Izumi Sugihara

List of Publications by Year
in descending order

67 papers	2,826 citations	201674 27 h-index	189892 50 g-index
73 all docs	73 docs citations	73 times ranked	1715 citing authors

#	Article	IF	Citations
1	Molecular, Topographic, and Functional Organization of the Cerebellar Cortex: A Study with Combined Aldolase C and Olivocerebellar Labeling. Journal of Neuroscience, 2004, 24, 8771-8785.	3.6	273
2	Patterns of Spontaneous Purkinje Cell Complex Spike Activity in the Awake Rat. Journal of Neuroscience, 1999, 19, 2728-2739.	3.6	213
3	Cerebellar Modules and Their Role as Operational Cerebellar Processing Units. Cerebellum, 2018, 17, 654-682.	2.5	151
4	Molecular, Topographic, and Functional Organization of the Cerebellar Nuclei: Analysis by Three-Dimensional Mapping of the Olivonuclear Projection and Aldolase C Labeling. Journal of Neuroscience, 2007, 27, 9696-9710.	3.6	142
5	The DIADEM Data Sets: Representative Light Microscopy Images of Neuronal Morphology to Advance Automation of Digital Reconstructions. Neuroinformatics, 2011, 9, 143-157.	2.8	128
6	Projection of reconstructed single purkinje cell axons in relation to the cortical and nuclear aldolase C compartments of the rat cerebellum. Journal of Comparative Neurology, 2009, 512, 282-304.	1.6	126
7	Identification of aldolase C compartments in the mouse cerebellar cortex by olivocerebellar labeling. Journal of Comparative Neurology, 2007, 500, 1076-1092.	1.6	123
8	Detailed Expression Pattern of Aldolase C (Aldoc) in the Cerebellum, Retina and Other Areas of the CNS Studied in Aldoc-Venus Knock-In Mice. PLoS ONE, 2014, 9, e86679.	2.5	92
9	The Roles of the Olivocerebellar Pathway in Motor Learning and Motor Control. A Consensus Paper. Cerebellum, 2017, 16, 230-252.	2.5	89
10	Compartmentalization of the Deep Cerebellar Nuclei Based on Afferent Projections and Aldolase C Expression. Cerebellum, 2011, 10, 449-463.	2.5	88
11	Microzonal projection and climbing fiber remodeling in single olivocerebellar axons of newborn rats at postnatal days 4-7. Journal of Comparative Neurology, 2005, 487, 93-106.	1.6	86
12	Systematic Regional Variations in Purkinje Cell Spiking Patterns. PLoS ONE, 2014, 9, e105633.	2.5	84
13	Projection patterns of single mossy fiber axons originating from the dorsal column nuclei mapped on the aldolase C compartments in the rat cerebellar cortex. Journal of Comparative Neurology, 2011, 519, 874-899.	1.6	81
14	Functional compartmentalization in the flocculus and the ventral dentate and dorsal group y nuclei: An analysis of single olivocerebellar axonal morphology. Journal of Comparative Neurology, 2004, 470, 113-133.	1.6	74
15	Olivocerebellar modulation of motor cortex ability to generate vibrissal movements in rat. Journal of Physiology, 2006, 571, 101-120.	2.9	74
16	Organization and remodeling of the olivocerebellar climbing fiber projection. Cerebellum, 2006, 5, 15-22.	2.5	65
17	Clustered Fine Compartmentalization of the Mouse Embryonic Cerebellar Cortex and Its Rearrangement into the Postnatal Striped Configuration. Journal of Neuroscience, 2012, 32, 15688-15703.	3.6	65
18	Relationship of complex spike synchrony bands and climbing fiber projection determined by reference to aldolase C compartments in crus IIa of the rat cerebellar cortex. Journal of Comparative Neurology, 2007, 501, 13-29.	1.6	58

