Botond Roska

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6969281/publications.pdf

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41 papers	5,707 citations	147801 31 h-index	276875 41 g-index
44 all docs	44 docs citations	44 times ranked	6177 citing authors

#	Article	IF	Citations
1	Genetic Reactivation of Cone Photoreceptors Restores Visual Responses in Retinitis Pigmentosa. Science, 2010, 329, 413-417.	12.6	578
2	Light-activated channels targeted to ON bipolar cells restore visual function in retinal degeneration. Nature Neuroscience, 2008, 11, 667-675.	14.8	522
3	Cell Types of the Human Retina and Its Organoids at Single-Cell Resolution. Cell, 2020, 182, 1623-1640.e34.	28.9	359
4	Partial recovery of visual function in a blind patient after optogenetic therapy. Nature Medicine, 2021, 27, 1223-1229.	30.7	335
5	Approach sensitivity in the retina processed by a multifunctional neural circuit. Nature Neuroscience, 2009, 12, 1308-1316.	14.8	290
6	Transcriptional code and disease map for adult retinal cell types. Nature Neuroscience, 2012, 15, 487-495.	14.8	235
7	Single-cellâ€“initiated monosynaptic tracing reveals layer-specific cortical network modules. Science, 2015, 349, 70-74.	12.6	212
8	Retinal stimulation strategies to restore vision: Fundamentals and systems. Progress in Retinal and Eye Research, 2016, 53, 21-47.	15.5	207
9	Emerging therapies for inherited retinal degeneration. Science Translational Medicine, 2016, 8, 368rv6.	12.4	179
10	The mesoSPIM initiative: open-source light-sheet microscopes for imaging cleared tissue. Nature Methods, 2019, 16, 1105-1108.	19.0	174
11	Genetic address book for retinal cell types. Nature Neuroscience, 2009, 12, 1197-1204.	14.8	172
12	Nanomechanical mapping of first binding steps of a virus to animal cells. Nature Nanotechnology, 2017, 12, 177-183.	31.5	170
13	Spatially asymmetric reorganization of inhibition establishes a motion-sensitive circuit. Nature, 2011, 469, 407-410.	27.8	165
14	Efficient transduction and optogenetic stimulation of retinal bipolar cells by a synthetic adenoâ€associated virus capsid and promoter. EMBO Molecular Medicine, 2014, 6, 1175-1190.	6.9	149
15	Targeting neuronal and glial cell types with synthetic promoter AAVs in mice, non-human primates and humans. Nature Neuroscience, 2019, 22, 1345-1356.	14.8	144
16	Ambient Illumination Toggles a Neuronal Circuit Switch in the Retina and Visual Perception at Cone Threshold. Neuron, 2013, 78, 325-338.	8.1	143
17	The First Stage of Cardinal Direction Selectivity Is Localized to the Dendrites of Retinal Ganglion Cells. Neuron, 2013, 79, 1078-1085.	8.1	139
18	miRNAs 182 and 183 Are Necessary to Maintain Adult Cone Photoreceptor Outer Segments and Visual Function. Neuron, 2014, 83, 586-600.	8.1	125

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19	Gene Therapy for Blindness. Annual Review of Neuroscience, 2013, 36, 467-488.	10.7	124
20	Optogenetics: 10 years after ChR2 in neuronsâ€"views from the community. Nature Neuroscience, 2015, 18, 1202-1212.	14.8	122
21	Congenital Nystagmus Gene FRMD7 Is Necessary for Establishing a Neuronal Circuit Asymmetry for Direction Selectivity. Neuron, 2016, 89, 177-193.	8.1	117
22	Whole-Brain Functional Ultrasound Imaging Reveals Brain Modules for Visuomotor Integration. Neuron, 2018, 100, 1241-1251.e7.	8.1	112
23	Different Modes of Visual Integration in the Lateral Geniculate Nucleus Revealed by Single-Cell-Initiated Transsynaptic Tracing. Neuron, 2017, 93, 767-776.e6.	8.1	111
24	Restoring vision. Nature, 2018, 557, 359-367.	27.8	108
25	Causal evidence for retina-dependent and -independent visual motion computations in mouse cortex. Nature Neuroscience, 2017, 20, 960-968.	14.8	101
26	Restoring light sensitivity using tunable near-infrared sensors. Science, 2020, 368, 1108-1113.	12.6	77
27	A network comprising short and long noncoding RNAs and RNA helicase controls mouse retina architecture. Nature Communications, 2015, 6, 7305.	12.8	76
28	The primate model for understanding and restoring vision. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26280-26287.	7.1	73
29	Rods in daylight act as relay cells for cone-driven horizontal cellâ€"mediated surround inhibition. Nature Neuroscience, 2014, 17, 1728-1735.	14.8	58
30	Whole-brain functional ultrasound imaging in awake head-fixed mice. Nature Protocols, 2021, 16, 3547-3571.	12.0	52
31	How Diverse Retinal Functions Arise from Feedback at the First Visual Synapse. Neuron, 2018, 99, 117-134.e11.	8.1	51
32	General anesthesia globally synchronizes activity selectively in layer 5 cortical pyramidal neurons. Neuron, 2022, 110, 2024-2040.e10.	8.1	44
33	Cis-regulatory landscapes of four cell types of the retina. Nucleic Acids Research, 2017, 45, 11607-11621.	14.5	39
34	Virus stamping for targeted single-cell infection in vitro and in vivo. Nature Biotechnology, 2018, 36, 81-88.	17.5	39
35	The formation of the light-sensing compartment of cone photoreceptors coincides with a transcriptional switch. ELife, 2017, 6, .	6.0	28
36	Depicting brighter possibilities for treating blindness. Science Translational Medicine, 2019, 11, .	12.4	24

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37	Rods Feed Cones to Keep them Alive. Cell, 2015, 161, 706-708.	28.9	12
38	Magnetically guided virus stamping for the targeted infection of single cells or groups of cells. Nature Protocols, 2019, 14, 3205-3219.	12.0	7
39	New Technologies for Outcome Measures in Retinal Disease: Review from the European Vision Institute Special Interest Focus Group. Ophthalmic Research, 2020, 63, 77-87.	1.9	7
40	The first steps in vision: cell types, circuits, and repair. EMBO Molecular Medicine, 2019, 11, .	6.9	5
41	New Technologies for Outcome Measures in Glaucoma: Review by the European Vision Institute Special Interest Focus Group. Ophthalmic Research, 2020, 63, 88-96.	1.9	2