Katrin I Willig

List of Publications by Year
in descending order

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Version: 2024-02-01

54 papers	8,463 citations	126708 33 h-index	189595 50 g-index
59 all docs	59 docs citations	59 times ranked	9796 citing authors

#	Article	IF	Citations
1	STED microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis. Nature, 2006, 440, 935-939.	13.7	1,031
2	Bruchpilot Promotes Active Zone Assembly, Ca2+ Channel Clustering, and Vesicle Release. Science, 2006, 312, 1051-1054.	6.0	976
3	Membrane protein sequestering by ionic proteinâ€“lipid interactions. Nature, 2011, 479, 552-555.	13.7	515
4	STED microscopy with continuous wave beams. Nature Methods, 2007, 4, 915-918.	9.0	465
5	Diffraction-unlimited all-optical imaging and writing with a photochromic GFP. Nature, 2011, 478, 204-208.	13.7	434
6	Stimulated emission depletion (STED) nanoscopy of a fluorescent protein-labeled organelle inside a living cell. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14271-14276.	3.3	415
7	Anatomy and Dynamics of a Supramolecular Membrane Protein Cluster. Science, 2007, 317, 1072-1076.	6.0	405
8	Live-cell imaging of dendritic spines by STED microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18982-18987.	3.3	364
9	Protein localization in electron micrographs using fluorescence nanoscopy. Nature Methods, 2011, 8, 80-84.	9.0	339
10	Nanoscale resolution in GFP-based microscopy. Nature Methods, 2006, 3, 721-723.	9.0	328
11	Nanoscopy in a Living Mouse Brain. Science, 2012, 335, 551-551.	6.0	319
12	The 2015 super-resolution microscopy roadmap. Journal Physics D: Applied Physics, 2015, 48, 443001.	1.3	291
13	STED Nanoscopy of Actin Dynamics in Synapses Deep Inside Living Brain Slices. Biophysical Journal, 2011, 101, 1277-1284.	0.2	270
14	Recycling, clustering, and endocytosis jointly maintain PIN auxin carrier polarity at the plasma membrane. Molecular Systems Biology, 2011, 7, 540.	3.2	232
15	The SNARE Motif Is Essential for the Formation of Syntaxin Clusters in the Plasma Membrane. Biophysical Journal, 2006, 90, 2843-2851.	0.2	168
16	Three-Dimensional Stimulated Emission Depletion Microscopy of Nitrogen-Vacancy Centers in Diamond Using Continuous-Wave Light. Nano Letters, 2009, 9, 3323-3329.	4.5	153
17	Nanoscale organization of nicotinic acetylcholine receptors revealed by stimulated emission depletion microscopy. Neuroscience, 2007, 144, 135-143.	1.1	130
18	Stimulated Emission Depletion Nanoscopy of Living Cells Using SNAP-Tag Fusion Proteins. Biophysical Journal, 2010, 98, 158-163.	0.2	128

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19	Lens-based fluorescence nanoscopy. Quarterly Reviews of Biophysics, 2015, 48, 178-243.	2.4	126
20	Two-Color STED Microscopy of Living Synapses Using A Single Laser-Beam Pair. Biophysical Journal, 2011, 101, 2545-2552.	0.2	121
21	Nanoscopy of Living Brain Slices with Low Light Levels. Neuron, 2012, 75, 992-1000.	3.8	117
22	STED microscopy resolves nanoparticle assemblies. New Journal of Physics, 2006, 8, 106-106.	1.2	104
23	Myelin basic protein-dependent plasma membrane reorganization in the formation of myelin. EMBO Journal, 2006, 25, 5037-5048.	3.5	99
24	Quantitative optical nanophysiology of Ca2+ signaling at inner hair cell active zones. Nature Communications, 2018, 9, 290.	5.8	88
25	Dysregulated Expression of Neuregulin-1 by Cortical Pyramidal Neurons Disrupts Synaptic Plasticity. Cell Reports, 2014, 8, 1130-1145.	2.9	81
26	In vivo mouse and live cell STED microscopy of neuronal actin plasticity using far-red emitting fluorescent proteins. Scientific Reports, 2017, 7, 11781.	1.6	81
27	Nanoscopy of Filamentous Actin in Cortical Dendrites of a Living Mouse. Biophysical Journal, 2014, 106, L01-L03.	0.2	80
28	Masked Rhodamine Dyes of Five Principal Colors Revealed by Photolysis of a 2â€Diazoâ€1â€Indanone Caging Group: Synthesis, Photophysics, and Light Microscopy Applications. Chemistry - A European Journal, 2014, 20, 13162-13173.	1.7	68
29	In vivo STED microscopy visualizes PSD95 sub-structures and morphological changes over several hours in the mouse visual cortex. Scientific Reports, 2018, 8, 219.	1.6	66
30	<scp>STED</scp> microscopy of living cells â€“ new frontiers in membrane and neurobiology. Journal of Neurochemistry, 2013, 126, 203-212.	2.1	62
31	Dual-Label STED Nanoscopy of Living Cells Using Photochromism. Nano Letters, 2011, 11, 3970-3973.	4.5	56
32	SRpHi ratiometric pH biosensors for super-resolution microscopy. Nature Communications, 2017, 8, 577.	5.8	50
33	Phosphorylated 3â€Heteroarylcoumarins and Their Use in Fluorescence Microscopy and Nanoscopy. Chemistry - A European Journal, 2012, 18, 16339-16348.	1.7	48
34	In vivo STED microscopy: A roadmap to nanoscale imaging in the living mouse. Methods, 2020, 174, 42-48.	1.9	27
35	Recent applications of superresolution microscopy in neurobiology. Current Opinion in Chemical Biology, 2014, 20, 16-21.	2.8	25
36	Stable but not rigid: Chronic in vivo STED nanoscopy reveals extensive remodeling of spines, indicating multiple drivers of plasticity. Science Advances, 2021, 7, .	4.7	24

