Yasuo Kawaguchi

List of Publications by Year
in descending order

88 papers	13,560 citations	38720 50 h-index	62565 80 g-index
93 all docs	93 docs citations	93 times ranked	8767 citing authors

#	Article	IF	Citations
1	GABAergic cell subtypes and their synaptic connections in rat frontal cortex. Cerebral Cortex, 1997, 7, 476-486.	1.6	1,249
2	Striatal interneurones: chemical, physiological and morphological characterization. Trends in Neurosciences, 1995, 18, 527-535.	4.2	1,051
3	New insights into the classification and nomenclature of cortical GABAergic interneurons. Nature Reviews Neuroscience, 2013, 14, 202-216.	4.9	707
4	Physiological, morphological, and histochemical characterization of three classes of interneurons in rat neostriatum. Journal of Neuroscience, 1993, 13, 4908-4923.	1.7	700
5	The origins of two-state spontaneous membrane potential fluctuations of neostriatal spiny neurons. Journal of Neuroscience, 1996, 16, 2397-2410.	1.7	680
6	Projection subtypes of rat neostriatal matrix cells revealed by intracellular injection of biocytin. Journal of Neuroscience, 1990, 10, 3421-3438.	1.7	522
7	Correlation of physiological subgroupings of nonpyramidal cells with parvalbumin- and calbindinD28k-immunoreactive neurons in layer V of rat frontal cortex. Journal of Neurophysiology, 1993, 70, 387-396.	0.9	511
8	Physiological subgroups of nonpyramidal cells with specific morphological characteristics in layer II/III of rat frontal cortex. Journal of Neuroscience, 1995, 15, 2638-2655.	1.7	478
9	Fast spiking cells in rat hippocampus (CA1 region) contain the calcium-binding protein parvalbumin. Brain Research, 1987, 416, 369-374.	1.1	476
10	Parvalbumin, somatostatin and cholecystokinin as chemical markers for specific GABAergic interneuron types in the rat frontal cortex. Journal of Neurocytology, 2002, 31, 277-287.	1.6	366
11	Intracellular recording of identified neostriatal patch and matrix spiny cells in a slice preparation preserving cortical inputs. Journal of Neurophysiology, 1989, 62, 1052-1068.	0.9	350
12	Physiological and morphological identification of somatostatin- or vasoactive intestinal polypeptide-containing cells among GABAergic cell subtypes in rat frontal cortex. Journal of Neuroscience, 1996, 16, 2701-2715.	1.7	336
13	Groupings of nonpyramidal and pyramidal cells with specific physiological and morphological characteristics in rat frontal cortex. Journal of Neurophysiology, 1993, 69, 416-431.	0.9	330
14	Neurochemical features and synaptic connections of large physiologically-identified GABAergic cells in the rat frontal cortex. Neuroscience, 1998, 85, 677-701.	1.1	264
15	Recurrent Connection Patterns of Corticostriatal Pyramidal Cells in Frontal Cortex. Journal of Neuroscience, 2006, 26, 4394-4405.	1.7	257
16	Neostriatal cell subtypes and their functional roles. Neuroscience Research, 1997, 27, 1-8.	1.0	234
17	Selective Cholinergic Modulation of Cortical GABAergic Cell Subtypes. Journal of Neurophysiology, 1997, 78, 1743-1747.	0.9	218
18	Quantitative Chemical Composition of Cortical GABAergic Neurons Revealed in Transgenic Venus-Expressing Rats. Cerebral Cortex, 2008, 18, 315-330.	1.6	214

