Shiqiang Gao

List of Publications by Year
in descending order

30 papers	1,163 citations	516215 16 h-index	454577 30 g-index
35 all docs	35 docs citations	35 times ranked	1495 citing authors

#	Article	IF	Citations
1	Channelrhodopsin-2â€“XXL, a powerful optogenetic tool for low-light applications. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13972-13977.	3.3	182
2	Mechano-dependent signaling by Latrophilin/CIRL quenches cAMP in proprioceptive neurons. ELife, 2017, 6, .	2.8	138
3	Dissecting Functions of <i>KATANIN</i> and <i>WRINKLED1</i> in Cotton Fiber Development by Virus-Induced Gene Silencing Â Â Â. Plant Physiology, 2012, 160, 738-748.	2.3	105
4	Optogenetic manipulation of cGMP in cells and animals by the tightly light-regulated guanylyl-cyclase opsin CyclOp. Nature Communications, 2015, 6, 8046.	5.8	95
5	Hypothalamic dopamine neurons motivate mating through persistent cAMP signalling. Nature, 2021, 597, 245-249.	13.7	63
6	A LOV-domain-mediated blue-light-activated adenylate (adenylyl) cyclase from the cyanobacterium <i>Microcoleus chthonoplastes</i> PCC 7420. Biochemical Journal, 2013, 455, 359-365.	1.7	61
7	Geminivirus Activates ASYMMETRIC LEAVES 2 to Accelerate Cytoplasmic DCP2-Mediated mRNA Turnover and Weakens RNA Silencing in Arabidopsis. PLoS Pathogens, 2015, 11, e1005196.	2.1	61
8	A new strain of Indian cassava mosaic virus causes a mosaic disease in the biodiesel crop Jatropha curcas. Archives of Virology, 2010, 155, 607-612.	0.9	58
9	Rhodopsin-cyclases for photocontrol of cGMP/cAMP and 2.3â€‰Å… structure of the adenylyl cyclase domain. Nature Communications, 2018, 9, 2046.	5.8	55
10	Synthetic Light-Activated Ion Channels for Optogenetic Activation and Inhibition. Frontiers in Neuroscience, 2018, 12, 643.	1.4	42
11	Two-component cyclase opsins of green algae are ATP-dependent and light-inhibited guanylyl cyclases. BMC Biology, 2018, 16, 144.	1.7	35
12	Optogenetic control of plant growth by a microbial rhodopsin. Nature Plants, 2021, 7, 144-151.	4.7	35
13	An optogenetic analogue of second-order reinforcement in<i>Drosophila</i>. Biology Letters, 2019, 15, 20190084.	1.0	29
14	A novel rhodopsin phosphodiesterase from <i>Salpingoeca rosetta</i> shows light-enhanced substrate affinity. Biochemical Journal, 2018, 475, 1121-1128.	1.7	28
15	Optogenetic control of the guard cell membrane potential and stomatal movement by the light-gated anion channel <i>Gt</i> ACR1. Science Advances, 2021, 7, .	4.7	28
16	Mutated Channelrhodopsins with Increased Sodium and Calcium Permeability. Applied Sciences (Switzerland), 2019, 9, 664.	1.3	25
17	Optimized photo-stimulation of halorhodopsin for long-term neuronal inhibition. BMC Biology, 2019, 17, 95.	1.7	25
18	Using Expansion Microscopy to Visualize and Characterize the Morphology of Mitochondrial Cristae. Frontiers in Cell and Developmental Biology, 2020, 8, 617.	1.8	14

#	Article	IF	Citations
19	PACmn for improved optogenetic control of intracellular cAMP. BMC Biology, 2021, 19, 227.	1.7	13
20	Visual function restoration with a highly sensitive and fast Channelrhodopsin in blind mice. Signal Transduction and Targeted Therapy, 2022, 7, 104.	7.1	10
21	Extending the Anion Channelrhodopsin-Based Toolbox for Plant Optogenetics. Membranes, 2021, 11, 287.	1.4	9
22	An engineered membrane-bound guanylyl cyclase with light-switchable activity. BMC Biology, 2021, 19, 54.	1.7	8
23	Modified Rhodopsins From Aureobasidium pullulans Excel With Very High Proton-Transport Rates. Frontiers in Molecular Biosciences, 2021, 8, 750528.	1.6	8
24	PMRT1, a <i>Plasmodium</i> -Specific Parasite Plasma Membrane Transporter, Is Essential for Asexual and Sexual Blood Stage Development. MBio, 2022, 13, e0062322.	1.8	7
25	Optogenetic tools for manipulation of cyclic nucleotides functionally coupled to cyclic nucleotideâ€gated channels. British Journal of Pharmacology, 2022, 179, 2519-2537.	2.7	6
26	Advances and prospects of rhodopsin-based optogenetics in plant research. Plant Physiology, 2021, 187, 572-589.	2.3	6
27	Advances, Perspectives and Potential Engineering Strategies of Light-Gated Phosphodiesterases for Optogenetic Applications. International Journal of Molecular Sciences, 2020, 21, 7544.	1.8	5
28	Characterization and Modification of Light-Sensitive Phosphodiesterases from Choanoflagellates. Biomolecules, 2022, 12, 88.	1.8	4
29	mem-iLID, a fast and economic protein purification method. Bioscience Reports, 2021, 41, .	1.1	3
30	Action potentials in Xenopus oocytes triggered by blue light. Journal of General Physiology, 2020, 152, .	0.9	2