

# Robert N S Sachdev

## List of Publications by Year in descending order

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41  
papers

2,441  
citations

257450

24  
h-index

276875

41  
g-index

45  
all docs

45  
docs citations

45  
times ranked

2852  
citing authors

#	ARTICLE	IF	CITATIONS
1	Motor Cortex Feedback Influences Sensory Processing by Modulating Network State. <i>Neuron</i> , 2013, 79, 567-578.	8.1	238
2	Chronic Cellular Imaging of Entire Cortical Columns in Awake Mice Using Microprisms. <i>Neuron</i> , 2013, 80, 900-913.	8.1	195
3	State Changes Rapidly Modulate Cortical Neuronal Responsiveness. <i>Journal of Neuroscience</i> , 2007, 27, 9607-9622.	3.6	189
4	Effect of Subthreshold Up and Down States on the Whisker-Evoked Response in Somatosensory Cortex. <i>Journal of Neurophysiology</i> , 2004, 92, 3511-3521.	1.8	159
5	Adaptive Filtering of Vibrissa Input in Motor Cortex of Rat. <i>Neuron</i> , 2002, 34, 1021-1034.	8.1	119
6	Improved methods for marking active neuron populations. <i>Nature Communications</i> , 2018, 9, 4440.	12.8	110
7	Neocortical Networks Entrain Neuronal Circuits in Cerebellar Cortex. <i>Journal of Neuroscience</i> , 2009, 29, 10309-10320.	3.6	108
8	Decreased Subcortical Cholinergic Arousal in Focal Seizures. <i>Neuron</i> , 2015, 85, 561-572.	8.1	99
9	Role of the Basal Forebrain Cholinergic Projection in Somatosensory Cortical Plasticity. <i>Journal of Neurophysiology</i> , 1998, 79, 3216-3228.	1.8	92
10	Dynamic Correlation between Whisking and Breathing Rhythms in Mice. <i>Journal of Neuroscience</i> , 2012, 32, 1653-1659.	3.6	88
11	Divergent Movement of Adjacent Whiskers. <i>Journal of Neurophysiology</i> , 2002, 87, 1440-1448.	1.8	84
12	Respiration Drives Network Activity and Modulates Synaptic and Circuit Processing of Lateral Inhibition in the Olfactory Bulb. <i>Journal of Neuroscience</i> , 2012, 32, 85-98.	3.6	80
13	A Perspective on Cortical Layering and Layer-Spanning Neuronal Elements. <i>Frontiers in Neuroanatomy</i> , 2018, 12, 56.	1.7	67
14	Unilateral vibrissa contact: changes in amplitude but not timing of rhythmic whisking. <i>Somatosensory &amp; Motor Research</i> , 2003, 20, 163-169.	0.9	63
15	Surround suppression and sparse coding in visual and barrel cortices. <i>Frontiers in Neural Circuits</i> , 2012, 6, 43.	2.8	61
16	Layer 6b Is Driven by Intracortical Long-Range Projection Neurons. <i>Cell Reports</i> , 2020, 30, 3492-3505.e5.	6.4	55
17	Temporal organization of multi-whisker contact in rats. <i>Somatosensory &amp; Motor Research</i> , 2001, 18, 91-100.	0.9	54
18	Delta rhythm in wakefulness: evidence from intracranial recordings in human beings. <i>Journal of Neurophysiology</i> , 2015, 114, 1248-1254.	1.8	46

