Sacha B Nelson

List of Publications by Year
in descending order

95	24,324	23879 60	42259 96
papers	citations	h-index	g-index

127	127	127	23557
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Homeostasis. Cell Systems, 2021, 12, 1124-1126.	2.9	0
2	Cortical RORÎ² is required for layer 4 transcriptional identity and barrel integrity. ELife, 2020, 9, .	2.8	21
3	Deletion of Stk11 and Fos in mouse BLA projection neurons alters intrinsic excitability and impairs formation of long-term aversive memory. ELife, 2020, 9, .	2.8	7
4	Single and population coding of taste in the gustatory cortex of awake mice. Journal of Neurophysiology, 2019, 122, 1342-1356.	0.9	44
5	Editorial overview: Neuronal Identity. Current Opinion in Neurobiology, 2019, 56, iii-iv.	2.0	0
6	A repeated molecular architecture across thalamic pathways. Nature Neuroscience, 2019, 22, 1925-1935.	7.1	132
7	Mapping the transcriptional diversity of genetically and anatomically defined cell populations in the mouse brain. ELife, 2019, 8, .	2.8	59
8	ATAC-seq on Sorted Adult Mouse Neurons. Bio-protocol, 2019, 9, e3382.	0.2	2
9	The role of the gustatory cortex in incidental experience-evoked enhancement of later taste learning. Learning and Memory, 2018, 25, 587-600.	0.5	15
10	Optogenetic Mapping of Intracortical Circuits Originating from Semilunar Cells in the Piriform Cortex. Cerebral Cortex, 2017, 27, bhv258.	1.6	24
11	Prenatal thalamic waves regulate cortical area size prior to sensory processing. Nature Communications, 2017, 8, 14172.	5.8	132
12	Dicer maintains the identity and function of proprioceptive sensory neurons. Journal of Neurophysiology, 2017, 117, 1057-1069.	0.9	16
13	The Cellular and Synaptic Architecture of the Mechanosensory Dorsal Horn. Cell, 2017, 168, 295-310.e19.	13.5	306
14	A Mammalian enhancer trap resource for discovering and manipulating neuronal cell types. ELife, 2016, 5, e13503.	2.8	57
15	Upregulation of Î¼3A Drives Homeostatic Plasticity by Rerouting AMPAR into the Recycling Endosomal Pathway. Cell Reports, 2016, 16, 2711-2722.	2.9	19
16	Striosomeâ€“dendron bouquets highlight a unique striatonigral circuit targeting dopamine-containing neurons. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11318-11323.	3.3	112
17	Synapse and genome: An elusive tÃªte-Ã-tÃªte. Science Signaling, 2015, 8, pe2.	1.6	3
18	Excitatory/Inhibitory Balance and Circuit Homeostasis in Autism Spectrum Disorders. Neuron, 2015, 87, 684-698.	3.8	858

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19	RNASeqMetaDB: a database and web server for navigating metadata of publicly available mouse RNA-Seq datasets. Bioinformatics, 2015, 31, 4038-4040.	1.8	14
20	Cell-Type-Specific Repression by Methyl-CpG-Binding Protein 2 Is Biased toward Long Genes. Journal of Neuroscience, 2014, 34, 12877-12883.	1.7	119
21	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
22	New insights into the classification and nomenclature of cortical GABAergic interneurons. Nature Reviews Neuroscience, 2013, 14, 202-216.	4.9	707
23	Convergence of pontine and proprioceptive streams onto multimodal cerebellar granule cells. ELife, 2013, 2, e00400.	2.8	206
24	A Critical and Cell-Autonomous Role for MeCP2 in Synaptic Scaling Up. Journal of Neuroscience, 2012, 32, 13529-13536.	1.7	122
25	Preclinical research in Rett syndrome: setting the foundation for translational success. DMM Disease Models and Mechanisms, 2012, 5, 733-745.	1.2	183
26	A Resource of Cre Driver Lines for Genetic Targeting of GABAergic Neurons in Cerebral Cortex. Neuron, 2011, 71, 995-1013.	3.8	1,659
27	MeCP2: Phosphorylated Locally, Acting Globally. Neuron, 2011, 72, 3-5.	3.8	11
28	Recent advances in single-cell MALDI mass spectrometry imaging and potential clinical impact. Expert Review of Proteomics, 2011, 8, 591-604.	1.3	89
29	A Quantitative Comparison of Cell-Type-Specific Microarray Gene Expression Profiling Methods in the Mouse Brain. PLoS ONE, 2011, 6, e16493.	1.1	108
30	Neurobiology of disease. Current Opinion in Neurobiology, 2011, 21, 823-826.	2.0	1
31	Activityâ€dependent changes in the firing properties of neocortical fastâ€spiking interneurons in the absence of large changes in gene expression. Developmental Neurobiology, 2011, 71, 62-70.	1.5	35
32	Cell Type-Specific Transcriptomics in the Brain. Journal of Neuroscience, 2011, 31, 6939-6943.	1.7	100
33	Ten years of Nature Reviews Neuroscience: insights from the highly cited. Nature Reviews Neuroscience, 2010, 11, 718-726.	4.9	32
34	Dissecting differential gene expression within the circadian neuronal circuit of Drosophila. Nature Neuroscience, 2010, 13, 60-68.	7.1	135
35	Genome-wide identification of targets of the droshaâ€"pasha/DGCR8 complex. Rna, 2009, 15, 537-545.	1.6	104
36	Pathophysiology of Locus Ceruleus Neurons in a Mouse Model of Rett Syndrome. Journal of Neuroscience, 2009, 29, 12187-12195.	1.7	110

