

Tom Baden

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8525749/publications.pdf>

Version: 2024-02-01

57
papers

3,785
citations

279798

23
h-index

168389

53
g-index

88
all docs

88
docs citations

88
times ranked

3418
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-telecentric two-photon microscopy for 3D random access mesoscale imaging. Nature Communications, 2022, 13, 544.	12.8	4
2	Is our retina really upside down?. Current Biology, 2022, 32, R300-R303.	3.9	4
3	Colourfulness as a possible measure of object proximity in the larval zebrafish brain. Current Biology, 2021, 31, R235-R236.	3.9	15
4	Two decades of neuroscience publication trends in Africa. Nature Communications, 2021, 12, 3429.	12.8	14
5	Circuit mechanisms for colour vision in zebrafish. Current Biology, 2021, 31, R807-R820.	3.9	20
6	Spherical arena reveals optokinetic response tuning to stimulus location, size, and frequency across entire visual field of larval zebrafish. ELife, 2021, 10, .	6.0	17
7	Distinct synaptic transfer functions in same-type photoreceptors. ELife, 2021, 10, .	6.0	10
8	Spectral inference reveals principal cone-integration rules of the zebrafish inner retina. Current Biology, 2021, 31, 5214-5226.e4.	3.9	6
9	Ancestral circuits for vertebrate color vision emerge at the first retinal synapse. Science Advances, 2021, 7, eabj6815.	10.3	26
10	Understanding the retinal basis of vision across species. Nature Reviews Neuroscience, 2020, 21, 5-20.	10.2	191
11	LED Zappelin™: An open source LED controller for arbitrary spectrum visual stimulation and optogenetics during 2-photon imaging. HardwareX, 2020, 8, e00127.	2.2	11
12	TReND in Africa: Toward a Truly Global (Neuro)science Community. Neuron, 2020, 107, 412-416.	8.1	8
13	Zebrafish Retinal Ganglion Cells Asymmetrically Encode Spectral and Temporal Information across Visual Space. Current Biology, 2020, 30, 2927-2942.e7.	3.9	37
14	Type-specific dendritic integration in mouse retinal ganglion cells. Nature Communications, 2020, 11, 2101.	12.8	30
15	Vertebrate vision: Lessons from non-model species. Seminars in Cell and Developmental Biology, 2020, 106, 1-4.	5.0	12
16	Fovea-like Photoreceptor Specializations Underlie Single UV Cone Driven Prey-Capture Behavior in Zebrafish. Neuron, 2020, 107, 320-337.e6.	8.1	91
17	The retinal basis of vision in chicken. Seminars in Cell and Developmental Biology, 2020, 106, 106-115.	5.0	28
18	Leveraging open hardware to alleviate the burden of COVID-19 on global health systems. PLoS Biology, 2020, 18, e3000730.	5.6	74

#	ARTICLE	IF	CITATIONS
19	A low-cost hyperspectral scanner for natural imaging and the study of animal colour vision above and under water. <i>Scientific Reports</i> , 2019, 9, 10799.	3.3	13
20	Motion Vision: A New Mechanism in the Mammalian Retina. <i>Current Biology</i> , 2019, 29, R933-R935.	3.9	4
21	Studying a Light Sensor with Light: Multiphoton Imaging in the Retina. <i>NeuroMethods</i> , 2019, , 225-250.	0.3	25
22	The Retinal Basis of Vertebrate Color Vision. <i>Annual Review of Vision Science</i> , 2019, 5, 177-200.	4.4	86
23	African neuroscience on the global stage: Nigeria as a model. <i>European Journal of Neuroscience</i> , 2019, 49, 1544-1551.	2.6	14
24	An arbitrary-spectrum spatial visual stimulator for vision research. <i>ELife</i> , 2019, 8, .	6.0	51
25	Spikeling: A low-cost hardware implementation of a spiking neuron for neuroscience teaching and outreach. <i>PLoS Biology</i> , 2018, 16, e2006760.	5.6	4
26	Zebrafish Differentially Process Color across Visual Space to Match Natural Scenes. <i>Current Biology</i> , 2018, 28, 2018-2032.e5.	3.9	161
27	Visual Neuroscience: A Retinal Ganglion Cell to Report Image Focus?. <i>Current Biology</i> , 2017, 27, R139-R141.	3.9	7
28	Inhibition decorrelates visual feature representations in the inner retina. <i>Nature</i> , 2017, 542, 439-444.	27.8	225
29	General features of inhibition in the inner retina. <i>Journal of Physiology</i> , 2017, 595, 5507-5515.	2.9	37
30	Openspritzer: an open hardware pressure ejection system for reliably delivering picolitre volumes. <i>Scientific Reports</i> , 2017, 7, 2188.	3.3	27
31	Local Signals in Mouse Horizontal Cell Dendrites. <i>Current Biology</i> , 2017, 27, 3603-3615.e5.	3.9	20
32	The $\hat{\alpha}$ -100 lab: A 3D-printable open-source platform for fluorescence microscopy, optogenetics, and accurate temperature control during behaviour of zebrafish, <i>Drosophila</i> , and <i>Caenorhabditis elegans</i> . <i>PLoS Biology</i> , 2017, 15, e2002702.	5.6	135
33	Benchmarking Spike Rate Inference in Population Calcium Imaging. <i>Neuron</i> , 2016, 90, 471-482.	8.1	154
34	Retinal Physiology: Non-Bipolar-Cell Excitatory Drive in the Inner Retina. <i>Current Biology</i> , 2016, 26, R706-R708.	3.9	2
35	Species-specific motion detectors. <i>Nature</i> , 2016, 535, 45-46.	27.8	13
36	The functional diversity of retinal ganglion cells in the mouse. <i>Nature</i> , 2016, 529, 345-350.	27.8	788

