

# Claus C Hilgetag

## List of Publications by Citations

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171  
papers

10,836  
citations

50  
h-index

103  
g-index

191  
ext. papers

12,648  
ext. citations

5.2  
avg. IF

6.56  
L-index

#	Paper	IF	Citations
171	Organization, development and function of complex brain networks. <i>Trends in Cognitive Sciences</i> , <b>2004</b> , 8, 418-25	14	1549
170	Sequence of information processing for emotions based on the anatomic dialogue between prefrontal cortex and amygdala. <i>NeuroImage</i> , <b>2007</b> , 34, 905-23	7.9	646
169	The challenge of mapping the human connectome based on diffusion tractography. <i>Nature Communications</i> , <b>2017</b> , 8, 1349	17.4	609
168	Enhanced visual spatial attention ipsilateral to rTMS-induced virtual lesions of human parietal cortex. <i>Nature Neuroscience</i> , <b>2001</b> , 4, 953-7	25.5	476
167	Nonoptimal component placement, but short processing paths, due to long-distance projections in neural systems. <i>PLoS Computational Biology</i> , <b>2006</b> , 2, e95	5	452
166	Anatomical connectivity defines the organization of clusters of cortical areas in the macaque monkey and the cat. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2000</b> , 355, 91-110	5.8	395
165	ON ELEMENTARY FLUX MODES IN BIOCHEMICAL REACTION SYSTEMS AT STEADY STATE. <i>Journal of Biological Systems</i> , <b>1994</b> , 02, 165-182	1.6	369
164	Hierarchical organization unveiled by functional connectivity in complex brain networks. <i>Physical Review Letters</i> , <b>2006</b> , 97, 238103	7.4	361
163	Intrinsic coupling modes: multiscale interactions in ongoing brain activity. <i>Neuron</i> , <b>2013</b> , 80, 867-86	13.9	295
162	The connectional organization of the cortico-thalamic system of the cat. <i>Cerebral Cortex</i> , <b>1999</b> , 9, 277-99	5.1	277
161	Role of mechanical factors in the morphology of the primate cerebral cortex. <i>PLoS Computational Biology</i> , <b>2006</b> , 2, e22	5	228
160	A proposal for a coordinated effort for the determination of brainwide neuroanatomical connectivity in model organisms at a mesoscopic scale. <i>PLoS Computational Biology</i> , <b>2009</b> , 5, e1000334	5	206
159	Computational analysis of functional connectivity between areas of primate cerebral cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2000</b> , 355, 111-26	5.8	196
158	Clustered organization of cortical connectivity. <i>Neuroinformatics</i> , <b>2004</b> , 2, 353-60	3.2	188
157	Quantitative architecture distinguishes prefrontal cortical systems in the rhesus monkey. <i>Cerebral Cortex</i> , <b>2001</b> , 11, 975-88	5.1	180
156	Reaction routes in biochemical reaction systems: algebraic properties, validated calculation procedure and example from nucleotide metabolism. <i>Journal of Mathematical Biology</i> , <b>2002</b> , 45, 153-81	2	163
155	Developmental mechanics of the primate cerebral cortex. <i>Anatomy and Embryology</i> , <b>2005</b> , 210, 411-7		150

