Robert S Waters

List of Publications by Year
in descending order

61 papers	1,622 citations	257429 24 h-index	315719 38 g-index
61 all docs	61 docs citations	61 times ranked	1308 citing authors

#	Article	IF	Citations
1	Structural and functional organization of the lower jaw barrel subfield in rat primary somatosensory cortex. Journal of Comparative Neurology, 2021, 529, 1895-1910.	1.6	2
2	Perspectives into the possible effects of the B.1.1.7 variant of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on spermatogenesis. Journal of Basic and Clinical Physiology and Pharmacology, 2021, .	1.3	0
3	Focality of the Induced E-Field Is a Contributing Factor in the Choice of TMS Parameters: Evidence from a 3D Computational Model of the Human Brain. Brain Sciences, 2020, 10, 1010.	2.3	12
4	Repetitive microstimulation in rat primary somatosensory cortex (SI) strengthens the connection between homotopic sites in the opposite SI and leads to expression of previously ineffective input from the ipsilateral forelimb. Brain Research, 2020, 1732, 146694.	2.2	0
5	Telemetry-controlled simultaneous stimulation-and-recording device (SRD) to study interhemispheric cortical circuits in rat primary somatosensory (SI) cortex. BMC Biomedical Engineering, 2019, 1, 19.	2.6	4
6	A newly identified nociresponsive region in the transitional zone (TZ) in rat sensorimotor cortex. Brain Research, 2019, 1717, 228-234.	2.2	11
7	Contributions of Nociresponsive Area 3a to Normal and Abnormal Somatosensory Perception. Journal of Pain, 2019, 20, 405-419.	1.4	16
8	A review of current theories and treatments for phantom limb pain. Journal of Clinical Investigation, 2018, 128, 2168-2176.	8.2	105
9	Hand-to-Face Remapping But No Differences in Temporal Discrimination Observed on the Intact Hand Following Unilateral Upper Limb Amputation. Frontiers in Neurology, 2017, 8, 8.	2.4	11
10	Differential Pattern of Interhemispheric Connections Between Homotopic Layer V Regions in the Forelimb Representation in Rat Barrel Field Cortex. Anatomical Record, 2015, 298, 1885-1902.	1.4	4
11	Wireless simultaneous stimulation-and-recording device to train cortical circuits in somatosensory cortex. , 2014, 2014, 426-9.		2
12	Forelimb amputation-induced reorganization in the ventral posterior lateral nucleus (VPL) provides a substrate for large-scale cortical reorganization in rat forepaw barrel subfield (FBS). Brain Research, 2014, 1583, 89-108.	2.2	19
13	Forelimb amputation-induced reorganization in the cuneate nucleus (CN) is not reflected in large-scale reorganization in rat forepaw barrel subfield cortex (FBS). Brain Research, 2013, 1526, 26-43.	2.2	10
14	Telemetry controlled simultaneous microstimulation and recording device for studying cortical plasticity. , 2013, , .		1
15	Functional and structural organization of the forelimb representation in cuneate nucleus in rat. Brain Research, 2012, 1468, 11-28.	2.2	16
16	Prenatal alcohol exposure reduces the size of the forelimb representation in motor cortex in rat: an intracortical microstimulation (ICMS) mapping study. Alcohol, 2010, 44, 185-194.	1.7	28
17	Genetic analysis of posterior medial barrel subfield (PMBSF) size in somatosensory cortex (SI) in recombinant inbred strains of mice. BMC Neuroscience, 2008, 9, 3.	1.9	21
18	Prenatal alcohol exposure delays acquisition and use of skilled reaching movements in juvenile rats. Physiology and Behavior, 2008, 94, 540-544.	2.1	15

