

# Gustavo Deco

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6700219/gustavo-deco-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

439  
papers

17,618  
citations

70  
h-index

119  
g-index

515  
ext. papers

23,043  
ext. citations

5.7  
avg, IF

7.3  
L-index

#	Paper	IF	Citations
439	Emerging concepts for the dynamical organization of resting-state activity in the brain. <i>Nature Reviews Neuroscience</i> , <b>2011</b> , 12, 43-56	13.5	1120
438	The dynamic brain: from spiking neurons to neural masses and cortical fields. <i>PLoS Computational Biology</i> , <b>2008</b> , 4, e1000092	5	634
437	Key role of coupling, delay, and noise in resting brain fluctuations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 10302-7	11.5	508
436	Ongoing cortical activity at rest: criticality, multistability, and ghost attractors. <i>Journal of Neuroscience</i> , <b>2012</b> , 32, 3366-75	6.6	431
435	Can sliding-window correlations reveal dynamic functional connectivity in resting-state fMRI?. <i>NeuroImage</i> , <b>2016</b> , 127, 242-256	7.9	351
434	Role of local network oscillations in resting-state functional connectivity. <i>NeuroImage</i> , <b>2011</b> , 57, 130-139	7.9	338
433	Resting-state functional connectivity emerges from structurally and dynamically shaped slow linear fluctuations. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 11239-52	6.6	333
432	Functional connectivity dynamics: modeling the switching behavior of the resting state. <i>NeuroImage</i> , <b>2015</b> , 105, 525-35	7.9	308
431	Rethinking segregation and integration: contributions of whole-brain modelling. <i>Nature Reviews Neuroscience</i> , <b>2015</b> , 16, 430-9	13.5	291
430	Computational models of schizophrenia and dopamine modulation in the prefrontal cortex. <i>Nature Reviews Neuroscience</i> , <b>2008</b> , 9, 696-709	13.5	273
429	Attention, short-term memory, and action selection: a unifying theory. <i>Progress in Neurobiology</i> , <b>2005</b> , 76, 236-56	10.9	241
428	Resting brains never rest: computational insights into potential cognitive architectures. <i>Trends in Neurosciences</i> , <b>2013</b> , 36, 268-74	13.3	240
427	Great expectations: using whole-brain computational connectomics for understanding neuropsychiatric disorders. <i>Neuron</i> , <b>2014</b> , 84, 892-905	13.9	237
426	Exploring the network dynamics underlying brain activity during rest. <i>Progress in Neurobiology</i> , <b>2014</b> , 114, 102-31	10.9	228
425	A neurodynamical cortical model of visual attention and invariant object recognition. <i>Vision Research</i> , <b>2004</b> , 44, 621-42	2.1	225
424	The dynamical balance of the brain at rest. <i>Neuroscientist</i> , <b>2011</b> , 17, 107-23	7.6	223
423	Stochastic dynamics as a principle of brain function. <i>Progress in Neurobiology</i> , <b>2009</b> , 88, 1-16	10.9	200

4 <sup>22</sup>	Neurodynamics of biased competition and cooperation for attention: a model with spiking neurons. <i>Journal of Neurophysiology</i> , <b>2005</b> , 94, 295-313	3.2	182
4 <sup>21</sup>	How local excitation-inhibition ratio impacts the whole brain dynamics. <i>Journal of Neuroscience</i> , <b>2014</b> , 34, 7886-98	6.6	180
4 <sup>20</sup>	Exploring mechanisms of spontaneous functional connectivity in MEG: how delayed network interactions lead to structured amplitude envelopes of band-pass filtered oscillations. <i>NeuroImage</i> , <b>2014</b> , 90, 423-35	7.9	175
4 <sup>19</sup>	The dynamics of resting fluctuations in the brain: metastability and its dynamical cortical core. <i>Scientific Reports</i> , <b>2017</b> , 7, 3095	4.9	175
4 <sup>18</sup>	Functional connectivity dynamically evolves on multiple time-scales over a static structural connectome: Models and mechanisms. <i>NeuroImage</i> , <b>2017</b> , 160, 84-96	7.9	158
4 <sup>17</sup>	Attention and working memory: a dynamical model of neuronal activity in the prefrontal cortex. <i>European Journal of Neuroscience</i> , <b>2003</b> , 18, 2374-90	3.5	155
4 <sup>16</sup>	Neuronal discharges and gamma oscillations explicitly reflect visual consciousness in the lateral prefrontal cortex. <i>Neuron</i> , <b>2012</b> , 74, 924-35	13.9	152
4 <sup>15</sup>	Human consciousness is supported by dynamic complex patterns of brain signal coordination. <i>Science Advances</i> , <b>2019</b> , 5, eaat7603	14.3	147
4 <sup>14</sup>	Resting-state temporal synchronization networks emerge from connectivity topology and heterogeneity. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004100	5	139
4 <sup>13</sup>	Decision-making and Weber's law: a neurophysiological model. <i>European Journal of Neuroscience</i> , <b>2006</b> , 24, 901-16	3.5	128
4 <sup>12</sup>	Modeling the outcome of structural disconnection on resting-state functional connectivity. <i>NeuroImage</i> , <b>2012</b> , 62, 1342-53	7.9	123
4 <sup>11</sup>	Oscillations, phase-of-firing coding, and spike timing-dependent plasticity: an efficient learning scheme. <i>Journal of Neuroscience</i> , <b>2009</b> , 29, 13484-93	6.6	119
4 <sup>10</sup>	The Noisy Brain Stochastic Dynamics as a Principle of Brain Function <b>2010</b> ,		114
4 <sup>09</sup>	A dynamical systems hypothesis of schizophrenia. <i>PLoS Computational Biology</i> , <b>2007</b> , 3, e228	5	112
4 <sup>08</sup>	Choice, difficulty, and confidence in the brain. <i>NeuroImage</i> , <b>2010</b> , 53, 694-706	7.9	111
4 <sup>07</sup>	Cognitive performance in healthy older adults relates to spontaneous switching between states of functional connectivity during rest. <i>Scientific Reports</i> , <b>2017</b> , 7, 5135	4.9	110
4 <sup>06</sup>	Neural coding: higher-order temporal patterns in the neurostatistics of cell assemblies. <i>Neural Computation</i> , <b>2000</b> , 12, 2621-53	2.9	109
4 <sup>05</sup>	An Information-Theoretic Approach to Neural Computing. <i>Perspectives in Neural Computing</i> , <b>1996</b> ,		109

404	Identification of optimal structural connectivity using functional connectivity and neural modeling. <i>Journal of Neuroscience</i> , <b>2014</b> , 34, 7910-6	6.6	108
403	Optimal information transfer in the cortex through synchronization. <i>PLoS Computational Biology</i> , <b>2010</b> , 6, e1000934	5	107
402	Brain mechanisms for perceptual and reward-related decision-making. <i>Progress in Neurobiology</i> , <b>2013</b> , 103, 194-213	10.9	106
401	Metastability and Coherence: Extending the Communication through Coherence Hypothesis Using A Whole-Brain Computational Perspective. <i>Trends in Neurosciences</i> , <b>2016</b> , 39, 125-135	13.3	104
400	Dynamic functional connectivity reveals altered variability in functional connectivity among patients with major depressive disorder. <i>Human Brain Mapping</i> , <b>2016</b> , 37, 2918-30	5.9	104
399	Theory and simulation in neuroscience. <i>Science</i> , <b>2012</b> , 338, 60-5	33.3	103
398	"What" and "where" in visual working memory: a computational neurodynamical perspective for integrating fMRI and single-neuron data. <i>Journal of Cognitive Neuroscience</i> , <b>2004</b> , 16, 683-701	3.1	103
397	Perception and self-organized instability. <i>Frontiers in Computational Neuroscience</i> , <b>2012</b> , 6, 44	3.5	98
396	Inversion of a large-scale circuit model reveals a cortical hierarchy in the dynamic resting human brain. <i>Science Advances</i> , <b>2019</b> , 5, eaat7854	14.3	97
395	Rich club organization supports a diverse set of functional network configurations. <i>NeuroImage</i> , <b>2014</b> , 96, 174-82	7.9	96
394	Coherent delta-band oscillations between cortical areas correlate with decision making. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 15085-90	11.5	95
393	Statistical Independence and Novelty Detection with Information Preserving Nonlinear Maps. <i>Neural Computation</i> , <b>1996</b> , 8, 260-269	2.9	93
392	How anatomy shapes dynamics: a semi-analytical study of the brain at rest by a simple spin model. <i>Frontiers in Computational Neuroscience</i> , <b>2012</b> , 6, 68	3.5	92
391	Two Strategies to Avoid Overfitting in Feedforward Networks. <i>Neural Networks</i> , <b>1997</b> , 10, 505-516	9.1	90
390	Synaptic and spiking dynamics underlying reward reversal in the orbitofrontal cortex. <i>Cerebral Cortex</i> , <b>2005</b> , 15, 15-30	5.1	88
389	Single or multiple frequency generators in on-going brain activity: A mechanistic whole-brain model of empirical MEG data. <i>NeuroImage</i> , <b>2017</b> , 152, 538-550	7.9	87
388	Decision-making, errors, and confidence in the brain. <i>Journal of Neurophysiology</i> , <b>2010</b> , 104, 2359-74	3.2	87
387	Connectome-harmonic decomposition of human brain activity reveals dynamical repertoire re-organization under LSD. <i>Scientific Reports</i> , <b>2017</b> , 7, 17661	4.9	84