154	Indeterminate organization of the visual system. <i>Science</i> , <b>1996</b> , 271, 776-7	33.3	148
153	Spatial growth of real-world networks. <i>Physical Review E</i> , <b>2004</b> , 69, 036103	2.4	142
152	Influence of stroke infarct location on functional outcome measured by the modified rankin scale. <i>Stroke</i> , <b>2014</b> , 45, 1695-702	6.7	140
151	Hierarchical organization of macaque and cat cortical sensory systems explored with a novel network processor. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2000</b> , 355, 71-89 <sup>5.8</sup>	5.8	117
150	Structure-function relationship in complex brain networks expressed by hierarchical synchronization. <i>New Journal of Physics</i> , <b>2007</b> , 9, 178-178	2.9	116
149	Organization of excitable dynamics in hierarchical biological networks. <i>PLoS Computational Biology</i> , <b>2008</b> , 4, e1000190	5	107
148	Gyrification and neural connectivity in schizophrenia. <i>Development and Psychopathology</i> , <b>2011</b> , 23, 339-52.3	5.3	91
147	Bridging Cytoarchitectonics and Connectomics in Human Cerebral Cortex. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 13943-8	6.6	90
146	Hierarchy and dynamics of neural networks. <i>Frontiers in Neuroinformatics</i> , <b>2010</b> , 4,	3.9	90
145	Modelling the development of cortical systems networks. <i>Neurocomputing</i> , <b>2004</b> , 58-60, 297-302	5.4	89
144	Edge vulnerability in neural and metabolic networks. <i>Biological Cybernetics</i> , <b>2004</b> , 90, 311-7	2.8	84
143	Criticality of spreading dynamics in hierarchical cluster networks without inhibition. <i>New Journal of Physics</i> , <b>2007</b> , 9, 110-110	2.9	82
142	A simple rule for axon outgrowth and synaptic competition generates realistic connection lengths and filling fractions. <i>Cerebral Cortex</i> , <b>2009</b> , 19, 3001-10	5.1	75
141	Fair attribution of functional contribution in artificial and biological networks. <i>Neural Computation</i> , <b>2004</b> , 16, 1887-915	2.9	75
140	A predictive model of the cat cortical connectome based on cytoarchitecture and distance. <i>Brain Structure and Function</i> , <b>2015</b> , 220, 3167-84	4	74
139	Trade-off between multiple constraints enables simultaneous formation of modules and hubs in neural systems. <i>PLoS Computational Biology</i> , <b>2013</b> , 9, e1002937	5	73
138	The primate connectome in context: Principles of connections of the cortical visual system. <i>NeuroImage</i> , <b>2016</b> , 134, 685-702	7.9	73
137	Sustained activity in hierarchical modular neural networks: self-organized criticality and oscillations. <i>Frontiers in Computational Neuroscience</i> , <b>2011</b> , 5, 30	3.5	72

136	Cortical Gradients and Laminar Projections in Mammals. <i>Trends in Neurosciences</i> , <b>2018</b> , 41, 775-788	13.3	72
135	Is the brain really a small-world network?. <i>Brain Structure and Function</i> , <b>2016</b> , 221, 2361-6	4	71
134	A Predictive Structural Model of the Primate Connectome. <i>Scientific Reports</i> , <b>2017</b> , 7, 43176	4.9	70
133	Optimal hierarchical modular topologies for producing limited sustained activation of neural networks. <i>Frontiers in Neuroinformatics</i> , <b>2010</b> , 4, 8	3.9	70
132	Parallel organization of contralateral and ipsilateral prefrontal cortical projections in the rhesus monkey. <i>BMC Neuroscience</i> , <b>2005</b> , 6, 32	3.2	67
131	Cytoarchitectural differences are a key determinant of laminar projection origins in the visual cortex. <i>NeuroImage</i> , <b>2010</b> , 51, 1006-17	7.9	66
130	On imputing function to structure from the behavioural effects of brain lesions. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2000</b> , 355, 147-61	5.8	65
129	Modeling of Large-Scale Functional Brain Networks Based on Structural Connectivity from DTI: Comparison with EEG Derived Phase Coupling Networks and Evaluation of Alternative Methods along the Modeling Path. <i>PLoS Computational Biology</i> , <b>2016</b> , 12, e1005025	5	62
128	Are there ten times more glia than neurons in the brain?. <i>Brain Structure and Function</i> , <b>2009</b> , 213, 365-6	4	59
127	Non-metric multidimensional scaling in the analysis of neuroanatomical connection data and the organization of the primate cortical visual system. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>1995</b> , 348, 281-308	5.8	59
126	Predicting the connectivity of primate cortical networks from topological and spatial node properties. <i>BMC Systems Biology</i> , <b>2007</b> , 1, 16	3.5	58
125	Functional circuitry underlying visual neglect. <i>Brain</i> , <b>2006</b> , 129, 1803-21	11.2	57
124	Mapping the connectome: multi-level analysis of brain connectivity. <i>Frontiers in Neuroinformatics</i> , <b>2012</b> , 6, 14	3.9	56
123	Multi-scale account of the network structure of macaque visual cortex. <i>Brain Structure and Function</i> , <b>2018</b> , 223, 1409-1435	4	53
122	Principles of ipsilateral and contralateral cortico-cortical connectivity in the mouse. <i>Brain Structure and Function</i> , <b>2017</b> , 222, 1281-1295	4	52
121	Hierarchy in the organization of brain networks. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2020</b> , 375, 20190319	5.8	47
120	A blueprint of mammalian cortical connectomes. <i>PLoS Biology</i> , <b>2019</b> , 17, e2005346	9.7	42
119	Restoration of visual orienting into a cortically blind hemifield by reversible deactivation of posterior parietal cortex or the superior colliculus. <i>Experimental Brain Research</i> , <b>2002</b> , 142, 463-74	2.3	42

