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	The new X-ray/visible microscopy MAXWELL technique for fast three-dimensional nanoimaging with isotropic resolution. Scientific Reports, 2022, 12, .	3.3	2
2	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
3	Cover Image, Volume 529, Issue 8. Journal of Comparative Neurology, 2021, 529, C2.	1.6	0
4	Light field microscopy based on structured light illumination. Optics Letters, 2021, 46, 3424.	3.3	15
5	Optical volumetric brain imaging: speed, depth, and resolution enhancement. Journal Physics D: Applied Physics, 2021, 54, 323002.	2.8	14
6	NeuroRetriever: Automatic Neuron Segmentation for Connectome Assembly. Frontiers in Systems Neuroscience, 2021, 15, 687182.	2.5	3
7	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
8	Three-Dimensional Tracking of Multiple Small Insects by a Single Camera. Journal of Insect Science, 2021, 21, .	1.5	4
9	Neuropeptide F inhibits dopamine neuron interference of long-term memory consolidation in Drosophila. IScience, 2021, 24, 103506.	4.1	6
10	Diverse Community Structures in the Neuronal-Level Connectome of the Drosophila Brain. Neuroinformatics, 2020, 18, 267-281.	2.8	12
11	Drosophila Brain Functional Data Analysis: A Unified Framework. , 2020, 2020, 1088-1091.		0
12	A synchrotron X-ray imaging strategy to map large animal brains. Chinese Journal of Physics, 2020, 65, 24-32.	3.9	24
13	Multiscale and Multimodal Imaging for Connectomics. Progress in Optical Science and Photonics, 2019, , 3-45.	0.5	0
14	Rapid single-wavelength lightsheet localization microscopy for clarified tissue. Nature Communications, 2019, 10, 4762.	12.8	25
15	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
16	Asymmetric ephaptic inhibition between compartmentalized olfactory receptor neurons. Nature Communications, 2019, 10, 1560.	12.8	52
17	Imaging through the Whole Brain of Drosophila at Î»/20 Super-resolution. IScience, 2019, 14, 164-170.	4.1	9
18	All-Optical Volumetric Physiology for Connectomics in Dense Neuronal Structures. IScience, 2019, 22, 133-146.	4.1	9

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19	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
20	Optical properties of adult Drosophila brains in one-, two-, and three-photon microscopy. Biomedical Optics Express, 2019, 10, 1627.	2.9	14
21	Millisecond two-photon optical ribbon imaging for small-animal functional connectome study. Optics Letters, 2019, 44, 3190.	3.3	14
22	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
23	Kaleido: Visualizing Big Brain Data with Automatic Color Assignment for Single-Neuron Images. Neuroinformatics, 2018, 16, 207-215.	2.8	0
24	Soma Detection in 3D Images of Neurons using Machine Learning Technique. Neuroinformatics, 2018, 16, 31-41.	2.8	10
25	A Single-Cell Level and Connectome-Derived Computational Model of the Drosophila Brain. Frontiers in Neuroinformatics, 2018, 12, 99.	2.5	24
26	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
27	Q&A: Why use synchrotron x-ray tomography for multi-scale connectome mapping?. BMC Biology, 2017, 15, 122.	3.8	34
28	Toward Whole-Body Connectomics. Journal of Neuroscience, 2016, 36, 11375-11383.	3.6	24
29	Additive Expression of Consolidated Memory through Drosophila Mushroom Body Subsets. PLoS Genetics, 2016, 12, e1006061.	3.5	25
30	Optogenetic Manipulation of Selective Neural Activity in Free-Moving Drosophila Adults. Methods in Molecular Biology, 2016, 1408, 377-387.	0.9	2
31	Non-invasive manipulation of Drosophila behavior by two-photon excited red-activatable channelrhodopsin. Biomedical Optics Express, 2015, 6, 4344.	2.9	10
32	Large-scale quantitative analysis of neurons via morphological structures by Fast Automatically Structural Tracing Algorithm (FAST). BMC Neuroscience, 2015, 16, .	1.9	0
33	Activating neurons by light in free moving adult flies. , 2015, , .		0
34	Connectomics-Based Analysis of Information Flow in the Drosophila Brain. Current Biology, 2015, 25, 1249-1258.	3.9	160
35	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
36	High-throughput multiphoton-induced three-dimensional ablation and imaging for biotissues. Biomedical Optics Express, 2015, 6, 491.	2.9	11

