Harald Janovjak

List of Publications by Year
in descending order

71 papers	3,738 citations	172457 29 h-index	128289 60 g-index
80 all docs	80 docs citations	80 times ranked	4568 citing authors

#	Article	IF	Citations
1	Optogenetic neuroregeneration. Neural Regeneration Research, 2022, 17, 1468.	3.0	1
2	Light-activated receptor tyrosine kinases: Designs and applications. Current Opinion in Pharmacology, 2022, 63, 102197.	3.5	3
3	Structure-guided optimization of light-activated chimeric G-protein-coupled receptors. Structure, 2022, 30, 1075-1087.e4.	3.3	9
4	Optogenetic delivery of trophic signals in a genetic model of Parkinsonâ€™s disease. PLoS Genetics, 2021, 17, e1009479.	3.5	11
5	Formation of Kiss1R/GPER Heterocomplexes Negatively Regulates Kiss1R-mediated Signalling through Limiting Receptor Cell Surface Expression. Journal of Molecular Biology, 2021, 433, 166843.	4.2	4
6	Microbial methionine transporters and biotechnological applications. Applied Microbiology and Biotechnology, 2021, 105, 3919-3929.	3.6	9
7	A Light-Oxygen-Voltage Receptor Integrates Light and Temperature. Journal of Molecular Biology, 2021, 433, 167107.	4.2	20
8	Acute and chronic effects of a light-activated FGF receptor in keratinocytes in vitro and in mice. Life Science Alliance, 2021, 4, e202101100.	2.8	5
9	A Rationally and Computationally Designed Fluorescent Biosensor for <scp>d</scp>-Serine. ACS Sensors, 2021, 6, 4193-4205.	7.8	8
10	LTP Induction Boosts Glutamate Spillover by Driving Withdrawal of Perisynaptic Astroglia. Neuron, 2020, 108, 919-936.e11.	8.1	159
11	Design and Application of Light-Regulated Receptor Tyrosine Kinases. Methods in Molecular Biology, 2020, 2173, 233-246.	0.9	4
12	All-Optical Miniaturized Co-culture Assay of Voltage-Gated Ca2+ Channels. Methods in Molecular Biology, 2020, 2173, 247-260.	0.9	1
13	Optogenetic control of excitatory post-synaptic differentiation through neuroligin-1 tyrosine phosphorylation. ELife, 2020, 9, .	6.0	15
14	Editorial overview: Synthetic sensors and signals â€" new tools for a new trade. Current Opinion in Structural Biology, 2019, 57, iii-v.	5.7	0
15	Light-activated chimeric GPCRs: limitations and opportunities. Current Opinion in Structural Biology, 2019, 57, 196-203.	5.7	28
16	Engineering Strategy and Vector Library for the Rapid Generation of Modular Light-Controlled Proteinâ€"Protein Interactions. Journal of Molecular Biology, 2019, 431, 3046-3055.	4.2	19
17	Isolation of synaptic vesicles from genetically engineered cultured neurons. Journal of Neuroscience Methods, 2019, 312, 114-121.	2.5	1
18	Light-activated Frizzled7 reveals a permissive role of non-canonical wnt signaling in mesendoderm cell migration. ELife, 2019, 8, .	6.0	32

