Reha S Erzurumlu

List of Publications by Year in Descending Order

54 papers	2,889 citations	24 h-index	53 g-index
57 ext. papers	3,151 ext. citations	7.3 avg, IF	5.04 L-index

#	Paper	IF	Citations
54	Layers 3 and 4 Neurons of the Bilateral Whisker-Barrel Cortex. *Neuroscience*, **2022**, 494, 140-151	3.9	
53	Wireless Optogenetic Modulation of Cortical Neurons Enabled by Radioluminescent Nanoparticles. *ACS Nano*, **2021**, 15, 5201-5208	16.7	7
52	voltage-sensitive dye imaging of mouse cortical activity with mesoscopic optical tomography. *Neurophotonics*, **2020**, 7, 041402	3.9	1
51	How the Barrel Cortex Became a Working Model for Developmental Plasticity: A Historical Perspective. *Journal of Neuroscience*, **2020**, 40, 6460-6473	6.6	9
50	Altered Forebrain Functional Connectivity and Neurotransmission in a Kinase-Inactive Met Mouse Model of Autism. *Molecular Imaging*, **2019**, 18, 1536012118821034	3.7	4
49	Nanoparticle-based fluoroionophore for analysis of potassium ion dynamics in 3D tissue models and. *Advanced Functional Materials*, **2018**, 28, 1704598	15.6	24
48	Insulin receptor sensitization restores neocortical excitation/inhibition balance in a mouse model of autism. *Molecular Autism*, **2018**, 9, 13	6.5	8
47	Development of tactile sensory circuits in the CNS. *Current Opinion in Neurobiology*, **2018**, 53, 66-75	7.6	19
46	Organization of orientation-specific whisker deflection responses in layer 2/3 of mouse somatosensory cortex. *Neuroscience*, **2018**, 368, 46-56	3.9	14
45	Planar implantable sensor for in vivo measurement of cellular oxygen metabolism in brain tissue. *Journal of Neuroscience Methods*, **2017**, 281, 1-6	3	6
44	Quantum Dot-Peptide-Fullerene Bioconjugates for Visualization of in Vitro and in Vivo Cellular Membrane Potential. *ACS Nano*, **2017**, 11, 5598-5613	16.7	53
43	A mutant with bilateral whisker to barrel inputs unveils somatosensory mapping rules in the cerebral cortex. *ELife*, **2017**, 6,	8.9	19
42	Structural and functional differences in the barrel cortex of Mecp2 null mice. *Journal of Comparative Neurology*, **2017**, 525, 3951-3961	3.4	13
41	Behavioral Consequences of a Bifacial Map in the Mouse Somatosensory Cortex. *Journal of Neuroscience*, **2017**, 37, 7209-7218	6.6	9
40	Review of mesoscopic optical tomography for depth-resolved imaging of hemodynamic changes and neural activities. *Neurophotonics*, **2017**, 4, 011009	3.9	13
39	Neonatal sensory nerve injury-induced synaptic plasticity in the trigeminal principal sensory nucleus. *Experimental Neurology*, **2016**, 275 Pt 2, 245-52	5.7	6
38	Sensory Activity-Dependent and Sensory Activity-Independent Properties of the Developing Rodent Trigeminal Principal Nucleus. *Developmental Neuroscience*, **2016**, 38, 163-170	2.2	1

