Hisao Tsukamoto

List of Publications by Year in descending order

32 papers	1,498 citations	394421 19 h-index	580821 25 g-index
32 all docs	32 docs citations	32 times ranked	1322 citing authors

#	Article	IF	Citations
1	Cephalochordate Melanopsin: Evolutionary Linkage between Invertebrate Visual Cells and Vertebrate Photosensitive Retinal Ganglion Cells. Current Biology, 2005, 15, 1065-1069.	3.9	219
2	Homologs of vertebrate Opn3 potentially serve as a light sensor in nonphotoreceptive tissue. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4998-5003.	7.1	147
3	Jellyfish vision starts with cAMP signaling mediated by opsin-G _s cascade. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15576-15580.	7.1	140
4	Counterion displacement in the molecular evolution of the rhodopsin family. Nature Structural and Molecular Biology, 2004, 11, 284-289.	8.2	138
5	Depth Perception from Image Defocus in a Jumping Spider. Science, 2012, 335, 469-471.	12.6	125
6	Expression and comparative characterization of Gqâ€coupled invertebrate visual pigments and melanopsin. Journal of Neurochemistry, 2008, 105, 883-890.	3.9	90
7	Monomeric Rhodopsin Is the Minimal Functional Unit Required for Arrestin Binding. Journal of Molecular Biology, 2010, 399, 501-511.	4.2	83
8	Diversity and functional properties of bistable pigments. Photochemical and Photobiological Sciences, 2010, 9, 1435-1443.	2.9	71
9	Identification and characterization of a protostome homologue of peropsin from a jumping spider. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2010, 196, 51-59.	1.6	57
10	The Magnitude of the Light-induced Conformational Change in Different Rhodopsins Correlates with Their Ability to Activate G Proteins. Journal of Biological Chemistry, 2009, 284, 20676-20683.	3.4	52
11	A rhodopsin exhibiting binding ability to agonist all-trans-retinal. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6303-6308.	7.1	51
12	A Constitutively Activating Mutation Alters the Dynamics and Energetics of a Key Conformational Change in a Ligand-free G Protein-coupled Receptor. Journal of Biological Chemistry, 2013, 288, 28207-28216.	3.4	38
13	Diversification of non-visual photopigment parapinopsin in spectral sensitivity for diverse pineal functions. BMC Biology, 2015, 13, 73.	3.8	38
14	A Go-type opsin mediates the shadow reflex in the annelid Platynereis dumerilii. BMC Biology, 2018, 16, 41.	3.8	36
15	Activation of Transducin by Bistable Pigment Parapinopsin in the Pineal Organ of Lower Vertebrates. PLoS ONE, 2015, 10, e0141280.	2.5	34
16	Chimeras of Channelrhodopsin-1 and -2 from Chlamydomonas reinhardtii Exhibit Distinctive Light-induced Structural Changes from Channelrhodopsin-2. Journal of Biological Chemistry, 2015, 290, 11623-11634.	3.4	31
17	The counterionâ€"retinylidene Schiff base interaction of an invertebrate rhodopsin rearranges upon light activation. Communications Biology, 2019, 2, 180.	4.4	31
18	A ciliary opsin in the brain of a marine annelid zooplankton is ultraviolet-sensitive, and the sensitivity is tuned by a single amino acid residue. Journal of Biological Chemistry, 2017, 292, 12971-12980.	3.4	27

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19	Rhodopsin in Nanodiscs Has Native Membrane-like Photointermediates. Biochemistry, 2011, 50, 5086-5091.	2.5	25
20	Retinal Attachment Instability Is Diversified among Mammalian Melanopsins. Journal of Biological Chemistry, 2015, 290, 27176-27187.	3.4	21
21	Distribution of Mammalian-Like Melanopsin in Cyclostome Retinas Exhibiting a Different Extent of Visual Functions. PLoS ONE, 2014, 9, e108209.	2.5	19
22	Structural properties determining low K+ affinity of the selectivity filter in the TWIK1 K+ channel. Journal of Biological Chemistry, 2018, 293, 6969-6984.	3.4	11
23	A Pivot between Helices V and VI near the Retinal-binding Site Is Necessary for Activation in Rhodopsins. Journal of Biological Chemistry, 2010, 285, 7351-7357.	3.4	7
24	Optogenetic Modulation of Ion Channels by Photoreceptive Proteins. Advances in Experimental Medicine and Biology, 2021, 1293, 73-88.	1.6	6
25	Session 2SFAâ€”the symposium â€œElucidation of biological functions by optical controlâ€•on BSJ2019 at Miyazaki, Japan. Biophysical Reviews, 2020, 12, 279-280.	3.2	1
26	2P334 Mutational analyses of amino acid-interactions around the retinal Schiff base in the invertebrate rhodopsin(Photobiology-vision and photoreception,Oral Presentations). Seibutsu Butsuri, 2007, 47, S196.	0.1	0
27	1P-272 Photoreaction of parietopsin(The 46th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2008, 48, S64.	0.1	0
28	1P-275 Comparative study on active state structures of rhodopsins having functionally varied properties using site-directed fluorescence labeling(The 46th Annual Meeting of the Biophysical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.1	0
29	3P275 Investigation on a relationship of spectral characteristics of the rhodopsins and depth perception mechanism in a jumping spider(Photobiology: Vision & Photoreception,The 48th Annual) Tj ETQq1 1 0.784314 rgBT /	0.1	0
30	Arrestin can Bind to a Single G-Protein Coupled Receptor. Biophysical Journal, 2010, 98, 291a.	0.5	0
31	Report of 4th Asia Oceania Conference on Photobiology (AOCP). Seibutsu Butsuri, 2009, 49, 098-099.	0.1	0
32	Optical control of cellular signaling pathways using animal opsins. , 2021, , .		0