Gregory S X E Jefferis

List of Publications by Citations

78 papers	5,480 citations	34 h-index	74 g-index
90 ext. papers	7,360 ext. citations	15.3 avg, IF	5.51 L-index

#	Paper	IF	Citations
78	Comprehensive maps of Drosophila higher olfactory centers: spatially segregated fruit and pheromone representation. *Cell*, **2007**, 128, 1187-203	56.2	466
77	A Complete Electron Microscopy Volume of the Brain of Adult Drosophila melanogaster. *Cell*, **2018**, 174, 730-743.e22	56.2	393
76	Representation of the glomerular olfactory map in the Drosophila brain. *Cell*, **2002**, 109, 243-55	56.2	371
75	Target neuron prespecification in the olfactory map of Drosophila. *Nature*, **2001**, 414, 204-8	50.4	334
74	Complementary function and integrated wiring of the evolutionarily distinct Drosophila olfactory subsystems. *Journal of Neuroscience*, **2011**, 31, 13357-75	6.6	329
73	Cellular organization of the neural circuit that drives Drosophila courtship behavior. *Current Biology* , **2010**, 20, 1602-14	6.3	261
72	An olfactory receptor for food-derived odours promotes male courtship in Drosophila. *Nature*, **2011** , 478, 236-40	50.4	233
71	Olfactory information processing in Drosophila. *Current Biology*, **2009**, 19, R700-13	6.3	217
70	A connectome and analysis of the adult central brain. *ELife*, **2020**, 9,	8.9	213
69	Sexual dimorphism in the fly brain. *Current Biology*, **2010**, 20, 1589-601	6.3	203
68	Developmental origin of wiring specificity in the olfactory system of Drosophila. *Development (Cambridge)*, **2004**, 131, 117-30	6.6	181
67	A bidirectional circuit switch reroutes pheromone signals in male and female brains. *Cell*, **2013**, 155, 1610-23	56.2	148
66	NBLAST: Rapid, Sensitive Comparison of Neuronal Structure and Construction of Neuron Family Databases. *Neuron*, **2016**, 91, 293-311	13.9	143
65	Quantitative measurements of alternating finger tapping in Parkinson's disease correlate with UPDRS motor disability and reveal the improvement in fine motor control from medication and deep brain stimulation. *Movement Disorders*, **2005**, 20, 1286-98	7	137
64	From lineage to wiring specificity. POU domain transcription factors control precise connections of Drosophila olfactory projection neurons. *Cell*, **2003**, 112, 157-67	56.2	136
63	Glomerular maps without cellular redundancy at successive levels of the Drosophila larval olfactory circuit. *Current Biology*, **2005**, 15, 982-92	6.3	126
62	Integration of Parallel Opposing Memories Underlies Memory Extinction. *Cell*, **2018**, 175, 709-722.e15	56.2	104

61	The DIADEM data sets: representative light microscopy images of neuronal morphology to advance automation of digital reconstructions. *Neuroinformatics*, **2011**, 9, 143-57	3.2	100
60	Development of neuronal connectivity in Drosophila antennal lobes and mushroom bodies. *Current Opinion in Neurobiology*, **2002**, 12, 80-6	7.6	90
59	Neurogenetic dissection of the lateral horn reveals major outputs, diverse behavioural functions, and interactions with the mushroom body. *ELife*, **2019**, 8,	8.9	73
58	The connectome of the adult Drosophila mushroom body provides insights into function. *ELife*, **2020**, 9,	8.9	70
57	Complete Connectomic Reconstruction of Olfactory Projection Neurons in the Fly Brain. *Current Biology*, **2020**, 30, 3183-3199.e6	6.3	65
56	The natverse, a versatile toolbox for combining and analysing neuroanatomical data. *ELife*, **2020**, 9,	8.9	62
55	Olfactory receptor and circuit evolution promote host specialization. *Nature*, **2020**, 579, 402-408	50.4	61
54	Wiring specificity in the olfactory system. *Seminars in Cell and Developmental Biology*, **2006**, 17, 50-65	7.5	58
53	Functional and anatomical specificity in a higher olfactory centre. *ELife*, **2019**, 8,	8.9	54
52	Communication from Learned to Innate Olfactory Processing Centers Is Required for Memory Retrieval in Drosophila. *Neuron*, **2018**, 100, 651-668.e8	13.9	51
51	Ultrafast tissue staining with chemical tags. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E3805-14	11.5	50
50	Pheromone processing in Drosophila. *Current Opinion in Neurobiology*, **2015**, 34, 149-57	7.6	48
49	Automatic Segmentation of Drosophila Neural Compartments Using GAL4 Expression Data Reveals Novel Visual Pathways. *Current Biology*, **2016**, 26, 1943-1954	6.3	48
48	A Neural Circuit Arbitrates between Persistence and Withdrawal in Hungry Drosophila. *Neuron*, **2019**, 104, 544-558.e6	13.9	46
47	Neuronal cell types in the fly: single-cell anatomy meets single-cell genomics. *Current Opinion in Neurobiology*, **2019**, 56, 125-134	7.6	41
46	Connectomics Analysis Reveals First-, Second-, and Third-Order Thermosensory and Hygrosensory Neurons in the Adult Drosophila Brain. *Current Biology*, **2020**, 30, 3167-3182.e4	6.3	41
45	Sparse and combinatorial neuron labelling. *Current Opinion in Neurobiology*, **2012**, 22, 101-10	7.6	40
44	Learning from connectomics on the fly. *Current Opinion in Insect Science*, **2017**, 24, 96-105	5.1	34

