Suzanna Becker

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3662171/publications.pdf

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68 papers

3,980 citations

30 h-index 56 g-index

72 all docs 72 docs citations

times ranked

72

3804 citing authors

#	Article	IF	CITATIONS
1	Remembering the past and imagining the future: A neural model of spatial memory and imagery Psychological Review, 2007, 114, 340-375.	3.8	796
2	Self-organizing neural network that discovers surfaces in random-dot stereograms. Nature, 1992, 355, 161-163.	27.8	325
3	Memory for events and their spatial context: models and experiments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2001, 356, 1493-1503.	4.0	291
4	Long-term semantic priming: A computational account and empirical evidence Journal of Experimental Psychology: Learning Memory and Cognition, 1997, 23, 1059-1082.	0.9	216
5	A computational principle for hippocampal learning and neurogenesis. Hippocampus, 2005, 15, 722-738.	1.9	211
6	A model of hippocampal neurogenesis in memory and mood disorders. Trends in Cognitive Sciences, 2007, 11, 70-76.	7.8	169
7	The long and short of semantic priming effects in lexical decision Journal of Experimental Psychology: Learning Memory and Cognition, 1997, 23, 1083-1105.	0.9	153
8	Adult hippocampal neurogenesis reduces memory interference in humans: opposing effects of aerobic exercise and depression. Frontiers in Neuroscience, 2013, 7, 66.	2.8	145
9	Using Deep Learning Algorithms to Grade Hydronephrosis Severity: Toward a Clinical Adjunct. Frontiers in Pediatrics, 2020, 8, 1.	1.9	103
10	Title is missing!. Network: Computation in Neural Systems, 1996, 7, 7-31.	3.6	102
11	The Effects of Physical Exercise and Cognitive Training on Memory and Neurotrophic Factors. Journal of Cognitive Neuroscience, 2017, 29, 1895-1907.	2.3	90
12	A Computational Model of Prefrontal Control in Free Recall: Strategic Memory Use in the California Verbal Learning Task. Journal of Cognitive Neuroscience, 2003, 15, 821-832.	2.3	74
13	Mutual information maximization: models of cortical self-organization. Network: Computation in Neural Systems, 1996, 7, 7-31.	3.6	71
14	Long-term semantic priming: A computational account and empirical evidence Journal of Experimental Psychology: Learning Memory and Cognition, 1997, 23, 1059-1082.	0.9	68
15	A Spiking Neuron Model of Cortical Correlates of Sensorineural Hearing Loss: Spontaneous Firing, Synchrony, and Tinnitus. Neural Computation, 2006, 18, 2942-2958.	2.2	64
16	Computational modeling and empirical studies of hippocampal neurogenesis-dependent memory: Effects of interference, stress and depression. Brain Research, 2009, 1299, 45-54.	2.2	62
17	Adult hippocampal neurogenesis and memory interference. Behavioural Brain Research, 2012, 227, 464-469.	2.2	62
18	UNSUPERVISED LEARNING PROCEDURES FOR NEURAL NETWORKS. International Journal of Neural Systems, 1991, 02, 17-33.	5.2	58

#	Article	IF	Citations
19	Peer victimization, depressive symptoms, and high salivary cortisol predict poorer memory in children. Brain and Cognition, 2011, 77, 191-199.	1.8	55
20	The role of adult hippocampal neurogenesis in reducing interference Behavioral Neuroscience, 2012, 126, 381-391.	1.2	54
21	Unsupervised neural network learning procedures for feature extraction and classification. Applied Intelligence, 1996, 6, 185-203.	5.3	51
22	A model of grounded language acquisition: Sensorimotor features improve lexical and grammatical learning. Journal of Memory and Language, 2005, 53, 258-276.	2.1	50
23	Implicit Learning in 3D Object Recognition: The Importance of Temporal Context. Neural Computation, 1999, 11, 347-374.	2.2	46
24	Computational Models of Millisecond Level Duration Tuning in Neural Circuits. Journal of Neuroscience, 2009, 29, 9255-9270.	3.6	43
25	Learning Mixture Models of Spatial Coherence. Neural Computation, 1993, 5, 267-277.	2.2	42
26	Examining the role of the temporo-parietal network in memory, imagery, and viewpoint transformations. Frontiers in Human Neuroscience, 2014, 8, 709.	2.0	42
27	Neurogenesis paradoxically decreases both pattern separation and memory interference. Frontiers in Systems Neuroscience, 2015, 9, 136.	2.5	39
28	Can homeostatic plasticity in deafferented primary auditory cortex lead to travelling waves of excitation?. Journal of Computational Neuroscience, 2011, 30, 279-299.	1.0	38
29	Linking Animal Models of Psychosis to Computational Models of Dopamine Function. Neuropsychopharmacology, 2007, 32, 54-66.	5.4	35
30	Neurogenesis and pattern separation: time for a divorce. Wiley Interdisciplinary Reviews: Cognitive Science, 2017, 8, e1427.	2.8	35
31	One spatial map or many? Spatial coding of connected environments Journal of Experimental Psychology: Learning Memory and Cognition, 2014, 40, 511-531.	0.9	31
32	A Computational Model of the Functional Role of the Ventral-Striatal D2 Receptor in the Expression of Previously Acquired Behaviors. Neural Computation, 2005, 17, 361-395.	2.2	30
33	Synergistic effects of diet and exercise on hippocampal function in chronically stressed mice. Neuroscience, 2015, 308, 180-193.	2.3	29
34	A Principle for Learning Egocentric-Allocentric Transformation. Neural Computation, 2008, 20, 709-737.	2.2	26
35	A role for adult hippocampal neurogenesis at multiple time scales: A study of recent and remote memory in humans Behavioral Neuroscience, 2015, 129, 435-449.	1.2	22
36	Effects of a 12-week running programme in youth and adults with complex mood disorders. BMJ Open Sport and Exercise Medicine, 2018, 4, e000314.	2.9	20

