

Hanbing Lu

List of Publications by Year in descending order

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Version: 2024-02-01

63
papers

3,290
citations

257450

24
h-index

161849

54
g-index

70
all docs

70
docs citations

70
times ranked

4578
citing authors

#	ARTICLE	IF	CITATIONS
1	Rat brains also have a default mode network. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3979-3984.	7.1	509
2	Characterization of continuously distributed cortical water diffusion rates with a stretched-exponential model. Magnetic Resonance in Medicine, 2003, 50, 727-734.	3.0	409
3	Synchronized delta oscillations correlate with the resting-state functional MRI signal. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18265-18269.	7.1	409
4	Anesthesia with Dexmedetomidine and Low-dose Isoflurane Increases Solute Transport <i>via</i> the Glymphatic Pathway in Rat Brain When Compared with High-dose Isoflurane. Anesthesiology, 2017, 127, 976-988.	2.5	144
5	Frequency specificity of functional connectivity in brain networks. NeuroImage, 2008, 42, 1047-1055.	4.2	141
6	Large-Scale Brain Networks in the Awake, Truly Resting Marmoset Monkey. Journal of Neuroscience, 2013, 33, 16796-16804.	3.6	133
7	Spatial correlations of laminar BOLD and CBV responses to rat whisker stimulation with neuronal activity localized by Fos expression. Magnetic Resonance in Medicine, 2004, 52, 1060-1068.	3.0	114
8	Cocaine-induced brain activation detected by dynamic manganese-enhanced magnetic resonance imaging (MEMRI). Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2489-2494.	7.1	107
9	Constituents and functional implications of the rat default mode network. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4541-7.	7.1	90
10	Neurophysiological Basis of Multi-Scale Entropy of Brain Complexity and Its Relationship With Functional Connectivity. Frontiers in Neuroscience, 2018, 12, 352.	2.8	90
11	Functional connectivity with the retrosplenial cortex predicts cognitive aging in rats. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12286-12291.	7.1	69
12	Compulsive drug use is associated with imbalance of orbitofrontal- and prefrontal-striatal circuits in punishment-resistant individuals. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9066-9071.	7.1	66
13	Mapping functional connectivity based on synchronized CMRO2 fluctuations during the resting state. NeuroImage, 2009, 45, 694-701.	4.2	62
14	Resting state functional connectivity: Its physiological basis and application in neuropharmacology. Neuropharmacology, 2014, 84, 79-89.	4.1	53
15	Converging Structural and Functional Evidence for a Rat Salience Network. Biological Psychiatry, 2020, 88, 867-878.	1.3	51
16	Physiological characterization of a robust survival rodent fMRI method. Magnetic Resonance Imaging, 2017, 35, 54-60.	1.8	46
17	Registering and analyzing rat fMRI data in the stereotaxic framework by exploiting intrinsic anatomical features. Magnetic Resonance Imaging, 2010, 28, 146-152.	1.8	44
18	The Rich-Club Organization in Rat Functional Brain Network to Balance Between Communication Cost and Efficiency. Cerebral Cortex, 2018, 28, 924-935.	2.9	43

#	ARTICLE	IF	CITATIONS
19	Post-treatment with amphetamine enhances reinnervation of the ipsilateral side cortex in stroke rats. <i>NeuroImage</i> , 2011, 56, 280-289.	4.2	39
20	Temporal evolution of the CBV-fMRI signal to rat whisker stimulation of variable duration and intensity: A linearity analysis. <i>NeuroImage</i> , 2005, 26, 432-440.	4.2	35
21	Heroin addiction engages negative emotional learning brain circuits in rats. <i>Journal of Clinical Investigation</i> , 2019, 129, 2480-2484.	8.2	35
22	Quantifying the blood oxygenation level dependent effect in cerebral blood volume-weighted functional MRI at 9.4T. <i>Magnetic Resonance in Medicine</i> , 2007, 58, 616-621.	3.0	34
23	Physiologically evoked neuronal current MRI in a bloodless turtle brain: Detectable or not?. <i>NeuroImage</i> , 2009, 47, 1268-1276.	4.2	33
24	Origins of the Resting-State Functional MRI Signal: Potential Limitations of the "Neurocentric" Model. <i>Frontiers in Neuroscience</i> , 2019, 13, 1136.	2.8	32
25	Abstinence from Cocaine and Sucrose Self-Administration Reveals Altered Mesocorticolimbic Circuit Connectivity by Resting State MRI. <i>Brain Connectivity</i> , 2014, 4, 499-510.	1.7	31
26	Low- but Not High-Frequency LFP Correlates with Spontaneous BOLD Fluctuations in Rat Whisker Barrel Cortex. <i>Cerebral Cortex</i> , 2016, 26, bhu248.	2.9	30
27	Delta Rhythm Orchestrates the Neural Activity Underlying the Resting State BOLD Signal via Phase-amplitude Coupling. <i>Cerebral Cortex</i> , 2019, 29, 119-133.	2.9	28
28	Multishot partial-k-space EPI for high-resolution fMRI demonstrated in a rat whisker barrel stimulation model at 3t. <i>Magnetic Resonance in Medicine</i> , 2003, 50, 1215-1222.	3.0	22
29	Dorsolateral caudate nucleus differentiates cocaine from natural reward-associated contextual cues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 4093-4098.	7.1	21
30	Resting-state functional MRI reveals altered brain connectivity and its correlation with motor dysfunction in a mouse model of Huntington's disease. <i>Scientific Reports</i> , 2017, 7, 16742.	3.3	21
31	Brain regional synchronous activity predicts tauopathy in 3\beta -TgAD mice. <i>Neurobiology of Aging</i> , 2018, 70, 160-169.	3.1	21
32	A novel transcranial magnetic stimulator for focal stimulation of rodent brain. <i>Brain Stimulation</i> , 2018, 11, 663-665.	1.6	20
33	fMRI response in the medial prefrontal cortex predicts cocaine but not sucrose self-administration history. <i>NeuroImage</i> , 2012, 62, 1857-1866.	4.2	19
34	Whole brain dynamics during optogenetic self-stimulation of the medial prefrontal cortex in mice. <i>Communications Biology</i> , 2021, 4, 66.	4.4	19
35	Intrinsic Insular-Frontal Networks Predict Future Nicotine Dependence Severity. <i>Journal of Neuroscience</i> , 2019, 39, 5028-5037.	3.6	18
36	Temporary disruption of the rat blood-brain barrier with a monoclonal antibody: A novel method for dynamic manganese-enhanced MRI. <i>NeuroImage</i> , 2010, 50, 7-14.	4.2	16