386	Estimation of Directed Effective Connectivity from fMRI Functional Connectivity Hints at Asymmetries of Cortical Connectome. <i>PLoS Computational Biology</i> , <b>2016</b> , 12, e1004762	5	84
385	Large-scale neural model for visual attention: integration of experimental single-cell and fMRI data. <i>Cerebral Cortex</i> , <b>2002</b> , 12, 339-48	5.1	82
384	Stimulus-dependent variability and noise correlations in cortical MT neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 13162-7	11.5	81
383	Inferring multi-scale neural mechanisms with brain network modelling. <i>ELife</i> , <b>2018</b> , 7,	8.9	80
382	Role of external stimulation in shaping evoked activity in a macroscopic model of cortex. <i>BMC Neuroscience</i> , <b>2014</b> , 15,	3.2	78
381	Modeling Alpha-Band Functional Connectivity for MEG Resting State Data: Oscillations and Delays in a Spiking Neuron Model. <i>BMC Neuroscience</i> , <b>2013</b> , 14,	3.2	78
380	A model of perceptual discrimination under sequential sensory evidence. <i>BMC Neuroscience</i> , <b>2013</b> , 14,	3.2	78
379	The effects of time delays on synchronization properties in a network of neural mass models. <i>BMC Neuroscience</i> , <b>2013</b> , 14,	3.2	78
378	Dynamic model of whole cortex reveals disassortative hub structure in the intracortical connectome. <i>BMC Neuroscience</i> , <b>2015</b> , 16, P57	3.2	78
377	Computational mechanism of postponed decisions. <i>BMC Neuroscience</i> , <b>2011</b> , 12,	3.2	78
376	Neurodynamical model of confidence decision-making in LIP. <i>BMC Neuroscience</i> , <b>2011</b> , 12,	3.2	78
375	The symptoms of schizophrenia related to the stability of attractor networks. <i>BMC Neuroscience</i> , <b>2007</b> , 8,	3.2	78
374	Neural network mechanisms underlying stimulus driven variability reduction. <i>PLoS Computational Biology</i> , <b>2012</b> , 8, e1002395	5	77
373	Nonlinear higher-order statistical decorrelation by volume-conserving neural architectures. <i>Neural Networks</i> , <b>1995</b> , 8, 525-535	9.1	76
372	Do Bilinguals Automatically Activate Their Native Language When They Are Not Using It?. <i>Cognitive Science</i> , <b>2017</b> , 41, 1629-1644	2.2	71
371	Neural plasticity in human brain connectivity: the effects of long term deep brain stimulation of the subthalamic nucleus in Parkinson's disease. <i>PLoS ONE</i> , <b>2014</b> , 9, e86496	3.7	71
370	Spontaneous brain activity predicts learning ability of foreign sounds. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 9295-305	6.6	70
369	Whole-Brain Multimodal Neuroimaging Model Using Serotonin Receptor Maps Explains Non-linear Functional Effects of LSD. <i>Current Biology</i> , <b>2018</b> , 28, 3065-3074.e6	6.3	69

368	Dynamic coupling of whole-brain neuronal and neurotransmitter systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 9566-9576	11.5	67
367	Attention: oscillations and neuropharmacology. <i>European Journal of Neuroscience</i> , <b>2009</b> , 30, 347-54	3.5	66
366	Awakening: Predicting external stimulation to force transitions between different brain states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 18088-18097	11.5	65
365	The Rediscovery of Slowness: Exploring the Timing of Cognition. <i>Trends in Cognitive Sciences</i> , <b>2015</b> , 19, 616-628	14	65
364	The time course of selective visual attention: theory and experiments. <i>Vision Research</i> , <b>2002</b> , 42, 2925-45	5.1	65
363	Cholinergic control of cortical network interactions enables feedback-mediated attentional modulation. <i>European Journal of Neuroscience</i> , <b>2011</b> , 34, 146-57	3.5	63
362	Neural variability in premotor cortex is modulated by trial history and predicts behavioral performance. <i>Neuron</i> , <b>2013</b> , 78, 249-55	13.9	62
361	Computational significance of transient dynamics in cortical networks. <i>European Journal of Neuroscience</i> , <b>2008</b> , 27, 217-27	3.5	62
360	The neuronal basis of attention: rate versus synchronization modulation. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 7679-86	6.6	61
359	A hierarchical neural system with attentional top-down enhancement of the spatial resolution for object recognition. <i>Vision Research</i> , <b>2000</b> , 40, 2845-59	2.1	61
358	Confidence-related decision making. <i>Journal of Neurophysiology</i> , <b>2010</b> , 104, 539-47	3.2	60
357	Portraits of communication in neuronal networks. <i>Nature Reviews Neuroscience</i> , <b>2019</b> , 20, 117-127	13.5	60
356	Top-down selective visual attention: A neurodynamical approach. <i>Visual Cognition</i> , <b>2001</b> , 8, 118-139	1.8	58
355	Hippocampal Sharp-Wave Ripples Influence Selective Activation of the Default Mode Network. <i>Current Biology</i> , <b>2016</b> , 26, 686-91	6.3	58
354	Synaptic dynamics and decision making. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 7545-9	11.5	57
353	The encoding of alternatives in multiple-choice decision making. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 10308-13	11.5	57
352	An attractor hypothesis of obsessive-compulsive disorder. <i>European Journal of Neuroscience</i> , <b>2008</b> , 28, 782-93	3.5	57
351	Bottom up modeling of the connectome: linking structure and function in the resting brain and their changes in aging. <i>NeuroImage</i> , <b>2013</b> , 80, 318-29	7.9	56

350	Weber's law in decision making: integrating behavioral data in humans with a neurophysiological model. <i>Journal of Neuroscience</i> , <b>2007</b> , 27, 11192-200	6.6	56
349	Uncovering the underlying mechanisms and whole-brain dynamics of deep brain stimulation for Parkinson's disease. <i>Scientific Reports</i> , <b>2017</b> , 7, 9882	4.9	55
348	Gradual emergence of spontaneous correlated brain activity during fading of general anesthesia in rats: Evidences from fMRI and local field potentials. <i>NeuroImage</i> , <b>2015</b> , 114, 185-98	7.9	54
347	The role of early visual cortex in visual integration: a neural model of recurrent interaction. <i>European Journal of Neuroscience</i> , <b>2004</b> , 20, 1089-100	3.5	54
346	Dynamical exploration of the repertoire of brain networks at rest is modulated by psilocybin. <i>NeuroImage</i> , <b>2019</b> , 199, 127-142	7.9	53
345	Time-Resolved Resting-State Functional Magnetic Resonance Imaging Analysis: Current Status, Challenges, and New Directions. <i>Brain Connectivity</i> , <b>2017</b> , 7, 465-481	2.7	53
344	Computational Neuroscience of Vision <b>2001</b> ,		52
343	Hierarchy of Information Processing in the Brain: A Novel 'Intrinsic Ignition' Framework. <i>Neuron</i> , <b>2017</b> , 94, 961-968	13.9	51
342	Multisensory contributions to the perception of vibrotactile events. <i>Behavioural Brain Research</i> , <b>2009</b> , 196, 145-54	3.4	51
341	Modeling resting-state functional networks when the cortex falls asleep: local and global changes. <i>Cerebral Cortex</i> , <b>2014</b> , 24, 3180-94	5.1	50
340	Resting-state fMRI correlations: From link-wise unreliability to whole brain stability. <i>NeuroImage</i> , <b>2017</b> , 157, 250-262	7.9	50
339	Understanding principles of integration and segregation using whole-brain computational connectomics: implications for neuropsychiatric disorders. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2017</b> , 375,	3	49
338	Task-Driven Activity Reduces the Cortical Activity Space of the Brain: Experiment and Whole-Brain Modeling. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004445	5	49
337	Spontaneous cortical activity is transiently poised close to criticality. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005543	5	49
336	Increased Stability and Breakdown of Brain Effective Connectivity During Slow-Wave Sleep: Mechanistic Insights from Whole-Brain Computational Modelling. <i>Scientific Reports</i> , <b>2017</b> , 7, 4634	4.9	48
335	Functional complexity emerging from anatomical constraints in the brain: the significance of network modularity and rich-clubs. <i>Scientific Reports</i> , <b>2016</b> , 6, 38424	4.9	48
334	Whole-Brain Neuronal Activity Displays Crackling Noise Dynamics. <i>Neuron</i> , <b>2018</b> , 100, 1446-1459.e6	13.9	47
333	Decreased integration and information capacity in stroke measured by whole brain models of resting state activity. <i>Brain</i> , <b>2017</b> , 140, 1068-1085	11.2	46