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19	Optical functionalization of human Class A orphan G-protein-coupled receptors. Nature Communications, 2018, 9, 1950.	12.8	46
20	Monitoring hippocampal glycine with the computationally designed optical sensor GlyFS. Nature Chemical Biology, 2018, 14, 861-869.	8.0	60
21	Optogenetic methods in drug screening: technologies and applications. Current Opinion in Biotechnology, 2017, 48, 8-14.	6.6	22
22	GrÃ¼nlichtâ€induzierte Rezeptorinaktivierung durch Cobalaminâ€bindende DomÃnen. Angewandte Chemie, 2017, 129, 4679-4682.	2.0	5
23	P3.03-006 Optical Control of Growth Factor Receptors to Advance Signal Transduction Research and Drug Screening. Journal of Thoracic Oncology, 2017, 12, S1346-S1347.	1.1	0
24	Ancestral Protein Reconstruction and Circular Permutation for Improving the Stability and Dynamic Range of FRET Sensors. Methods in Molecular Biology, 2017, 1596, 71-87.	0.9	9
25	Greenâ€Lightâ€Induced Inactivation of Receptor Signaling Using Cobalaminâ€Binding Domains. Angewandte Chemie - International Edition, 2017, 56, 4608-4611.	13.8	85
26	Method for Developing Optical Sensors Using a Synthetic Dye-Fluorescent Protein FRET Pair and Computational Modeling and Assessment. Methods in Molecular Biology, 2017, 1596, 89-99.	0.9	2
27	Eine Phytochromâ€Sensordomäne ermÃ¶glicht eine Rezeptoraktivierung durch rotes Licht. Angewandte Chemie, 2016, 128, 6447-6450.	2.0	7
28	A Phytochrome Sensory Domain Permits Receptor Activation by Red Light. Angewandte Chemie - International Edition, 2016, 55, 6339-6342.	13.8	72
29	Optogenetic Control of Nodal Signaling Reveals a Temporal Pattern of Nodal Signaling Regulating Cell Fate Specification during Gastrulation. Cell Reports, 2016, 16, 866-877.	6.4	101
30	Rangefinder: A Semisynthetic FRET Sensor Design Algorithm. ACS Sensors, 2016, 1, 1286-1290.	7.8	11
31	Light at the End of the Protein: Crystal Structure of a C-Terminal Light-Sensing Domain. Structure, 2016, 24, 213-215.	3.3	1
32	Construction of a robust and sensitive arginine biosensor through ancestral protein reconstruction. Protein Science, 2015, 24, 1412-1422.	7.6	60
33	Quantification of riboflavin, flavin mononucleotide, and flavin adenine dinucleotide in mammalian model cells by CE with LEDâ€induced fluorescence detection. Electrophoresis, 2015, 36, 518-525.	2.4	47
34	Light-assisted small-molecule screening against protein kinases. Nature Chemical Biology, 2015, 11, 952-954.	8.0	42
35	Flipping the Photoswitch: Ion Channels Under Light Control. Advances in Experimental Medicine and Biology, 2015, 869, 101-117.	1.6	12
36	The optogenetic promise for oncology: Episode I. Molecular and Cellular Oncology, 2014, 1, e964045.	0.7	5

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37	Spatioâ€temporally precise activation of engineered receptor tyrosine kinases by light. EMBO Journal, 2014, 33, 1713-1726.	7.8	226
38	Optical Control of Ligand-Gated Ion Channels. Methods in Molecular Biology, 2013, 998, 417-435.	0.9	3
39	Optical control of metabotropic glutamate receptors. Nature Neuroscience, 2013, 16, 507-516.	14.8	192
40	Optical Control of Metabotropic Glutamate Receptors for Probing of G Protein Signaling and Receptor Activation Mechanism. Biophysical Journal, 2012, 102, 517a.	0.5	0
41	Design and Application of a Light-Activated Metabotropic Glutamate Receptor for Optical Control of Intracellular Signaling Pathways. Biophysical Journal, 2011, 100, 177a.	0.5	0
42	A modern ionotropic glutamate receptor with a K+ selectivity signature sequence. Nature Communications, 2011, 2, 232.	12.8	31
43	Pharmacology of ionotropic glutamate receptors: A structural perspective. Bioorganic and Medicinal Chemistry, 2010, 18, 7759-7772.	3.0	70
44	A light-gated, potassium-selective glutamate receptor for the optical inhibition of neuronal firing. Nature Neuroscience, 2010, 13, 1027-1032.	14.8	124
45	A Light-Gated, Potassium-Selective Glutamate Receptor for the Optical Inhibition of Neuronal Firing. Biophysical Journal, 2010, 98, 223a.	0.5	0
46	Periodic Forces Trigger a Complex Mechanical Response in Ubiquitin. Journal of Molecular Biology, 2009, 390, 443-456.	4.2	11
47	The Anisotropic Response of Ubiquitin Unfolded by Periodic Forces. Biophysical Journal, 2009, 96, 217a-218a.	0.5	0
48	Design Of A Potassium Selective, Light-gated Glutamate Receptor. Biophysical Journal, 2009, 96, 489a.	0.5	0
49	From Valleys to Ridges: Exploring the Dynamic Energy Landscape of Single Membrane Proteins. ChemPhysChem, 2008, 9, 954-966.	2.1	43
50	Fully automated single-molecule force spectroscopy for screening applications. Nanotechnology, 2008, 19, 384020.	2.6	32
51	Single-Molecule Microscopy and Force Spectroscopy of Membrane Proteins. Springer Series in Biophysics, 2008, , 279-311.	0.4	0
52	Digital force-feedback for protein unfolding experiments using atomic force microscopy. Nanotechnology, 2007, 18, 044022.	2.6	10
53	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
54	Transmembrane Helices Have Rough Energy Surfaces. Journal of the American Chemical Society, 2007, 129, 246-247.	13.7	50

