Michael J Hawrylycz

List of Publications by Year
in descending order

71	29,795	57631 44	79541 73
papers	citations	h-index	g-index

100	100	100	38238
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A robust and high-throughput Cre reporting and characterization system for the whole mouse brain. Nature Neuroscience, 2010, 13, 133-140.	7.1	5,650
2	Genome-wide atlas of gene expression in the adult mouse brain. Nature, 2007, 445, 168-176.	13.7	4,863
3	An anatomically comprehensive atlas of the adult human brain transcriptome. Nature, 2012, 489, 391-399.	13.7	2,321
4	A mesoscale connectome of the mouse brain. Nature, 2014, 508, 207-214.	13.7	2,143
5	Adult mouse cortical cell taxonomy revealed by single cell transcriptomics. Nature Neuroscience, 2016, 19, 335-346.	7.1	1,522
6	Shared and distinct transcriptomic cell types across neocortical areas. Nature, 2018, 563, 72-78.	13.7	1,323
7	Conserved cell types with divergent features in human versus mouse cortex. Nature, 2019, 573, 61-68.	13.7	1,198
8	Transcriptional landscape of the prenatal human brain. Nature, 2014, 508, 199-206.	13.7	1,147
9	The Allen Mouse Brain Common Coordinate Framework: A 3D Reference Atlas. Cell, 2020, 181, 936-953.e20.	13.5	597
10	Correlated gene expression supports synchronous activity in brain networks. Science, 2015, 348, 1241-1244.	6.0	532
11	Integrative functional genomic analysis of human brain development and neuropsychiatric risks. Science, 2018, 362, .	6.0	516
12	Canonical genetic signatures of the adult human brain. Nature Neuroscience, 2015, 18, 1832-1844.	7.1	503
13	A taxonomy of transcriptomic cell types across the isocortex and hippocampal formation. Cell, 2021, 184, 3222-3241.e26.	13.5	479
14	An anatomic transcriptional atlas of human glioblastoma. Science, 2018, 360, 660-663.	6.0	384
15	Comparative cellular analysis of motor cortex in human, marmoset and mouse. Nature, 2021, 598, 111-119.	13.7	361
16	Large-Scale Cellular-Resolution Gene Profiling in Human Neocortex Reveals Species-Specific Molecular Signatures. Cell, 2012, 149, 483-496.	13.5	342
17	A comprehensive transcriptional map of primate brain development. Nature, 2016, 535, 367-375.	13.7	341
18	Genomic Anatomy of the Hippocampus. Neuron, 2008, 60, 1010-1021.	3.8	337

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19	Classification of electrophysiological and morphological neuron types in the mouse visual cortex. Nature Neuroscience, 2019, 22, 1182-1195.	7.1	333
20	A multimodal cell census and atlas of the mammalian primary motor cortex. Nature, 2021, 598, 86-102.	13.7	316
21	Integrated Morphoelectric and Transcriptomic Classification of Cortical GABAergic Cells. Cell, 2020, 183, 935-953.e19.	13.5	290
22	Mapping Social Behavior-Induced Brain Activation at Cellular Resolution in the Mouse. Cell Reports, 2015, 10, 292-305.	2.9	270
23	An anatomic gene expression atlas of the adult mouse brain. Nature Neuroscience, 2009, 12, 356-362.	7.1	264
24	A High-Resolution Spatiotemporal Atlas of Gene Expression of the Developing Mouse Brain. Neuron, 2014, 83, 309-323.	3.8	246
25	A Proposal for a Coordinated Effort for the Determination of Brainwide Neuroanatomical Connectivity in Model Organisms at a Mesoscopic Scale. PLoS Computational Biology, 2009, 5, e1000334.	1.5	242
26	Transcriptional Architecture of the Primate Neocortex. Neuron, 2012, 73, 1083-1099.	3.8	234
27	BigNeuron: Large-Scale 3D Neuron Reconstruction from Optical Microscopy Images. Neuron, 2015, 87, 252-256.	3.8	202
28	A community-based transcriptomics classification and nomenclature of neocortical cell types. Nature Neuroscience, 2020, 23, 1456-1468.	7.1	183
29	Morphological diversity of single neurons in molecularly defined cell types. Nature, 2021, 598, 174-181.	13.7	180
30	Neuroinformatics of the Allen Mouse Brain Connectivity Atlas. Methods, 2015, 73, 4-17.	1.9	176
31	A transcriptomic and epigenomic cell atlas of the mouse primary motor cortex. Nature, 2021, 598, 103-110.	13.7	166
32	Human neocortical expansion involves glutamatergic neuron diversification. Nature, 2021, 598, 151-158.	13.7	160
33	Cellular anatomy of the mouse primary motor cortex. Nature, 2021, 598, 159-166.	13.7	117
34	Neuroinformatics for Genome-Wide 3-D Gene Expression Mapping in the Mouse Brain. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2007, 4, 382-393.	1.9	109
35	Digital Atlasing and Standardization in the Mouse Brain. PLoS Computational Biology, 2011, 7, e1001065.	1.5	109
36	Virtual finger boosts three-dimensional imaging and microsurgery as well as terabyte volume image visualization and analysis. Nature Communications, 2014, 5, 4342.	5.8	109

