

# Nicolas P Rougier

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,099  
citations

687363

13  
h-index

414414

32  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1310  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Ten Simple Rules for Better Figures. PLoS Computational Biology, 2014, 10, e1003833.	3.2	90
3	Sustainable computational science: the ReScience initiative. PeerJ Computer Science, 2017, 3, e142.	4.5	86
4	Re-run, Repeat, Reproduce, Reuse, Replicate: Transforming Code into Scientific Contributions. Frontiers in Neuroinformatics, 2017, 11, 69.	2.5	64
5	Emergence of attention within a neural population. Neural Networks, 2006, 19, 573-581.	5.9	58
6	Dynamic self-organising map. Neurocomputing, 2011, 74, 1840-1847.	5.9	57
7	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	41
8	Identification of distinct pathological signatures induced by patient-derived $\alpha$ -synuclein structures in nonhuman primates. Science Advances, 2020, 6, eaaz9165.	10.3	34
9	Activity spread and breathers induced by finite transmission speeds in two-dimensional neural fields. Physical Review E, 2010, 82, 055701.	2.1	33
10	A long journey into reproducible computational neuroscience. Frontiers in Computational Neuroscience, 2015, 9, 30.	2.1	28
11	A Dynamic Neural Field Approach to the Covert and Overt Deployment of Spatial Attention. Cognitive Computation, 2011, 3, 279-293.	5.2	27
12	A natural history of skills. Progress in Neurobiology, 2018, 171, 114-124.	5.7	19
13	A Distributed Model of Spatial Visual Attention. Lecture Notes in Computer Science, 2005, , 54-72.	1.3	18
14	A Neural Field Model of the Somatosensory Cortex: Formation, Maintenance and Reorganization of Ordered Topographic Maps. PLoS ONE, 2012, 7, e40257.	2.5	18
15	A parsimonious computational model of visual target position encoding in the superior colliculus. Biological Cybernetics, 2015, 109, 549-559.	1.3	15
16	DANA: Distributed numerical and adaptive modelling framework. Network: Computation in Neural Systems, 2012, 23, 237-253.	3.6	14
17	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
18	Dynamic neural field with local inhibition. Biological Cybernetics, 2006, 94, 169-179.	1.3	11

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19	Learning representations in a gated prefrontal cortex model of dynamic task switching. Cognitive Science, 2002, 26, 503-520.	1.7	11
20	From physiological principles to computational models of the cortex. Journal of Physiology (Paris), 2007, 101, 32-39.	2.1	7
21	Synchronous and asynchronous evaluation of dynamic neural fields. Journal of Difference Equations and Applications, 2011, 17, 1119-1133.	1.1	7
22	A Density-Driven Method for the Placement of Biological Cells Over Two-Dimensional Manifolds. Frontiers in Neuroinformatics, 2018, 12, 12.	2.5	7
23	No clock to rule them all. Journal of Physiology (Paris), 2011, 105, 83-90.	2.1	6
24	A Distributed Computational Model of Spatial Memory Anticipation During a Visual Search Task. Lecture Notes in Computer Science, 2007, , 170-188.	1.3	6
25	New journal for reproduction and replication results. Nature, 2020, 581, 30-30.	27.8	6
26	A Computational Model of Dual Competition between the Basal Ganglia and the Cortex. ENeuro, 2018, 5, ENEURO.0339-17.2018.	1.9	6
27	Knowledge extraction from the learning of sequences in a long short term memory (LSTM) architecture. Knowledge-Based Systems, 2022, 235, 107657.	7.1	6
28	Implicit and explicit representations. Neural Networks, 2009, 22, 155-160.	5.9	5
29	A Simple Reservoir Model of Working Memory with Real Values. , 2018, , .		5
30	A Robust Model of Gated Working Memory. Neural Computation, 2020, 32, 153-181.	2.2	5
31	Using neural dynamics to switch attention. , 0, , .		3
32	ReScience C: A Journal for Reproducible Replications in Computational Science. Lecture Notes in Computer Science, 2019, , 150-156.	1.3	3
33	Challenge to test reproducibility of old computer code. Nature, 2019, 574, 634-634.	27.8	2
34	Randomized Self-Organizing Map. Neural Computation, 2021, 33, 2241-2273.	2.2	2
35	Dynamics of Reward Based Decision Making: A Computational Study. Lecture Notes in Computer Science, 2016, , 322-329.	1.3	2
36	Coordination over a unique medium of exchange under information scarcity. Palgrave Communications, 2019, 5, .	4.7	2

#	ARTICLE	IF	CITATIONS
37	Stability analysis of a neural field self-organizing map. Journal of Mathematical Neuroscience, 2020, 10, 20.	2.4	2
38	When Artificial Intelligence and Computational Neuroscience Meet. , 2020, , 303-335.		2
39	Asynchronous Evaluation as an Efficient and Natural Way to Compute Neural Networks. , 2009, , .		1
40	The formation of habits in the neocortex under the implicit supervision of the basal ganglia. BMC Neuroscience, 2015, 16, .	1.9	1
41	The art of scaling up : A computational account on action selection in basal ganglia. , 2017, , .		1
42	Digital typography. , 2018, , .		1
43	Self-Organizing Dynamic Neural Fields. , 2013, , 281-288.		1
44	Code reviewing puts extra demands on referees. Nature, 2018, 556, 309-309.	27.8	1
45	A computational view of area 3b of primary somatosensory cortex. BMC Neuroscience, 2013, 14, .	1.9	0
46	Motivated self-organization. , 2017, , .		0
47	Visual Target Selection Emerges from a Bio-inspired Network Topology. Studies in Computational Intelligence, 2012, , 317-330.	0.9	0
48	Implicit Knowledge Extraction and Structuration from Electrical Diagrams. Lecture Notes in Computer Science, 2017, , 235-241.	1.3	0
49	Computational benefits of structural plasticity, illustrated in songbirds. Neuroscience and Biobehavioral Reviews, 2022, 132, 1183-1196.	6.1	0
50	Latent Space Exploration and Functionalization of a Gated Working Memory Model Using Conceptors. Cognitive Computation, 0, , 1.	5.2	0