Ed S Lein

List of Publications by Year
in descending order

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67 papers	29,965 citations	47006 47 h-index	88630 70 g-index
110 all docs	110 docs citations	110 times ranked	42131 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.	14.8	5,650
2	Genome-wide atlas of gene expression in the adult mouse brain. Nature, 2007, 445, 168-176.	27.8	4,863
3	An anatomically comprehensive atlas of the adult human brain transcriptome. Nature, 2012, 489, 391-399.	27.8	2,321
4	The Human Cell Atlas. ELife, 2017, 6, .	6.0	1,547
5	Shared and distinct transcriptomic cell types across neocortical areas. Nature, 2018, 563, 72-78.	27.8	1,323
6	Conserved cell types with divergent features in human versus mouse cortex. Nature, 2019, 573, 61-68.	27.8	1,198
7	Transcriptional landscape of the prenatal human brain. Nature, 2014, 508, 199-206.	27.8	1,147
8	Coexpression Networks Implicate Human Midfetal Deep Cortical Projection Neurons in the Pathogenesis of Autism. Cell, 2013, 155, 997-1007.	28.9	825
9	Disruptive CHD8 Mutations Define a Subtype of Autism Early in Development. Cell, 2014, 158, 263-276.	28.9	637
10	Patches of Disorganization in the Neocortex of Children with Autism. New England Journal of Medicine, 2014, 370, 1209-1219.	27.0	601
11	Integrative functional genomic analysis of human brain development and neuropsychiatric risks. Science, 2018, 362, .	12.6	516
12	Canonical genetic signatures of the adult human brain. Nature Neuroscience, 2015, 18, 1832-1844.	14.8	503
13	Genetic identification of brain cell types underlying schizophrenia. Nature Genetics, 2018, 50, 825-833.	21.4	497
14	Differential connectivity and response dynamics of excitatory and inhibitory neurons in visual cortex. Nature Neuroscience, 2011, 14, 1045-1052.	14.8	439
15	Single-nucleus and single-cell transcriptomes compared in matched cortical cell types. PLoS ONE, 2018, 13, e0209648.	2.5	400
16	An anatomic transcriptional atlas of human glioblastoma. Science, 2018, 360, 660-663.	12.6	384
17	Comparative cellular analysis of motor cortex in human, marmoset and mouse. Nature, 2021, 598, 111-119.	27.8	361
18	Using single nuclei for RNA-seq to capture the transcriptome of postmortem neurons. Nature Protocols, 2016, 11, 499-524.	12.0	358

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19	Large-Scale Cellular-Resolution Gene Profiling in Human Neocortex Reveals Species-Specific Molecular Signatures. Cell, 2012, 149, 483-496.	28.9	342
20	A comprehensive transcriptional map of primate brain development. Nature, 2016, 535, 367-375.	27.8	341
21	The promise of spatial transcriptomics for neuroscience in the era of molecular cell typing. Science, 2017, 358, 64-69.	12.6	333
22	Classification of electrophysiological and morphological neuron types in the mouse visual cortex. Nature Neuroscience, 2019, 22, 1182-1195.	14.8	333
23	A multimodal cell census and atlas of the mammalian primary motor cortex. Nature, 2021, 598, 86-102.	27.8	316
24	Integrated Morphoelectric and Transcriptomic Classification of Cortical GABAergic Cells. Cell, 2020, 183, 935-953.e19.	28.9	290
25	An anatomic gene expression atlas of the adult mouse brain. Nature Neuroscience, 2009, 12, 356-362.	14.8	264
26	Transcriptional Architecture of the Primate Neocortex. Neuron, 2012, 73, 1083-1099.	8.1	234
27	Neurodevelopmental disease genes implicated by de novo mutation and copy number variation morbidity. Nature Genetics, 2019, 51, 106-116.	21.4	231
28	Transcriptomic and morphophysiological evidence for a specialized human cortical GABAergic cell type. Nature Neuroscience, 2018, 21, 1185-1195.	14.8	212
29	Expansion sequencing: Spatially precise in situ transcriptomics in intact biological systems. Science, 2021, 371, .	12.6	197
30	Molecular and cellular reorganization of neural circuits in the human lineage. Science, 2017, 358, 1027-1032.	12.6	192
31	A community-based transcriptomics classification and nomenclature of neocortical cell types. Nature Neuroscience, 2020, 23, 1456-1468.	14.8	183
32	Human neocortical expansion involves glutamatergic neuron diversification. Nature, 2021, 598, 151-158.	27.8	160
33	Hybridization-based in situ sequencing (HybISS) for spatially resolved transcriptomics in human and mouse brain tissue. Nucleic Acids Research, 2020, 48, e112-e112.	14.5	145
34	Sparse recurrent excitatory connectivity in the microcircuit of the adult mouse and human cortex. ELife, 2018, 7, .	6.0	142
35	h-Channels Contribute to Divergent Intrinsic Membrane Properties of Supragranular Pyramidal Neurons in Human versus Mouse Cerebral Cortex. Neuron, 2018, 100, 1194-1208.e5.	8.1	134
36	Correlated Gene Expression and Target Specificity Demonstrate Excitatory Projection Neuron Diversity. Cerebral Cortex, 2015, 25, 433-449.	2.9	125

