Alexander Sher

List of Publications by Year
in descending order

29 papers	3,138 citations	394421 19 h-index	552781 26 g-index
40 all docs	40 docs citations	40 times ranked	2617 citing authors

#	Article	IF	Citations
1	Spatio-temporal correlations and visual signalling in a complete neuronal population. Nature, 2008, 454, 995-999.	27.8	1,128
2	Electrical Stimulation of Mammalian Retinal Ganglion Cells With Multielectrode Arrays. Journal of Neurophysiology, 2006, 95, 3311-3327.	1.8	331
3	Photovoltaic restoration of sight with high visual acuity. Nature Medicine, 2015, 21, 476-482.	30.7	296
4	Spatial Properties and Functional Organization of Small Bistratified Ganglion Cells in Primate Retina. Journal of Neuroscience, 2007, 27, 13261-13272.	3.6	189
5	High-Resolution Electrical Stimulation of Primate Retina for Epiretinal Implant Design. Journal of Neuroscience, 2008, 28, 4446-4456.	3.6	183
6	Loss of Responses to Visual But Not Electrical Stimulation in Ganglion Cells of Rats With Severe Photoreceptor Degeneration. Journal of Neurophysiology, 2009, 102, 3260-3269.	1.8	92
7	Mapping nonlinear receptive field structure in primate retina at single cone resolution. ELife, 2015, 4, .	6.0	77
8	Activation of ganglion cells and axon bundles using epiretinal electrical stimulation. Journal of Neurophysiology, 2017, 118, 1457-1471.	1.8	64
9	Properties and application of a multichannel integrated circuit for low-artifact, patterned electrical stimulation of neural tissue. Journal of Neural Engineering, 2012, 9, 066005.	3.5	63
10	Anatomical Identification of Extracellularly Recorded Cells in Large-Scale Multielectrode Recordings. Journal of Neuroscience, 2015, 35, 4663-4675.	3.6	63
11	A Polyaxonal Amacrine Cell Population in the Primate Retina. Journal of Neuroscience, 2014, 34, 3597-3606.	3.6	60
12	A non-canonical pathway for mammalian blue-green color vision. Nature Neuroscience, 2012, 15, 952-953.	14.8	57
13	Restoration of Retinal Structure and Function after Selective Photocoagulation. Journal of Neuroscience, 2013, 33, 6800-6808.	3.6	53
14	Spatiotemporal characteristics of retinal response to network-mediated photovoltaic stimulation. Journal of Neurophysiology, 2018, 119, 389-400.	1.8	51
15	Unusual Physiological Properties of Smooth Monostratified Ganglion Cell Types in Primate Retina. Neuron, 2019, 103, 658-672.e6.	8.1	50
16	Maximum Entropy Approaches to Living Neural Networks. Entropy, 2010, 12, 89-106.	2.2	47
17	Deafferented Adult Rod Bipolar Cells Create New Synapses with Photoreceptors to Restore Vision. Journal of Neuroscience, 2017, 37, 4635-4644.	3.6	44
18	Retinal Representation of the Elementary Visual Signal. Neuron, 2014, 81, 130-139.	8.1	42

#	Article	IF	Citations
19	Inference of nonlinear receptive field subunits with spike-triggered clustering. ELife, 2020, 9, .	6.0	30
20	Reconstruction of natural images from responses of primate retinal ganglion cells. ELife, 2020, 9, .	6.0	28
21	Temporal structure in spiking patterns of ganglion cells defines perceptual thresholds in rodents with subretinal prosthesis. Scientific Reports, 2018, 8, 3145.	3.3	25
22	Optimization of Electrical Stimulation for a High-Fidelity Artificial Retina. , 2019, , .		24
23	Development of Animal Models of Local Retinal Degeneration. , 2015, 56, 4644.		23
24	Contrast Sensitivity With a Subretinal Prosthesis and Implications for Efficient Delivery of Visual Information. , 2015, 56, 7186.		21
25	Stereotyped Synaptic Connectivity Is Restored during Circuit Repair in the Adult Mammalian Retina. Current Biology, 2018, 28, 1818-1824.e2.	3.9	20
26	Identification of a Retinal Circuit for Recurrent Suppression Using Indirect Electrical Imaging. Current Biology, 2016, 26, 1935-1942.	3.9	16
27	Spatially patterned bi-electrode epiretinal stimulation for axon avoidance at cellular resolution. Journal of Neural Engineering, 2021, 18, 066007.	3.5	9
28	Large scale matching of function to the genetic identity of retinal ganglion cells. Scientific Reports, 2017, 7, 15395.	3.3	6
29	Individual variability of neural computations in the primate retina. Neuron, 2022, 110, 698-708.e5.	8.1	5