Satoshi P Tsunoda

List of Publications by Year
in descending order

42	3,127	236925	330143
papers	citations	25 h-index	37 g-index

47	47	47	3060
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Red-shifted optogenetic excitation: a tool for fast neural control derived from Volvox carteri. Nature Neuroscience, 2008, 11, 631-633.	14.8	490
2	The Microbial Opsin Family of Optogenetic Tools. Cell, 2011, 147, 1446-1457.	28.9	471
3	Conversion of Channelrhodopsin into a Light-Gated Chloride Channel. Science, 2014, 344, 409-412.	12.6	339
4	A distinct abundant group of microbial rhodopsins discovered using functional metagenomics. Nature, 2018, 558, 595-599.	27.8	190
5	Channelrhodopsin-1 Initiates Phototaxis and Photophobic Responses inChlamydomonasby Immediate Light-Induced Depolarization. Plant Cell, 2008, 20, 1665-1677.	6.6	156
6	Color-tuned Channelrhodopsins for Multiwavelength Optogenetics. Journal of Biological Chemistry, 2012, 287, 31804-31812.	3.4	147
7	Photoactivation of Channelrhodopsin. Journal of Biological Chemistry, 2008, 283, 1637-1643.	3.4	146
8	A natural light-driven inward proton pump. Nature Communications, 2016, 7, 13415.	12.8	124
9	H+-Pumping Rhodopsin from the Marine Alga Acetabularia. Biophysical Journal, 2006, 91, 1471-1479.	0.5	75
10	A unique choanoflagellate enzyme rhodopsin exhibits light-dependent cyclic nucleotide phosphodiesterase activity. Journal of Biological Chemistry, 2017, 292, 7531-7541.	3.4	74
11	Observations of rotation within the FoF1-ATP synthase: deciding between rotation of the Focsubunit ring and artifact. FEBS Letters, 2000, 470, 244-248.	2.8	73
12	Glu 87 of Channelrhodopsinâ€1 Causes pHâ€dependent Color Tuning and Fast Photocurrent Inactivation^{â€}. Photochemistry and Photobiology, 2009, 85, 564-569.	2.5	72
13	Crystal structure of heliorhodopsin. Nature, 2019, 574, 132-136.	27.8	71
14	Light-Driven Sodium-Pumping Rhodopsin: A New Concept of Active Transport. Chemical Reviews, 2018, 118, 10646-10658.	47.7	70
15	Schizorhodopsins: A family of rhodopsins from Asgard archaea that function as light-driven inward H ⁺ pumps. Science Advances, 2020, 6, eaaz2441.	10.3	65
16	Aquaporin-1, Nothing but a Water Channel. Journal of Biological Chemistry, 2004, 279, 11364-11367.	3.4	51
17	Remote control of neural function by X-ray-induced scintillation. Nature Communications, 2021, 12, 4478.	12.8	50
18	Rhodopsin optogenetic toolbox v2.0 for light-sensitive excitation and inhibition in Caenorhabditis elegans. PLoS ONE, 2018, 13, e0191802.	2.5	44

#	Article	IF	Citations
19	Cross-linking of Two Î² Subunits in the Closed Conformation in F1-ATPase. Journal of Biological Chemistry, 1999, 274, 5701-5706.	3.4	41
20	Structural Model of Channelrhodopsin. Journal of Biological Chemistry, 2012, 287, 7456-7466.	3.4	39
21	Proton exclusion by an aquaglyceroprotein: a voltage clamp study. Biology of the Cell, 2005, 97, 545-550.	2.0	38
22	Molecular properties of a DTD channelrhodopsin from <i>Guillardia theta</i>. Biophysics and Physicobiology, 2017, 14, 57-66.	1.0	37
23	Optogenetic approaches addressing extracellular modulation of neural excitability. Scientific Reports, 2016, 6, 23947.	3.3	34
24	Probing conformations of the Î² subunit of F0F1-ATP synthase in catalysis. Biochemical and Biophysical Research Communications, 2006, 342, 800-807.	2.1	31
25	Structural insights into the mechanism of rhodopsin phosphodiesterase. Nature Communications, 2020, 11, 5605.	12.8	30
26	Functional characterization of sodium-pumping rhodopsins with different pumping properties. PLoS ONE, 2017, 12, e0179232.	2.5	26
27	Spectroscopic study of the transmembrane domain of a rhodopsinâ€“phosphodiesterase fusion protein from a unicellular eukaryote. Journal of Biological Chemistry, 2019, 294, 3432-3443.	3.4	22
28	Ion Channel Properties of a Cation Channelrhodopsin, Gt_CCR4. Applied Sciences (Switzerland), 2019, 9, 3440.	2.5	19
29	Specific residues in the cytoplasmic domain modulate photocurrent kinetics of channelrhodopsin from Klebsormidium nitens. Communications Biology, 2021, 4, 235.	4.4	17
30	Novel optogenetics tool: Gt_CCR4, a light-gated cation channel with high reactivity to weak light. Biophysical Reviews, 2020, 12, 453-459.	3.2	13
31	Production of a Light-Gated Proton Channel by Replacing the Retinal Chromophore with Its Synthetic Vinylene Derivative. Journal of Physical Chemistry Letters, 2018, 9, 2857-2862.	4.6	12
32	Molecular Properties of New Enzyme Rhodopsins with Phosphodiesterase Activity. ACS Omega, 2020, 5, 10602-10609.	3.5	10
33	Optogenetic reprogramming of carbon metabolism using light-powering microbial proton pump systems. Metabolic Engineering, 2022, 72, 227-236.	7.0	10
34	Molecular Properties and Optogenetic Applications of Enzymerhodopsins. Advances in Experimental Medicine and Biology, 2021, 1293, 153-165.	1.6	9
35	TAT Rhodopsin Is an Ultraviolet-Dependent Environmental pH Sensor. Biochemistry, 2021, 60, 899-907.	2.5	9
36	Ion transport activity and optogenetics capability of light-driven Na+-pump KR2. PLoS ONE, 2021, 16, e0256728.	2.5	9

#	Article	IF	Citations
37	A series of commentaries for a symposium entitled â€œSession 3SDA - Optogenetics: applying photoreceptor for understanding biological phenomenaâ€• Biophysical Reviews, 2020, 12, 295-296.	3.2	1
38	Multicolor optogenetics. Neuroscience Research, 2011, 71, e313.	1.9	0
39	Giant enhancement of fluctuation in small biological systems under external fields. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 054028.	2.3	0
40	Functional Mechanism of Channelrhodopsins. Nippon Laser Igakkaishi, 2016, 36, 451-459.	0.0	0
41	Ion Transport Mechanism of the Microbial Rhodopsins Revealed by Electrophysiological Studies. Seibutsu Butsuri, 2017, 57, 179-185.	0.1	0
42	A variety of photoreceptors and the frontiers of optogenetics. Biophysics and Physicobiology, 2022, 19, 1-3.	1.0	0