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19	Selective Coexpression of Multiple Chemical Markers Defines Discrete Populations of Neocortical GABAergic Neurons. Cerebral Cortex, 2011, 21, 1803-1817.	1.6	209
20	Noradrenergic Excitation and Inhibition of GABAergic Cell Types in Rat Frontal Cortex. Journal of Neuroscience, 1998, 18, 6963-6976.	1.7	205
21	Axon Branching and Synaptic Bouton Phenotypes in GABAergic Nonpyramidal Cell Subtypes. Journal of Neuroscience, 2004, 24, 2853-2865.	1.7	180
22	Heterogeneity of Phasic Cholinergic Signaling in Neocortical Neurons. Journal of Neurophysiology, 2007, 97, 2215-2229.	0.9	176
23	Serotonin Modulates Fast-Spiking Interneuron and Synchronous Activity in the Rat Prefrontal Cortex through 5-HT_{1A}and 5-HT_{2A}Receptors. Journal of Neuroscience, 2010, 30, 2211-2222.	1.7	172
24	Large aspiny cells in the matrix of the rat neostriatum in vitro: physiological identification, relation to the compartments and excitatory postsynaptic currents. Journal of Neurophysiology, 1992, 67, 1669-1682.	0.9	171
25	Neocortical Inhibitory Terminals Innervate Dendritic Spines Targeted by Thalamocortical Afferents. Journal of Neuroscience, 2007, 27, 1139-1150.	1.7	154
26	Neostriatal GABAergic interneurones contain NOS, calretinin or parvalbumin. NeuroReport, 1993, 5, 205-208.	0.6	150
27	Highly Differentiated Projection-Specific Cortical Subnetworks. Journal of Neuroscience, 2011, 31, 10380-10391.	1.7	144
28	Dopamine D₁-Like Receptor Activation Excites Rat Striatal Large Aspiny Neurons<i>In Vitro</i>. Journal of Neuroscience, 1998, 18, 5180-5190.	1.7	140
29	Dependence of GABAergic Synaptic Areas on the Interneuron Type and Target Size. Journal of Neuroscience, 2000, 20, 375-386.	1.7	136
30	Monitoring and Updating of Action Selection for Goal-Directed Behavior through the Striatal Direct and Indirect Pathways. Neuron, 2018, 99, 1302-1314.e5.	3.8	131
31	Receptor subtypes involved in callosally-induced postsynaptic potentials in rat frontal agranular cortex in vitro. Experimental Brain Research, 1992, 88, 33-40.	0.7	130
32	The Diversity of Cortical Inhibitory Synapses. Frontiers in Neural Circuits, 2016, 10, 27.	1.4	115
33	Physiological heterogeneity of nonpyramidal cells in rat hippocampal CA1 region. Experimental Brain Research, 1988, 72, 494-502.	0.7	114
34	Spatial distributions of chemically identified intrinsic neurons in relation to patch and matrix compartments of rat neostriatum. Journal of Comparative Neurology, 1993, 332, 499-513.	0.9	102
35	Dendritic Branch Typing and Spine Expression Patterns in Cortical Nonpyramidal Cells. Cerebral Cortex, 2006, 16, 696-711.	1.6	102
36	Two subtypes of non-pyramidal cells in rat hippocampal formation identified by intracellular recording and HRP injection. Brain Research, 1987, 411, 190-195.	1.1	96

