Ann-Shyn Chiang

List of Publications by Year
in descending order

91 papers	6,505 citations	126907 33 h-index	71685 76 g-index
101 all docs	101 docs citations	101 times ranked	7273 citing authors

#	Article	IF	Citations
1	Three-Dimensional Reconstruction of Brain-wide Wiring Networks in Drosophila at Single-Cell Resolution. Current Biology, 2011, 21, 1-11.	3.9	761
2	Neural stem and progenitor cells in nestin-GFP transgenic mice. Journal of Comparative Neurology, 2004, 469, 311-324.	1.6	640
3	Dissecting the pathological effects of human AÎ²40 and AÎ²42 in Drosophila : A potential model for Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6623-6628.	7.1	444
4	The staufen/pumilio Pathway Is Involved in Drosophila Long-Term Memory. Current Biology, 2003, 13, 286-296.	3.9	432
5	Delivery of nitric oxide with a nanocarrier promotes tumour vessel normalization and potentiates anti-cancer therapies. Nature Nanotechnology, 2019, 14, 1160-1169.	31.5	267
6	NMDA Receptors Mediate Olfactory Learning and Memory in Drosophila. Current Biology, 2005, 15, 603-615.	3.9	216
7	Gradients of the Drosophila Chinmo BTB-Zinc Finger Protein Govern Neuronal Temporal Identity. Cell, 2006, 127, 409-422.	28.9	213
8	A Map of Olfactory Representation in the Drosophila Mushroom Body. Cell, 2007, 128, 1205-1217.	28.9	206
9	Connectomics-Based Analysis of Information Flow in the Drosophila Brain. Current Biology, 2015, 25, 1249-1258.	3.9	160
10	A Comprehensive Wiring Diagram of the Protocerebral Bridge for Visual Information Processing in the Drosophila Brain. Cell Reports, 2013, 3, 1739-1753.	6.4	159
11	Visualizing Long-Term Memory Formation in Two Neurons of the Drosophila Brain. Science, 2012, 335, 678-685.	12.6	157
12	Aging Specifically Impairs amnesiac-Dependent Memory in Drosophila. Neuron, 2003, 40, 1003-1011.	8.1	155
13	Specific requirement of NMDA receptors for long-term memory consolidation in Drosophila ellipsoid body. Nature Neuroscience, 2007, 10, 1578-1586.	14.8	152
14	Distinct Roles of TRP Channels in Auditory Transduction and Amplification in Drosophila. Neuron, 2013, 77, 115-128.	8.1	151
15	Identification of combinatorial drug regimens for treatment of Huntington's disease using Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3777-3781.	7.1	150
16	Imaging of an Early Memory Trace in theDrosophilaMushroom Body. Journal of Neuroscience, 2008, 28, 4368-4376.	3.6	119
17	Serotoninâ€“mushroom body circuit modulating the formation of anesthesia-resistant memory in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13794-13799.	7.1	119
18	Drosophila ORB protein in two mushroom body output neurons is necessary for long-term memory formation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7898-7903.	7.1	115

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19	Insect NMDA receptors mediate juvenile hormone biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 37-42.	7.1	101
20	Heterotypic Gap Junctions between Two Neurons in the Drosophila Brain Are Critical for Memory. Current Biology, 2011, 21, 848-854.	3.9	97
21	An Octopamine-Mushroom Body Circuit Modulates the Formation of Anesthesia-Resistant Memory in Drosophila. Current Biology, 2013, 23, 2346-2354.	3.9	92
22	Development of theDrosophilamushroom bodies: elaboration,remodeling and spatial organization of dendrites in the calyx. Development (Cambridge), 2003, 130, 2603-2610.	2.5	86
23	Auditory circuit in the Drosophila brain. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2607-2612.	7.1	85
24	Selection of Motor Programs for Suppressing Food Intake and Inducing Locomotion in the Drosophila Brain. PLoS Biology, 2014, 12, e1001893.	5.6	81
25	Octopamine Neuromodulatory Effects on a Social Behavior Decision-Making Network in Drosophila Males. PLoS ONE, 2010, 5, e13248.	2.5	80
26	Microtome-Free 3-Dimensional Confocal Imaging Method for Visualization of Mouse Intestine With Subcellular-Level Resolution. Gastroenterology, 2009, 137, 453-465.	1.3	79
27	Three-dimensional mapping of brain neuropils in the cockroach,Diploptera punctata. Journal of Comparative Neurology, 2001, 440, 1-11.	1.6	77
28	Blockade of Neurotransmission in Drosophila Mushroom Bodies Impairs Odor Attraction, but Not Repulsion. Current Biology, 2003, 13, 1900-1904.	3.9	75
29	Molecular Genetic Analysis of Sexual Rejection: Roles of Octopamine and Its Receptor OAMB inDrosophilaCourtship Conditioning. Journal of Neuroscience, 2012, 32, 14281-14287.	3.6	69
30	Parallel Neural Pathways Mediate CO ₂ Avoidance Responses in Drosophila. Science, 2013, 340, 1338-1341.	12.6	69
31	High-resolution confocal imaging and three-dimensional rendering. Methods, 2003, 30, 86-93.	3.8	66
32	Pathogenic VCP/TER94 Alleles Are Dominant Actives and Contribute to Neurodegeneration by Altering Cellular ATP Level in a Drosophila IBMPFD Model. PLoS Genetics, 2011, 7, e1001288.	3.5	53
33	Asymmetric ephaptic inhibition between compartmentalized olfactory receptor neurons. Nature Communications, 2019, 10, 1560.	12.8	52
34	Systems memory consolidation in Drosophila. Current Opinion in Neurobiology, 2013, 23, 84-91.	4.2	49
35	Long-term memory requires sequential protein synthesis in three subsets of mushroom body output neurons in Drosophila. Scientific Reports, 2017, 7, 7112.	3.3	38
36	Optogenetic control of selective neural activity in multiple freely moving Drosophila adults. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5367-5372.	7.1	36