#	ARTICLE	IF	CITATIONS
37	Imaging Ca ²⁺ Dynamics in Cone Photoreceptor Axon Terminals of the Mouse Retina. <i>Journal of Visualized Experiments</i> , 2015, , e52588.	0.3	9
38	Open Labware: 3-D Printing Your Own Lab Equipment. <i>PLoS Biology</i> , 2015, 13, e1002086.	5.6	239
39	A Synaptic Mechanism for Temporal Filtering of Visual Signals. <i>PLoS Biology</i> , 2014, 12, e1001972.	5.6	44
40	Bridging the Gap: establishing the necessary infrastructure and knowledge for teaching and research in neuroscience in Africa. <i>Metabolic Brain Disease</i> , 2014, 29, 217-220.	2.9	33
41	Retinal bipolar cells: elementary building blocks of vision. <i>Nature Reviews Neuroscience</i> , 2014, 15, 507-519.	10.2	374
42	Spikes and ribbon synapses in early vision. <i>Trends in Neurosciences</i> , 2013, 36, 480-488.	8.6	56
43	Early Vision: Where (Some of) the Magic Happens. <i>Current Biology</i> , 2013, 23, R1096-R1098.	3.9	8
44	Spikes in Mammalian Bipolar Cells Support Temporal Layering of the Inner Retina. <i>Current Biology</i> , 2013, 23, 48-52.	3.9	137
45	A Tale of Two Retinal Domains: Near-Optimal Sampling of Achromatic Contrasts in Natural Scenes through Asymmetric Photoreceptor Distribution. <i>Neuron</i> , 2013, 80, 1206-1217.	8.1	162
46	Neurowissenschaften in Afrika – Kooperationen und Perspektiven. <i>E-Neuroforum</i> , 2013, 19, 73-74.	0.1	0
47	GABAA Receptors Containing the $\beta 2$ Subunit Are Critical for Direction-Selective Inhibition in the Retina. <i>PLoS ONE</i> , 2012, 7, e35109.	2.5	22
48	Spikes in Retinal Bipolar Cells Phase-Lock to Visual Stimuli with Millisecond Precision. <i>Current Biology</i> , 2011, 21, 1859-1869.	3.9	66
49	In vivo evidence that retinal bipolar cells generate spikes modulated by light. <i>Nature Neuroscience</i> , 2011, 14, 951-952.	14.8	56
50	Primary Afferent Depolarization and Frequency Processing in Auditory Afferents. <i>Journal of Neuroscience</i> , 2010, 30, 14862-14869.	3.6	27
51	Dynamics of free intracellular Ca ²⁺ during synaptic and spike activity of cricket tibial motoneurons. <i>European Journal of Neuroscience</i> , 2009, 29, 1357-1368.	2.6	9
52	Front leg movements and tibial motoneurons underlying auditory steering in the cricket (<i>Gryllus</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 I	1.7	15
53	Motorische Kontrolle der akustischen Orientierung von Grillen. <i>E-Neuroforum</i> , 2008, 14, 267-273.	0.1	0
54	Neurite-specific Ca ²⁺ dynamics underlying sound processing in an auditory interneurone. <i>Developmental Neurobiology</i> , 2007, 67, 68-80.	3.0	21

#	ARTICLE	IF	CITATIONS
55	Neurite-specific Ca ²⁺ dynamics underlying sound processing in an auditory interneurone. <i>Journal of Neurobiology</i> , 2007, 67, 68-80.	3.6	13
56	Zebrafish Differentially Process Colour Across Visual Space to Match Natural Scenes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	2
57	What the Zebrafish's Eye Tells the Zebrafish's Brain: Retinal Ganglion Cells for Prey Capture and Colour Vision. <i>SSRN Electronic Journal</i> , 0, , .	0.4	4