Peter Robin Hiesinger

List of Publications by Year
in descending order

62 papers	4,991 citations	147801 31 h-index	155660 55 g-index
91 all docs	91 docs citations	91 times ranked	6138 citing authors

#	Article	IF	Citations
1	Neuronal filopodia: From stochastic dynamics to robustness of brain morphogenesis. Seminars in Cell and Developmental Biology, 2023, 133, 10-19.	5.0	16
2	Brain wiring with composite instructions. BioEssays, 2021, 43, e2000166.	2.5	17
3	Systematic functional analysis of rab GTPases reveals limits of neuronal robustness to environmental challenges in flies. ELife, 2021, 10, .	6.0	20
4	Brain connectivity inversely scales with developmental temperature in Drosophila. Cell Reports, 2021, 37, 110145.	6.4	27
5	A neurodevelopmental origin of behavioral individuality in the <i>Drosophila</i> visual system. Science, 2020, 367, 1112-1119.	12.6	97
6	Autophagy-dependent filopodial kinetics restrict synaptic partner choice during Drosophila brain wiring. Nature Communications, 2020, 11, 1325.	12.8	31
7	Neuronal strategies for meeting the right partner during brain wiring. Current Opinion in Neurobiology, 2020, 63, 1-8.	4.2	19
8	The Drosophila amyloid precursor protein homologue mediates neuronal survival and neuroglial interactions. PLoS Biology, 2020, 18, e3000703.	5.6	10
9	Title is missing!. , 2020, 18, e3000703.		0
10	Title is missing!. , 2020, 18, e3000703.		0
11	Title is missing!. , 2020, 18, e3000703.		0
12	Title is missing!. , 2020, 18, e3000703.		0
13	Title is missing!. , 2020, 18, e3000703.		0
14	Title is missing!. , 2020, 18, e3000703.		0
15	Serial Synapse Formation through Filopodial Competition for Synaptic Seeding Factors. Developmental Cell, 2019, 50, 447-461.e8.	7.0	39
16	Rab GTPases and Membrane Trafficking inÂNeurodegeneration. Current Biology, 2018, 28, R471-R486.	3.9	171
17	Live Observation of Two Parallel Membrane Degradation Pathways at Axon Terminals. Current Biology, 2018, 28, 1027-1038.e4.	3.9	59
18	The where, what, and when of membrane protein degradation in neurons. Developmental Neurobiology, 2018, 78, 283-297.	3.0	34

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19	The Evolution of Variability and Robustness in Neural Development. Trends in Neurosciences, 2018, 41, 577-586.	8.6	54
20	Wiring visual systems: common and divergent mechanisms and principles. Current Opinion in Neurobiology, 2017, 42, 128-135.	4.2	24
21	Live Imaging of Connectivity in Developing Neural Circuits in Drosophila. , 2017, , 149-167.		0
22	miR-124 Regulates Diverse Aspects of Rhythmic Behavior in<i>Drosophila</i>. Journal of Neuroscience, 2016, 36, 3414-3421.	3.6	32
23	The Developmental Rules of Neural Superposition in Drosophila. Cell, 2015, 162, 120-133.	28.9	65
24	Beyond Molecular Codes: Simple Rules to Wire Complex Brains. Cell, 2015, 163, 285-291.	28.9	95
25	Filopodial dynamics and growth cone stabilization in Drosophila visual circuit development. ELife, 2015, 4, .	6.0	78
26	The Evolution and Development of Neural Superposition. Journal of Neurogenetics, 2014, 28, 216-232.	1.4	34
27	Ca2+â€"Calmodulin regulates SNARE assembly and spontaneous neurotransmitter release via v-ATPase subunit V0a1. Journal of Cell Biology, 2014, 205, 21-31.	5.2	60
28	Regulation of branching dynamics by axon-intrinsic asymmetries in Tyrosine Kinase Receptor signaling. ELife, 2014, 3, e01699.	6.0	36
29	The synaptic maintenance problem: membrane recycling, Ca2+ homeostasis and late onset degeneration. Molecular Neurodegeneration, 2013, 8, 23.	10.8	76
30	Membrane trafficking in neuronal maintenance and degeneration. Cellular and Molecular Life Sciences, 2013, 70, 2919-2934.	5.4	62
31	The vesicular ATPase: A missing link between acidification and exocytosis. Journal of Cell Biology, 2013, 203, 171-173.	5.2	31
32	Charcot-Marie-Tooth 2B mutations in rab7 cause dosage-dependent neurodegeneration due to partial loss of function. ELife, 2013, 2, e01064.	6.0	62
33	Combining recombineering and ends-out homologous recombination to systematically characterize Drosophila gene families. Communicative and Integrative Biology, 2012, 5, 179-183.	1.4	12
34	The synaptic vesicle SNARE neuronal Synaptobrevin promotes endolysosomal degradation and prevents neurodegeneration. Journal of Cell Biology, 2012, 196, 261-276.	5.2	40
35	Autophagy, neuron-specific degradation and neurodegeneration. Autophagy, 2012, 8, 711-713.	9.1	17
36	Lysosomal calcium homeostasis defects, not proton pump defects, cause endo-lysosomal dysfunction in PSEN-deficient cells. Journal of Cell Biology, 2012, 198, 23-35.	5.2	187