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37	A role for microRNAs in the Drosophila circadian clock. Genes and Development, 2009, 23, 2179-2191.	2.7	178
38	Transcriptional and Electrophysiological Maturation of Neocortical Fast-Spiking GABAergic Interneurons. Journal of Neuroscience, 2009, 29, 7040-7052.	1.7	256
39	Intact Long-Term Potentiation but Reduced Connectivity between Neocortical Layer 5 Pyramidal Neurons in a Mouse Model of Rett Syndrome. Journal of Neuroscience, 2009, 29, 11263-11270.	1.7	112
40	Strength through Diversity. Neuron, 2008, 60, 477-482.	3.8	208
41	The Fezf2â€“Ctip2 genetic pathway regulates the fate choice of subcortical projection neurons in the developing cerebral cortex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11382-11387.	3.3	313
42	Region-Specific Spike-Frequency Acceleration in Layer 5 Pyramidal Neurons Mediated by Kv1 Subunits. Journal of Neuroscience, 2008, 28, 13716-13726.	1.7	58
43	Layer V Neurons in Mouse Cortex Projecting to Different Targets Have Distinct Physiological Properties. Journal of Neurophysiology, 2007, 98, 3330-3340.	0.9	319
44	Multiple forms of long-term plasticity at unitary neocortical layer 5 synapses. Neuropharmacology, 2007, 52, 176-184.	2.0	82
45	A manual method for the purification of fluorescently labeled neurons from the mammalian brain. Nature Protocols, 2007, 2, 2924-2929.	5.5	133
46	The squirrel as a rodent model of the human visual system. Visual Neuroscience, 2006, 23, 765-778.	0.5	64
47	Lack of Patchy Horizontal Connectivity in Primary Visual Cortex of a Mammal without Orientation Maps. Journal of Neuroscience, 2006, 26, 7680-7692.	1.7	61
48	The Disease Progression of Mecp2 Mutant Mice Is Affected by the Level of BDNF Expression. Neuron, 2006, 49, 341-348.	3.8	512
49	The problem of neuronal cell types: a physiological genomics approach. Trends in Neurosciences, 2006, 29, 339-345.	4.2	145
50	The squirrel as a rodent model of the human visual system. Visual Neuroscience, 2006, 23, 941-941.	0.5	0
51	Molecular taxonomy of major neuronal classes in the adult mouse forebrain. Nature Neuroscience, 2006, 9, 99-107.	7.1	502
52	Potentiation of cortical inhibition by visual deprivation. Nature, 2006, 443, 81-84.	13.7	344
53	Probing the transcriptome of neuronal cell types. Current Opinion in Neurobiology, 2006, 16, 571-576.	2.0	82
54	Laminar Organization of Response Properties in Primary Visual Cortex of the Gray Squirrel(Sciurus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.9	57