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37	Coordinateâ€Targeted and Coordinateâ€Stochastic Superâ€Resolution Microscopy with the Reversibly Switchable Fluorescent Protein Dreiklang. ChemPhysChem, 2014, 15, 756-762.	1.0	22
38	Nanoscale Resolution with Focused Light: Stimulated Emission Depletion and Other Reversible Saturable Optical Fluorescence Transitions Microscopy Concepts. , 2006, , 571-579.		19
39	The murine ortholog of Kaufman oculocerebrofacial syndrome protein Ube3b regulates synapse number by ubiquitinating Ppp3cc. Molecular Psychiatry, 2021, 26, 1980-1995.	4.1	18
40	Multi-label inÂvivo STED microscopy by parallelized switching of reversibly switchable fluorescent proteins. Cell Reports, 2021, 35, 109192.	2.9	18
41	Transient electron energy distribution in supported Ag nanoparticles. New Journal of Physics, 2002, 4, 95-95.	1.2	16
42	Modulation of cognition and neuronal plasticity in gain- and loss-of-function mouse models of the schizophrenia risk gene Tcf4. Translational Psychiatry, 2020, 10, 343.	2.4	16
43	Investigating the feasibility of channelrhodopsin variants for nanoscale optogenetics. Neurophotonics, 2019, 6, 1.	1.7	15
44	Environmental enrichment enhances patterning and remodeling of synaptic nanoarchitecture as revealed by STED nanoscopy. ELife, 2022, 11, .	2.8	14
45	MRT letter: Nanoscopy of protein colocalization in living cells by STED and GSDIM. Microscopy Research and Technique, 2012, 75, 1-6.	1.2	12
46	Anesthesia triggers drug delivery to experimental glioma in mice by hijacking caveolar transport. Neuro-Oncology Advances, 2021, 3, vdab140.	0.4	10
47	Stimulated Emission Depletion (STED) Imaging of Dendritic Spines in Living Hippocampal Slices. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot069260.	0.2	6
48	Hyperactivity is a Core Endophenotype of Elevated Neuregulin-1 Signaling in Embryonic Glutamatergic Networks. Schizophrenia Bulletin, 2021, 47, 1409-1420.	2.3	3
49	Gephyrin-Lacking PV Synapses on Neocortical Pyramidal Neurons. International Journal of Molecular Sciences, 2021, 22, 10032.	1.8	3
50	Resolft Nanoscopy in Life Sciences: Unraveling Fine Details with Low Light Levels. Biophysical Journal, 2013, 104, 534a.	0.2	1
51	Masked Rhodamine Dyes of Five Principal Colors Revealed by Photolysis of a 2-Diazo-1-Indanone Caging Group: Synthesis, Photophysics, and Light Microscopy Applications. Chemistry - A European Journal, 2014, 20, 13044-13044.	1.7	1
52	Recent Developments in STED-Microscopy. , 2007, , .		1
53	STED Nanoscopy in Living Cells using Live Cell Compatible Markers. Biophysical Journal, 2009, 96, 17a.	0.2	0
54	Far-field fluorescence microscopy at the macromolecular scale. , 2006, , .		0