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19	Organization of the marmoset cerebellum in threeâ€dimensional space: Lobulation, aldolase C compartmentalization and axonal projection. Journal of Comparative Neurology, 2010, 518, 1764-1791.	1.6	56
20	Close correlation between the birth date of purkinje cells and the longitudinal compartmentalization of the mouse adult cerebellum. Journal of Comparative Neurology, 2011, 519, 2594-2614.	1.6	52
21	Structural Basis of Cerebellar Microcircuits in the Rat. Journal of Neuroscience, 2013, 33, 16427-16442.	3.6	49
22	Maternal immune activation by polyriboinosinic-polyribocytidilic acid injection produces synaptic dysfunction but not neuronal loss in the hippocampus of juvenile rat offspring. Brain Research, 2010, 1363, 170-179.	2.2	46
23	Divergent projections of single pontocerebellar axons to multiple cerebellar lobules in the mouse. Journal of Comparative Neurology, 2019, 527, 1966-1985.	1.6	43
24	FoxP2 expression in the cerebellum and inferior olive: Development of the transverse stripeâ€shaped expression pattern in the mouse cerebellar cortex. Journal of Comparative Neurology, 2012, 520, 656-677.	1.6	41
25	Post-lesion transcommissural growth of olivary climbing fibres creates functional synaptic microzones. European Journal of Neuroscience, 2003, 18, 3027-3036.	2.6	34
26	Heterogeneity of Purkinje cell simple spikeâ€"complex spike interactions: zebrinâ€•and nonâ€zebrinâ€related variations. Journal of Physiology, 2017, 595, 5341-5357.	2.9	34
27	Crus I in the Rodent Cerebellum: Its Homology to Crus I and II in the Primate Cerebellum and Its Anatomical Uniqueness Among Neighboring Lobules. Cerebellum, 2018, 17, 49-55.	2.5	32
28	Branching patterns of olivocerebellar axons in relation to the compartmental organization of the cerebellum. Frontiers in Neural Circuits, 2013, 7, 3.	2.8	27
29	Lobular homology in cerebellar hemispheres of humans, non-human primates and rodents: a structural, axonal tracing and molecular expression analysis. Brain Structure and Function, 2017, 222, 2449-2472.	2.3	27
30	The entire trajectories of single pontocerebellar axons and their lobular and longitudinal terminal distribution patterns in multiple aldolase Câ€positive compartments of the rat cerebellar cortex. Journal of Comparative Neurology, 2019, 527, 2488-2511.	1.6	27
31	Single axonal morphology and termination to cerebellar aldolase C stripes characterize distinct spinocerebellar projection systems originating from the thoracic spinal cord in the mouse. Journal of Comparative Neurology, 2018, 526, 681-706.	1.6	26
32	Cerebellar modules in the olivoâ€corticoâ€nuclear loop demarcated by <i>pcdh10</i> expression in the adult mouse. Journal of Comparative Neurology, 2018, 526, 2406-2427.	1.6	25
33	Cerebellar Nuclei and the Inferior Olivary Nuclei: Organization and Connections. , 2013, , 377-436.		24
34	Spatial rearrangement of Purkinje cell subsets forms the transverse and longitudinal compartmentalization in the mouse embryonic cerebellum. Journal of Comparative Neurology, 2017, 525, 2971-2990.	1.6	23
35	Digital Morphometry of Rat Cerebellar Climbing Fibers Reveals Distinct Branch and Bouton Types. Journal of Neuroscience, 2012, 32, 14670-14684.	3.6	22
36	Modulation of Purkinje cell complex spike waveform by synchrony levels in the olivocerebellar system. Frontiers in Systems Neuroscience, 2014, 8, 210.	2.5	20

