

Katrin I Willig

List of Publications by Year in descending order

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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	Environmental enrichment enhances patterning and remodeling of synaptic nanoarchitecture as revealed by STED nanoscopy. <i>ELife</i> , 2022, 11, .	2.8	14
2	The murine ortholog of Kaufman oculocerebrofacial syndrome protein Ube3b regulates synapse number by ubiquitinating Ppp3cc. <i>Molecular Psychiatry</i> , 2021, 26, 1980-1995.	4.1	18
3	Hyperactivity is a Core Endophenotype of Elevated Neuregulin-1 Signaling in Embryonic Glutamatergic Networks. <i>Schizophrenia Bulletin</i> , 2021, 47, 1409-1420.	2.3	3
4	Multi-label in vivo STED microscopy by parallelized switching of reversibly switchable fluorescent proteins. <i>Cell Reports</i> , 2021, 35, 109192.	2.9	18
5	Stable but not rigid: Chronic in vivo STED nanoscopy reveals extensive remodeling of spines, indicating multiple drivers of plasticity. <i>Science Advances</i> , 2021, 7, .	4.7	24
6	Gephyrin-Lacking PV Synapses on Neocortical Pyramidal Neurons. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10032.	1.8	3
7	Anesthesia triggers drug delivery to experimental glioma in mice by hijacking caveolar transport. <i>Neuro-Oncology Advances</i> , 2021, 3, vdab140.	0.4	10
8	In vivo STED microscopy: A roadmap to nanoscale imaging in the living mouse. <i>Methods</i> , 2020, 174, 42-48.	1.9	27
9	Modulation of cognition and neuronal plasticity in gain- and loss-of-function mouse models of the schizophrenia risk gene Tcf4. <i>Translational Psychiatry</i> , 2020, 10, 343.	2.4	16
10	Investigating the feasibility of channelrhodopsin variants for nanoscale optogenetics. <i>Neurophotonics</i> , 2019, 6, 1.	1.7	15
11	In vivo STED microscopy visualizes PSD95 sub-structures and morphological changes over several hours in the mouse visual cortex. <i>Scientific Reports</i> , 2018, 8, 219.	1.6	66
12	Quantitative optical nanophysiology of Ca ²⁺ signaling at inner hair cell active zones. <i>Nature Communications</i> , 2018, 9, 290.	5.8	88
13	In vivo mouse and live cell STED microscopy of neuronal actin plasticity using far-red emitting fluorescent proteins. <i>Scientific Reports</i> , 2017, 7, 11781.	1.6	81
14	SRpHi ratiometric pH biosensors for super-resolution microscopy. <i>Nature Communications</i> , 2017, 8, 577.	5.8	50
15	The 2015 super-resolution microscopy roadmap. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 443001.	1.3	291
16	Lens-based fluorescence nanoscopy. <i>Quarterly Reviews of Biophysics</i> , 2015, 48, 178-243.	2.4	126
17	Coordinate-Targeted and Coordinate-Stochastic Super-Resolution Microscopy with the Reversibly Switchable Fluorescent Protein Dreiklang. <i>ChemPhysChem</i> , 2014, 15, 756-762.	1.0	22
18	Recent applications of superresolution microscopy in neurobiology. <i>Current Opinion in Chemical Biology</i> , 2014, 20, 16-21.	2.8	25