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55	Free Energy of Membrane Protein Unfolding Derived from Single-Molecule Force Measurements. Biophysical Journal, 2007, 93, 930-937.	0.5	45
56	Pulling single bacteriorhodopsin out of a membrane: Comparison of simulation and experiment. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 537-544.	2.6	24
57	Observing Folding Pathways and Kinetics of a Single Sodium-proton Antiporter from Escherichia coli. Journal of Molecular Biology, 2006, 355, 2-8.	4.2	48
58	Bacteriorhodopsin Folds into the Membrane against an External Force. Journal of Molecular Biology, 2006, 357, 644-654.	4.2	93
59	Imaging and detecting molecular interactions of single transmembrane proteins. Neurobiology of Aging, 2006, 27, 546-561.	3.1	38
60	Direct measurement of single-molecule visco-elasticity in atomic force microscope force-extension experiments. European Biophysics Journal, 2006, 35, 287-292.	2.2	24
61	Automated alignment and pattern recognition of single-molecule force spectroscopy data. Journal of Microscopy, 2005, 218, 125-132.	1.8	33
62	Hydrodynamic effects in fast AFM single-molecule force measurements. European Biophysics Journal, 2005, 34, 91-96.	2.2	111
63	Molecular Force Modulation Spectroscopy Revealing the Dynamic Response of Single Bacteriorhodopsins. Biophysical Journal, 2005, 88, 1423-1431.	0.5	69
64	Complex Stability of Single Proteins Explored by Forced Unfolding Experiments. Biophysical Journal, 2005, 88, L37-L39.	0.5	5
65	Probing the Energy Landscape of the Membrane Protein Bacteriorhodopsin. Structure, 2004, 12, 871-879.	3.3	80
66	Controlled Unfolding and Refolding of a Single Sodium-proton Antiporter using Atomic Force Microscopy. Journal of Molecular Biology, 2004, 340, 1143-1152.	4.2	99
67	Unfolding pathways of native bacteriorhodopsin depend on temperature. EMBO Journal, 2003, 22, 5220-5229.	7.8	111
68	Folding, Structure and Function of Biological Nanomachines Examined by AFM. AIP Conference Proceedings, 2003, , .	0.4	1
69	Cellular dynamics observed at sub-nanometer resolution using atomic force microscopy. Microscopy and Microanalysis, 2002, 8, 892-893.	0.4	0
70	Observing structure, function and assembly of single proteins by AFM. Progress in Biophysics and Molecular Biology, 2002, 79, 1-43.	2.9	155
71	Processing of gene expression data generated by quantitative real-time RT-PCR. BioTechniques, 2002, 32, 1372-4, 1376, 1378-9.	1.8	964