43	Facilitating Neuron-Specific Genetic Manipulations in Using a Split GAL4 Repressor. *Genetics*, **2017**, 206, 775-784	4	31
42	Olfactory Neurons and Brain Centers Directing Oviposition Decisions in Drosophila. *Cell Reports*, **2018**, 24, 1667-1678	10.6	31
41	Automated Reconstruction of a Serial-Section EM Drosophila Brain with Flood-Filling Networks and Local Realignment		25
40	Automatic detection of synaptic partners in a whole-brain Drosophila electron microscopy data set. *Nature Methods*, **2021**, 18, 771-774	21.6	24
39	A strategy for building neuroanatomy ontologies. *Bioinformatics*, **2012**, 28, 1262-9	7.2	23
38	Neural circuit basis of aversive odour processing in Drosophila from sensory input to descending output		23
37	Fly Cell Atlas: A single-nucleus transcriptomic atlas of the adult fruit fly.. *Science*, **2022**, 375, eabk2432	33.3	23
36	Information flow, cell types and stereotypy in a full olfactory connectome. *ELife*, **2021**, 10,	8.9	22
35	Genetically targeted 3D visualisation of Drosophila neurons under Electron Microscopy and X-Ray Microscopy using miniSOG. *Scientific Reports*, **2016**, 6, 38863	4.9	22
34	Input Connectivity Reveals Additional Heterogeneity of Dopaminergic Reinforcement in Drosophila. *Current Biology*, **2020**, 30, 3200-3211.e8	6.3	21
33	Chemoreceptor Co-Expression in Drosophila Olfactory Neurons		18
32	Second-Generation Chemical Tags: Sensitivity, Versatility, and Speed. *Genetics*, **2017**, 205, 1399-1408	4	14
31	The natverse: a versatile computational toolbox to combine and analyse neuroanatomical data		14
30	Insect olfaction: a map of smell in the brain. *Current Biology*, **2005**, 15, R668-70	6.3	13
29	Optimization of fluorophores for chemical tagging and immunohistochemistry of Drosophila neurons. *PLoS ONE*, **2018**, 13, e0200759	3.7	12
28	Neurotransmitter Classification from Electron Microscopy Images at Synaptic Sites in Drosophila		12
27	A mutual information approach to automate identification of neuronal clusters in Drosophila brain images. *Frontiers in Neuroinformatics*, **2012**, 6, 21	3.9	11
26	Circuits for integrating learnt and innate valences in the fly brain		10

25	NBLAST: Rapid, sensitive comparison of neuronal structure and construction of neuron family databases		9
24	The connectome of the adult Drosophila mushroom body: implications for function		9
23	Circuits for integrating learned and innate valences in the insect brain. *ELife*, **2021**, 10,	8.9	8
22	Drosophila olfaction: the end of stereotypy?. *Neuron*, **2008**, 59, 843-5	13.9	6
21	BAcTrace, a tool for retrograde tracing of neuronal circuits in Drosophila. *Nature Methods*, **2020**, 17, 1254-1261	41.2	6
20	Wiring specificity: axon-dendrite matching refines the olfactory map. *Current Biology*, **2006**, 16, R373-6	6.3	5
19	Development of wiring specificity of the Drosophila olfactory system. *Chemical Senses*, **2005**, 30 Suppl 1, i94	4.8	5
18	Functional and Anatomical Specificity in a Higher Olfactory Centre		5
17	Information flow, cell types and stereotypy in a full olfactory connectome		5
16	A neural circuit arbitrates between perseverance and withdrawal in hungry Drosophila		5
15	Neuroanatomy: decoding the fly brain. *Current Biology*, **2011**, 21, R19-20	6.3	4
14	Neuroscience. Calcium and CREST for healthy dendrites. *Science*, **2004**, 303, 179-81	33.3	4
13	Communication from learned to innate olfactory processing centers is required for memory retrieval in Drosophila		4
12	Connectomics analysis reveals first, second, and third order thermosensory and hygrosensory neurons in the adult Drosophila brain		3
11	Author response: A connectome and analysis of the adult Drosophila central brain **2020**,		3
10	Neurogenetic dissection of the Drosophila innate olfactory processing center		3
9	The making of an olfactory specialist		3
8	Input connectivity reveals additional heterogeneity of dopaminergic reinforcement in Drosophila		2

7	BAcTrace a new tool for retrograde tracing of neuronal circuits		2
6	Chemoreceptor co-expression in olfactory neurons.. *ELife*, **2022**, 11,	8.9	2
5	Behavior: Why Male Flies Sing Different Songs. *Current Biology*, **2019**, 29, R243-R245	6.3	0
4	Mating-driven variability in olfactory local interneuron wiring.. *Science Advances*, **2022**, 8, eabm7723	14.3	0
3	Insect Olfaction: Telling Food from Foe. *Current Biology*, **2015**, 25, R995-8	6.3	
2	Olfactory coding: when smells collide. *Current Biology*, **2006**, 16, R1000-3	6.3	
1	Neurodevelopment: Comparative connectomics and the study of circuit assembly. *Current Biology*, **2021**, 31, R452-R454	6.3	