Ofer Yizhar

List of Publications by Year
in descending order

72 papers	16,712 citations	70961 41 h-index	98622 67 g-index
82 all docs	82 docs citations	82 times ranked	17460 citing authors

#	Article	IF	Citations
1	Localized chemogenetic silencing of inhibitory neurons: a novel mouse model of focal cortical epileptic activity. Cerebral Cortex, 2023, 33, 2838-2856.	1.6	4
2	Neurophotonic Tools for Microscopic Measurements and Manipulation: Status Report. Neurophotonics, 2022, 9, 013001.	1.7	17
3	Rhodopsin-bestrophin fusion proteins from unicellular algae form gigantic pentameric ion channels. Nature Structural and Molecular Biology, 2022, 29, 592-603.	3.6	23
4	Optogenetics at the presynapse. Nature Neuroscience, 2022, 25, 984-998.	7.1	37
5	Efficient optogenetic silencing of neurotransmitter release with a mosquito rhodopsin. Neuron, 2021, 109, 1621-1635.e8.	3.8	81
6	Optogenetic strategies for high-efficiency all-optical interrogation using blue-light-sensitive opsins. ELife, 2021, 10, .	2.8	29
7	The social dilemma: prefrontal control of mammalian sociability. Current Opinion in Neurobiology, 2021, 68, 67-75.	2.0	39
8	Somatostatin interneurons in the prefrontal cortex control affective state discrimination in mice. Nature Neuroscience, 2020, 23, 47-60.	7.1	112
9	Wireless Optogenetic Stimulation of Oxytocin Neurons in a Semi-natural Setup Dynamically Elevates Both Pro-social and Agonistic Behaviors. Neuron, 2020, 107, 644-655.e7.	3.8	54
10	In situ electrochemical generation of nitric oxide for neuronal modulation. Nature Nanotechnology, 2020, 15, 690-697.	15.6	58
11	Anatomically and functionally distinct thalamocortical inputs to primary and secondary mouse whisker somatosensory cortices. Nature Communications, 2020, 11, 3342.	5.8	74
12	InÂVivo Optophysiology Reveals Lateral Inhibition among Layer 1 Interneurons. Neuron, 2020, 106, 14-16.	3.8	1
13	Associative and plastic thalamic signaling to the lateral amygdala controls fear behavior. Nature Neuroscience, 2020, 23, 625-637.	7.1	58
14	Locus coeruleus norepinephrine activity mediates sensory-evoked awakenings from sleep. Science Advances, 2020, 6, eaaz4232.	4.7	124
15	Designer Drugs for Designer Receptors: Unlocking the Translational Potential of Chemogenetics. Trends in Pharmacological Sciences, 2019, 40, 362-364.	4.0	3
16	Dynamics of social representation in the mouse prefrontal cortex. Nature Neuroscience, 2019, 22, 2013-2022.	7.1	78
17	Pathway-, layer- and cell-type-specific thalamic input to mouse barrel cortex. ELife, 2019, 8, .	2.8	80
18	High-efficiency holographic stimulation of blue light-sensitive excitatory opsins in vivo. , 2019, , .		0

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19	Stress and sociability. Nature Neuroscience, 2018, 21, 304-306.	7.1	6
20	12. Relapse to Methamphetamine Seeking After Choice-Based Voluntary Abstinence (Contingency) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 S5.	0.7	0
21	Two-Photon Bidirectional Control and Imaging of Neuronal Excitability with High Spatial Resolution InÂVivo. Cell Reports, 2018, 22, 3087-3098.	2.9	150
22	High-efficiency optogenetic silencing with soma-targeted anion-conducting channelrhodopsins. Nature Communications, 2018, 9, 4125.	5.8	209
23	Two-Photon Imaging and Manipulation of Neural Networks with High Spatial Resolution and Minimal Crosstalk. , 2018, , .		0
24	Reciprocal amygdalaâ€“prefrontal interactions in learning. Current Opinion in Neurobiology, 2018, 52, 149-155.	2.0	38
25	Cell Type-Specific Targeting Strategies for Optogenetics. Neuromethods, 2018, , 25-42.	0.2	4
26	A Functional Gradient in the Rodent Prefrontal Cortex Supports Behavioral Inhibition. Current Biology, 2017, 27, 549-555.	1.8	101
27	Optogenetic control of mitochondrial metabolism and Ca ²⁺ signaling by mitochondria-targeted opsins. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5167-E5176.	3.3	52
28	Manipulating fear associations via optogenetic modulation of amygdala inputs to prefrontal cortex. Nature Neuroscience, 2017, 20, 836-844.	7.1	146
29	Silencing Neurons: Tools, Applications, and Experimental Constraints. Neuron, 2017, 95, 504-529.	3.8	263
30	Building Bridges through Science. Neuron, 2017, 96, 730-735.	3.8	2
31	CRF receptor type 2 neurons in the posterior bed nucleus of the stria terminalis critically contribute to stress recovery. Molecular Psychiatry, 2017, 22, 1691-1700.	4.1	67
32	Functional characterization of sodium-pumping rhodopsins with different pumping properties. PLoS ONE, 2017, 12, e0179232.	1.1	26
33	Ucn3 and CRF-R2 in the medial amygdala regulate complex social dynamics. Nature Neuroscience, 2016, 19, 1489-1496.	7.1	91
34	Biophysical constraints of optogenetic inhibition at presynaptic terminals. Nature Neuroscience, 2016, 19, 554-556.	7.1	317
35	Chronic Optogenetic Activation Augments AÎ² Pathology in a Mouse Model of Alzheimer Disease. Cell Reports, 2015, 11, 859-865.	2.9	186
36	A sexually dimorphic hypothalamic circuit controls maternal care and oxytocin secretion. Nature, 2015, 525, 519-522.	13.7	201