332	A computational neuroscience approach to schizophrenia and its onset. <i>Neuroscience and Biobehavioral Reviews</i> , <b>2011</b> , 35, 1644-53	9	45
331	Sequential memory: a putative neural and synaptic dynamical mechanism. <i>Journal of Cognitive Neuroscience</i> , <b>2005</b> , 17, 294-307	3.1	45
330	Unsupervised Mutual Information Criterion for Elimination of Overtraining in Supervised Multilayer Networks. <i>Neural Computation</i> , <b>1995</b> , 7, 86-107	2.9	45
329	Harmonic Brain Modes: A Unifying Framework for Linking Space and Time in Brain Dynamics. <i>Neuroscientist</i> , <b>2018</b> , 24, 277-293	7.6	44
328	Changes of mind in an attractor network of decision-making. <i>PLoS Computational Biology</i> , <b>2011</b> , 7, e1002086	9.86	44
327	Interactions between higher and lower visual areas improve shape selectivity of higher level neurons-explaining crowding phenomena. <i>Brain Research</i> , <b>2007</b> , 1157, 167-76	3.7	44
326	Primate Amygdala Neurons Simulate Decision Processes of Social Partners. <i>Cell</i> , <b>2019</b> , 177, 986-998.e15	56.2	43
325	Structural connectivity in schizophrenia and its impact on the dynamics of spontaneous functional networks. <i>Chaos</i> , <b>2013</b> , 23, 046111	3.3	43
324	A unified model of spatial and object attention based on inter-cortical biased competition. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 775-781	5.4	42
323	Intra-cortical propagation of EEG alpha oscillations. <i>NeuroImage</i> , <b>2014</b> , 103, 444-453	7.9	41
322	Perturbation of whole-brain dynamics in silico reveals mechanistic differences between brain states. <i>NeuroImage</i> , <b>2018</b> , 169, 46-56	7.9	41
321	Brain States and Transitions: Insights from Computational Neuroscience. <i>Cell Reports</i> , <b>2020</b> , 32, 108128	10.6	40
320	Network dynamics with BrainX(3): a large-scale simulation of the human brain network with real-time interaction. <i>Frontiers in Neuroinformatics</i> , <b>2015</b> , 9, 02	3.9	39
319	Effective reduced diffusion-models: a data driven approach to the analysis of neuronal dynamics. <i>PLoS Computational Biology</i> , <b>2009</b> , 5, e1000587	5	38
318	The role of fluctuations in perception. <i>Trends in Neurosciences</i> , <b>2008</b> , 31, 591-8	13.3	38
317	Increased methylation at an unexplored glucocorticoid responsive element within exon 1 of NR3C1 gene is related to anxious-depressive disorders and decreased hippocampal connectivity. <i>European Neuropsychopharmacology</i> , <b>2018</b> , 28, 579-588	1.2	37
316	A fluctuation-driven mechanism for slow decision processes in reverberant networks. <i>PLoS ONE</i> , <b>2008</b> , 3, e2534	3.7	37
315	Double electron capture of He <sup>2+</sup> from He at high velocity. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1991</b> , 24, L133-L138	1.3	37

314	Effective connectivity inferred from fMRI transition dynamics during movie viewing points to a balanced reconfiguration of cortical interactions. <i>NeuroImage</i> , <b>2018</b> , 180, 534-546	7.9	35
313	A neurodynamical model of visual attention: feedback enhancement of spatial resolution in a hierarchical system. <i>Journal of Computational Neuroscience</i> , <b>2001</b> , 10, 231-53	1.4	35
312	Resting-State Functional Connectivity Magnetic Resonance Imaging and Outcome After Acute Stroke. <i>Stroke</i> , <b>2018</b> , 49, 2353-2360	6.7	35
311	Using the virtual brain to reveal the role of oscillations and plasticity in shaping brain's dynamical landscape. <i>Brain Connectivity</i> , <b>2014</b> , 4, 791-811	2.7	34
310	A whole-brain computational modeling approach to explain the alterations in resting-state functional connectivity during progression of Alzheimer's disease. <i>NeuroImage: Clinical</i> , <b>2017</b> , 16, 343-354	5.3	34
309	Multi-stable perception balances stability and sensitivity. <i>Frontiers in Computational Neuroscience</i> , <b>2013</b> , 7, 17	3.5	34
308	Stochastic resonance in the mutual information between input and output spike trains of noisy central neurons. <i>Physica D: Nonlinear Phenomena</i> , <b>1998</b> , 117, 276-282	3.3	33
307	The most relevant human brain regions for functional connectivity: Evidence for a dynamical workspace of binding nodes from whole-brain computational modelling. <i>NeuroImage</i> , <b>2017</b> , 146, 197-210	7.9	32
306	Perceptual detection as a dynamical bistability phenomenon: a neurocomputational correlate of sensation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 20073-7	11.5	32
305	Holding multiple items in short term memory: a neural mechanism. <i>PLoS ONE</i> , <b>2013</b> , 8, e61078	3.7	32
304	Attention in natural scenes: Neurophysiological and computational bases. <i>Neural Networks</i> , <b>2006</b> , 19, 1383-94	9.1	31
303	Object-based visual neglect: a computational hypothesis. <i>European Journal of Neuroscience</i> , <b>2002</b> , 16, 1994-2000	3.5	31
302	Role of white-matter pathways in coordinating alpha oscillations in resting visual cortex. <i>NeuroImage</i> , <b>2015</b> , 106, 328-39	7.9	29
301	How delays matter in an oscillatory whole-brain spiking-neuron network model for MEG alpha-rhythms at rest. <i>NeuroImage</i> , <b>2014</b> , 87, 383-94	7.9	29
300	Cortical rich club regions can organize state-dependent functional network formation by engaging in oscillatory behavior. <i>NeuroImage</i> , <b>2017</b> , 146, 561-574	7.9	28
299	The role of rhythmic neural synchronization in rest and task conditions. <i>Frontiers in Human Neuroscience</i> , <b>2011</b> , 5, 4	3.3	28
298	A model of binocular rivalry based on competition in IT. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 503-507	5.4	28
297	A neurodynamical model for selective visual attention using oscillators. <i>Neural Networks</i> , <b>2001</b> , 14, 981-991	9.1	28

296	Metastability in Senescence. <i>Trends in Cognitive Sciences</i> , <b>2017</b> , 21, 509-521	14	27
295	Detecting event-related time-dependent directional couplings. <i>New Journal of Physics</i> , <b>2006</b> , 8, 6-6	2.9	27
294	Novel Intrinsic Ignition Method Measuring Local-Global Integration Characterizes Wakefulness and Deep Sleep. <i>ENeuro</i> , <b>2017</b> , 4,	3.9	27
293	Insights into Brain Architectures from the Homological Scaffolds of Functional Connectivity Networks. <i>Frontiers in Systems Neuroscience</i> , <b>2016</b> , 10, 85	3.5	27
292	Brain songs framework used for discovering the relevant timescale of the human brain. <i>Nature Communications</i> , <b>2019</b> , 10, 583	17.4	26
291	Structure-function discrepancy: inhomogeneity and delays in synchronized neural networks. <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003736	5	26
290	Structural connectivity allows for multi-threading during rest: the structure of the cortex leads to efficient alternation between resting state exploratory behavior and default mode processing. <i>NeuroImage</i> , <b>2012</b> , 60, 2274-84	7.9	26
289	The neuronal dynamics underlying cognitive flexibility in set shifting tasks. <i>Journal of Computational Neuroscience</i> , <b>2007</b> , 23, 313-31	1.4	26
288	Feature-based attention in human visual cortex: simulation of fMRI data. <i>NeuroImage</i> , <b>2004</b> , 21, 36-45	7.9	26
287	Effective Connectivity in Depression. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , <b>2018</b> , 3, 187-197	3.4	25
286	Dynamics extraction in multivariate biomedical time series. <i>Biological Cybernetics</i> , <b>1998</b> , 79, 15-27	2.8	25
285	Neurons and the synaptic basis of the fMRI signal associated with cognitive flexibility. <i>NeuroImage</i> , <b>2005</b> , 26, 454-70	7.9	25
284	Altered ability to access a clinically relevant control network in patients remitted from major depressive disorder. <i>Human Brain Mapping</i> , <b>2019</b> , 40, 2771-2786	5.9	24
283	Cooperation and biased competition model can explain attentional filtering in the prefrontal cortex. <i>European Journal of Neuroscience</i> , <b>2004</b> , 19, 1969-77	3.5	24
282	Task-driven intra- and interarea communications in primate cerebral cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 4761-6	11.5	23
281	Human brain connectivity: Clinical applications for clinical neurophysiology. <i>Clinical Neurophysiology</i> , <b>2020</b> , 131, 1621-1651	4.3	23
280	Prediction of Decisions from Noise in the Brain before the Evidence is Provided. <i>Frontiers in Neuroscience</i> , <b>2011</b> , 5, 33	5.1	23
279	Lexical plasticity in early bilinguals does not alter phoneme categories: II. Experimental evidence. <i>Journal of Cognitive Neuroscience</i> , <b>2009</b> , 21, 2343-57	3.1	23