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37	Q&A: Why use synchrotron x-ray tomography for multi-scale connectome mapping?. BMC Biology, 2017, 15, 122.	3.8	34
38	Three-dimensional optical method for integrated visualization of mouse islet microstructure and vascular network with subcellular-level resolution. Journal of Biomedical Optics, 2010, 15, 046018.	2.6	30
39	High-throughput Computer Method for 3D Neuronal Structure Reconstruction from the Image Stack of the Drosophila Brain and Its Applications. PLoS Computational Biology, 2012, 8, e1002658.	3.2	26
40	Glutamate-gated chloride channels inhibit juvenile hormone biosynthesis in the cockroach, Diploptera punctata. Insect Biochemistry and Molecular Biology, 2005, 35, 1260-1268.	2.7	25
41	Rapid single-wavelength lightsheet localization microscopy for clarified tissue. Nature Communications, 2019, 10, 4762.	12.8	25
42	Additive Expression of Consolidated Memory through Drosophila Mushroom Body Subsets. PLoS Genetics, 2016, 12, e1006061.	3.5	25
43	DrosophilaPQBP1 Regulates Learning Acquisition at Projection Neurons in Aversive Olfactory Conditioning. Journal of Neuroscience, 2010, 30, 14091-14101.	3.6	24
44	Toward Whole-Body Connectomics. Journal of Neuroscience, 2016, 36, 11375-11383.	3.6	24
45	A Single-Cell Level and Connectome-Derived Computational Model of the Drosophila Brain. Frontiers in Neuroinformatics, 2018, 12, 99.	2.5	24
46	A synchrotron X-ray imaging strategy to map large animal brains. Chinese Journal of Physics, 2020, 65, 24-32.	3.9	24
47	Parallel circuits control temperature preference in Drosophila during ageing. Nature Communications, 2015, 6, 7775.	12.8	22
48	Glutamate-induced rise in cytosolic calcium concentration stimulates in vitro rates of juvenile hormone biosynthesis in corpus allatum of Diploptera punctata. Molecular and Cellular Endocrinology, 1999, 158, 163-171.	3.2	21
49	Diversity and wiring variability of visual local neurons in the Drosophila medulla M6 stratum. Journal of Comparative Neurology, 2014, 522, 3795-3816.	1.6	20
50	Anatomical Characterization of Thermosensory AC Neurons in the Adult Drosophila Brain. Journal of Neurogenetics, 2011, 25, 1-6.	1.4	18
51	Three-wavelength light control of freely moving Drosophila Melanogaster for less perturbation and efficient social-behavioral studies. Biomedical Optics Express, 2015, 6, 514.	2.9	17
52	Light field microscopy based on structured light illumination. Optics Letters, 2021, 46, 3424.	3.3	15
53	Optical volumetric brain imaging: speed, depth, and resolution enhancement. Journal Physics D: Applied Physics, 2021, 54, 323002.	2.8	14
54	Optical properties of adult Drosophila brains in one-, two-, and three-photon microscopy. Biomedical Optics Express, 2019, 10, 1627.	2.9	14