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37	Single-cell transcriptomic evidence for dense intracortical neuropeptide networks. ELife, 2019, 8, .	2.8	98
38	Molecular and anatomical signatures of sleep deprivation in the mouse brain. Frontiers in Neuroscience, 2010, 4, 165.	1.4	90
39	Exploration and visualization of gene expression with neuroanatomy in the adult mouse brain. BMC Bioinformatics, 2008, 9, 153.	1.2	87
40	Transcriptomic Perspectives on Neocortical Structure, Development, Evolution, and Disease. Annual Review of Neuroscience, 2017, 40, 629-652.	5.0	85
41	Automatic tracing of ultra-volumes of neuronal images. Nature Methods, 2017, 14, 332-333.	9.0	75
42	Clustering of spatial gene expression patterns in the mouse brain and comparison with classical neuroanatomy. Methods, 2010, 50, 105-112.	1.9	70
43	Cell-typeâ€“based model explaining coexpression patterns of genes in the brain. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5397-5402.	3.3	66
44	TeraVR empowers precise reconstruction of complete 3-D neuronal morphology in the whole brain. Nature Communications, 2019, 10, 3474.	5.8	64
45	Common cell type nomenclature for the mammalian brain. ELife, 2020, 9, .	2.8	56
46	BlastNeuron for Automated Comparison, Retrieval and Clustering of 3D Neuron Morphologies. Neuroinformatics, 2015, 13, 487-499.	1.5	55
47	Visualizing the spatial gene expression organization in the brain through non-linear similarity embeddings. Methods, 2015, 73, 79-89.	1.9	54
48	Multi-scale correlation structure of gene expression in the brain. Neural Networks, 2011, 24, 933-942.	3.3	45
49	Single-cell and single-nucleus RNA-seq uncovers shared and distinct axes of variation in dorsal LGN neurons in mice, non-human primates, and humans. ELife, 2021, 10, .	2.8	41
50	Areal and laminar differentiation in the mouse neocortex using large scale gene expression data. Methods, 2010, 50, 113-121.	1.9	38
51	Cross-modal coherent registration of whole mouse brains. Nature Methods, 2022, 19, 111-118.	9.0	36
52	Quantitative methods for genome-scale analysis of in situ hybridization and correlation with microarray data. Genome Biology, 2008, 9, R23.	13.9	29
53	Consistent cross-modal identification of cortical neurons with coupled autoencoders. Nature Computational Science, 2021, 1, 120-127.	3.8	29
54	New light on cortical neuropeptides and synaptic network plasticity. Current Opinion in Neurobiology, 2020, 63, 176-188.	2.0	26

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55	Transcriptional network orchestrating regional patterning of cortical progenitors. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	25
56	Surface-based mapping of gene expression and probabilistic expression maps in the mouse cortex. Methods, 2010, 50, 55-62.	1.9	23
57	Is Neuroscience FAIR? A Call for Collaborative Standardisation of Neuroscience Data. Neuroinformatics, 2022, 20, 507-512.	1.5	23
58	The Allen Brain Atlas. , 2014, , 1111-1126.		18
59	Cellular resolution anatomical and molecular atlases for prenatal human brains. Journal of Comparative Neurology, 2022, 530, 6-503.	0.9	14
60	Petabyte-Scale Multi-Morphometry of Single Neurons for Whole Brains. Neuroinformatics, 2022, 20, 525-536.	1.5	14
61	Exploration and visualization of connectivity in the adult mouse brain. Methods, 2015, 73, 90-97.	1.9	13
62	NeuroBlast: a 3D spatial homology search tool for gene expression. BMC Neuroscience, 2007, 8, .	0.8	11
63	Large-Scale Neuroinformatics for In Situ Hybridization Data in the Mouse Brain. International Review of Neurobiology, 2012, 104, 159-182.	0.9	9
64	Computational neuroanatomy and co-expression of genes in the adult mouse brain, analysis tools for the Allen Brain Atlas. Quantitative Biology, 2013, 1, 91-100.	0.3	9
65	Reconstructing the brain: from image stacks to neuron synthesis. Brain Informatics, 2016, 3, 205-209.	1.8	9
66	The Allen Brain Atlas: Delivering Neuroscience to the Web on a Genome Wide Scale. , 2007, , 17-26.		8
67	The INCF Digital Atlasing Program: Report on Digital Atlasing Standards in the Rodent Brain. Nature Precedings, 2009, , .	0.1	7
68	Cell-type-specific neuroanatomy of cliques of autism-related genes in the mouse brain. Frontiers in Computational Neuroscience, 2015, 9, 55.	1.2	3
69	Workshop report: 1st INCF Workshop on Mouse and Rat Brain Digital Atlasing Systems. Nature Precedings, 2007, , .	0.1	1
70	Workshop report: 1st INCF Workshop on Mouse and Rat Brain Digital Atlasing Systems. Nature Precedings, 2007, , .	0.1	1
71	Spatial mapping of multi-modal data in neuroscience. Methods, 2015, 73, 1-3.	1.9	0