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19	Nanoscopy of Filamentous Actin in Cortical Dendrites of a Living Mouse. <i>Biophysical Journal</i> , 2014, 106, L01-L03.	0.2	80
20	Masked Rhodamine Dyes of Five Principal Colors Revealed by Photolysis of a 2-Diazo-1-Indanone Caging Group: Synthesis, Photophysics, and Light Microscopy Applications. <i>Chemistry - A European Journal</i> , 2014, 20, 13044-13044.	1.7	1
21	Masked Rhodamine Dyes of Five Principal Colors Revealed by Photolysis of a 2-Diazo-1-Indanone Caging Group: Synthesis, Photophysics, and Light Microscopy Applications. <i>Chemistry - A European Journal</i> , 2014, 20, 13162-13173.	1.7	68
22	Dysregulated Expression of Neuregulin-1 by Cortical Pyramidal Neurons Disrupts Synaptic Plasticity. <i>Cell Reports</i> , 2014, 8, 1130-1145.	2.9	81
23	<scp>STED</scp> microscopy of living cells â€“ new frontiers in membrane and neurobiology. <i>Journal of Neurochemistry</i> , 2013, 126, 203-212.	2.1	62
24	Resolft Nanoscopy in Life Sciences: Unraveling Fine Details with Low Light Levels. <i>Biophysical Journal</i> , 2013, 104, 534a.	0.2	1
25	Nanoscopy of Living Brain Slices with Low Light Levels. <i>Neuron</i> , 2012, 75, 992-1000.	3.8	117
26	Phosphorylated 3-Heteroarylcoumarins and Their Use in Fluorescence Microscopy and Nanoscopy. <i>Chemistry - A European Journal</i> , 2012, 18, 16339-16348.	1.7	48
27	Stimulated Emission Depletion (STED) Imaging of Dendritic Spines in Living Hippocampal Slices. <i>Cold Spring Harbor Protocols</i> , 2012, 2012, pdb.prot069260.	0.2	6
28	Nanoscopy in a Living Mouse Brain. <i>Science</i> , 2012, 335, 551-551.	6.0	319
29	MRT letter: Nanoscopy of protein colocalization in living cells by STED and GSDIM. <i>Microscopy Research and Technique</i> , 2012, 75, 1-6.	1.2	12
30	STED Nanoscopy of Actin Dynamics in Synapses Deep Inside Living Brain Slices. <i>Biophysical Journal</i> , 2011, 101, 1277-1284.	0.2	270
31	Two-Color STED Microscopy of Living Synapses Using A Single Laser-Beam Pair. <i>Biophysical Journal</i> , 2011, 101, 2545-2552.	0.2	121
32	Dual-Label STED Nanoscopy of Living Cells Using Photochromism. <i>Nano Letters</i> , 2011, 11, 3970-3973.	4.5	56
33	Diffraction-unlimited all-optical imaging and writing with a photochromic GFP. <i>Nature</i> , 2011, 478, 204-208.	13.7	434
34	Protein localization in electron micrographs using fluorescence nanoscopy. <i>Nature Methods</i> , 2011, 8, 80-84.	9.0	339
35	Membrane protein sequestering by ionic protein-lipid interactions. <i>Nature</i> , 2011, 479, 552-555.	13.7	515
36	Recycling, clustering, and endocytosis jointly maintain PIN auxin carrier polarity at the plasma membrane. <i>Molecular Systems Biology</i> , 2011, 7, 540.	3.2	232

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37	Stimulated Emission Depletion Nanoscopy of Living Cells Using SNAP-Tag Fusion Proteins. Biophysical Journal, 2010, 98, 158-163.	0.2	128
38	STED Nanoscopy in Living Cells using Live Cell Compatible Markers. Biophysical Journal, 2009, 96, 17a.	0.2	0
39	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
40	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
41	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
42	Anatomy and Dynamics of a Supramolecular Membrane Protein Cluster. Science, 2007, 317, 1072-1076.	6.0	405
43	Nanoscale organization of nicotinic acetylcholine receptors revealed by stimulated emission depletion microscopy. Neuroscience, 2007, 144, 135-143.	1.1	130
44	STED microscopy with continuous wave beams. Nature Methods, 2007, 4, 915-918.	9.0	465
45	Recent Developments in STED-Microscopy. , 2007, , .		1
46	STED microscopy resolves nanoparticle assemblies. New Journal of Physics, 2006, 8, 106-106.	1.2	104
47	Nanoscale Resolution with Focused Light: Stimulated Emission Depletion and Other Reversible Saturable Optical Fluorescence Transitions Microscopy Concepts. , 2006, , 571-579.		19
48	The SNARE Motif Is Essential for the Formation of Syntaxin Clusters in the Plasma Membrane. Biophysical Journal, 2006, 90, 2843-2851.	0.2	168
49	Bruchpilot Promotes Active Zone Assembly, Ca ²⁺ Channel Clustering, and Vesicle Release. Science, 2006, 312, 1051-1054.	6.0	976
50	Nanoscale resolution in GFP-based microscopy. Nature Methods, 2006, 3, 721-723.	9.0	328
51	STED microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis. Nature, 2006, 440, 935-939.	13.7	1,031
52	Myelin basic protein-dependent plasma membrane reorganization in the formation of myelin. EMBO Journal, 2006, 25, 5037-5048.	3.5	99
53	Far-field fluorescence microscopy at the macromolecular scale. , 2006, , .		0
54	Transient electron energy distribution in supported Ag nanoparticles. New Journal of Physics, 2002, 4, 95-95.	1.2	16