278	Neuronal adaptation effects in decision making. <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 234-46	6.6	23
277	Functional graph alterations in schizophrenia: a result from a global anatomic decoupling?. <i>Pharmacopsychiatry</i> , <b>2012</b> , 45 Suppl 1, S57-64	2	23
276	Computational modeling of resting-state activity demonstrates markers of normalcy in children with prenatal or perinatal stroke. <i>Journal of Neuroscience</i> , <b>2015</b> , 35, 8914-24	6.6	22
275	Stochastic cortical neurodynamics underlying the memory and cognitive changes in aging. <i>Neurobiology of Learning and Memory</i> , <b>2015</b> , 118, 150-61	3.1	22
274	Information maximization and independent component analysis; is there a difference?. <i>Neural Computation</i> , <b>1998</b> , 10, 2085-101	2.9	22
273	Extracting orthogonal subject- and condition-specific signatures from fMRI data using whole-brain effective connectivity. <i>NeuroImage</i> , <b>2018</b> , 178, 238-254	7.9	22
272	Deterministic analysis of stochastic bifurcations in multi-stable neurodynamical systems. <i>Biological Cybernetics</i> , <b>2007</b> , 96, 487-96	2.8	21
271	Network bursting dynamics in excitatory cortical neuron cultures results from the combination of different adaptive mechanisms. <i>PLoS ONE</i> , <b>2013</b> , 8, e75824	3.7	21
270	Novel fingerprinting method characterises the necessary and sufficient structural connectivity from deep brain stimulation electrodes for a successful outcome. <i>New Journal of Physics</i> , <b>2015</b> , 17, 015001	2.9	20
269	Ghost Attractors in Spontaneous Brain Activity: Recurrent Excursions Into Functionally-Relevant BOLD Phase-Locking States. <i>Frontiers in Systems Neuroscience</i> , <b>2020</b> , 14, 20	3.5	20
268	Resting state networks in empirical and simulated dynamic functional connectivity. <i>NeuroImage</i> , <b>2017</b> , 159, 388-402	7.9	20
267	Cortico-cortical communication dynamics. <i>Frontiers in Systems Neuroscience</i> , <b>2014</b> , 8, 19	3.5	20
266	Synaptic depression and slow oscillatory activity in a biophysical network model of the cerebral cortex. <i>Frontiers in Computational Neuroscience</i> , <b>2012</b> , 6, 64	3.5	20
265	Learning to attend: modeling the shaping of selectivity in infero-temporal cortex in a categorization task. <i>Biological Cybernetics</i> , <b>2006</b> , 94, 351-65	2.8	20
264	A characterization of HRV's nonlinear hidden dynamics by means of Markov models. <i>IEEE Transactions on Biomedical Engineering</i> , <b>1999</b> , 46, 978-86	5	20
263	Effective visual working memory capacity: an emergent effect from the neural dynamics in an attractor network. <i>PLoS ONE</i> , <b>2012</b> , 7, e42719	3.7	20
262	Modeling regional changes in dynamic stability during sleep and wakefulness. <i>NeuroImage</i> , <b>2020</b> , 215, 116833	7.9	20
261	Common neural signatures of psychedelics: Frequency-specific energy changes and repertoire expansion revealed using connectome-harmonic decomposition. <i>Progress in Brain Research</i> , <b>2018</b> , 242, 97-120	2.9	20

260	Reliable local dynamics in the brain across sessions are revealed by whole-brain modeling of resting state activity. <i>Human Brain Mapping</i> , <b>2019</b> , 40, 2967-2980	5.9	19
259	Bridging the gap between physiology and behavior: evidence from the sSoTS model of human visual attention. <i>Psychological Review</i> , <b>2011</b> , 118, 3-41	6.3	19
258	A biased competition based neurodynamical model of visual neglect. <i>Medical Engineering and Physics</i> , <b>2004</b> , 26, 733-43	2.4	19
257	Network Events on Multiple Space and Time Scales in Cultured Neural Networks and in a Stochastic Rate Model. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004547	5	19
256	Revisiting the global workspace orchestrating the hierarchical organization of the human brain. <i>Nature Human Behaviour</i> , <b>2021</b> , 5, 497-511	12.8	19
255	Networks for memory, perception, and decision-making, and beyond to how the syntax for language might be implemented in the brain. <i>Brain Research</i> , <b>2015</b> , 1621, 316-34	3.7	18
254	Statistical Fluctuations in Attractor Networks Related to Schizophrenia. <i>Pharmacopsychiatry</i> , <b>2007</b> , 40, S78-S84	2	18
253	Turbulent-like Dynamics in the Human Brain. <i>Cell Reports</i> , <b>2020</b> , 33, 108471	10.6	17
252	Distinct criticality of phase and amplitude dynamics in the resting brain. <i>NeuroImage</i> , <b>2018</b> , 180, 442-447	7.9	17
251	Altered resting-state whole-brain functional networks of neonates with intrauterine growth restriction. <i>Cortex</i> , <b>2016</b> , 77, 119-131	3.8	17
250	'If you are good, I get better': the role of social hierarchy in perceptual decision-making. <i>Social Cognitive and Affective Neuroscience</i> , <b>2014</b> , 9, 1489-97	4	17
249	A neuro-cognitive visual system for object recognition based on testing of interactive attentional top-down hypotheses. <i>Perception</i> , <b>2000</b> , 29, 1249-64	1.2	17
248	Environmental factors linked to depression vulnerability are associated with altered cerebellar resting-state synchronization. <i>Scientific Reports</i> , <b>2016</b> , 6, 37384	4.9	17
247	Task-related effective connectivity reveals that the cortical rich club gates cortex-wide communication. <i>Human Brain Mapping</i> , <b>2018</b> , 39, 1246-1262	5.9	17
246	Genetic influences on hub connectivity of the human connectome. <i>Nature Communications</i> , <b>2021</b> , 12, 4237	17.4	17
245	Communication before coherence. <i>European Journal of Neuroscience</i> , <b>2012</b> , 36, 2689-709	3.5	16
244	A multiple-choice task with changes of mind. <i>PLoS ONE</i> , <b>2012</b> , 7, e43131	3.7	16
243	Neural dynamics of cross-modal and cross-temporal associations. <i>Experimental Brain Research</i> , <b>2005</b> , 166, 325-36	2.3	16