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37	Capturing the Forest but Missing the Trees: Microstates Inadequate for Characterizing Shorter-Scale EEG Dynamics. Neural Computation, 2019, 31, 2177-2211.	2.2	19
38	Dynamic task-linked switching between brain networks – A tri-network perspective. Brain and Cognition, 2021, 151, 105725.	1.8	19
39	Stochastic Correlative Learning Algorithms. IEEE Transactions on Signal Processing, 2004, 52, 2200-2209.	5.3	16
40	Development of a flexible, realistic hearing in noise test environment (R-HINT-E). Signal Processing, 2004, 84, 299-309.	3.7	11
41	Computational cognitive neuroscience. Brain Research, 2009, 1299, 1-2.	2.2	10
42	Emotional memory in pregnant women at risk for postpartum depression. Psychiatry Research, 2015, 229, 777-783.	3.3	10
43	Stress and binge drinking: A toxic combination for the teenage brain. Neuropsychologia, 2016, 90, 251-260.	1.6	10
44	Early Intervention with a Multi-Ingredient Dietary Supplement Improves Mood and Spatial Memory in a Triple Transgenic Mouse Model of Alzheimer's Disease. Journal of Alzheimer's Disease, 2018, 64, 835-857.	2.6	10
45	A Novel Model-Based Hearing Compensation Design Using a Gradient-Free Optimization Method. Neural Computation, 2005, 17, 2648-2671.	2.2	9
46	A neural network model of hippocampal–striatal–prefrontal interactions in contextual conditioning. Brain Research, 2008, 1202, 87-98.	2.2	9
47	Toward an Open-Ended BCI: A User-Centered Coadaptive Design. Neural Computation, 2017, 29, 2742-2768.	2.2	8
48	Grading Prenatal Hydronephrosis from Ultrasound Imaging Using Deep Convolutional Neural Networks. , 2018, , .		8
49	Modeling Mental Navigation in Scenes with Multiple Objects. Neural Computation, 2004, 16, 1851-1872.	2.2	7
50	Progressive Thresholding: Shaping and Specificity in Automated Neurofeedback Training. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2297-2305.	4.9	7
51	Associative Arithmetic with Boltzmann Machines: The Role of Number Representations. Lecture Notes in Computer Science, 2002, , 277-283.	1.3	7
52	When Do Objects Become Landmarks? A VR Study of the Effect of Task Relevance on Spatial Memory. PLoS ONE, 2012, 7, e35940.	2.5	6
53	Visual perspective as a two-dimensional construct in episodic future thought. Consciousness and Cognition, 2021, 93, 103148.	1.5	6
54	Pathologies of precision: A Bayesian account of goals, habits, and episodic foresight in addiction. Brain and Cognition, 2022, 158, 105843.	1.8	5

#	Article	IF	Citations
55	BCI Illiteracy: It's Us, Not Them. Optimizing BCIs for Individual Brains. , 2022, , .		5
56	Emotional reaction recognition from EEG., 2017,,.		4
57	A Brain-Computer Interface Based on Abstract Visual and Auditory Imagery: Evidence for an Effect of Artistic Training. Lecture Notes in Computer Science, 2017, , 313-332.	1.3	3
58	Impact of a structured, group-based running programme on clinical, cognitive and social function in youth and adults with complex mood disorders: a 12-week pilot study. BMJ Open Sport and Exercise Medicine, 2019, 5, e000521.	2.9	2
59	Model Synapses with Frequency Potentiation Characteristics Can Cooperatively Enhance Hebbian Learning., 1995,, 197-202.		2
60	Recovery of High Interference Memory in Spite of Lingering Cognitive Deficits in a Longitudinal Pilot Study of Hospitalized Depressed Patients. Frontiers in Psychiatry, 2020, 11, 736.	2.6	1
61	Marr's theory of the hippocampus as a simple memory. , 2016, , 159-178.		1
62	Preface to the special issue: Computational cognitive neuroscience. Brain Research, 2008, 1202, 1-2.	2.2	0
63	Preface to the special issue on computational cognitive neuroscience. Brain Research, 2010, 1365, 1-2.	2.2	0
64	Restricted Boltzmann Machine Models of Hippocampal Coding and Neurogenesis., 2017,, 443-461.		0
65	Memory for events and their spatial context: models and experiments. , 2002, , 249-268.		O
66	From Dopamine to Psychosis: A Computational Approach. Lecture Notes in Computer Science, 2003, , 1115-1121.	1.3	0
67	<code><title>Learning</code> spatially coherent properties of the visual world in connectionist networks <code></title>., 1991,,.</code>		0
68	Combined Aerobic Exercise and Neurofeedback Lead to Improved Task-Relevant Intrinsic Network Synchrony. Frontiers in Human Neuroscience, 0, 16, .	2.0	0