118	Towards a "canonical" agranular cortical microcircuit. <i>Frontiers in Neuroanatomy</i> , <b>2014</b> , 8, 165	3.6	41
117	Development of multi-cluster cortical networks by time windows for spatial growth. <i>Neurocomputing</i> , <b>2007</b> , 70, 1829-1832	5.4	40
116	Inter-hemispheric competition of sub-cortical structures is a crucial mechanism in paradoxical lesion effects and spatial neglect. <i>Progress in Brain Research</i> , <b>1999</b> , 121, 121-41	2.9	40
115	Graded classes of cortical connections: quantitative analyses of laminar projections to motion areas of cat extrastriate cortex. <i>European Journal of Neuroscience</i> , <b>2005</b> , 22, 681-96	3.5	39
114	Hierarchical modular brain connectivity is a stretch for criticality. <i>Trends in Cognitive Sciences</i> , <b>2014</b> , 18, 114-5	14	38
113	Uniformity, specificity and variability of corticocortical connectivity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2000</b> , 355, 7-20	5.8	38
112	A closer look at the apparent correlation of structural and functional connectivity in excitable neural networks. <i>Scientific Reports</i> , <b>2015</b> , 5, 7870	4.9	35
111	Perspective: network-guided pattern formation of neural dynamics. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2014</b> , 369,	5.8	32
110	Multiclass Support Vector Machine-Based Lesion Mapping Predicts Functional Outcome in Ischemic Stroke Patients. <i>PLoS ONE</i> , <b>2015</b> , 10, e0129569	3.7	31
109	Axiomatic scalable neurocontroller analysis via the Shapley value. <i>Artificial Life</i> , <b>2006</b> , 12, 333-52	1.4	30
108	Simultaneity of responses in a hierarchical visual network. <i>NeuroReport</i> , <b>2001</b> , 12, 2753-9	1.7	30
107	Building blocks of self-sustained activity in a simple deterministic model of excitable neural networks. <i>Frontiers in Computational Neuroscience</i> , <b>2012</b> , 6, 50	3.5	29
106	Persistency and flexibility of complex brain networks underlie dual-task interference. <i>Human Brain Mapping</i> , <b>2015</b> , 36, 3542-62	5.9	28
105	What Information about the Conserved-Moiety Structure of Chemical Reaction Systems Can be Derived from Their Stoichiometry?. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 8017-8023		27
104	Spatiotemporal ontogeny of brain wiring. <i>Science Advances</i> , <b>2019</b> , 5, eaav9694	14.3	26
103	An architectonic type principle integrates macroscopic cortico-cortical connections with intrinsic cortical circuits of the primate brain. <i>Network Neuroscience</i> , <b>2019</b> , 3, 905-923	5.6	23
102	Characterization of visual percepts evoked by noninvasive stimulation of the human posterior parietal cortex. <i>PLoS ONE</i> , <b>2011</b> , 6, e27204	3.7	23
101	The architecture of mammalian cortical connectomes in light of the theory of the dual origin of the cerebral cortex. <i>Cortex</i> , <b>2019</b> , 118, 244-261	3.8	22