242	Exploring the intrinsic information loss in single-humped maps by refining multi-symbol partitions. <i>Physica D: Nonlinear Phenomena</i> , <b>1996</b> , 94, 57-64	3.3	16
241	Cortical microcircuit dynamics mediating binocular rivalry: the role of adaptation in inhibition. <i>Frontiers in Human Neuroscience</i> , <b>2011</b> , 5, 145	3.3	15
240	Neural and computational mechanisms of postponed decisions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 11626-31	11.5	15
239	Cognitive flexibility and decision-making in a model of conditional visuomotor associations. <i>European Journal of Neuroscience</i> , <b>2005</b> , 22, 2927-36	3.5	15
238	Stereotypical modulations in dynamic functional connectivity explained by changes in BOLD variance. <i>NeuroImage</i> , <b>2018</b> , 171, 40-54	7.9	14
237	Linking Entropy at Rest with the Underlying Structural Connectivity in the Healthy and Lesioned Brain. <i>Cerebral Cortex</i> , <b>2018</b> , 28, 2948-2958	5.1	14
236	Evidence from a rare case study for Hebbian-like changes in structural connectivity induced by long-term deep brain stimulation. <i>Frontiers in Behavioral Neuroscience</i> , <b>2015</b> , 9, 167	3.5	14
235	A computational model of visual marking using an inter-connected network of spiking neurons: the spiking search over time & space model (sSoTS). <i>Journal of Physiology (Paris)</i> , <b>2006</b> , 100, 110-24		14
234	Signature of consciousness in brain-wide synchronization patterns of monkey and human fMRI signals. <i>NeuroImage</i> , <b>2021</b> , 226, 117470	7.9	14
233	Beyond the disconnectivity hypothesis of schizophrenia. <i>Cerebral Cortex</i> , <b>2020</b> , 30, 1213-1233	5.1	13
232	Non-reward neural mechanisms in the orbitofrontal cortex. <i>Cortex</i> , <b>2016</b> , 83, 27-38	3.8	13
231	Information Transmission and Temporal Code in Central Spiking Neurons. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4697-4700	7.4	13
230	Learning time series evolution by unsupervised extraction of correlations. <i>Physical Review E</i> , <b>1995</b> , 51, 1780-1790	2.4	13
229	Introduction of short-range interactions in continuum distorted-wave theory of electron capture for ion-atom collisions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1988</b> , 21, 1403-1410	1.3	13
228	Noise in attractor networks in the brain produced by graded firing rate representations. <i>PLoS ONE</i> , <b>2011</b> , 6, e23630	3.7	13
227	Discrepancies between Multi-Electrode LFP and CSD Phase-Patterns: A Forward Modeling Study. <i>Frontiers in Neural Circuits</i> , <b>2016</b> , 10, 51	3.5	13
226	Neural correlates of metacognition: A critical perspective on current tasks. <i>Neuroscience and Biobehavioral Reviews</i> , <b>2016</b> , 71, 167-175	9	13
225	Distinct modes of functional connectivity induced by movie-watching. <i>NeuroImage</i> , <b>2019</b> , 184, 335-348	7.9	13

224	A new computational approach to estimate whole-brain effective connectivity from functional and structural MRI, applied to language development. <i>Scientific Reports</i> , <b>2019</b> , 9, 8479	4.9	12
223	Characterizing the Dynamical Complexity Underlying Meditation. <i>Frontiers in Systems Neuroscience</i> , <b>2019</b> , 13, 27	3.5	12
222	Correction for Deco et al., Key role of coupling, delay, and noise in resting brain fluctuations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 12207-12208	11.5	12
221	Non-parametric Data Selection for Neural Learning in Non-stationary Time Series. <i>Neural Networks</i> , <b>1997</b> , 10, 401-407	9.1	12
220	The neurodynamics of visual search. <i>Visual Cognition</i> , <b>2006</b> , 14, 1006-1024	1.8	12
219	Extended method of moments for deterministic analysis of stochastic multistable neurodynamical systems. <i>Physical Review E</i> , <b>2007</b> , 75, 031913	2.4	12
218	Large-Scale Computational Modeling of Genetic Regulatory Networks. <i>Artificial Intelligence Review</i> , <b>2003</b> , 20, 75-93	9.7	12
217	Pair production with electron capture in relativistic heavy-ion collisions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1989</b> , 22, 1043-1050	1.3	12
216	Asymptotic behaviour of distorted-wave models for ionisation at relativistic energies. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1989</b> , 22, 1357-1364	1.3	12
215	Does the regulation of local excitation-inhibition balance aid in recovery of functional connectivity? A computational account. <i>NeuroImage</i> , <b>2016</b> , 136, 57-67	7.9	12
214	Resting state dynamics meets anatomical structure: Temporal multiple kernel learning (tMKL) model. <i>NeuroImage</i> , <b>2019</b> , 184, 609-620	7.9	12
213	Disrupted brain structural connectivity in Pediatric Bipolar Disorder with psychosis. <i>Scientific Reports</i> , <b>2019</b> , 9, 13638	4.9	11
212	Deconstructing multisensory enhancement in detection. <i>Journal of Neurophysiology</i> , <b>2015</b> , 113, 1800-1832	3.2	11
211	The influence of spatiotemporal structure of noisy stimuli in decision making. <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003492	5	11
210	Attention and spatial resolution: a theoretical and experimental study of visual search in hierarchical patterns. <i>Perception</i> , <b>2007</b> , 36, 335-54	1.2	11
209	A computational neuroscience account of visual neglect. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 811-816	5.4	11
208	Dynamical consequences of regional heterogeneity in the brain's transcriptional landscape. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	11
207	Confidence through consensus: a neural mechanism for uncertainty monitoring. <i>Scientific Reports</i> , <b>2016</b> , 6, 21830	4.9	11

206	The role of multi-area interactions for the computation of apparent motion. <i>NeuroImage</i> , <b>2010</b> , 51, 1018-26	7.9	10
205	Finite automata-models for the investigation of dynamical systems. <i>Information Processing Letters</i> , <b>1997</b> , 63, 137-141	0.8	10
204	Neurodynamics of the prefrontal cortex during conditional visuomotor associations. <i>Journal of Cognitive Neuroscience</i> , <b>2008</b> , 20, 421-31	3.1	10
203	Electron capture in collisions between bare heavy ions at ultra relativistic impact energies. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1988</b> , 21, 1229-1235	1.3	10
202	mTOR-related synaptic pathology causes autism spectrum disorder-associated functional hyperconnectivity. <i>Nature Communications</i> , <b>2021</b> , 12, 6084	17.4	10
201	Effective connectivity in autism. <i>Autism Research</i> , <b>2020</b> , 13, 32-44	5.1	10
200	Model-based whole-brain effective connectivity to study distributed cognition in health and disease. <i>Network Neuroscience</i> , <b>2020</b> , 4, 338-373	5.6	10
199	Feed-forward information and zero-lag synchronization in the sensory thalamocortical circuit are modulated during stimulus perception. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 7513-7522	11.5	9
198	The dynamics of human cognition: Increasing global integration coupled with decreasing segregation found using iEEG. <i>NeuroImage</i> , <b>2018</b> , 172, 492-505	7.9	9
197	Network analysis of whole-brain fMRI dynamics: A new framework based on dynamic communicability. <i>NeuroImage</i> , <b>2019</b> , 201, 116007	7.9	9
196	Simulating posterior parietal damage in a biologically plausible framework: neuropsychological tests of the search over time and space model. <i>Cognitive Neuropsychology</i> , <b>2009</b> , 26, 343-90	2.3	9
195	Temporal clustering with spiking neurons and dynamic synapses: towards technological applications. <i>Neural Networks</i> , <b>2001</b> , 14, 275-85	9.1	9
194	Brain tumor classification based on EEG hidden dynamics. <i>Intelligent Data Analysis</i> , <b>1999</b> , 3, 287-306	1.1	9
193	Spatiotemporal coding in the cortex: information flow-based learning in spiking neural networks. <i>Neural Computation</i> , <b>1999</b> , 11, 919-34	2.9	9
192	Brain tumor classification based on EEG hidden dynamics. <i>Intelligent Data Analysis</i> , <b>1999</b> , 3, 287-306	1.1	9
191	Coarse Coding Resource-Allocating Network. <i>Neural Computation</i> , <b>1993</b> , 5, 105-114	2.9	9
190	Biased Competition Mechanisms for Visual Attention in a Multimodular Neurodynamical System. <i>Lecture Notes in Computer Science</i> , <b>2001</b> , 114-126	0.9	9
189	Detection of recurrent activation patterns across focal seizures: Application to seizure onset zone identification. <i>Clinical Neurophysiology</i> , <b>2017</b> , 128, 977-985	4.3	8