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37	Multiple signals evoked by unisensory stimulation converge onto cerebellar granule and Purkinje cells in mice. Communications Biology, 2020, 3, 381.	4.4	18
38	Morphology of single olivocerebellar axons in the denervationâ€"reinnervation model produced by subtotal lesion of the rat inferior olive. Brain Research, 2012, 1449, 24-37.	2.2	15
39	Compartmentalization of the chick cerebellar cortex based on the link between the striped expression pattern of aldolase C and the topographic olivocerebellar projection. Journal of Comparative Neurology, 2015, 523, 1886-1912.	1.6	14
40	Dense projection of Stillingâ€™s nucleus spinocerebellar axons that convey tail proprioception to the midline area in lobule VIII of the mouse cerebellum. Brain Structure and Function, 2020, 225, 621-638.	2.3	14
41	Heterogeneous vestibulocerebellar mossy fiber projections revealed by single axon reconstruction in the mouse. Journal of Comparative Neurology, 2020, 528, 1775-1802.	1.6	12
42	Efferent innervation in the goldfish saccule examined by acetylcholinesterase histochemistry. Hearing Research, 2001, 153, 91-99.	2.0	11
43	Peri- and Postnatal Development of Cerebellar Compartments in the Mouse. Cerebellum, 2013, 12, 325-327.	2.5	11
44	Axonal Trajectories of Single Climbing and Mossy Fiber Neurons in the Cerebellar Cortex and Nucleus. , 2013, , 437-467.		11
45	Striped Distribution Pattern of Purkinje Cells of Different Birthdates in the Mouse Cerebellar Cortex Studied with the Neurog2-CreER Transgenic Line. Neuroscience, 2021, 462, 122-140.	2.3	9
46	Heterogeneity of intrinsic plasticity in cerebellar Purkinje cells linked with cortical molecular zones. IScience, 2022, 25, 103705.	4.1	9
47	Electrophysiological Excitability and Parallel Fiber Synaptic Properties of Zebrin-Positive and -Negative Purkinje Cells in Lobule VIII of the Mouse Cerebellar Slice. Frontiers in Cellular Neuroscience, 2018, 12, 513.	3.7	8
48	Reorganization of longitudinal compartments in the laterally protruding paraflocculus of the postnatal mouse cerebellum. Journal of Comparative Neurology, 2020, 528, 1725-1741.	1.6	8
49	Common Origin of the Cerebellar Dual Somatotopic Areas Revealed by Tracking Embryonic Purkinje Cell Clusters with Birthdate Tagging. ENeuro, 2020, 7, ENEURO.0251-20.2020.	1.9	8
50	Cerebellar afferents originating from the medullary reticular formation that are different from mossy, climbing or monoaminergic fibers in the rat. Brain Research, 2014, 1566, 31-46.	2.2	7
51	Climbing Fiber-Mediated Spillover Transmission to Interneurons Is Regulated by EAAT4. Journal of Neuroscience, 2021, 41, 8126-8133.	3.6	6
52	Bright Field Neuronal Preparation Optimized for Automatic Computerized Reconstruction, a Case with Cerebellar Climbing Fibers. Neuroinformatics, 2011, 9, 113-118.	2.8	5
53	The Olivocerebellar Tract. , 2016, , 55-61.		5
54	Systematic analysis of neuronal wiring of the rodent deep cerebellar nuclei reveals differences reflecting adaptations at the neuronal circuit and internuclear levels. Journal of Comparative Neurology, 2014, 522, 2481-2497.	1.6	4

#	Article	IF	Citations
55	Cerebellar connectivity maps embody individual adaptive behavior in mice. Nature Communications, 2022, 13, 580.	12.8	4
56	Single axonal morphology reveals high heterogeneity in spinocerebellar axons originating from the lumbar spinal cord in the mouse. Journal of Comparative Neurology, 2021, 529, 3893-3921.	1.6	3
57	Morphology of the olivocerebellar projection of the chick: An axonal reconstruction study. Journal of Comparative Neurology, 2013, 521, 3321-3339.	1.6	2
58	Cerebellar Lobules and Stripes, Viewed from Development, Topographic Axonal Projections, Functional Localization, and Interspecies Homology. Contemporary Clinical Neuroscience, 2021, , 93-119.	0.3	2
59	Off-oscillation in hair cell membrane is correlated with the decremental response at the hair cell-afferent fibre synapse in the goldfish sacculus. NeuroReport, 1996, 7, 2341-2346.	1.2	1
60	Cerebellar Nuclei and the Inferior Olivary Nuclei: Organization and Connections. , 2022, , 497-557.		1
61	Mapping Synaptic Connectivity in the Cerebellar Cortex Using RuBi-Glutamate Uncaging. Neuromethods, 2022, , 171-185.	0.3	1
62	New insights on vertebrate olivo-cerebellar climbing fibers from computerized morphological reconstructions. Bioarchitecture, 2013, 3, 38-41.	1.5	0
63	Spatial rearrangement of Purkinje cell subsets forms the transverse and longitudinal compartmentalization in the mouse embryonic cerebellum. Journal of Comparative Neurology, 2017, 525, spc1.	1.6	0
64	Cover Image, Volume 526, Issue 15. Journal of Comparative Neurology, 2018, 526, C1-C1.	1.6	0
65	Cerebellar Nuclei and the Inferior Olivary Nuclei: Organization and Connections. , 2020, , 1-61.		0
66	Axonal Trajectories of Single Climbing and Mossy Fiber Neurons in the Cerebellar Cortex and Nucleus. , 2020, , 1-35.		0
67	Axonal Trajectories of Single Climbing and Mossy Fiber Neurons in the Cerebellar Cortex and Nucleus. , 2022, , 559-593.		0