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55	Millisecond two-photon optical ribbon imaging for small-animal functional connectome study. Optics Letters, 2019, 44, 3190.	3.3	14
56	The Neuron Navigator: Exploring the information pathway through the neural maze. , 2011, , .		13
57	CREBA and CREBB in two identified neurons gate long-term memory formation in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
58	Diverse Community Structures in the Neuronal-Level Connectome of the Drosophila Brain. Neuroinformatics, 2020, 18, 267-281.	2.8	12
59	High-throughput multiphoton-induced three-dimensional ablation and imaging for biotissues. Biomedical Optics Express, 2015, 6, 491.	2.9	11
60	Non-invasive manipulation of Drosophila behavior by two-photon excited red-activatable channelrhodopsin. Biomedical Optics Express, 2015, 6, 4344.	2.9	10
61	Automatedin situbrain imaging for mapping theDrosophilaconnectome. Journal of Neurogenetics, 2015, 29, 157-168.	1.4	10
62	Soma Detection in 3D Images of Neurons using Machine Learning Technique. Neuroinformatics, 2018, 16, 31-41.	2.8	10
63	Neural control of cell size in the corpora allata during the reproductive cycle of the cockroachDiploptera punctata(Dictyoptera: Blaberidae). Invertebrate Reproduction and Development, 1998, 33, 25-34.	0.8	9
64	Imaging through the Whole Brain of Drosophila at Î»/20 Super-resolution. IScience, 2019, 14, 164-170.	4.1	9
65	All-Optical Volumetric Physiology for Connectomics in Dense Neuronal Structures. IScience, 2019, 22, 133-146.	4.1	9
66	Developing a Stereotypical Drosophila Brain Atlas. IEEE Transactions on Biomedical Engineering, 2014, 61, 2848-2858.	4.2	8
67	Comprehensive map of visual projection neurons for processing ultraviolet information in the Drosophila brain. Journal of Comparative Neurology, 2021, 529, 1988-2013.	1.6	8
68	Genes and Circuits for Olfactory-Associated Long-Term Memory inDrosophila. Journal of Neurogenetics, 2008, 22, 257-284.	1.4	6
69	NMDA Receptors in Drosophila. Frontiers in Neuroscience, 2008, , 213-233.	0.0	6
70	Neuropeptide F inhibits dopamine neuron interference of long-term memory consolidation in Drosophila. IScience, 2021, 24, 103506.	4.1	6
71	Toward the Drosophila connectome: structural analysis of the brain network. BMC Neuroscience, 2013, 14, .	1.9	5
72	Retention of Features on a Mapped Drosophila Brain Surface Using a BÃ©zier-Tube-Based Surface Model Averaging Technique. IEEE Transactions on Biomedical Engineering, 2012, 59, 3314-3326.	4.2	4

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73	Three-Dimensional Tracking of Multiple Small Insects by a Single Camera. Journal of Insect Science, 2021, 21, .	1.5	4
74	A semi-automatic method for neuron centerline extraction in confocal microscopic image stack. , 2008, , .		3
75	NeuroRetriever: Automatic Neuron Segmentation for Connectome Assembly. Frontiers in Systems Neuroscience, 2021, 15, 687182.	2.5	3
76	Optogenetic Manipulation of Selective Neural Activity in Free-Moving Drosophila Adults. Methods in Molecular Biology, 2016, 1408, 377-387.	0.9	2
77	The new X-ray/visible microscopy MAXWELL technique for fast three-dimensional nanoimaging with isotropic resolution. Scientific Reports, 2022, 12, .	3.3	2
78	Connectivity and path analysis for neuron network in the Drosophila brain. , 2013, , .		1
79	On the robustness of the Drosophila neural network. , 2013, , .		1
80	Large-scale segmentation and tracing for neurons in Drosophila brain by Fast Automatically Structural Tracing Algorithm (FASTA). BMC Neuroscience, 2013, 14, .	1.9	0
81	Imaging Drosophila brain neurons for â€œFlyCircuitâ€•analysis. , 0, , 268-272.		0
82	Large-scale quantitative analysis of neurons via morphological structures by Fast Automatically Structural Tracing Algorithm (FAST). BMC Neuroscience, 2015, 16, .	1.9	0
83	Activating neurons by light in free moving adult flies. , 2015, , .		0
84	Kaleido: Visualizing Big Brain Data with Automatic Color Assignment for Single-Neuron Images. Neuroinformatics, 2018, 16, 207-215.	2.8	0
85	Multiscale and Multimodal Imaging for Connectomics. Progress in Optical Science and Photonics, 2019, , 3-45.	0.5	0
86	Forgetting memories through distinct actin remodeling mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20807-20808.	7.1	0
87	Drosophila Brain Functional Data Analysis: A Unified Framework. , 2020, 2020, 1088-1091.		0
88	Cover Image, Volume 529, Issue 8. Journal of Comparative Neurology, 2021, 529, C2.	1.6	0
89	Two-photon excited ReaChR by a three-stage femtosecond optical parametric amplifier. , 2015, , .		0
90	Imaging Through the Whole Brain of Drosophila at Î»/20 Super-Resolution. SSRN Electronic Journal, 0, , .	0.4	0

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91	Computing Image Intersection and Union Regions for Drosophila Neurons Based on Multi-core CPUs. Communications in Computer and Information Science, 2019, , 294-303.	0.5	0