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37	Automatedin situbrain imaging for mapping theDrosophilaconnectome. Journal of Neurogenetics, 2015, 29, 157-168.	1.4	10
38	Parallel circuits control temperature preference in Drosophila during ageing. Nature Communications, 2015, 6, 7775.	12.8	22
39	Two-photon excited ReaChR by a three-stage femtosecond optical parametric amplifier. , 2015, , .		0
40	Developing a Stereotypical Drosophila Brain Atlas. IEEE Transactions on Biomedical Engineering, 2014, 61, 2848-2858.	4.2	8
41	Selection of Motor Programs for Suppressing Food Intake and Inducing Locomotion in the Drosophila Brain. PLoS Biology, 2014, 12, e1001893.	5.6	81
42	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
43	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
44	Large-scale segmentation and tracing for neurons in Drosophila brain by Fast Automatically Structural Tracing Algorithm (FASTA). BMC Neuroscience, 2013, 14, .	1.9	0
45	Toward the Drosophila connectome: structural analysis of the brain network. BMC Neuroscience, 2013, 14, .	1.9	5
46	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
47	Connectivity and path analysis for neuron network in the Drosophila brain. , 2013, , .		1
48	An Octopamine-Mushroom Body Circuit Modulates the Formation of Anesthesia-Resistant Memory in Drosophila. Current Biology, 2013, 23, 2346-2354.	3.9	92
49	Distinct Roles of TRP Channels in Auditory Transduction and Amplification in Drosophila. Neuron, 2013, 77, 115-128.	8.1	151
50	Systems memory consolidation in Drosophila. Current Opinion in Neurobiology, 2013, 23, 84-91.	4.2	49
51	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
52	On the robustness of the Drosophila neural network. , 2013, , .		1
53	Parallel Neural Pathways Mediate CO ₂ Avoidance Responses in Drosophila. Science, 2013, 340, 1338-1341.	12.6	69
54	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

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55	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
56	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
57	Visualizing Long-Term Memory Formation in Two Neurons of the Drosophila Brain. Science, 2012, 335, 678-685.	12.6	157
58	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
59	The Neuron Navigator: Exploring the information pathway through the neural maze. , 2011, , .		13
60	Anatomical Characterization of Thermosensory AC Neurons in the Adult Drosophila Brain. Journal of Neurogenetics, 2011, 25, 1-6.	1.4	18
61	Three-Dimensional Reconstruction of Brain-wide Wiring Networks in Drosophila at Single-Cell Resolution. Current Biology, 2011, 21, 1-11.	3.9	761
62	Heterotypic Gap Junctions between Two Neurons in the Drosophila Brain Are Critical for Memory. Current Biology, 2011, 21, 848-854.	3.9	97
63	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
64	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
65	Octopamine Neuromodulatory Effects on a Social Behavior Decision-Making Network in Drosophila Males. PLoS ONE, 2010, 5, e13248.	2.5	80
66	DrosophilaPQBP1 Regulates Learning Acquisition at Projection Neurons in Aversive Olfactory Conditioning. Journal of Neuroscience, 2010, 30, 14091-14101.	3.6	24
67	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
68	Microtome-Free 3-Dimensional Confocal Imaging Method for Visualization of Mouse Intestine With Subcellular-Level Resolution. Gastroenterology, 2009, 137, 453-465.	1.3	79
69	Genes and Circuits for Olfactory-Associated Long-Term Memory inDrosophila. Journal of Neurogenetics, 2008, 22, 257-284.	1.4	6
70	Imaging of an Early Memory Trace in theDrosophilaMushroom Body. Journal of Neuroscience, 2008, 28, 4368-4376.	3.6	119
71	A semi-automatic method for neuron centerline extraction in confocal microscopic image stack. , 2008, , .		3
72	NMDA Receptors in Drosophila. Frontiers in Neuroscience, 2008, , 213-233.	0.0	6

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73	A Map of Olfactory Representation in the Drosophila Mushroom Body. Cell, 2007, 128, 1205-1217.	28.9	206
74	Specific requirement of NMDA receptors for long-term memory consolidation in Drosophila ellipsoid body. Nature Neuroscience, 2007, 10, 1578-1586.	14.8	152
75	Gradients of the Drosophila Chinmo BTB-Zinc Finger Protein Govern Neuronal Temporal Identity. Cell, 2006, 127, 409-422.	28.9	213
76	NMDA Receptors Mediate Olfactory Learning and Memory in Drosophila. Current Biology, 2005, 15, 603-615.	3.9	216
77	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
78	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
79	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
80	Neural stem and progenitor cells in nestin-GFP transgenic mice. Journal of Comparative Neurology, 2004, 469, 311-324.	1.6	640
81	The staufen/pumilio Pathway Is Involved in Drosophila Long-Term Memory. Current Biology, 2003, 13, 286-296.	3.9	432
82	Blockade of Neurotransmission in Drosophila Mushroom Bodies Impairs Odor Attraction, but Not Repulsion. Current Biology, 2003, 13, 1900-1904.	3.9	75
83	High-resolution confocal imaging and three-dimensional rendering. Methods, 2003, 30, 86-93.	3.8	66
84	Aging Specifically Impairs amnesiac-Dependent Memory in Drosophila. Neuron, 2003, 40, 1003-1011.	8.1	155
85	Development of theDrosophilamushroom bodies: elaboration,remodeling and spatial organization of dendrites in the calyx. Development (Cambridge), 2003, 130, 2603-2610.	2.5	86
86	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
87	Three-dimensional mapping of brain neuropils in the cockroach,Diploptera punctata. Journal of Comparative Neurology, 2001, 440, 1-11.	1.6	77
88	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
89	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
90	Imaging Drosophila brain neurons for â€œFlyCircuitâ€•analysis. , 0, , 268-272.		0

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91	Imaging Through the Whole Brain of Drosophila at Î»/20 Super-Resolution. SSRN Electronic Journal, 0, , .	0.4	0