100	Mapping causal functional contributions derived from the clinical assessment of brain damage after stroke. <i>NeuroImage: Clinical</i> , <b>2015</b> , 9, 83-94	5.3	22
99	Computational Methods for the Analysis of Brain Connectivity 295-336		22
98	Features of spatial and functional segregation and integration of the primate connectome revealed by trade-off between wiring cost and efficiency. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005776	5	21
97	Tractography-based connectomes are dominated by false-positive connections <b>2016</b> ,		21
96	Game theoretical mapping of causal interactions underlying visuo-spatial attention in the human brain based on stroke lesions. <i>Human Brain Mapping</i> , <b>2017</b> , 38, 3454-3471	5.9	20
95	Neuron density fundamentally relates to architecture and connectivity of the primate cerebral cortex. <i>NeuroImage</i> , <b>2019</b> , 189, 777-792	7.9	20
94	Attention and control of manual responses in cognitive conflict: Findings from TMS perturbation studies. <i>Neuropsychologia</i> , <b>2015</b> , 74, 7-20	3.2	20
93	Cortico-cortical communication dynamics. <i>Frontiers in Systems Neuroscience</i> , <b>2014</b> , 8, 19	3.5	20
92	Occipitoparietal alpha-band responses to the graded allocation of top-down spatial attention. <i>Journal of Neurophysiology</i> , <b>2014</b> , 112, 1307-16	3.2	20
91	Stochastic resonance in discrete excitable dynamics on graphs. <i>Chaos, Solitons and Fractals</i> , <b>2012</b> , 45, 611-618	9.3	20
90	Toward a theory of coactivation patterns in excitable neural networks. <i>PLoS Computational Biology</i> , <b>2018</b> , 14, e1006084	5	19
89	Perturbation of visuospatial attention by high-frequency offline rTMS. <i>Experimental Brain Research</i> , <b>2008</b> , 189, 121-8	2.3	19
88	Connectional characteristics of areas in Walker's map of primate prefrontal cortex. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 741-746	5.4	18
87	A Connectomic Hypothesis for the Hominization of the Brain. <i>Cerebral Cortex</i> , <b>2021</b> , 31, 2425-2449	5.1	18
86	The natural axis of transmitter receptor distribution in the human cerebral cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	18
85	Structural Properties of Synaptic Transmission and Temporal Dynamics at Excitatory Layer 5B Synapses in the Adult Rat Somatosensory Cortex. <i>Frontiers in Synaptic Neuroscience</i> , <b>2018</b> , 10, 24	3.5	18
84	Comparison between diffusion MRI tractography and histological tract-tracing of cortico-cortical structural connectivity in the ferret brain. <i>Network Neuroscience</i> , <b>2019</b> , 3, 1038-1050	5.6	17
83	Reduced rich-club connectivity is related to disability in primary progressive MS. <i>Neurology: Neuroimmunology and NeuroInflammation</i> , <b>2017</b> , 4, e375	9.1	17

82	Beyond the average: Detecting global singular nodes from local features in complex networks. <i>Europhysics Letters</i> , <b>2009</b> , 87, 18008	1.6	17
81	A solution to the binding problem? Information processing. <i>Current Biology</i> , <b>1996</b> , 6, 1092-5	6.3	16
80	Comprehensive computational modelling of the development of mammalian cortical connectivity underlying an architectonic type principle. <i>PLoS Computational Biology</i> , <b>2018</b> , 14, e1006550	5	14
79	Altered topology of large-scale structural brain networks in chronic stroke. <i>Brain Communications</i> , <b>2019</b> , 1, fcz020	4.5	13
78	Role of long cycles in excitable dynamics on graphs. <i>Physical Review E</i> , <b>2014</b> , 90, 052805	2.4	13
77	Causal functional contributions and interactions in the attention network of the brain: an objective multi-perturbation analysis. <i>Brain Structure and Function</i> , <b>2016</b> , 221, 2553-68	4	12
76	Contributions of human parietal and frontal cortices to attentional control during conflict resolution: a 1-Hz offline rTMS study. <i>Experimental Brain Research</i> , <b>2010</b> , 205, 131-8	2.3	12
75	Causal localization of neural function: the Shapley value method. <i>Neurocomputing</i> , <b>2004</b> , 58-60, 215-222	5.4	12
74	Fair localization of function via multi-lesion analysis. <i>Neuroinformatics</i> , <b>2004</b> , 2, 163-8	3.2	12
73	Spatial neglect and paradoxical lesion effects in the cat IA model based on midbrain connectivity. <i>Neurocomputing</i> , <b>2000</b> , 32-33, 793-799	5.4	11
72	Perturbation-driven paradoxical facilitation of visuo-spatial function: Revisiting the Sprague effect. <i>Cortex</i> , <b>2020</b> , 122, 10-39	3.8	10
71	Topological determinants of self-sustained activity in a simple model of excitable dynamics on graphs. <i>Scientific Reports</i> , <b>2017</b> , 7, 42340	4.9	9
70	Sculpting the brain. <i>Scientific American</i> , <b>2009</b> , 300, 66-71	0.5	9
69	Revisiting brain modes in a new computational era: approaches for the characterization of brain-behavioural associations. <i>Brain</i> , <b>2020</b> , 143, 1088-1098	11.2	9
68	Topological reinforcement as a principle of modularity emergence in brain networks. <i>Network Neuroscience</i> , <b>2019</b> , 3, 589-605	5.6	8
67	Neural correlates of visuospatial bias in patients with left hemisphere stroke: a causal functional contribution analysis based on game theory. <i>Neuropsychologia</i> , <b>2018</b> , 115, 142-153	3.2	8
66	Building the Ferretome. <i>Frontiers in Neuroinformatics</i> , <b>2016</b> , 10, 16	3.9	8
65	Modular topology emerges from plasticity in a minimalistic excitable network model. <i>Chaos</i> , <b>2017</b> , 27, 047406	3.3	7