188	Lifespan associated global patterns of coherent neural communication. <i>NeuroImage</i> , <b>2020</b> , 216, 116824	7.9	8
187	Variability and information content in auditory cortex spike trains during an interval-discrimination task. <i>Journal of Neurophysiology</i> , <b>2013</b> , 110, 2163-74	3.2	8
186	Altered amygdalar resting-state connectivity in depression is explained by both genes and environment. <i>Human Brain Mapping</i> , <b>2015</b> , 36, 3761-76	5.9	8
185	Slow Modulation of Ongoing Discharge in the Auditory Cortex during an Interval-Discrimination Task. <i>Frontiers in Integrative Neuroscience</i> , <b>2011</b> , 5, 60	3.2	8
184	Determining the Information Flow of Dynamical Systems from Continuous Probability Distributions. <i>Physical Review Letters</i> , <b>1997</b> , 78, 2345-2348	7.4	8
183	Testing nonlinear Markovian hypotheses in dynamical systems. <i>Physica D: Nonlinear Phenomena</i> , <b>1997</b> , 104, 61-74	3.3	8
182	Nonlinear independent component analysis and multivariate time series analysis. <i>Physica D: Nonlinear Phenomena</i> , <b>1997</b> , 108, 335-349	3.3	8
181	Lexical plasticity in early bilinguals does not alter phoneme categories: I. Neurodynamical modeling. <i>Journal of Cognitive Neuroscience</i> , <b>2008</b> , 20, 76-94	3.1	8
180	The neurodynamics underlying attentional control in set shifting tasks. <i>Cognitive Neurodynamics</i> , <b>2007</b> , 1, 249-59	4.2	8
179	Modular biased-competition and cooperation: a candidate mechanism for selective working memory. <i>European Journal of Neuroscience</i> , <b>2004</b> , 20, 2789-803	3.5	8
178	Speech recognition with spiking neurons and dynamic synapses: a model motivated by the human auditory pathway. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 937-942	5.4	8
177	The coding of information by spiking neurons: an analytical study. <i>Network: Computation in Neural Systems</i> , <b>1998</b> , 9, 303-317	0.7	8
176	Neural learning of chaotic dynamics. <i>Neural Processing Letters</i> , <b>1995</b> , 2, 23-26	2.4	8
175	Statistical-ensemble theory of redundancy reduction and the duality between unsupervised and supervised neural learning. <i>Physical Review E</i> , <b>1995</b> , 52, 6580-6587	2.4	8
174	Electron capture in the target following e <sup>-</sup> -e <sup>3+</sup> pair production in the simultaneous presence of the fields of the projectile and of the target. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1988</b> , 21, L299-L302	1.3	8
173	Perturbations in dynamical models of whole-brain activity dissociate between the level and stability of consciousness. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1009139	5	8
172	Rare long-range cortical connections enhance human information processing. <i>Current Biology</i> , <b>2021</b> , 31, 4436-4448.e5	6.3	8
171	Degenerate time-dependent network dynamics anticipate seizures in human epileptic brain. <i>PLoS Biology</i> , <b>2018</b> , 16, e2002580	9.7	7

170	Source-reconstruction of the sensorimotor network from resting-state macaque electrocorticography. <i>NeuroImage</i> , <b>2018</b> , 181, 347-358	7.9	7
169	A common neurodynamical mechanism could mediate externally induced and intrinsically generated transitions in visual awareness. <i>PLoS ONE</i> , <b>2013</b> , 8, e53833	3.7	7
168	The timing of vision - how neural processing links to different temporal dynamics. <i>Frontiers in Psychology</i> , <b>2011</b> , 2, 151	3.4	7
167	Integrating fMRI and single-cell data of visual working memory. <i>Neurocomputing</i> , <b>2004</b> , 58-60, 729-737	5.4	7
166	Redundancy reduction with information-preserving nonlinear maps		7
165	Dynamical consequences of regional heterogeneity in the brain's transcriptional landscape		7
164	The Dynamics of Functional Brain Networks Associated With Depressive Symptoms in a Nonclinical Sample. <i>Frontiers in Neural Circuits</i> , <b>2020</b> , 14, 570583	3.5	7
163	Microbiota alterations in proline metabolism impact depression.. <i>Cell Metabolism</i> , <b>2022</b> , 34, 681-701.e1024.6		7
162	The Aging Imageomics Study: rationale, design and baseline characteristics of the study population. <i>Mechanisms of Ageing and Development</i> , <b>2020</b> , 189, 111257	5.6	6
161	Scale-freeness or partial synchronization in neural mass phase oscillator networks: Pick one of two?. <i>NeuroImage</i> , <b>2018</b> , 180, 428-441	7.9	6
160	Learning selective top-down control enhances performance in a visual categorization task. <i>Journal of Neurophysiology</i> , <b>2012</b> , 108, 3124-37	3.2	6
159	Identification of deterministic chaos by an information-theoretic measure of the sensitive dependence on the initial conditions. <i>Physica D: Nonlinear Phenomena</i> , <b>1997</b> , 110, 173-181	3.3	6
158	Suppressive effects in visual search: A neurocomputational analysis of preview search. <i>Neurocomputing</i> , <b>2007</b> , 70, 1925-1931	5.4	6
157	Neurodynamical amplification of perceptual signals via system-size resonance. <i>Physica D: Nonlinear Phenomena</i> , <b>2008</b> , 237, 316-323	3.3	6
156	Capture from the vacuum in ion-ion collisions at relativistic energies. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1989</b> , 22, 3709-3716	1.3	6
155	Creation of e <sup>-</sup> e <sup>+</sup> pairs in the target field followed by e <sup>-</sup> capture in the target. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1988</b> , 21, 1861-1866	1.3	6
154	The human orbitofrontal cortex, vmPFC, and anterior cingulate cortex effective connectome: emotion, memory, and action.. <i>Cerebral Cortex</i> , <b>2022</b> ,	5.1	6
153	The Effective Connectivity of the Human Hippocampal Memory System.. <i>Cerebral Cortex</i> , <b>2022</b> ,	5.1	6

152	Identifying optimal working points of individual Virtual Brains: A large-scale brain network modelling study		6
151	LSD flattens the brain's energy landscape: evidence from receptor-informed network control theory		6
150	Circuit mechanisms for the chemical modulation of cortex-wide network interactions and behavioral variability. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	6
149	Reduced spatiotemporal brain dynamics are associated with increased depressive symptoms after a relationship breakup. <i>NeuroImage: Clinical</i> , <b>2020</b> , 27, 102299	5.3	5
148	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. <i>BMC Neuroscience</i> , <b>2017</b> , 18,	3.2	5
147	Effect of Field Spread on Resting-State Magneto Encephalography Functional Network Analysis: A Computational Modeling Study. <i>Brain Connectivity</i> , <b>2017</b> , 7, 541-557	2.7	5
146	Reward-biased probabilistic decision-making: Mean-field predictions and spiking simulations. <i>Neurocomputing</i> , <b>2006</b> , 69, 1175-1178	5.4	5
145	Continuous Boltzmann machine with rotor neurons. <i>Neural Networks</i> , <b>1995</b> , 8, 375-385	9.1	5
144	Decorrelated Hebbian Learning for Clustering and Function Approximation. <i>Neural Computation</i> , <b>1995</b> , 7, 338-348	2.9	5
143	Matrix continuum distorted-wave approximation for electron capture. <i>Physical Review A</i> , <b>1993</b> , 47, 3769-3774	3.74	5
142	Angular distribution of electron-positron pairs produced in ion-ion collisions at relativistic energies. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1990</b> , 143, 387-392	2.3	5
141	Playing at the Edge of Criticality: Expanded Whole-Brain Repertoire of Connectome-Harmonics. <i>Springer Series on Bio- and Neurosystems</i> , <b>2019</b> , 27-45	0.5	5
140	A Neurodynamical Model of Visual Attention <b>2005</b> , 593-599		5
139	The dynamics of resting fluctuations in the brain: metastability and its dynamical cortical core		5
138	Generative Embeddings of Brain Collective Dynamics Using Variational Autoencoders. <i>Physical Review Letters</i> , <b>2020</b> , 125, 238101	7.4	5
137	Breakdown of Whole-brain Dynamics in Preterm-born Children. <i>Cerebral Cortex</i> , <b>2020</b> , 30, 1159-1170	5.1	5
136	Neural mechanisms of vibrotactile categorization. <i>Human Brain Mapping</i> , <b>2019</b> , 40, 3078-3090	5.9	4
135	Does Bilingualism Alter Lexical Structure? Response to Oppenheim, Wu, and Thierry (2018). <i>Cognitive Science</i> , <b>2019</b> , 43, e12707	2.2	4

134	Data augmentation based on dynamical systems for the classification of brain states. <i>Chaos, Solitons and Fractals</i> , <b>2020</b> , 139, 110069	9.3	4
133	Multiple Choice Neurodynamical Model of the Uncertain Option Task. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005250	5	4
132	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
131	Neurodynamical mechanism of binding and selective attention for visual search. <i>Neurocomputing</i> , <b>2000</b> , 32-33, 693-699	5.4	4
130	An information theory based learning paradigm for linear feature extraction. <i>Neurocomputing</i> , <b>1996</b> , 12, 203-221	5.4	4
129	Brain simulation as a cloud service: The Virtual Brain on EBRAINS.. <i>NeuroImage</i> , <b>2022</b> , 118973	7.9	4
128	Sensory-motor cortices shape functional connectivity dynamics in the human brain. <i>Nature Communications</i> , <b>2021</b> , 12, 6373	17.4	4
127	Computational Modelling in Behavioural Neuroscience		4
126	Cortical state transitions and stimulus response evolve along stiff and sloppy parameter dimensions, respectively. <i>ELife</i> , <b>2020</b> , 9,	8.9	4
125	The Computational Neuroscience of Visual Cognition: Attention, Memory and Reward. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 100-117	0.9	4
124	The Role of Short-Term Memory in Visual Attention <b>2005</b> , 610-617		4
123	Unsupervised learning for Boltzman Machines		4
122	Bridging multiple scales in the human brain using computational modelling		4
121	Perturbations in dynamical models of whole-brain activity dissociate between the level and stability of consciousness		4
120	Loss of consciousness reduces the stability of brain hubs and the heterogeneity of brain dynamics		4
119	Altered trajectories in the dynamical repertoire of functional network states under psilocybin		4
118	Personalization of hybrid brain models from neuroimaging and electrophysiology data		4
117	Functional harmonics reveal multi-dimensional basis functions underlying cortical organization		4