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37	Distinct Firing Patterns of Neuronal Subtypes in Cortical Synchronized Activities. Journal of Neuroscience, 2001, 21, 7261-7272.	1.7	95
38	Cortical Inhibitory Cell Types Differentially Form Intralaminar and Interlaminar Subnetworks withExcitatory Neurons. Journal of Neuroscience, 2009, 29, 10533-10540.	1.7	91
39	Two distinct activity patterns of fast-spiking interneurons during neocortical UP states. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8428-8433.	3.3	90
40	Two distinct subgroups of cholecystokinin-immunoreactive cortical interneurons. Brain Research, 1997, 752, 175-183.	1.1	85
41	Actions of Substance P on Rat Neostriatal Neurons<i>In Vitro</i>. Journal of Neuroscience, 1996, 16, 5141-5153.	1.7	81
42	Fast-spiking non-pyramidal cells in the hippocampal CA3 region, dentate gyrus and subiculum of rats. Brain Research, 1987, 425, 351-355.	1.1	79
43	Firing-Pattern-Dependent Specificity of Cortical Excitatory Feed-Forward Subnetworks. Journal of Neuroscience, 2008, 28, 11186-11195.	1.7	78
44	Pyramidal Cell Subtypes and Their Synaptic Connections in Layer 5 of Rat Frontal Cortex. Cerebral Cortex, 2017, 27, 5755-5771.	1.6	76
45	Reinforcement learning: computing the temporal difference of values via distinct corticostriatal pathways. Trends in Neurosciences, 2012, 35, 457-467.	4.2	71
46	Cell Diversity and Connection Specificity between Callosal Projection Neurons in the Frontal Cortex. Journal of Neuroscience, 2011, 31, 3862-3870.	1.7	70
47	Functional effects of distinct innervation styles of pyramidal cells by fast spiking cortical interneurons. ELife, 2015, 4, .	2.8	68
48	Multiple Layer 5 Pyramidal Cell Subtypes Relay Cortical Feedback from Secondary to Primary Motor Areas in Rats. Cerebral Cortex, 2014, 24, 2362-2376.	1.6	67
49	Specialized Cortical Subnetworks Differentially Connect Frontal Cortex to Parahippocampal Areas. Journal of Neuroscience, 2012, 32, 1898-1913.	1.7	66
50	Thalamocortical Axonal Activity in Motor Cortex Exhibits Layer-Specific Dynamics during Motor Learning. Neuron, 2018, 100, 244-258.e12.	3.8	63
51	New neurons use Slit-Robo signaling to migrate through the glial meshwork and approach a lesion for functional regeneration. Science Advances, 2018, 4, eaav0618.	4.7	60
52	Large Volume Electron Microscopy and Neural Microcircuit Analysis. Frontiers in Neural Circuits, 2018, 12, 98.	1.4	56
53	Conserved properties of dendritic trees in four cortical interneuron subtypes. Scientific Reports, 2011, 1, 89.	1.6	55
54	A carbon nanotube tape for serial-section electron microscopy of brain ultrastructure. Nature Communications, 2018, 9, 437.	5.8	53

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55	Dopaminergic Control of Motivation and Reinforcement Learning: A Closed-Circuit Account for Reward-Oriented Behavior. Journal of Neuroscience, 2013, 33, 8866-8890.	1.7	49
56	Two groups of secondary vestibular neurons mediating horizontal canal signals, probably to the ipsilateral medial rectus muscle, under inhibitory influences from the cerebellar flocculus in rabbits. Neuroscience Research, 1985, 2, 434-446.	1.0	48
57	Differentiated Participation of Thalamocortical Subnetworks in Slow/Spindle Waves and Desynchronization. Journal of Neuroscience, 2012, 32, 1730-1746.	1.7	46
58	Evidence of a collateralized climbing fiber projection from the inferior olive to the flocculus and vestibular nuclei in rabbits. Neuroscience Letters, 1981, 22, 23-29.	1.0	44
59	Direction- and distance-dependent interareal connectivity of pyramidal cell subpopulations in the rat frontal cortex. Frontiers in Neural Circuits, 2013, 7, 164.	1.4	42
60	Phasic cholinergic signaling in the hippocampus: Functional homology with the neocortex?. Hippocampus, 2007, 17, 327-332.	0.9	41
61	Segregated Excitatoryâ€"Inhibitory Recurrent Subnetworks in Layer 5 of the Rat Frontal Cortex. Cerebral Cortex, 2017, 27, 5846-5857.	1.6	36
62	Selective Thalamic Innervation of Rat Frontal Cortical Neurons. Cerebral Cortex, 2016, 26, 2689-2704.	1.6	31
63	Important factors for the three-dimensional reconstruction of neuronal structures from serial ultrathin sections. Frontiers in Neural Circuits, 2009, 3, 4.	1.4	30
64	Common excitatory synaptic inputs to electrically connected cortical fast-spiking cell networks. Journal of Neurophysiology, 2013, 110, 795-806.	0.9	29
65	The morphological and chemical characteristics of striatal neurons immunoreactive for the Î±1-subunit of the GABAA receptor in the rat. Neuroscience, 1997, 80, 775-792.	1.1	27
66	Slow synchronized bursts of inhibitory postsynaptic currents (0.1â€"0.3 Hz) by cholinergic stimulation in the rat frontal cortex in vitro. Neuroscience, 2001, 107, 551-560.	1.1	26
67	Comment on â€œPrinciples of connectivity among morphologically defined cell types in adult neocortexâ€• Science, 2016, 353, 1108-1108.	6.0	24
68	Temporal Structure of Neuronal Activity among Cortical Neuron Subtypes during Slow Oscillations in Anesthetized Rats. Journal of Neuroscience, 2015, 35, 11988-12001.	1.7	20
69	Semaphorin 6Aâ€"Plexin A2/A4 Interactions with Radial Glia Regulate Migration Termination of Superficial Layer Cortical Neurons. IScience, 2019, 21, 359-374.	1.9	20
70	Excitatory effects on renal sympathetic nerve activity induced by stimulation at two distinctive sites in the fastigial nucleus of rabbits. Brain Research, 1984, 304, 372-376.	1.1	18
71	Cortical Divergent Projections in Mice Originate from Two Sequentially Generated, Distinct Populations of Excitatory Cortical Neurons with Different Initial Axonal Outgrowth Characteristics. Cerebral Cortex, 2016, 26, 2257-2270.	1.6	18
72	Control of excitatory hierarchical circuits by parvalbumin-FS basket cells in layer 5 of the frontal cortex: insights for cortical oscillations. Journal of Neurophysiology, 2019, 121, 2222-2236.	0.9	15