#	ARTICLE	IF	CITATIONS
19	All-optical functional synaptic connectivity mapping in acute brain slices using the calcium integrator CaMPARI. <i>Journal of Physiology</i> , 2017, 595, 1465-1477.	2.9	42
20	Pixying Behavior: A Versatile Real-Time and Post Hoc Automated Optical Tracking Method for Freely Moving and Head Fixed Animals. <i>ENeuro</i> , 2017, 4, ENEURO.0245-16.2017.	1.9	42
21	Experimental model for functional magnetic resonance imaging of somatic sensory cortex in the unanesthetized rat. <i>NeuroImage</i> , 2003, 19, 742-750.	4.2	35
22	Direct Inhibition Evoked by Whisker Stimulation in Somatic Sensory (SI) Barrel Field Cortex of the Awake Rat. <i>Journal of Neurophysiology</i> , 2000, 84, 1497-1504.	1.8	32
23	Activity-Dependent Plasticity in Adult Somatic Sensory Cortex. <i>Seminars in Neuroscience</i> , 1997, 9, 47-58.	2.2	31
24	Stimulus Frequency Processing in Awake Rat Barrel Cortex. <i>Journal of Neuroscience</i> , 2006, 26, 12198-12205.	3.6	29
25	Effect of temperature and glia in brain size enlargement and origin of allometric body-brain size scaling in vertebrates. <i>BMC Evolutionary Biology</i> , 2014, 14, 178.	3.2	27
26	Cortical barrel field ablation and unconditioned whisking kinematics. <i>Somatosensory &amp; Motor Research</i> , 2001, 18, 223-227.	0.9	25
27	Whisking Asymmetry Signals Motor Preparation and the Behavioral State of Mice. <i>Journal of Neuroscience</i> , 2019, 39, 9818-9830.	3.6	25
28	Thalamic input to motor cortex facilitates goal-directed action initiation. <i>Current Biology</i> , 2021, 31, 4148-4155.e4.	3.9	23
29	Receptive Fields and Response Properties of Neurons in the Star-Nosed Mole's Somatosensory Fovea. <i>Journal of Neurophysiology</i> , 2002, 87, 2602-2611.	1.8	22
30	Enhancement of Cortical Plasticity by Behavioral Training in Acetylcholine-Depleted Adult Rats. <i>Journal of Neurophysiology</i> , 2000, 84, 1971-1981.	1.8	21
31	Air-Track: a real-world floating environment for active sensing in head-fixed mice. <i>Journal of Neurophysiology</i> , 2016, 116, 1542-1553.	1.8	21
32	Effects of Sexual Experience and Puberty on Mouse Genital Cortex revealed by Chronic Imaging. <i>Current Biology</i> , 2019, 29, 3588-3599.e4.	3.9	21
33	Optically Induced Calcium-Dependent Gene Activation and Labeling of Active Neurons Using CaMPARI and Cal-Light. <i>Frontiers in Synaptic Neuroscience</i> , 2019, 11, 16.	2.5	21
34	Fast, Flexible Closed-Loop Feedback: Tracking Movement in "Real-Millisecond-Time". <i>ENeuro</i> , 2019, 6, ENEURO.0147-19.2019.	1.9	20
35	Up and Down States and Memory Consolidation Across Somatosensory, Entorhinal, and Hippocampal Cortices. <i>Frontiers in Systems Neuroscience</i> , 2020, 14, 22.	2.5	19
36	Real-Time Closed-Loop Feedback in Behavioral Time Scales Using DeepLabCut. <i>ENeuro</i> , 2021, 8, ENEURO.0415-20.2021.	1.9	18

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37	Effects of excitotoxic striatal lesions on single unit activity in globus pallidus and entopeduncular nucleus of the cat. Brain Research, 1989, 501, 295-306.	2.2	17
38	Bursting properties of units in cat globus pallidus and entopeduncular nucleus: the effect of excitotoxic striatal lesions. Brain Research, 1991, 549, 194-204.	2.2	13
39	Effects of stimulus duration on neuronal response properties in the somatosensory cortex of the star-nosed mole. Somatosensory & Motor Research, 2002, 19, 272-278.	0.9	9
40	Perspective on the Multiple Pathways to Changing Brain States. Frontiers in Systems Neuroscience, 2020, 14, 23.	2.5	9
41	Effect of high velocity, large amplitude stimuli on the spread of depolarization in S1 barrel cortex. Somatosensory & Motor Research, 2011, 28, 73-85.	0.9	4