Matthew R Banghart

List of Publications by Year
in descending order

24 papers	2,347 citations	471509 17 h-index	713466 21 g-index
27 all docs	27 docs citations	27 times ranked	2796 citing authors

#	Article	IF	Citations
1	Light-activated ion channels for remote control of neuronal firing. Nature Neuroscience, 2004, 7, 1381-1386.	14.8	660
2	Photochemical control of endogenous ion channels and cellular excitability. Nature Methods, 2008, 5, 331-338.	19.0	216
3	Photochromic Blockers of Voltageâ€Gated Potassium Channels. Angewandte Chemie - International Edition, 2009, 48, 9097-9101.	13.8	203
4	Tuning Photochromic Ion Channel Blockers. ACS Chemical Neuroscience, 2011, 2, 536-543.	3.5	155
5	Optochemical control of genetically engineered neuronal nicotinic acetylcholine receptors. Nature Chemistry, 2012, 4, 105-111.	13.6	153
6	Nicotine is a Selective Pharmacological Chaperone of Acetylcholine Receptor Number and Stoichiometry. Implications for Drug Discovery. AAPS Journal, 2009, 11, 167-177.	4.4	148
7	Engineering Light-Gated Ion Channelsâ€. Biochemistry, 2006, 45, 15129-15141.	2.5	130
8	Photo-Targeted Nanoparticles. Nano Letters, 2010, 10, 250-254.	9.1	120
9	Spectral Evolution of a Photochemical Protecting Group for Orthogonal Two-Color Uncaging with Visible Light. Journal of the American Chemical Society, 2013, 135, 15948-15954.	13.7	102
10	Light-Induced Depolarization of Neurons Using a Modified Shaker K+ Channel and a Molecular Photoswitch. Journal of Neurophysiology, 2006, 96, 2792-2796.	1.8	92
11	Photoactivatable Neuropeptides for Spatiotemporally Precise Delivery of Opioids in Neural Tissue. Neuron, 2012, 73, 249-259.	8.1	80
12	Optogenetic photochemical control of designer K+ channels in mammalian neurons. Journal of Neurophysiology, 2011, 106, 488-496.	1.8	61
13	The light-sensitive dimerizer zapalog reveals distinct modes of immobilization for axonal mitochondria. Nature Cell Biology, 2019, 21, 768-777.	10.3	56
14	Development of novel Lewis acid catalyzed cycloisomerizations: synthesis of bicyclo[3.1.0]hexenes and cyclopentenones. Tetrahedron, 2003, 59, 8919-8930.	1.9	42
15	Neural basis of opioid-induced respiratory depression and its rescue. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	36
16	A Caged Enkephalin Optimized for Simultaneously Probing Mu and Delta Opioid Receptors. ACS Chemical Neuroscience, 2018, 9, 684-690.	3.5	34
17	Caged Naloxone Reveals Opioid Signaling Deactivation Kinetics. Molecular Pharmacology, 2013, 84, 687-695.	2.3	31
18	Convergent, functionally independent signaling by mu and delta opioid receptors in hippocampal parvalbumin interneurons. ELife, 2021, 10, .	6.0	17

#	Article	IF	Citations
19	A 1H NMR Assay for Measuring the Photostationary States of Photoswitchable Ligands. Methods in Molecular Biology, 2013, 995, 107-120.	0.9	5
20	Photopharmacology: Controlling Native Voltage-Gated Ion Channels withÂLight. Biophysical Journal, 2010, 98, 212a.	0.5	2
21	Itâ€™s lights out for presynaptic terminals. Neuron, 2021, 109, 1755-1757.	8.1	2
22	Development of Novel Lewis Acid Catalyzed Cycloisomerizations: Synthesis of Bicyclo[3.1.0]hexenes and Cyclopentenones.. ChemInform, 2004, 35, no.	0.0	0
23	Discovery Of Photochromic Ligands That Block Voltage-gated K+ Channels At The Internal TEA Binding Site. Biophysical Journal, 2009, 96, 23a.	0.5	0
24	Light At The End Of The Channel: Photochromic Blockers For Optical Control Of Ion Channels In Individual Cells. Biophysical Journal, 2009, 96, 179a.	0.5	0