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37	Local connectivity and synaptic dynamics in mouse and human neocortex. Science, 2022, 375, eabj5861.	12.6	124
38	Conservation and divergence of cortical cell organization in human and mouse revealed by MERFISH. Science, 2022, 377, 56-62.	12.6	107
39	Single-cell transcriptomic evidence for dense intracortical neuropeptide networks. ELife, 2019, 8, .	6.0	98
40	Neuropathological and transcriptomic characteristics of the aged brain. ELife, 2017, 6, .	6.0	97
41	Enhancer viruses for combinatorial cell-subclass-specific labeling. Neuron, 2021, 109, 1449-1464.e13.	8.1	93
42	Functional enhancer elements drive subclass-selective expression from mouse to primate neocortex. Cell Reports, 2021, 34, 108754.	6.4	88
43	Transcriptomic Perspectives on Neocortical Structure, Development, Evolution, and Disease. Annual Review of Neuroscience, 2017, 40, 629-652.	10.7	85
44	A robust ex vivo experimental platform for molecular-genetic dissection of adult human neocortical cell types and circuits. Scientific Reports, 2018, 8, 8407.	3.3	77
45	Cell type ontologies of the Human Cell Atlas. Nature Cell Biology, 2021, 23, 1129-1135.	10.3	71
46	Transcriptomic evidence that von Economo neurons are regionally specialized extratelencephalic-projecting excitatory neurons. Nature Communications, 2020, 11, 1172.	12.8	70
47	STRT-seq-2i: dual-index 5Ê¹ single cell and nucleus RNA-seq on an addressable microwell array. Scientific Reports, 2017, 7, 16327.	3.3	69
48	Cell type discovery using single-cell transcriptomics: implications for ontological representation. Human Molecular Genetics, 2018, 27, R40-R47.	2.9	63
49	Biallelic mutations in human DCC cause developmental split-brain syndrome. Nature Genetics, 2017, 49, 606-612.	21.4	62
50	Single nucleus multi-omics identifies human cortical cell regulatory genome diversity. Cell Genomics, 2022, 2, 100107.	6.5	58
51	Common cell type nomenclature for the mammalian brain. ELife, 2020, 9, .	6.0	56
52	Signature morpho-electric, transcriptomic, and dendritic properties of human layer 5 neocortical pyramidal neurons. Neuron, 2021, 109, 2914-2927.e5.	8.1	54
53	Cell type discovery and representation in the era of high-content single cell phenotyping. BMC Bioinformatics, 2017, 18, 559.	2.6	51
54	A machine learning method for the discovery of minimum marker gene combinations for cell type identification from single-cell RNA sequencing. Genome Research, 2021, 31, 1767-1780.	5.5	50

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55	Improving reliability and absolute quantification of human brain microarray data by filtering and scaling probes using RNA-Seq. BMC Genomics, 2014, 15, 154.	2.8	49
56	Single-Cell Profiling of an InÂVitro Model of Human Interneuron Development Reveals Temporal Dynamics of Cell Type Production and Maturation. Neuron, 2017, 93, 1035-1048.e5.	8.1	43
57	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, .	6.0	41
58	Distinctive Structural and Molecular Features of Myelinated Inhibitory Axons in Human Neocortex. ENeuro, 2018, 5, ENEURO.0297-18.2018.	1.9	35
59	Parallel RNA and DNA analysis after deep sequencing (PRDD-seq) reveals cell type-specific lineage patterns in human brain. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13886-13895.	7.1	33
60	Scaled, high fidelity electrophysiological, morphological, and transcriptomic cell characterization. ELife, 2021, 10, .	6.0	33
61	Shifting the paradigm: new approaches for characterizing and classifying neurons. Current Opinion in Neurobiology, 2009, 19, 530-536.	4.2	28
62	Strong and reliable synaptic communication between pyramidal neurons in adult human cerebral cortex. Cerebral Cortex, 2023, 33, 2857-2878.	2.9	21
63	Comprehensive in situ mapping of human cortical transcriptomic cell types. Communications Biology, 2021, 4, 998.	4.4	18
64	Cellular resolution anatomical and molecular atlases for prenatal human brains. Journal of Comparative Neurology, 2022, 530, 6-503.	1.6	14
65	FR-Match: robust matching of cell type clusters from single cell RNA sequencing data using the Friedmanâ€“Rafsky non-parametric test. Briefings in Bioinformatics, 2020, 22, .	6.5	12
66	PRODUCTION OF A PRELIMINARY QUALITY CONTROL PIPELINE FOR SINGLE NUCLEI RNA-SEQ AND ITS APPLICATION IN THE ANALYSIS OF CELL TYPE DIVERSITY OF POST-MORTEM HUMAN BRAIN NEOCORTEX. , 2017, 22, 564-575.		8
67	SmartScope2: Simultaneous Imaging and Reconstruction of Neuronal Morphology. Scientific Reports, 2017, 7, 9325.	3.3	8