116	Revisiting the Global Workspace: Orchestration of the functional hierarchical organisation of the human brain		4
115	Anatomical and Functional Gradients Shape Dynamic Functional Connectivity in the Human Brain		4
114	Increased sensitivity to strong perturbations in a whole-brain model of LSD. <i>NeuroImage</i> , <b>2021</b> , 230, 117809	6.9	4
113	Leonardo da Vinci and the search for order in neuroscience. <i>Current Biology</i> , <b>2021</b> , 31, R704-R709	6.3	4
112	Decoding brain states on the intrinsic manifold of human brain dynamics across wakefulness and sleep. <i>Communications Biology</i> , <b>2021</b> , 4, 854	6.7	4
111	Noise-driven multistability vs deterministic chaos in phenomenological semi-empirical models of whole-brain activity. <i>Chaos</i> , <b>2021</b> , 31, 023127	3.3	4
110	Propagation of BOLD Activity Reveals Task-dependent Directed Interactions Across Human Visual Cortex. <i>Cerebral Cortex</i> , <b>2020</b> , 30, 5899-5914	5.1	3
109	Linear distributed source modeling of local field potentials recorded with intra-cortical electrode arrays. <i>PLoS ONE</i> , <b>2017</b> , 12, e0187490	3.7	3
108	Neuronal Discharges and Gamma Oscillations Explicitly Reflect Visual Consciousness in the Lateral Prefrontal Cortex. <i>Neuron</i> , <b>2012</b> , 74, 1139	13.9	3
107	Balanced input allows optimal encoding in a stochastic binary neural network model: an analytical study. <i>PLoS ONE</i> , <b>2012</b> , 7, e30723	3.7	3
106	Dynamical Analysis of Time Series by Statistical Tests. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , <b>1997</b> , 07, 2629-2652	2	3
105	Information Flow in Chaotic Symbolic Dynamics for Finite and Infinitesimal Resolution. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , <b>1997</b> , 07, 97-105	2	3
104	Systems-Level Neuronal Modeling of Visual Attentional Mechanisms. <i>Artificial Intelligence Review</i> , <b>2003</b> , 20, 143-160	9.7	3
103	Ionization of heavy targets by impact of relativistic projectiles. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1988</b> , 35, 100-102	1.2	3
102	Propagation of BOLD activity reveals task-dependent directed interactions across human visual cortex		3
101	Effective connectivity inferred from fMRI transition dynamics during movie viewing points to a balanced reconfiguration of cortical interactions		3
100	Connectome-harmonic decomposition of human brain activity reveals dynamical repertoire re-organization under LSD		3
99	Multiscale dynamic mean field (MDMF) model relates resting-state brain dynamics with local cortical excitatory-inhibitory neurotransmitter homeostasis. <i>Network Neuroscience</i> , <b>2021</b> , 5, 757-782	5.6	3

98	Brain Connectivity Studies on Structure-Function Relationships: A Short Survey with an Emphasis on Machine Learning. <i>Computational Intelligence and Neuroscience</i> , <b>2021</b> , 2021, 5573740	3	3
97	Whole-Brain Dynamics in Aging: Disruptions in Functional Connectivity and the Role of the Rich Club. <i>Cerebral Cortex</i> , <b>2021</b> , 31, 2466-2481	5.1	3
96	Increased brain atrophy and lesion load is associated with stronger lower alpha MEG power in multiple sclerosis patients. <i>NeuroImage: Clinical</i> , <b>2021</b> , 30, 102632	5.3	3
95	Ephaptic coupling in white matter fibre bundles modulates axonal transmission delays. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1007858	5	3
94	Rare long-range cortical connections enhance information processing		3
93	Deep learning the arrow of time in brain activity: characterising brain-environment behavioural interactions in health and disease		3
92	On the intersection between data quality and dynamical modelling of large-scale fMRI signals.. <i>NeuroImage</i> , <b>2022</b> , 119051	7.9	3
91	Psychedelic Resting-state Neuroimaging: A Review and Perspective on Balancing Replication and Novel Analyses.. <i>Neuroscience and Biobehavioral Reviews</i> , <b>2022</b> , 104689	9	3
90	The human language effective connectome. <i>NeuroImage</i> , <b>2022</b> , 119352	7.9	3
89	Large-scale Computational Models of Ongoing Brain Activity <b>2017</b> , 425-437		2
88	Computational Models of Dysconnectivity in Large-Scale Resting-State Networks <b>2018</b> , 87-116		2
87	Critical Slowing and Perception <b>2014</b> , 191-226		2
86	The Encoding of Decision Difficulty and Movement Time in the Primate Premotor Cortex. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004502	5	2
85	Complexity reduction of rate-equations models for two-choice decision-making. <i>PLoS ONE</i> , <b>2013</b> , 8, e80829	3.7	2
84	Perceptual learning with perceptions. <i>Cognitive Neurodynamics</i> , <b>2011</b> , 5, 31-43	4.2	2
83	Simulated functional networks in health and schizophrenia: a graph theoretical approach. <i>BMC Neuroscience</i> , <b>2011</b> , 12,	3.2	2
82	Stochastic Neural Dynamics as a Principle of Perception <b>2009</b> , 247-262		2
81	Investigating the underlying Markovian dynamics of ECG rhythms by information flow. <i>Chaos, Solitons and Fractals</i> , <b>2001</b> , 12, 2877-2888	9.3	2

80	Predictive Coding in the Visual Cortex by a Recurrent Network with Gabor Receptive Fields. <i>Neural Processing Letters</i> , <b>2001</b> , 14, 107-114	2.4	2
79	Do Symmetric Eikonal and Continuum Distorted Wave models satisfy the correct boundary conditions?. <i>Physica Scripta</i> , <b>1995</b> , 51, 334-338	2.6	2
78	Two-center effects in relativistic radiative electron capture. <i>Physical Review A</i> , <b>1989</b> , 39, 5451-5454	2.6	2
77	K-shell ionisation in heavy ion collisions at relativistic energies. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1990</b> , 23, 2091-2096	1.3	2
76	Toward Noninvasive Brain Stimulation 2.0 in Alzheimer's Disease.. <i>Ageing Research Reviews</i> , <b>2021</b> , 75, 101555	12	2
75	Unifying turbulent dynamics framework distinguishes different brain states		2
74	The coding of information by spiking neurons: an analytical study. <i>Network: Computation in Neural Systems</i> , <b>1998</b> , 9, 303-317	0.7	2
73	Neural Mechanisms of Visual Memory: A Neurocomputational Perspective <b>2008</b> , 247-290		2
72	Consistent local dynamics in the brain across sessions are revealed by whole brain modeling of resting state activity		2
71	Extracting orthogonal subject- and behavior-specific signatures from fMRI data using whole-brain effective connectivity		2
70	A cross-species link between mTOR-related synaptic pathology and functional hyperconnectivity in autism		2
69	Harmonic brain modes: a unifying framework for linking space and time in brain dynamics		2
68	Nonequilibrium brain dynamics as a signature of consciousness. <i>Physical Review E</i> , <b>2021</b> , 104, 014411	2.4	2
67	Temporal irreversibility of neural dynamics as a signature of consciousness		2
66	Loss of consciousness reduces the stability of brain hubs and the heterogeneity of brain dynamics. <i>Communications Biology</i> , <b>2021</b> , 4, 1037	6.7	2
65	A Neurodynamical Theory of Visual Attention: Comparisons with fMRI- and Single-Neuron Data. <i>Lecture Notes in Computer Science</i> , <b>2002</b> , 3-8	0.9	2
64	A Neuronal Model of Binding and Selective Attention for Visual Search. <i>Perspectives in Neural Computing</i> , <b>1999</b> , 262-271		2
63	The Menstrual Cycle Modulates Whole-Brain Turbulent Dynamics.. <i>Frontiers in Neuroscience</i> , <b>2021</b> , 15, 753820	5.1	2

