Bailu Si

List of Publications by Year
in descending order

39	691	686830 13	642321 23
papers	citations	h-index	g-index

39	39	39	723
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Abnormal Reactivity of Brain Oscillations to Visual Search Target in Children With Attention-Deficit/Hyperactivity Disorder. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2023, 8, 522-530.	1.1	2
2	Learning Cognitive Map Representations for Navigation by Sensoryâ€"Motor Integration. IEEE Transactions on Cybernetics, 2022, 52, 508-521.	6.2	5
3	A theory of geometry representations for spatial navigation. Progress in Neurobiology, 2022, 211, 102228.	2.8	3
4	Entorhinal-hippocampal interactions lead to globally coherent representations of space. Current Research in Neurobiology, 2022, 3, 100035.	1.1	0
5	A brain-inspired compact cognitive mapping system. Cognitive Neurodynamics, 2021, 15, 91-101.	2.3	13
6	Learning allocentric representations of space for navigation. Neurocomputing, 2021, 453, 579-589.	3.5	3
7	Probabilistic learning vector quantization on manifold of symmetric positive definite matrices. Neural Networks, 2021, 142, 105-118.	3.3	6
8	Characterization of exploratory patterns and hippocampalâ€"prefrontal network oscillations during the emergence of free exploration. Science Bulletin, 2021, 66, 2238-2250.	4.3	7
9	The DIAMOND Model: Deep Recurrent Neural Networks for Self-Organizing Robot Control. Frontiers in Neurorobotics, 2020, 14, 62.	1.6	2
10	NeuroBayesSLAM: Neurobiologically inspired Bayesian integration of multisensory information for robot navigation. Neural Networks, 2020, 126, 21-35.	3.3	23
11	Video data for the cognitive mapping process of NeuroBayesSLAM system. Data in Brief, 2020, 30, 105637.	0.5	0
12	A sampling-based multi-tree fusion algorithm for frontier detection. International Journal of Advanced Robotic Systems, 2019, 16, 172988141986542.	1.3	7
13	Unsupervised Feature Learning for Visual Place Recognition in Changing Environments. , 2019, , .		3
14	Mobile Robot Exploration Based on Rapidly-exploring Random Trees and Dynamic Window Approach. , 2019, , .		10
15	Learning joint spaceâ€"timeâ€"frequency features for EEG decoding on small labeled data. Neural Networks, 2019, 114, 67-77.	3.3	74
16	A Reinforcement Learning Neural Network for Robotic Manipulator Control. Neural Computation, 2018, 30, 1983-2004.	1.3	26
17	Sample-Based Frontier Detection for Autonomous Robot Exploration. , 2018, , .		8
18	Combined optimisation of waveform and quantisation thresholds for multistatic radar systems. IET Signal Processing, 2018, 12, 559-565.	0.9	4

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19	Group feature selection with multiclass support vector machine. Neurocomputing, 2018, 317, 42-49.	3.5	25
20	A novel pyramidal cell type promotes sharp-wave synchronization in the hippocampus. Nature Neuroscience, 2018, 21, 985-995.	7.1	65
21	<scp>S</scp>elforganization of modular activity of grid cells. Hippocampus, 2017, 27, 1204-1213.	0.9	32
22	Two-dimensional forward-looking sonar image registration by maximization of peripheral mutual information. International Journal of Advanced Robotic Systems, 2017, 14, 172988141774627.	1.3	18
23	A prey-predator model for efficient robot tracking. , 2017, , .		1
24	Model learning based on grid cell representations. , 2017, , .		1
25	Cognitive Mapping Based on Conjunctive Representations of Space and Movement. Frontiers in Neurorobotics, 2017, 11, 61.	1.6	20
26	Local Autoencoding for Parameter Estimation in a Hidden Potts-Markov Random Field. IEEE Transactions on Image Processing, 2016, 25, 2324-2336.	6.0	9
27	Label field initialization for MRF-based sonar image segmentation by selective autoencoding. , 2016, , .		4
28	Prior parameter estimation for Ising-MRF-based sonar image segmentation by local center-encoding. , 2015, , .		6
29	Self-organization of hippocampal representations in large environments. , 2015, , .		0
30	Continuous Attractor Network Model for Conjunctive Position-by-Velocity Tuning of Grid Cells. PLoS Computational Biology, 2014, 10, e1003558.	1.5	23
31	A model for the differentiation between grid and conjunctive units in medial entorhinal cortex. Hippocampus, 2013, 23, 1410-1424.	0.9	77
32	Grid cells on the ball. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P03013.	0.9	18
33	Grid maps for spaceflight, anyone? They are for free!. Behavioral and Brain Sciences, 2013, 36, 566-567.	0.4	7
34	Grid alignment in entorhinal cortex. Biological Cybernetics, 2012, 106, 483-506.	0.6	85
35	Self-organization of multiple spatial and context memories in the hippocampus. Neuroscience and Biobehavioral Reviews, 2012, 36, 1609-1625.	2.9	40
36	The role of competitive learning in the generation of DG fields from EC inputs. Cognitive Neurodynamics, 2009, 3, 177-187.	2.3	59

#	Article	IF	Citations
37	Gain-based Exploration: From Multi-armed Bandits to Partially Observable Environments. , 2007, , .		5
38	Robot Exploration by Subjectively Maximizing Objective Information Gain. , 0, , .		0
39	Grid Cells Lose Coherence in Realistic Environments. , 0, , .		0