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73	A Dual Role Hypothesis of the Cortico-Basal-Ganglia Pathways: Opponency and Temporal Difference Through Dopamine and Adenosine. Frontiers in Neural Circuits, 2018, 12, 111.	1.4	13
74	Electrophysiological characteristics of inhibitory neurons of the prepositus hypoglossi nucleus as analyzed in Venus-expressing transgenic rats. Neuroscience, 2011, 197, 89-98.	1.1	12
75	Computing rewardâ€prediction error: an integrated account of cortical timing and basalâ€ganglia pathways for appetitive and aversive learning. European Journal of Neuroscience, 2015, 42, 2003-2021.	1.2	12
76	Differential Striatal Axonal Arborizations of the Intratelencephalic and Pyramidal-Tract Neurons: Analysis of the Data in the MouseLight Database. Frontiers in Neural Circuits, 2019, 13, 71.	1.4	12
77	Pyramidal cell subtype-dependent cortical oscillatory activity regulates motor learning. Communications Biology, 2021, 4, 495.	2.0	11
78	Ipsi- and contralateral corticocortical projection-dependent subcircuits in layer 2 of the rat frontal cortex. Journal of Neurophysiology, 2019, 122, 1461-1472.	0.9	9
79	Local Circuit Neurons in the Frontal Cortex and the Neostriatum. , 1995, , 73-88.		7
80	Local Circuit Neurons in the Frontal Cortico-Striatal System. , 2003, , 125-148.		4
81	Corticocortical innervation subtypes of layer 5 intratelencephalic cells in the murine secondary motor cortex. Cerebral Cortex, 2022, 33, 50-67.	1.6	3
82	Neural circuits: Japan. Frontiers in Neural Circuits, 2014, 8, 135.	1.4	1
83	Hierarchical Organization of Neocortical Neuron Types. , 2013, , 181-202.		1
84	Cerebral Cortex: Inhibitory Cells. , 2009, , 775-783.		0
85	Functional Significance of Rallâ€™s Power of Three Halves Law in Cortical Nonpyramidal Cells. , 2013, , 45-51.		0
86	Substance P Excites Large Aspiny Neurons of the Rat Neostriatum. Advances in Behavioral Biology, 1996, , 151-156.	0.2	0
87	Cortical GABAergic Neural Circuits.. The Brain & Neural Networks, 1998, 5, 171-177.	0.1	0
88	Interaction between Neuron and Radial Glia Mediated by Semaphorin 6A-Plexin A2/A4 Signaling Regulates Migration Termination of Superficial Layer Neurons of the Cerebral Cortex. SSRN Electronic Journal, 0, , .	0.4	0