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37	Optogenetic Brain Interfaces. IEEE Reviews in Biomedical Engineering, 2014, 7, 3-30.	13.1	76
38	Viral Vector-Based Techniques for Optogenetic Modulation In Vivo. Neuromethods, 2014, , 289-310.	0.2	1
39	Neuron-Specific Expression of Tomosyn1 in the Mouse Hippocampal Dentate Gyrus Impairs Spatial Learning and Memory. NeuroMolecular Medicine, 2013, 15, 351-363.	1.8	17
40	Optopatcherâ€"An electrode holder for simultaneous intracellular patch-clamp recording and optical manipulation. Journal of Neuroscience Methods, 2013, 214, 113-117.	1.3	54
41	GABAergic Projection Neurons Route Selective Olfactory Inputs to Specific Higher-Order Neurons. Neuron, 2013, 79, 917-931.	3.8	111
42	1PT128 Crystal Structure of a light-gated cation channel, channeirhodopsin(The 50th Annual Meeting) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.0	0
43	Principles for applying optogenetic tools derived from direct comparative analysis of microbial opsins. Nature Methods, 2012, 9, 159-172.	9.0	666
44	Two-photon optogenetic toolbox for fast inhibition, excitation and bistable modulation. Nature Methods, 2012, 9, 1171-1179.	9.0	299
45	Crystal structure of the channelrhodopsin light-gated cation channel. Nature, 2012, 482, 369-374.	13.7	503
46	Optogenetic Insights into Social Behavior Function. Biological Psychiatry, 2012, 71, 1075-1080.	0.7	62
47	A new mode of corticothalamic transmission revealed in the Gria4â^'/â^' model of absence epilepsy. Nature Neuroscience, 2011, 14, 1167-1173.	7.1	159
48	Neocortical excitation/inhibition balance in information processing and social dysfunction. Nature, 2011, 477, 171-178.	13.7	2,036
49	The Microbial Opsin Family of Optogenetic Tools. Cell, 2011, 147, 1446-1457.	13.5	471
50	Optogenetics in Neural Systems. Neuron, 2011, 71, 9-34.	3.8	1,629
51	Recombinase-Driver Rat Lines: Tools, Techniques, and Optogenetic Application to Dopamine-Mediated Reinforcement. Neuron, 2011, 72, 721-733.	3.8	593
52	The Development and Application of Optogenetics. Annual Review of Neuroscience, 2011, 34, 389-412.	5.0	1,567
53	An Implantable Optical Stimulation Delivery System for Actuating an Excitable Biosubstrate. IEEE Journal of Solid-State Circuits, 2011, 46, 321-332.	3.5	19
54	An optogenetic toolbox designed for primates. Nature Neuroscience, 2011, 14, 387-397.	7.1	400

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55	Microbial Opsins: A Family of Single-Component Tools for Optical Control of Neural Activity. Cold Spring Harbor Protocols, 2011, 2011, top102.	0.2	38
56	Ultrafast optogenetic control. Nature Neuroscience, 2010, 13, 387-392.	7.1	660
57	Tuning arousal with optogenetic modulation of locus coeruleus neurons. Nature Neuroscience, 2010, 13, 1526-1533.	7.1	800
58	Non-conducting function of the Kv2.1 channel enables it to recruit vesicles for release in neuroendocrine and nerve cells. Journal of Cell Science, 2010, 123, 1940-1947.	1.2	38
59	Mapping Dynamic Protein Interactions to Insulin Secretory Granule Behavior with TIRF-FRET. Biophysical Journal, 2010, 99, 1311-1320.	0.2	22
60	Parvalbumin neurons and gamma rhythms enhance cortical circuit performance. Nature, 2009, 459, 698-702.	13.7	2,258
61	Bi-stable neural state switches. Nature Neuroscience, 2009, 12, 229-234.	7.1	533
62	Friends and foes in synaptic transmission: the role of tomosyn in vesicle priming. Trends in Neurosciences, 2009, 32, 275-282.	4.2	50
63	Red-shifted optogenetic excitation: a tool for fast neural control derived from Volvox carteri. Nature Neuroscience, 2008, 11, 631-633.	7.1	490
64	Modulating Vesicle Priming Reveals that Vesicle Immobilization Is Necessary but not Sufficient for Fusion-Competence. PLoS ONE, 2008, 3, e2694.	1.1	18
65	Receptor-mediated Regulation of Tomosyn-Syntaxin 1A Interactions in Bovine Adrenal Chromaffin Cells. Journal of Biological Chemistry, 2007, 282, 22887-22899.	1.6	38
66	Multiple functional domains are involved in tomosyn regulation of exocytosis. Journal of Neurochemistry, 2007, 103, 604-616.	2.1	43
67	Ion interaction at the pore of Lc-type Ca2+ channel is sufficient to mediate depolarization-induced exocytosis. Journal of Neurochemistry, 2006, 97, 116-127.	2.1	59
68	Nonconventional Trafficking of Ras Associated with Ras Signal Organization. Traffic, 2006, 7, 1119-1126.	1.3	35
69	Spatiotemporal Organization of Ras Signaling: Rasosomes and the Galectin Switch. Cellular and Molecular Neurobiology, 2006, 26, 469-493.	1.7	69
70	Ras and Its Signals Diffuse through the Cell on Randomly Moving Nanoparticles. Cancer Research, 2006, 66, 1974-1981.	0.4	33
71	Involvement of Sir2/4 in Silencing of DNA Breakage and Recombination on Mouse YACs during Yeast Meiosis. Molecular Biology of the Cell, 2005, 16, 1449-1455.	0.9	5
72	Tomosyn inhibits priming of large dense-core vesicles in a calcium-dependent manner. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2578-2583.	3.3	104