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37	Similarities of Drosophila rab GTPases Based on Expression Profiling: Completion and Analysis of the rab-Gal4 Kit. PLoS ONE, 2012, 7, e40912.	2.5	23
38	Systematic Discovery of Rab GTPases with Synaptic Functions in Drosophila. Current Biology, 2011, 21, 1704-1715.	3.9	122
39	Intracellular trafficking in <i>Drosophila</i> visual system development: A basis for pattern formation through simple mechanisms. Developmental Neurobiology, 2011, 71, 1227-1245.	3.0	6
40	A Drosophila genetic screen yields allelic series of core microRNA biogenesis factors and reveals post-developmental roles for microRNAs. Rna, 2011, 17, 1997-2010.	3.5	28
41	Guidance Receptor Degradation Is Required for Neuronal Connectivity in the Drosophila Nervous System. PLoS Biology, 2010, 8, e1000553.	5.6	21
42	On the role of v-ATPase V0a1â€“dependent degradation in Alzheimer Disease. Communicative and Integrative Biology, 2010, 3, 604-607.	1.4	45
43	A dual function of V0-ATPase a1 provides an endolysosomal degradation mechanism in <i>Drosophila melanogaster</i> photoreceptors. Journal of Cell Biology, 2010, 189, 885-899.	5.2	100
44	NAD synthase NMNAT acts as a chaperone to protect against neurodegeneration. Nature, 2008, 452, 887-891.	27.8	193
45	V-ATPase V0 Sector Subunit a1 in Neurons Is a Target of Calmodulin. Journal of Biological Chemistry, 2008, 283, 294-300.	3.4	33
46	Synaptic Patterning by Morphogen Signaling. Science Signaling, 2008, 1, pe20.	3.6	3
47	Thirty-One Flavors of Drosophila Rab Proteins. Genetics, 2007, 176, 1307-1322.	2.9	264
48	Activity-Independent Prespecification of Synaptic Partners in the Visual Map of Drosophila. Current Biology, 2006, 16, 1835-1843.	3.9	96
49	The Nicotinic Acetylcholine Receptor DÎ±7 Is Required for an Escape Behavior inDrosophila. PLoS Biology, 2006, 4, e63.	5.6	124
50	Drosophila NMNAT Maintains Neural Integrity Independent of Its NAD Synthesis Activity. PLoS Biology, 2006, 4, e416.	5.6	160
51	The v-ATPase V 0 Subunit a1 Is Required for a Late Step in Synaptic Vesicle Exocytosis in Drosophila. Cell, 2005, 121, 607-620.	28.9	297
52	Genetics in the Age of Systems Biology. Cell, 2005, 123, 1173-1174.	28.9	21
53	Mutations in Drosophila sec15 Reveal a Function in Neuronal Targeting for a Subset of Exocyst Components. Neuron, 2005, 46, 219-232.	8.1	129
54	Flying in the face of total disruption. Nature Genetics, 2004, 36, 211-212.	21.4	10

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55	The BDGP Gene Disruption Project. Genetics, 2004, 167, 761-781.	2.9	774
56	Synaptojanin Is Recruited by Endophilin to Promote Synaptic Vesicle Uncoating. Neuron, 2003, 40, 733-748.	8.1	376
57	Mapping Drosophila mutations with molecularly defined P element insertions. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10860-10865.	7.1	89
58	Endophilin Promotes a Late Step in Endocytosis at Glial Invaginations inDrosophilaPhotoreceptor Terminals. Journal of Neuroscience, 2003, 23, 10732-10744.	3.6	86
59	Drosophila Fragile X Protein, DFXR, Regulates Neuronal Morphology and Function in the Brain. Neuron, 2002, 34, 961-972.	8.1	215
60	Drosophila VAP-33A Directs Bouton Formation at Neuromuscular Junctions in a Dosage-Dependent Manner. Neuron, 2002, 35, 291-306.	8.1	181
61	Visualization of synaptic markers in the optic neuropils ofDrosophila using a new constrained deconvolution method. Journal of Comparative Neurology, 2001, 429, 277-288.	1.6	32
62	Neuropil Pattern Formation and Regulation of Cell Adhesion Molecules in<i>Drosophila</i>Optic Lobe Development Depend on Synaptobrevin. Journal of Neuroscience, 1999, 19, 7548-7556.	3.6	42