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55	Highly Nonrandom Features of Synaptic Connectivity in Local Cortical Circuits. PLoS Biology, 2005, 3, e68.	2.6	1,222
56	Reduced cortical activity due to a shift in the balance between excitation and inhibition in a mouse model of Rett Syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12560-12565.	3.3	558
57	Orientation Selectivity without Orientation Maps in Visual Cortex of a Highly Visual Mammal. Journal of Neuroscience, 2005, 25, 19-28.	1.7	161
58	Functional cell classes and functional architecture in the early visual system of a highly visual rodent. Progress in Brain Research, 2005, 149, 127-145.	0.9	24
59	Endocannabinoid-Dependent Neocortical Layer-5 LTD in the Absence of Postsynaptic Spiking. Journal of Neurophysiology, 2004, 92, 3338-3343.	0.9	85
60	Hebb and anti-Hebb meet in the brainstem. Nature Neuroscience, 2004, 7, 687-688.	7.1	15
61	A proportional but slower NMDA potentiation follows AMPA potentiation in LTP. Nature Neuroscience, 2004, 7, 518-524.	7.1	139
62	Selective reconfiguration of layer 4 visual cortical circuitry by visual deprivation. Nature Neuroscience, 2004, 7, 1353-1359.	7.1	358
63	Homeostatic plasticity in the developing nervous system. Nature Reviews Neuroscience, 2004, 5, 97-107.	4.9	2,027
64	Activity-Dependent Remodeling of Presynaptic Inputs by Postsynaptic Expression of Activated CaMKII. Neuron, 2003, 39, 269-281.	3.8	93
65	Neocortical LTD via Coincident Activation of Presynaptic NMDA and Cannabinoid Receptors. Neuron, 2003, 39, 641-654.	3.8	532
66	The NMDA-to-AMPA Ratio at Synapses Onto Layer 2/3 Pyramidal Neurons Is Conserved Across Prefrontal and Visual Cortices. Journal of Neurophysiology, 2003, 90, 771-779.	0.9	180
67	Receptive Field Properties and Laminar Organization of Lateral Geniculate Nucleus in the Gray Squirrel (Sciurus carolinensis). Journal of Neurophysiology, 2003, 90, 3398-3418.	0.9	58
68	Rate and timing in cortical synaptic plasticity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 1851-1857.	1.8	28
69	Short-Term Depression at Thalamocortical Synapses Contributes to Rapid Adaptation of Cortical Sensory Responses In Vivo. Neuron, 2002, 34, 437-446.	3.8	454
70	Fast Propagation of Firing Rates through Layered Networks of Noisy Neurons. Journal of Neuroscience, 2002, 22, 1956-1966.	1.7	193
71	Spike timing, calcium signals and synaptic plasticity. Current Opinion in Neurobiology, 2002, 12, 305-314.	2.0	199
72	Multi-unit spike-triggered averaging: a method for probing the physiology of central synapses. Journal of Neuroscience Methods, 2002, 120, 121-129.	1.3	5

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73	Critical periods for experience-dependent synaptic scaling in visual cortex. Nature Neuroscience, 2002, 5, 783-789.	7.1	541
74	Rate, Timing, and Cooperativity Jointly Determine Cortical Synaptic Plasticity. Neuron, 2001, 32, 1149-1164.	3.8	1,022
75	Postsynaptic Depolarization Scales Quantal Amplitude in Cortical Pyramidal Neurons. Journal of Neuroscience, 2001, 21, RC170-RC170.	1.7	114
76	Synaptic plasticity: taming the beast. Nature Neuroscience, 2000, 3, 1178-1183.	7.1	1,822
77	A recurrent network model for the phase invariance of complex cell responses. Neurocomputing, 2000, 32-33, 339-344.	3.5	5
78	Hebb and homeostasis in neuronal plasticity. Current Opinion in Neurobiology, 2000, 10, 358-364.	2.0	594
79	Multiple Forms of Short-Term Plasticity at Excitatory Synapses in Rat Medial Prefrontal Cortex. Journal of Neurophysiology, 2000, 83, 3031-3041.	0.9	195
80	Timing Isn't Everything. Neuron, 2000, 26, 545-546.	3.8	5
81	Activity Coregulates Quantal AMPA and NMDA Currents at Neocortical Synapses. Neuron, 2000, 26, 659-670.	3.8	300
82	Complex cells as cortically amplified simple cells. Nature Neuroscience, 1999, 2, 277-282.	7.1	179
83	Activity-dependent regulation of excitability in rat visual cortical neurons. Neurocomputing, 1999, 26-27, 101-106.	3.5	12
84	Decorrelation of spike trains by synaptic depression. Neurocomputing, 1999, 26-27, 147-153.	3.5	16
85	Dynamics of neuronal processing in rat somatosensory cortex. Trends in Neurosciences, 1999, 22, 513-520.	4.2	143
86	Differential Depression at Excitatory and Inhibitory Synapses in Visual Cortex. Journal of Neuroscience, 1999, 19, 4293-4304.	1.7	174
87	Activity-dependent scaling of quantal amplitude in neocortical neurons. Nature, 1998, 391, 892-896.	13.7	1,944
88	Synaptic depression: a key player in the cortical balancing act. Nature Neuroscience, 1998, 1, 539-541.	7.1	56
89	BDNF Has Opposite Effects on the Quantal Amplitude of Pyramidal Neuron and Interneuron Excitatory Synapses. Neuron, 1998, 21, 521-530.	3.8	425
90	Thinking Globally, Acting Locally. Neuron, 1998, 21, 933-935.	3.8	62

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91	Synaptic Depression and the Temporal Response Characteristics of V1 Cells. Journal of Neuroscience, 1998, 18, 4785-4799.	1.7	352
92	Spatio-Temporal Subthreshold Receptive Fields in the Vibrissa Representation of Rat Primary Somatosensory Cortex. Journal of Neurophysiology, 1998, 80, 2882-2892.	0.9	297
93	A Quantitative Description of Short-Term Plasticity at Excitatory Synapses in Layer 2/3 of Rat Primary Visual Cortex. Journal of Neuroscience, 1997, 17, 7926-7940.	1.7	527
94	NMDA receptors in sensory information processing. Current Opinion in Neurobiology, 1992, 2, 484-488.	2.0	17
95	Topographic organization of the optic radiation of the cat. Journal of Comparative Neurology, 1985, 240, 322-330.	0.9	35