62	Learning a New Selection Rule in Visual and Frontal Cortex. <i>Cerebral Cortex</i> , <b>2016</b> , 26, 3611-26	5.1	1
61	Disrupted connectivity in schizophrenia: modelling the impact of structural connectivity changes on the dynamics of spontaneous functional networks. <i>BMC Neuroscience</i> , <b>2013</b> , 14,	3.2	1
60	Visual stimulation quenches global alpha range activity in awake primate V4: a case study. <i>Neurophotonics</i> , <b>2017</b> , 4, 031222	3.9	1
59	Audiovisual matching in speech and nonspeech sounds: a neurodynamical model. <i>Journal of Cognitive Neuroscience</i> , <b>2010</b> , 22, 240-7	3.1	1
58	Neurodynamical approach to the picture-word interference effect. <i>Neurocomputing</i> , <b>2006</b> , 69, 1317-1321	5.4	1
57	Selective attention in visual search: A neural network of phase oscillators. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 1151-1160	5.4	1
56	Statistical physics theory of query learning by an ensemble of higher-order neural networks. <i>Physical Review E</i> , <b>1995</b> , 52, 1953-1957	2.4	1
55	Information theory and local learning rules in a self-organizing network of Ising spins. <i>Physical Review E</i> , <b>1995</b> , 52, 2860-2871	2.4	1
54	Dynamic primitives of brain network interaction Special Issue "Advances in Mapping the Connectome".. <i>NeuroImage</i> , <b>2022</b> , 250, 118928	7.9	1
53	Effective connectivity extracts clinically relevant prognostic information from resting state activity in stroke. <i>Brain Communications</i> , <b>2021</b> , 3, fcab233	4.5	1
52	Cortical state transitions and stimulus response evolve along stiff and sloppy parameter dimensions, respectively		1
51	Ephaptic coupling in white matter fibre bundles modulates axonal transmission delays		1
50	Effective connectivity extracts clinically relevant prognostic information from resting state activity in stroke		1
49	Multiscale dynamic mean field model to relate resting-state brain dynamics with local cortical excitatory-inhibitory neurotransmitter homeostasis in health and disease		1
48	Characterizing the Dynamical Complexity underlying Meditation		1
47	Task-related effective connectivity reveals that the cortical rich club gates cortex-wide communication		1
46	Stochastic Dynamics in the Brain and Probabilistic Decision-Making. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 31-50	0.9	1
45	The phase of Theta oscillations modulates successful memory formation at encoding. <i>Neuropsychologia</i> , <b>2021</b> , 154, 107775	3.2	1

44	Bridging the gap between single receptor type activity and whole-brain dynamics. <i>FEBS Journal</i> , <b>2021</b> ,	5.7	1
43	Meditation-induced effects on whole-brain structural and effective connectivity		1
42	Harmonic waves as the fundamental principle underlying temporo-spatial dynamics of brain and mind: Comment on "Is temporo-spatial dynamics the "common currency" of brain and mind? In Quest of "Spatiotemporal Neuroscience"" Georg Northoff et al. <i>Physics of Life Reviews</i> , <b>2020</b> , 33, 67-69	2.1	1
41	Macroscopic quantities of collective brain activity during wakefulness and anesthesia		1
40	Functional harmonics reveal multi-dimensional basis functions underlying cortical organization. <i>Cell Reports</i> , <b>2021</b> , 36, 109554	10.6	1
39	On the edge of criticality: strength-dependent perturbation unveils delicate balance between fluctuation and oscillation in brain dynamics		1
38	The effect of noise on the synchronization dynamics of the Kuramoto model on a large human connectome graph. <i>Neurocomputing</i> , <b>2021</b> , 461, 696-704	5.4	1
37	Whole-brain dynamics differentiate among cisgender and transgender individuals.. <i>Human Brain Mapping</i> , <b>2022</b> ,	5.9	1
36	Whole-brain modeling of neuroimaging data: Moving beyond correlation to causation <b>2019</b> , 139-143		0
35	Reply: Defining a functional network homeostasis after stroke: EEG-based approach is complementary to functional MRI. <i>Brain</i> , <b>2017</b> , 140, e72	11.2	0
34	Computational significance of transient dynamics in cortical networks. <i>European Journal of Neuroscience</i> , <b>2008</b> , 27, 790-790	3.5	0
33	A neurodynamical model to simulate neural activities in visual attention experiments. <i>Neurocomputing</i> , <b>2002</b> , 44-46, 759-767	5.4	0
32	Learning spatio-temporal stimuli with networks of spiking neurons and dynamic synapses. <i>Neurocomputing</i> , <b>2001</b> , 38-40, 935-943	5.4	0
31	Revealing the Relevant Spatiotemporal Scale Underlying Whole-Brain Dynamics. <i>Frontiers in Neuroscience</i> , <b>2021</b> , 15, 715861	5.1	0
30	Uncovering the spatiotemporal scales of common neuro-mental constructs: Comment on "Is temporo-spatial dynamics the 'common currency' of brain and mind? In Quest of 'Spatiotemporal Neuroscience'" by Georg Northoff et al. <i>Physics of Life Reviews</i> , <b>2020</b> , 33, 64-66	2.1	0
29	Low entropy map of brain oscillatory activity identifies spatially localized events: A new method for automated epilepsy focus prediction. <i>NeuroImage</i> , <b>2020</b> , 208, 116410	7.9	0
28	Hierarchical disruption in the cortex of anesthetized monkeys as a new signature of consciousness loss. <i>NeuroImage</i> , <b>2021</b> , 227, 117618	7.9	0
27	Classification of Complex Emotions Using EEG and Virtual Environment: Proof of Concept and Therapeutic Implication. <i>Frontiers in Human Neuroscience</i> , <b>2021</b> , 15, 711279	3.3	0

26	Whole-brain modeling to predict optimal deep brain stimulation targeting <b>2022</b> , 543-559		o
25	Functional network antagonism and consciousness. <i>Network Neuroscience</i> ,1-29	5.6	o
24	Effects of classic psychedelic drugs on turbulent signatures in brain dynamics. <i>Network Neuroscience</i> ,1-42	5.6	o
23	Edge-centric analysis of stroke patients: An alternative approach for biomarkers of lesion recovery. <i>NeuroImage: Clinical</i> , <b>2022</b> , 35, 103055	5.3	o
22	Neural Plasticity in Human Brain Connectivity <b>2017</b> , 527-546		
21	Local Cortical Dynamics Related to Mental Illnesses <b>2010</b> , 321-339		
20	RATE AND GAMMA MODULATION IN ATTENTIONAL TASKS. <i>New Mathematics and Natural Computation</i> , <b>2009</b> , 05, 135-142	0.6	
19	A nonlinear markovian characterization of time series using neural networks. <i>Lecture Notes in Computer Science</i> , <b>1997</b> , 481-488	0.9	
18	Neuronal and Cortical Dynamical Mechanisms Underlying Brain Functions <b>2008</b> , 219-240		
17	Biased Competition and Cooperation: A Mechanism of Mammalian Visual Recognition? <b>2007</b> , 187-203		
16	Rest EEG Hidden Dynamics as a Discriminant for Brain Tumour Classification. <i>Perspectives in Neural Computing</i> , <b>2000</b> , 169-180		
15	Simultaneous Parallel Processing of Object and Position by Temporal Correlation. <i>Lecture Notes in Computer Science</i> , <b>2001</b> , 64-71	0.9	
14	The Spiking Search over Time and Space Model (sSoTS): Simulating Dual Task Experiments and the Temporal Dynamics of Preview Search. <i>Lecture Notes in Computer Science</i> , <b>2007</b> , 338-351	0.9	
13	Computational Neuroscience and Cognitive Brain Functions <b>2007</b> , 153-167		
12	Imaging Connectomics and the Understanding of Brain Diseases. <i>Advances in Experimental Medicine and Biology</i> , <b>2019</b> , 1192, 139-158	3.6	
11	Information Theory Based Regularizing Methods. <i>Perspectives in Neural Computing</i> , <b>1996</b> , 225-241		
10	Nonlinear Feature Extraction: Deterministic Neural Networks. <i>Perspectives in Neural Computing</i> , <b>1996</b> , 135-166		
9	Statistical Physics Theory of Supervised Learning and Generalization. <i>Perspectives in Neural Computing</i> , <b>1996</b> , 187-217		

- 8 Nonparametric data selection for improvement of parametric neural learning: A cumulant-surrogate method. *Lecture Notes in Computer Science*, **1996**, 121-126 0.9
- 7 Preliminaries of Information Theory and Neural Networks. *Perspectives in Neural Computing*, **1996**, 7-37
- 6 Information dynamics and neural techniques for data analysis. *Neural Network Systems Techniques and Applications*, **1998**, 305-351
- 5 Brain Dynamics at Rest: How Structure Shapes Dynamics 233-243
- 4 Traces of statistical learning in the brain's functional connectivity after artificial language exposure. *Neuropsychologia*, **2019**, 124, 246-253 3.2
- 3 Large-scale societal dynamics are reflected in human mood and brain.. *Scientific Reports*, **2022**, 12, 4646 4.9
- 2 Spontaneous Activity, Models of **2022**, 3289-3293
- 1 Multiscale Brain Connectivity **2022**, 2105-2107