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19	Genetic Analysis of Tongue Size and Taste Papillae Number and Size in Recombinant Inbred Strains of Mice. Chemical Senses, 2008, 33, 693-707.	2.0	18
20	Long-term effects of prenatal alcohol exposure on the size of the whisker representation in juvenile and adult rat barrel cortex. Alcohol, 2007, 41, 239-251.	1.7	26
21	Early postnatal alcohol exposure reduced the size of vibrissal barrel field in rat somatosensory cortex (SI) but did not disrupt barrel field organization. Alcohol, 2007, 41, 253-261.	1.7	9
22	Prenatal alcohol exposure delays the development of the cortical barrel field in neonatal rats. Experimental Brain Research, 2006, 172, 1-13.	1.5	27
23	Prenatal alcohol exposure (PAE) reduces the size of the forepaw representation in forepaw barrel subfield (FBS) cortex in neonatal rats: relationship between periphery and central representation. Experimental Brain Research, 2006, 172, 387-396.	1.5	20
24	Prenatal alcohol exposure alters the size, but not the pattern, of the whisker representation in neonatal rat barrel cortex. Experimental Brain Research, 2005, 165, 167-178.	1.5	26
25	Genetic analysis of barrel field size in the first somatosensory area (SI) in inbred and recombinant inbred strains of mice. Somatosensory & Motor Research, 2005, 22, 141-150.	0.9	11
26	Delayed reorganization of the shoulder representation in forepaw barrel subfield (FBS) in first somatosensory cortex (SI) following forelimb deafferentation in adult rats. Experimental Brain Research, 2003, 153, 100-112.	1.5	21
27	Removal of GABAergic inhibition alters subthreshold input in neurons in forepaw barrel subfield (FBS) in rat first somatosensory cortex (SI) after digit stimulation. Experimental Brain Research, 2002, 145, 411-428.	1.5	35
28	Thalamocortical arbors extend beyond single cortical barrels: an in vivo intracellular tracing study in rat. Experimental Brain Research, 2001, 136, 152-168.	1.5	85
29	Location and distribution of Fos protein expression in rat hippocampus following acute moderate aerobic exercise. Experimental Brain Research, 2001, 137, 26-35.	1.5	42
30	Large-scale cortical reorganization following forelimb deafferentation in rat does not involve plasticity of intracortical connections. Experimental Brain Research, 2001, 138, 8-25.	1.5	32
31	Effects of large-scale limb deafferentation on the morphological and physiological organization of the forepaw barrel subfield (FBS) in somatosensory cortex (SI) in adult and neonatal rats. Experimental Brain Research, 1999, 128, 315-331.	1.5	28
32	Specificity in the Interaction of HVA Ca2+ Channel Types With Ca2+-Dependent AHPs and Firing Behavior in Neocortical Pyramidal Neurons. Journal of Neurophysiology, 1998, 79, 2522-2534.	1.8	105
33	In vivo intracellular recording and labeling of neurons in the forepaw barrel subfield (FBS) of rat somatosensory cortex. NeuroReport, 1996, 7, 2261-2276.	1.2	33
34	Electrical stimulation of a forepaw digit increases the physiological representation of that digit in layer IV of SI cortex in rat. NeuroReport, 1996, 7, 2395-2400.	1.2	5
35	Relationship between representation of hindpaw and hindpaw barrel subfield (HBS) in layer IV of rat somatosensory cortex. NeuroReport, 1996, 7, 2317-2324.	1.2	10
36	Digit removal leads to discrepancies between the structural and functional organization of the forepaw barrel subfield in layer IV of rat primary somatosensory cortex. Experimental Brain Research, 1996, 108, 417-26.	1.5	27

