Nicolas P Rougier

List of Publications by Year
in descending order

50	1,099	687363 13	414414 32
papers	citations	h-index	g-index

59	59	59	1310
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Knowledge extraction from the learning of sequences in a long short term memory (LSTM) architecture. Knowledge-Based Systems, 2022, 235, 107657.	7.1	6
2	Computational benefits of structural plasticity, illustrated in songbirds. Neuroscience and Biobehavioral Reviews, 2022, 132, 1183-1196.	6.1	0
3	Randomized Self-Organizing Map. Neural Computation, 2021, 33, 2241-2273.	2.2	2
4	A Robust Model of Gated Working Memory. Neural Computation, 2020, 32, 153-181.	2.2	5
5	Identification of distinct pathological signatures induced by patient-derived Î±-synuclein structures in nonhuman primates. Science Advances, 2020, 6, eaaz9165.	10.3	34
6	New journal for reproduction and replication results. Nature, 2020, 581, 30-30.	27.8	6
7	Stability analysis of a neural field self-organizing map. Journal of Mathematical Neuroscience, 2020, 10, 20.	2.4	2
8	When Artificial Intelligence and Computational Neuroscience Meet. , 2020, , 303-335.		2
9	ReScience C: A Journal for Reproducible Replications in Computational Science. Lecture Notes in Computer Science, 2019, , 150-156.	1.3	3
10	Challenge to test reproducibility of old computer code. Nature, 2019, 574, 634-634.	27.8	2
11	Coordination over a unique medium of exchange under information scarcity. Palgrave Communications, 2019, 5, .	4.7	2
12	A Simple Reservoir Model of Working Memory with Real Values. , 2018, , .		5
13	Digital typography. , 2018, , .		1
14	A natural history of skills. Progress in Neurobiology, 2018, 171, 114-124.	5.7	19
15	A Density-Driven Method for the Placement of Biological Cells Over Two-Dimensional Manifolds. Frontiers in Neuroinformatics, 2018, 12, 12.	2.5	7
16	A Computational Model of Dual Competition between the Basal Ganglia and the Cortex. ENeuro, 2018, 5, ENEURO.0339-17.2018.	1.9	6
17	Code reviewing puts extra demands on referees. Nature, 2018, 556, 309-309.	27.8	1
18	The art of scaling up : A computational account on action selection in basal ganglia. , 2017, , .		1

#	Article	IF	Citations
19	Motivated self-organization. , 2017, , .		0
20	Re-run, Repeat, Reproduce, Reuse, Replicate: Transforming Code into Scientific Contributions. Frontiers in Neuroinformatics, 2017, 11, 69.	2.5	64
21	Sustainable computational science: the ReScience initiative. PeerJ Computer Science, 2017, 3, e142.	4.5	86
22	Implicit Knowledge Extraction and Structuration from Electrical Diagrams. Lecture Notes in Computer Science, 2017, , 235-241.	1.3	0
23	Dynamics of Reward Based Decision Making: A Computational Study. Lecture Notes in Computer Science, 2016, , 322-329.	1.3	2
24	The formation of habits in the neocortex under the implicit supervision of the basal ganglia. BMC Neuroscience, 2015, 16, .	1.9	1
25	A long journey into reproducible computational neuroscience. Frontiers in Computational Neuroscience, 2015, 9, 30.	2.1	28
26	A parsimonious computational model of visual target position encoding in the superior colliculus. Biological Cybernetics, 2015, 109, 549-559.	1.3	15
27	Structure of receptive fields in a computational model of area 3b of primary sensory cortex. Frontiers in Computational Neuroscience, 2014, 8, 76.	2.1	12
28	Ten Simple Rules for Better Figures. PLoS Computational Biology, 2014, 10, e1003833.	3.2	90
29	A computational view of area 3b of primary somatosensory cortex. BMC Neuroscience, 2013, 14, .	1.9	0
30	Self-Organizing Dynamic Neural Fields. , 2013, , 281-288.		1
31	DANA: Distributed numerical and adaptive modelling framework. Network: Computation in Neural Systems, 2012, 23, 237-253.	3.6	14
32	A Neural Field Model of the Somatosensory Cortex: Formation, Maintenance and Reorganization of Ordered Topographic Maps. PLoS ONE, 2012, 7, e40257.	2.5	18
33	Visual Target Selection Emerges from a Bio-inspired Network Topology. Studies in Computational Intelligence, 2012, , 317-330.	0.9	0
34	Synchronous and asynchronous evaluation of dynamic neural fields. Journal of Difference Equations and Applications, 2011, 17, 1119-1133.	1.1	7
35	No clock to rule them all. Journal of Physiology (Paris), 2011, 105, 83-90.	2.1	6
36	A Dynamic Neural Field Approach to the Covert and Overt Deployment of Spatial Attention. Cognitive Computation, 2011, 3, 279-293.	5.2	27

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37	Dynamic self-organising map. Neurocomputing, 2011, 74, 1840-1847.	5.9	57
38	Activity spread and breathers induced by finite transmission speeds in two-dimensional neural fields. Physical Review E, 2010, 82, 055701.	2.1	33
39	Asynchronous Evaluation as an Efficient and Natural Way to Compute Neural Networks. , 2009, , .		1
40	Implicit and explicit representations. Neural Networks, 2009, 22, 155-160.	5.9	5
41	From physiological principles to computational models of the cortex. Journal of Physiology (Paris), 2007, 101, 32-39.	2.1	7
42	A Distributed Computational Model of Spatial Memory Anticipation During a Visual Search Task. Lecture Notes in Computer Science, 2007, , 170-188.	1.3	6
43	Emergence of attention within a neural population. Neural Networks, 2006, 19, 573-581.	5.9	58
44	Dynamic neural field with local inhibition. Biological Cybernetics, 2006, 94, 169-179.	1.3	11
45	Prefrontal cortex and flexible cognitive control: Rules without symbols. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7338-7343.	7.1	367
46	A Distributed Model of Spatial Visual Attention. Lecture Notes in Computer Science, 2005, , 54-72.	1.3	18
47	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	41
48	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	11
49	Using neural dynamics to switch attention. , 0, , .		3
50	Latent Space Exploration and Functionalization of a Gated Working Memory Model Using Conceptors. Cognitive Computation, 0, , 1.	5.2	0