Elena Govorunova

List of Publications by Year
in descending order

21	1,639	566801 15	752256 20
papers	citations	h-index	g-index

25	25	25	1626
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Natural light-gated anion channels: A family of microbial rhodopsins for advanced optogenetics. Science, 2015, 349, 647-650.	6.0	575
2	Microbial Rhodopsins: Diversity, Mechanisms, and Optogenetic Applications. Annual Review of Biochemistry, 2017, 86, 845-872.	5.0	271
3	New Channelrhodopsin with a Red-Shifted Spectrum and Rapid Kinetics from Mesostigma viride. MBio, 2011, 2, e00115-11.	1.8	89
4	Characterization of a Highly Efficient Blue-shifted Channelrhodopsin from the Marine Alga Platymonas subcordiformis. Journal of Biological Chemistry, 2013, 288, 29911-29922.	1.6	88
5	Gating mechanisms of a natural anion channelrhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14236-14241.	3.3	65
6	Intramolecular Proton Transfer in Channelrhodopsins. Biophysical Journal, 2013, 104, 807-817.	0.2	62
7	Diversity of Chlamydomonas Channelrhodopsins. Photochemistry and Photobiology, 2012, 88, 119-128.	1.3	58
8	Kalium channelrhodopsins are natural light-gated potassium channels that mediate optogenetic inhibition. Nature Neuroscience, 2022, 25, 967-974.	7.1	56
9	Structurally Distinct Cation Channelrhodopsins from Cryptophyte Algae. Biophysical Journal, 2016, 110, 2302-2304.	0.2	50
10	Photochemical reaction cycle transitions during anion channelrhodopsin gating. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1993-2000.	3.3	49
11	Photosensory Functions of Channelrhodopsins in Native Algal Cells^{â€}. Photochemistry and Photobiology, 2009, 85, 556-563.	1.3	48
12	RubyACRs, nonalgal anion channelrhodopsins with highly red-shifted absorption. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22833-22840.	3.3	45
13	Bacteriorhodopsin-like channelrhodopsins: Alternative mechanism for control of cation conductance. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9512-E9519.	3.3	44
14	Rhodopsin optogenetic toolbox v2.0 for light-sensitive excitation and inhibition in Caenorhabditis elegans. PLoS ONE, 2018, 13, e0191802.	1.1	44
15	Proteomonas sulcata ACR1: A Fast Anion Channelrhodopsin. Photochemistry and Photobiology, 2016, 92, 257-263.	1.3	42
16	Role of a Helix B Lysine Residue in the Photoactive Site in Channelrhodopsins. Biophysical Journal, 2014, 106, 1607-1617.	0.2	13
17	The road to optogenetics: Microbial rhodopsins. Biochemistry (Moscow), 2016, 81, 928-940.	0.7	13
18	The crystal structure of bromide-bound GtACR1 reveals a pre-activated state in the transmembrane anion tunnel. ELife, 2021, 10, .	2.8	11

#	Article	IF	Citations
19	Opposite Charge Movements Within the Photoactive Site Modulate Two-Step Channel Closing in GtACR1. Biophysical Journal, 2019, 117, 2034-2040.	0.2	7
20	Changes in photoreceptor currents and their sensitivity to the chemoeffector tryptone during gamete mating in Chlamydomonas reinhardtii. Planta, 2006, 225, 441-449.	1.6	6
21	Editorial on Special Issue â€œThe Advances and Applications of Optogeneticsâ€• Applied Sciences (Switzerland), 2020, 10, 6563.	1.3	0