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37	Relationship between the organization of the forepaw barrel subfield and the representation of the forepaw in layer IV of rat somatosensory cortex. Experimental Brain Research, 1995, 103, 183-97.	1.5	74
38	Organization and Development of the Forepaw Representation in Forepaw Barrel Subfield in Somatosensory Cortex of Rat. Cerebral Cortex, 1995, , 77-122.	0.6	6
39	Reevaluation of area 3b in the cat based on architectonic and electrophysiological studies: Regional variability with functional and anatomical consistencies. Journal of Comparative Neurology, 1994, 341, 357-374.	1.6	15
40	Large Unresponsive Zones Appear in Cat Somatosensory Cortex Immediately After Ulnar Nerve Cut. Canadian Journal of Neurological Sciences, 1994, 21, 233-247.	0.5	16
41	Early development of the SI cortical barrel field representation in neonatal rats follows a lateral-to-medial gradient: an electrophysiological study. Experimental Brain Research, 1993, 92, 369-74.	1.5	43
42	Contributions of low-threshold calcium current and anomalous rectifier (Ih) to slow depolarizations underlying burst firing in human neocortical neurons in vitro. Neuroscience Letters, 1991, 124, 17-21.	2.1	72
43	Organization of the Mouse Motor Cortex Studied by Retrograde Tracing and Intracortical Microstimulation (ICMS) Mapping. Canadian Journal of Neurological Sciences, 1991, 18, 28-38.	0.5	97
44	Ulnar nerve innervation of paw and SI cortex of cat. NeuroReport, 1990, 1, 225-228.	1.2	6
45	Early development of SI cortical barrel subfield representation of forelimb in normal and deafferented neonatal rat as delineated by peroxidase conjugated lectin, peanut agglutinin (PNA). Experimental Brain Research, 1990, 81, 234-40.	1.5	23
46	Absence of Responses to Microstimulation at the Hand-Face Border in Baboon Primary Motor Cortex. Canadian Journal of Neurological Sciences, 1990, 17, 24-29.	0.5	5
47	Topographic Organization of Baboon Primary Motor Cortex: Face, Hand, Forelimb, and Shoulder Representation. Somatosensory & Motor Research, 1990, 7, 485-514.	0.9	47
48	Early development of the representation of the body surface in SI cortex barrel field in neonatal rats as demonstrated with peanut agglutinin binding: evidence for differential development within the rattunculus. Experimental Brain Research, 1989, 77, 425-431.	1.5	35
49	Physiological properties and patterns of projection in the cortico-cortical connections from the second somatosensory cortex to the motor cortex, area 4Î³, in the cat. Brain Research, 1989, 504, 206-210.	2.2	23
50	Motor effects produced by stimulation of secondary somatosensory (SII) cortex in the monkey. Experimental Brain Research, 1985, 58, 440-2.	1.5	12
51	Anatomical and physiological properties of the projection from the sensory cortex to the motor cortex in normal cats: the difference between corticocortical and thalamocortical projections. Brain Research, 1985, 345, 68-78.	2.2	56
52	Caudal cuneate nucleus projection to the direct thalamic relay to the motor cortex: an electrophysiological study. Brain Research, 1985, 360, 361-365.	2.2	11
53	Corticocortical connections to the motor cortex from the posterior parietal lobe (areas 5a, 5b, 7) in the cat demonstrated by the retrograde axonal transport of horseradish peroxidase. Experimental Brain Research, 1984, 54, 476-84.	1.5	40
54	Caudal cuneate nucleus projection to the direct thalamic relay to motor cortex in cat: an electrophysiological and anatomical study. Brain Research, 1984, 323, 360-364.	2.2	15

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55	Low threshold motor effects produced by stimulation of area preinsularis (2pr.i) of the secondary sensory cortex in the cat; Input-output relationships. Experimental Brain Research, 1983, 51, 108-16.	1.5	15
56	Movement of facial muscles following intra-cortical microstimulation (ICMS) along the lateral branch of the posterior bank of the ansate sulcus, areas 5a and 5b, in the cat. Experimental Brain Research, 1983, 50-50, 459-63.	1.5	14
57	Physiological properties of neurons projecting from area 3a to area 4 gamma of feline cerebral cortex. Journal of Neurophysiology, 1982, 48, 1048-1057.	1.8	23
58	Pattern of projection and physiological properties of cortico-cortical connections from the posterior bank of the ansate sulcus to the motor cortex, area 4?, in the cat. Experimental Brain Research, 1982, 48, 335-44.	1.5	34
59	Physiological properties and pattern of projection of cortico-cortical connections from the anterior bank of the ansate sulcus to the motor cortex, area 4Î³, in the cat. Experimental Brain Research, 1982, 46, 403-412.	1.5	56
60	Input-output relationships in cat's motor cortex after pyramidal section.. Journal of Neurophysiology, 1981, 46, 694-703.	1.8	31
61	Posterior cortical lesions and specific crossmodal transfer in the rat. Physiological Psychology, 1976, 4, 281-284.	0.8	16