7
52	Dithio-phospholipids for oriented immobilization of proteins to gold surfaces. <i>Tetrahedron Letters</i> , 2001, 42, 2677-2680.	1.4	6
53	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
54	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

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55	Competitive binding assay for biotin and biotin derivatives, based on avidin and biotin-4-fluorescein. <i>Methods in Enzymology</i> , 2020, 633, 1-20.	1.0	5
56	Probing the Energy Landscape of Protein-Binding Reactions by Dynamic Force Spectroscopy. , 2009, , 407-447.		5
57	Atomic Force Microscopy Studies of Human Rhinovirus. <i>Methods in Enzymology</i> , 2010, 475, 515-539.	1.0	4
58	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
59	Nanopharmacological Force Sensing to Reveal Allosteric Coupling in Transporter Binding Sites. <i>Angewandte Chemie</i> , 2016, 128, 1751-1754.	2.0	3
60	3D Imaging of Individual Ion Channels in Live Cells at 40nm Resolution. <i>Single Molecules</i> , 2000, 1, 25-31.	0.9	3
61	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2010, , 763-785.		3
62	Poly(Ethylene Glycol): An Ideal Spacer for Molecular Recognition Force Microscopy/Spectroscopy.. <i>Single Molecules</i> , 2000, 1, 99-103.	0.9	2
63	Molecular Recognition Force Microscopy: From Molecular Bonds to Complex Energy Landscapes. , 2011, , 355-387.		2
64	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. , 2000, 1, 59.		1
65	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. , 2000, 1, 59.		1
66	Recognition Force Spectroscopy Studies of the NTA-His6 Bond. <i>Single Molecules</i> , 2000, 1, 59-65.	0.9	1
67	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. <i>Nanoscience and Technology</i> , 2007, , 101-125.	1.5	1
68	Dynamic Force Microscopy and Spectroscopy. <i>Nanoscience and Technology</i> , 2006, , 143-164.	1.5	0
69	Multiple Evidenz für einen ungewöhnlichen Wechselwirkungsmodus zwischen Calmodulin und Orai-Proteinen. <i>Angewandte Chemie</i> , 2017, 129, 15962-15967.	2.0	0
70	Single-Molecule Studies on Cells and Membranes Using the Atomic Force Microscope. , 2010, , 479-503.		0