64	Brain anomaly networks uncover heterogeneous functional reorganization patterns after stroke. <i>NeuroImage: Clinical</i> , <b>2018</b> , 20, 523-530	5-3	7
63	Neural mechanisms of spatial attention in the cat. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 1281-1287	5-4	7
62	Cytoarchitectonic similarity is a wiring principle of the human connectome		7
61	Cortical and thalamic connectivity of occipital visual cortical areas 17, 18, 19, and 21 of the domestic ferret ( <i>Mustela putorius furo</i> ). <i>Journal of Comparative Neurology</i> , <b>2019</b> , 527, 1293-1314	3-4	7
60	Cortical and thalamic connectivity of temporal visual cortical areas 20a and 20b of the domestic ferret ( <i>Mustela putorius furo</i> ). <i>Journal of Comparative Neurology</i> , <b>2019</b> , 527, 1333-1347	3-4	6
59	The effect of 10 Hz repetitive transcranial magnetic stimulation of posterior parietal cortex on visual attention. <i>PLoS ONE</i> , <b>2015</b> , 10, e0126802	3-7	6
58	Selective perturbation of cognitive conflict in the human brain-A combined fMRI and rTMS study. <i>Scientific Reports</i> , <b>2016</b> , 6, 38700	4-9	6
57	Cortical and thalamic connectivity of posterior parietal visual cortical areas PPc and PPr of the domestic ferret ( <i>Mustela putorius furo</i> ). <i>Journal of Comparative Neurology</i> , <b>2019</b> , 527, 1315-1332	3-4	5
56	Game theoretical mapping of white matter contributions to visuospatial attention in stroke patients with hemineglect. <i>Human Brain Mapping</i> , <b>2020</b> , 41, 2926-2950	5-9	5
55	Bilateral competitive processing of visual spatial attention in the human brain. <i>Neurocomputing</i> , <b>2003</b> , 52-54, 793-798	5-4	5
54	Models of paradoxical lesion effects and rules of inference for imputing function to structure in the brain. <i>Neurocomputing</i> , <b>1999</b> , 26-27, 933-938	5-4	5
53	Intrinsic Functional Connectivity Resembles Cortical Architecture at Various Levels of Isoflurane Anesthesia. <i>Cerebral Cortex</i> , <b>2018</b> , 28, 2991-3003	5-1	5
52	Cluster Structure of Cortical Systems in Mammalian Brains <b>1998</b> , 41-46		5
51	Discrimination of the hierarchical structure of cortical layers in 2-photon microscopy data by combined unsupervised and supervised machine learning. <i>Scientific Reports</i> , <b>2019</b> , 9, 7424	4-9	4
50	Tracing evolution of spatio-temporal dynamics of the cerebral cortex: cortico-cortical communication dynamics. <i>Frontiers in Systems Neuroscience</i> , <b>2014</b> , 8, 76	3-5	4
49	Influence of stimulus type on effects of flanker, flanker position, and trial sequence in a saccadic eye movement task. <i>Quarterly Journal of Experimental Psychology</i> , <b>2013</b> , 66, 2253-67	1-8	4
48	Brain simulation as a cloud service: The Virtual Brain on EBRAINS.. <i>NeuroImage</i> , <b>2022</b> , 118973	7-9	4
47	Technical considerations of a game-theoretical approach for lesion symptom mapping. <i>BMC Neuroscience</i> , <b>2016</b> , 17, 40	3-2	4