37	In Vivo Mesoscopic Voltage-Sensitive Dye Imaging of Brain Activation. *Scientific Reports*, **2016**, 6, 25269	4.9	17
36	Insulin-Independent GABAA Receptor-Mediated Response in the Barrel Cortex of Mice with Impaired Met Activity. *Journal of Neuroscience*, **2016**, 36, 3691-7	6.6	12
35	Enhancement of postsynaptic GABAA and extrasynaptic NMDA receptor-mediated responses in the barrel cortex of Mecp2-null mice. *Journal of Neurophysiology*, **2016**, 115, 1298-306	3.2	18
34	Role of whiskers in sensorimotor development of C57BL/6 mice. *Behavioural Brain Research*, **2015**, 287, 146-55	3.4	37
33	In Vivo Voltage-Sensitive Dye Imaging of Subcortical Brain Function. *Scientific Reports*, **2015**, 5, 17325	4.9	22
32	Region-Specific Disruption of Adenylate Cyclase Type 1 Gene Differentially Affects Somatosensorimotor Behaviors in Mice(1,2,3). *ENeuro*, **2014**, 1,	3.9	10
31	Thalamic NMDA receptor function is necessary for patterning of the thalamocortical somatosensory map and for sensorimotor behaviors. *Journal of Neuroscience*, **2014**, 34, 12001-14	6.6	35
30	Region-Specific Disruption of Adenylate Cyclase Type 1 Gene Differentially Affects Somatosensorimotor Behaviors in Mice. *ENeuro*, **2014**, 1,	3.9	2
29	Neurovascular coupling: in vivo optical techniques for functional brain imaging. *BioMedical Engineering OnLine*, **2013**, 12, 38	4.1	62
28	Development of the principal nucleus trigeminal lemniscal projections in the mouse. *Journal of Comparative Neurology*, **2013**, 521, 299-311	3.4	15
27	Cooperative slit and netrin signaling in contralateralization of the mouse trigeminothalamic pathway. *Journal of Comparative Neurology*, **2013**, 521, 312-25	3.4	6
26	In vivo imaging of brain metabolism activity using a phosphorescent oxygen-sensitive probe. *Journal of Neuroscience Methods*, **2013**, 216, 146-51	3	32
25	Functional significance of cortical NMDA receptors in somatosensory information processing. *Journal of Neurophysiology*, **2013**, 110, 2627-36	3.2	14
24	Development and critical period plasticity of the barrel cortex. *European Journal of Neuroscience*, **2012**, 35, 1540-53	3.5	216
23	Neurotransmitter release at the thalamocortical synapse instructs barrel formation but not axon patterning in the somatosensory cortex. *Journal of Neuroscience*, **2012**, 32, 6183-96	6.6	63
22	Astrocytes promote peripheral nerve injury-induced reactive synaptogenesis in the neonatal CNS. *Journal of Neurophysiology*, **2011**, 106, 2876-87	3.2	28
21	Mapping the face in the somatosensory brainstem. *Nature Reviews Neuroscience*, **2010**, 11, 252-63	13.5	161
20	Critical period for the whisker-barrel system. *Experimental Neurology*, **2010**, 222, 10-2	5.7	15

19	Cortical adenylyl cyclase 1 is required for thalamocortical synapse maturation and aspects of layer IV barrel development. *Journal of Neuroscience*, **2008**, 28, 5931-43	6.6	60
18	Molecular determinants of the face map development in the trigeminal brainstem. *The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology*, **2006**, 288, 121-34		34
17	Exuberant thalamocortical axon arborization in cortex-specific NMDAR1 knockout mice. *Journal of Comparative Neurology*, **2005**, 485, 280-92	3.4	92
16	Somatosensory cortical plasticity: recruiting silenced barrels by active whiskers. *Experimental Neurology*, **2003**, 184, 565-9	5.7	3
15	NMDA receptor-dependent pattern transfer from afferents to postsynaptic cells and dendritic differentiation in the barrel cortex. *Molecular and Cellular Neurosciences*, **2002**, 21, 477-92	4.8	99
14	Slit2, a branching-arborization factor for sensory axons in the Mammalian CNS. *Journal of Neuroscience*, **2002**, 22, 4540-9	6.6	77
13	Lesion-induced thalamocortical axonal plasticity in the S1 cortex is independent of NMDA receptor function in excitatory cortical neurons. *Journal of Neuroscience*, **2002**, 22, 9171-5	6.6	44
12	Regulation of neurotrophin-induced axonal responses via Rho GTPases. *Journal of Comparative Neurology*, **2001**, 438, 377-87	3.4	37
11	Differential effects of NGF and NT-3 on embryonic trigeminal axon growth patterns. *Journal of Comparative Neurology*, **2000**, 425, 202-18	3.4	46
10	Cortex-restricted disruption of NMDAR1 impairs neuronal patterns in the barrel cortex. *Nature*, **2000**, 406, 726-31	50.4	415
9	Directional specificity and patterning of sensory axons in trigeminal ganglion-whisker pad cocultures. *Developmental Brain Research*, **2000**, 119, 277-281		2
8	NMDA receptor-dependent refinement of somatotopic maps. *Neuron*, **1997**, 19, 1201-10	13.9	168
7	Whisker-related neuronal patterns fail to develop in the trigeminal brainstem nuclei of NMDAR1 knockout mice. *Cell*, **1994**, 76, 427-37	56.2	415
6	Maintenance of discrete somatosensory maps in subcortical relay nuclei is dependent on an intact sensory cortex. *Developmental Brain Research*, **1988**, 44, 302-8		23
5	Development of order in the rat trigeminal system. *Journal of Comparative Neurology*, **1983**, 213, 365-80	3.4	141
4	Critical and sensitive periods in neurobiology. *Current Topics in Developmental Biology*, **1982**, 17, 207-40	5.3	19
3	Order in the developing rat trigeminal nerve. *Developmental Brain Research*, **1982**, 255, 305-10		20
2	Trigeminal projections to the superior colliculus of the rat. *Journal of Comparative Neurology*, **1981**, 201, 221-42	3.4	130

1	Efferent connections of the brainstem trigeminal complex with the facial nucleus of the rat. *Journal of Comparative Neurology*, **1979**, 188, 75-86	3.4	92