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37	Supramammillary neurons projecting to the septum regulate dopamine and motivation for environmental interaction in mice. <i>Nature Communications</i> , 2021, 12, 2811.	12.8	16
38	Octopus visual system: A functional MRI model for detecting neuronal electric currents without a blood-oxygen-level-dependent confound. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 1311-1319.	3.0	14
39	Intrinsic differences in insular circuits moderate the negative association between nicotine dependence and cingulate-striatal connectivity strength. <i>Neuropsychopharmacology</i> , 2020, 45, 1042-1049.	5.4	14
40	Real-time animal functional magnetic resonance imaging and its application to neuropharmacological studies. <i>Magnetic Resonance Imaging</i> , 2008, 26, 1266-1272.	1.8	13
41	TE-dependent spatial and spectral specificity of functional connectivity. <i>NeuroImage</i> , 2012, 59, 3075-3084.	4.2	13
42	A novel method to induce nicotine dependence by intermittent drug delivery using osmotic minipumps. <i>Pharmacology Biochemistry and Behavior</i> , 2016, 142, 79-84.	2.9	13
43	Physiological Considerations of Functional Magnetic Resonance Imaging in Animal Models. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2019, 4, 522-532.	1.5	13
44	Orbitofrontal cortex and dorsal striatum functional connectivity predicts incubation of opioid craving after voluntary abstinence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	13
45	Acute Nicotine-Induced Tachyphylaxis Is Differentially Manifest in the Limbic System. <i>Neuropsychopharmacology</i> , 2011, 36, 2498-2512.	5.4	12
46	Functional Connectivity of Hippocampal CA3 Predicts Neurocognitive Aging via CA1 Frontal Circuit. <i>Cerebral Cortex</i> , 2020, 30, 4297-4305.	2.9	12
47	Medial prefrontal cortex and anteromedial thalamus interaction regulates goal-directed behavior and dopaminergic neuron activity. <i>Nature Communications</i> , 2022, 13, 1386.	12.8	12
48	Focal transcranial magnetic stimulation in awake rats: Enhanced glucose uptake in deep cortical layers. <i>Journal of Neuroscience Methods</i> , 2020, 339, 108709.	2.5	11
49	High-field continuous arterial spin labeling with long labeling duration: Reduced confounds from blood transit time and postlabeling delay. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 1557-1566.	3.0	10
50	Momentum-weighted conjugate gradient descent algorithm for gradient coil optimization. <i>Magnetic Resonance in Medicine</i> , 2004, 51, 158-164.	3.0	9
51	Longitudinal observations using simultaneous fMRI, multiple channel electrophysiology recording, and chemical microiontophoresis in the rat brain. <i>Journal of Neuroscience Methods</i> , 2018, 306, 68-76.	2.5	9
52	Manganese-Enhanced MRI Reflects Both Activity-Independent and Activity-Dependent Uptake within the Rat Habenulomesencephalic Pathway. <i>PLoS ONE</i> , 2015, 10, e0127773.	2.5	8
53	Development of Focused Transcranial Magnetic Stimulation for Rodents by Copper-Array Shields. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	8
54	Angle-tuned coils: attractive building blocks for TMS with improved depth-spread performance. <i>Journal of Neural Engineering</i> , 2022, 19, 026059.	3.5	8

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55	A high-density theta burst paradigm enhances the aftereffects of transcranial magnetic stimulation: Evidence from focal stimulation of rat motor cortex. <i>Brain Stimulation</i> , 2022, 15, 833-842.	1.6	6
56	Comparison of visually evoked local field potentials in isolated turtle brain: Patterned versus blank stimulation. <i>Journal of Neuroscience Methods</i> , 2010, 187, 26-32.	2.5	3
57	Differential expression of nicotine withdrawal as a function of developmental age in the rat. <i>Pharmacology Biochemistry and Behavior</i> , 2019, 187, 172802.	2.9	3
58	High-Performance Magnetic-core Coils for Targeted Rodent Brain Stimulations. <i>BME Frontiers</i> , 2022, 2022, .	4.5	3
59	Introduction to the special issue on neuroimaging in neuropharmacology. <i>Neuropharmacology</i> , 2014, 84, 63-64.	4.1	1
60	A flared-end gradient coil with outer-wall direct cooling for human brain imaging: A feasibility study. <i>Magnetic Resonance Imaging</i> , 2019, 62, 191-198.	1.8	1
61	Acquisition of Resting-State Functional Magnetic Resonance Imaging Data in the Rat. <i>Journal of Visualized Experiments</i> , 2021, , .	0.3	1
62	Cocaine and Amphetamine Neuroimaging in Small Rodents. , 2013, , 699-710.		0
63	Magnetic Resonance Imaging of Pharmacological Systems. , 2010, , 91-104.		0