Reha S Erzurumlu

List of Publications by Year
in descending order

56 papers	3,416 citations	236925 25 h-index	161849 54 g-index
57 all docs	57 docs citations	57 times ranked	3251 citing authors

#	Article	IF	Citations
1	Layers 3 and 4 Neurons of the Bilateral Whisker-Barrel Cortex. Neuroscience, 2022, 494, 140-151.	2.3	3
2	Wireless Optogenetic Modulation of Cortical Neurons Enabled by Radioluminescent Nanoparticles. ACS Nano, 2021, 15, 5201-5208.	14.6	31
3	How the Barrel Cortex Became a Working Model for Developmental Plasticity: A Historical Perspective. Journal of Neuroscience, 2020, 40, 6460-6473.	3.6	26
4	In vivo voltage-sensitive dye imaging of mouse cortical activity with mesoscopic optical tomography. Neurophotonics, 2020, 7, 041402.	3.3	3
5	Altered Forebrain Functional Connectivity and Neurotransmission in a Kinase-Inactive <i>Met</i> Mouse Model of Autism. Molecular Imaging, 2019, 18, 153601211882103.	1.4	5
6	Nanoparticleâ€Based Fluoroionophore for Analysis of Potassium Ion Dynamics in 3D Tissue Models and In Vivo. Advanced Functional Materials, 2018, 28, 1704598.	14.9	33
7	Organization of Orientation-Specific Whisker Deflection Responses in Layer 2/3 of Mouse Somatosensory Cortex. Neuroscience, 2018, 368, 46-56.	2.3	23
8	Insulin receptor sensitization restores neocortical excitation/inhibition balance in a mouse model of autism. Molecular Autism, 2018, 9, 13.	4.9	13
9	Development of tactile sensory circuits in the CNS. Current Opinion in Neurobiology, 2018, 53, 66-75.	4.2	28
10	Planar implantable sensor for in vivo measurement of cellular oxygen metabolism in brain tissue. Journal of Neuroscience Methods, 2017, 281, 1-6.	2.5	8
11	Quantum Dotâ€"Peptideâ€"Fullerene Bioconjugates for Visualization of <i>in Vitro</i> and <i>in Vivo</i> Cellular Membrane Potential. ACS Nano, 2017, 11, 5598-5613.	14.6	68
12	Structural and functional differences in the barrel cortex of <i>Mecp2</i> null mice. Journal of Comparative Neurology, 2017, 525, 3951-3961.	1.6	21
13	Behavioral Consequences of a Bifacial Map in the Mouse Somatosensory Cortex. Journal of Neuroscience, 2017, 37, 7209-7218.	3.6	14
14	A mutant with bilateral whisker to barrel inputs unveils somatosensory mapping rules in the cerebral cortex. ELife, 2017, 6, .	6.0	24
15	Sensory Activity-Dependent and Sensory Activity-Independent Properties of the Developing Rodent Trigeminal Principal Nucleus. Developmental Neuroscience, 2016, 38, 163-170.	2.0	1
16	In Vivo Mesoscopic Voltage-Sensitive Dye Imaging of Brain Activation. Scientific Reports, 2016, 6, 25269.	3.3	19
17	Review of mesoscopic optical tomography for depth-resolved imaging of hemodynamic changes and neural activities. Neurophotonics, 2016, 4, 011009.	3.3	18
18	Insulin-Independent GABA_AReceptor-Mediated Response in the Barrel Cortex of Mice with Impaired Met Activity. Journal of Neuroscience, 2016, 36, 3691-3697.	3.6	13