46	Multimodal Memory Components and Their Long-Term Dynamics Identified in Cortical Layers II/III but Not Layer V. <i>Frontiers in Integrative Neuroscience</i> , <b>2019</b> , 13, 54	3.2	3
45	Female vs. Male Ampelmännchen-Gender-Specific Reaction Times to Male and Female Traffic Light Figures. <i>Frontiers in Psychology</i> , <b>2017</b> , 8, 690	3.4	3
44	Automated volumes-of-interest identification for classical and atypical Parkinsonian syndrome differentiation using T2SMR imaging. <i>Methods of Information in Medicine</i> , <b>2013</b> , 52, 128-36	1.5	3
43	Should I stay or should I go--cognitive conflict in multi-attribute signals probed with East and West German AmpelmännchenTraffic signs. <i>PLoS ONE</i> , <b>2013</b> , 8, e64712	3.7	3
42	Principles of brain connectivity organization. <i>Behavioral and Brain Sciences</i> , <b>2006</b> , 29, 18-19	0.9	3
41	Classes and gradients of prefrontal cortical organization in the primate. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 823-829	5.4	3
40	Uniformity and specificity of long-range corticocortical connections in the visual cortex of the cat. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 667-673	5.4	3
39	Hierarchical organization and neuronal response latencies in the primate visual system. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 1519-1523	5.4	3
38	The portable UNIX programming system (PUPS) and CANTOR: a computational environment for dynamical representation and analysis of complex neurobiological data. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2001</b> , 356, 1259-76	5.8	3
37	Topological Reinforcement as a Principle of Modularity Emergence in Brain Networks		3
36	Organization and Function of Complex Cortical Networks <b>2007</b> , 107-133		3
35	Connectivity and cortical architecture. <i>E-Neuroforum</i> , <b>2016</b> , 7, 56-63		3
34	Brain Connectivity meets Reservoir Computing		3
33	Bio-instantiated recurrent neural networks		3
32	Individual differences in local functional brain connectivity affect TMS effects on behavior. <i>Scientific Reports</i> , <b>2020</b> , 10, 10422	4.9	2
31	Brain network science needs to become predictive. Comment on "Understanding brain networks and brain organization" by Luiz Pessoa. <i>Physics of Life Reviews</i> , <b>2014</b> , 11, 446-7	2.1	2
30	Topographic restoration of visual spatial attention in the cortically blind cat. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 831-835	5.4	2
29	Comprehensive computational modelling of the development of mammalian cortical connectivity underlying an architectonic type principle		2

28	Reply: Inhibition between human brain areas or methodological artefact?. <i>Brain</i> , <b>2020</b> , 143, e39	11.2	2
27	Systematic modelling of the development of laminar projection origins in the cerebral cortex: Interactions of spatio-temporal patterns of neurogenesis and cellular heterogeneity. <i>PLoS Computational Biology</i> , <b>2020</b> , 16, e1007991	5	2
26	Bio-instantiated recurrent neural networks: Integrating neurobiology-based network topology in artificial networks. <i>Neural Networks</i> , <b>2021</b> , 142, 608-618	9.1	2
25	Optimization Analysis of Complex Neuroanatomical Data <b>1997</b> , 925-930		2
24	Random axon outgrowth and synaptic competition generate realistic connection lengths and filling fractions. <i>BMC Neuroscience</i> , <b>2009</b> , 10,	3.2	1
23	An architectonic type principle in the development of laminar patterns of cortico-cortical connections		1
22	Intrinsic functional connectivity resembles cortical architecture at various levels of isoflurane anesthesia		1
21	The natural axis of transmitter receptor distribution in the human cerebral cortex		1
20	Neuron density fundamentally relates to architecture and connectivity of the primate cerebral cortex		1
19	An architectonic type principle in the development of laminar patterns of cortico-cortical connections. <i>Brain Structure and Function</i> , <b>2021</b> , 226, 979-987	4	1
18	The PUPS-MOSIX Environment: A Homeostatic Environment for Neuro- and Bio-informatic Applications <b>2003</b> , 187-202		1
17	Unifying the essential concepts of biological networks: biological insights and philosophical foundations. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2020</b> , 375, 20190314	5.8	0
16	Game-theoretical mapping of fundamental brain functions based on lesion deficits in acute stroke. <i>Brain Communications</i> , <b>2021</b> , 3, fcab204	4.5	0
15	The highways and byways of the brain.. <i>PLoS Biology</i> , <b>2022</b> , 20, e3001612	9.7	0
14	A natural cortical axis connecting the outside and inside of the human brain. <i>Network Neuroscience</i> , 1-20	5.6	0
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