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19	Enhancement of postsynaptic GABA_A and extrasynaptic NMDA receptor-mediated responses in the barrel cortex of <i>Mecp2</i>-null mice. Journal of Neurophysiology, 2016, 115, 1298-1306.	1.8	22
20	CNS consequences of perinatal peripheral injuries. Experimental Neurology, 2016, 275, 243-244.	4.1	0
21	Neonatal sensory nerve injury-induced synaptic plasticity in the trigeminal principal sensory nucleus. Experimental Neurology, 2016, 275, 245-252.	4.1	6
22	In Vivo Voltage-Sensitive Dye Imaging of Subcortical Brain Function. Scientific Reports, 2015, 5, 17325.	3.3	25
23	In vivo mesoscopic voltage-sensitive dye imaging of brain activation. , 2015, , .		0
24	Role of whiskers in sensorimotor development of C57BL/6 mice. Behavioural Brain Research, 2015, 287, 146-155.	2.2	66
25	Thalamic NMDA Receptor Function Is Necessary for Patterning of the Thalamocortical Somatosensory Map and for Sensorimotor Behaviors. Journal of Neuroscience, 2014, 34, 12001-12014.	3.6	43
26	Region-Specific Disruption of Adenylate Cyclase Type 1 Gene Differentially Affects Somatosensorimotor Behaviors in Mice. ENeuro, 2014, 1, ENEURO.0007-14.2014.	1.9	13
27	Region-Specific Disruption of Adenylate Cyclase Type 1 Gene Differentially Affects Somatosensorimotor Behaviors in Mice. ENeuro, 2014, 1, .	1.9	2
28	Neurovascular coupling: in vivo optical techniques for functional brain imaging. BioMedical Engineering OnLine, 2013, 12, 38.	2.7	95
29	Development of the principal nucleus trigeminal lemniscal projections in the mouse. Journal of Comparative Neurology, 2013, 521, 299-311.	1.6	18
30	Cooperative slit and netrin signaling in contralateralization of the mouse trigeminothalamic pathway. Journal of Comparative Neurology, 2013, 521, 312-325.	1.6	6
31	In vivo imaging of brain metabolism activity using a phosphorescent oxygen-sensitive probe. Journal of Neuroscience Methods, 2013, 216, 146-151.	2.5	40
32	Functional significance of cortical NMDA receptors in somatosensory information processing. Journal of Neurophysiology, 2013, 110, 2627-2636.	1.8	21
33	Neurotransmitter Release at the Thalamocortical Synapse Instructs Barrel Formation But Not Axon Patterning in the Somatosensory Cortex. Journal of Neuroscience, 2012, 32, 6183-6196.	3.6	79
34	Development and critical period plasticity of the barrel cortex. European Journal of Neuroscience, 2012, 35, 1540-1553.	2.6	275
35	Astrocytes promote peripheral nerve injury-induced reactive synaptogenesis in the neonatal CNS. Journal of Neurophysiology, 2011, 106, 2876-2887.	1.8	32
36	Mapping the face in the somatosensory brainstem. Nature Reviews Neuroscience, 2010, 11, 252-263.	10.2	180

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37	Critical period for the whisker-barrel system. Experimental Neurology, 2010, 222, 10-12.	4.1	15
38	Cortical Adenylyl Cyclase 1 Is Required for Thalamocortical Synapse Maturation and Aspects of Layer IV Barrel Development. Journal of Neuroscience, 2008, 28, 5931-5943.	3.6	67
39	Molecular determinants of the face map development in the trigeminal brainstem. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 121-134.	2.0	35
40	Exuberant thalamocortical axon arborization in cortex-specific NMDAR1 knockout mice. Journal of Comparative Neurology, 2005, 485, 280-292.	1.6	98
41	Somatosensory cortical plasticity: recruiting silenced barrels by active whiskers. Experimental Neurology, 2003, 184, 565-569.	4.1	3
42	NMDA Receptor-Dependent Pattern Transfer from Afferents to Postsynaptic Cells and Dendritic Differentiation in the Barrel Cortex. Molecular and Cellular Neurosciences, 2002, 21, 477-492.	2.2	112
43	Slit2, a Branchingâ€“Arborization Factor for Sensory Axons in the Mammalian CNS. Journal of Neuroscience, 2002, 22, 4540-4549.	3.6	84
44	Lesion-Induced Thalamocortical Axonal Plasticity in the S1 Cortex Is Independent of NMDA Receptor Function in Excitatory Cortical Neurons. Journal of Neuroscience, 2002, 22, 9171-9175.	3.6	48
45	Regulation of neurotrophin-induced axonal responses via Rho GTPases. Journal of Comparative Neurology, 2001, 438, 377-387.	1.6	39
46	Differential effects of NGF and NT-3 on embryonic trigeminal axon growth patterns. Journal of Comparative Neurology, 2000, 425, 202-218.	1.6	51
47	Cortex-restricted disruption of NMDAR1 impairs neuronal patterns in the barrel cortex. Nature, 2000, 406, 726-731.	27.8	474
48	Directional specificity and patterning of sensory axons in trigeminal ganglionâ€“whisker pad cocultures. Developmental Brain Research, 2000, 119, 277-281.	1.7	3
49	NMDA Receptor-Dependent Refinement of Somatotopic Maps. Neuron, 1997, 19, 1201-1210.	8.1	182
50	Whisker-related neuronal patterns fail to develop in the trigeminal brainstem nuclei of NMDAR1 knockout mice. Cell, 1994, 76, 427-437.	28.9	461
51	Maintenance of discrete somatosensory maps in subcortical relay nuclei is dependent on an intact sensory cortex. Developmental Brain Research, 1988, 44, 302-308.	1.7	23
52	Development of order in the rat trigeminal system. Journal of Comparative Neurology, 1983, 213, 365-380.	1.6	149
53	Chapter 6 Critical and Sensitive Periods in Neurobiology. Current Topics in Developmental Biology, 1982, 17, 207-240.	2.2	24
54	Order in the developing rat trigeminal nerve. Developmental Brain Research, 1982, 3, 305-310.	1.7	23

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55	Trigeminal projections to the superior colliculus of the rat. Journal of Comparative Neurology, 1981, 201, 221-242.	1.6	146
56	Efferent connections of the brainstem trigeminal complex with the facial nucleus of the rat. Journal of Comparative Neurology, 1979, 188, 75-86.	1.6	104