List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Dynamic Sounds Capture the Boundaries of Peripersonal Space Representation in Humans. PLoS ONE, 2012, 7, e44306.	2.5	171
2	Role of short-term cardiovascular regulation in heart period variability: a modeling study. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H1479-H1493.	3.2	115
3	Acute cardiovascular response to isocapnic hypoxia. I. A mathematical model. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H149-H165.	3.2	105
4	Interpretable and lightweight convolutional neural network for EEG decoding: Application to movement execution and imagination. Neural Networks, 2020, 129, 55-74.	5.9	70
5	Transfer Entropy as a Measure of Brain Connectivity: A Critical Analysis With the Help of Neural Mass Models. Frontiers in Computational Neuroscience, 2020, 14, 45.	2.1	68
6	Extending peripersonal space representation without tool-use: evidence from a combined behavioral-computational approach. Frontiers in Behavioral Neuroscience, 2015, 9, 4.	2.0	65
7	EEG Alpha Power Is Modulated by Attentional Changes during Cognitive Tasks and Virtual Reality Immersion. Computational Intelligence and Neuroscience, 2019, 2019, 1-18.	1.7	65
8	An integrated model of the human ventilatory control system: the response to hypercapnia. Clinical Physiology, 2001, 21, 447-464.	0.7	60
9	A wavelet-based energetic approach for the analysis of biomedical signals: Application to the electroencephalogram and electro-oculogram. Applied Mathematics and Computation, 2009, 207, 42-62.	2.2	58
10	Neurocomputational approaches to modelling multisensory integration in the brain: A review. Neural Networks, 2014, 60, 141-165.	5.9	54
11	Theoretical analysis of rest and exercise hemodynamics in patients with total cavopulmonary connection. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H1018-H1034.	3.2	50
12	Neural bases of peri-hand space plasticity through tool-use: Insights from a combined computational–experimental approach. Neuropsychologia, 2010, 48, 812-830.	1.6	48
13	A mathematical model of CO ₂ effect on cardiovascular regulation. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2036-H2052.	3.2	46
14	Mathematical modeling of cardiovascular coupling: Central autonomic commands and baroreflex control. Autonomic Neuroscience: Basic and Clinical, 2011, 162, 66-71.	2.8	44
15	Visuotactile Representation of Peripersonal Space: A Neural Network Study. Neural Computation, 2010, 22, 190-243.	2.2	40
16	Recognition of Abstract Objects Via Neural Oscillators: Interaction Among Topological Organization, Associative Memory and Gamma Band Synchronization. IEEE Transactions on Neural Networks, 2009, 20, 316-335.	4.2	39
17	An emergent model of multisensory integration in superior colliculus neurons. Frontiers in Integrative Neuroscience, 2010, 4, 6.	2.1	39
18	A biologically inspired neurocomputational model for audiovisual integration and causal inference. European Journal of Neuroscience, 2017, 46, 2481-2498.	2.6	38

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19	An integrated model of the human ventilatory control system: the response to hypoxia. Clinical Physiology, 2001, 21, 465-477.	0.7	35
20	A wavelet based method for automatic detection of slow eye movements: A pilot study. Medical Engineering and Physics, 2006, 28, 860-875.	1.7	35
21	SHORT-TERM AUTONOMIC CONTROL OF CARDIOVASCULAR FUNCTION: A MINI-REVIEW WITH THE HELP OF MATHEMATICAL MODELS. Journal of Integrative Neuroscience, 2003, 02, 219-247.	1.7	34
22	Multisensory integration in the superior colliculus: a neural network model. Journal of Computational Neuroscience, 2009, 26, 55-73.	1.0	34
23	A theoretical study of multisensory integration in the superior colliculus by a neural network model. Neural Networks, 2008, 21, 817-829.	5.9	32
24	Hebbian mechanisms help explain development of multisensory integration in the superior colliculus: a neural network model. Biological Cybernetics, 2012, 106, 691-713.	1.3	31
25	Neural adaptation accounts for the dynamic resizing of peripersonal space: evidence from a psychophysical-computational approach. Journal of Neurophysiology, 2018, 119, 2307-2333.	1.8	31
26	A Neural Network Model of Ventriloquism Effect and Aftereffect. PLoS ONE, 2012, 7, e42503.	2.5	29
27	A neurocomputational analysis of the sound-induced flash illusion. NeuroImage, 2014, 92, 248-266.	4.2	28
28	Rapid Recalibration of Peri-Personal Space: Psychophysical, Electrophysiological, and Neural Network Modeling Evidence. Cerebral Cortex, 2020, 30, 5088-5106.	2.9	28
29	Role of the Baroreflex in Cardiovascular Instability: A Modeling Study. Cardiovascular Engineering (Dordrecht, Netherlands), 2001, 1, 101-115.	1.0	25
30	A computational study of multisensory maturation in the superior colliculus (SC). Experimental Brain Research, 2011, 213, 341-349.	1.5	25
31	Role of Tissue Hypoxia in Cerebrovascular Regulation: A Mathematical Modeling Study. Annals of Biomedical Engineering, 2001, 29, 563-574.	2.5	23
32	Alpha and theta mechanisms operating in internal-external attention competition. Journal of Integrative Neuroscience, 2021, 20, 1.	1.7	22
33	Multisensory Bayesian Inference Depends on Synapse Maturation during Training: Theoretical Analysis and Neural Modeling Implementation. Neural Computation, 2017, 29, 735-782.	2.2	20
34	Acute cardiovascular response to isocapnic hypoxia. II. Model validation. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H166-H175.	3.2	19
35	A Modeling Study of Bilirubin Kinetics During Molecular Adsorbent Recirculating System Sessions. Artificial Organs, 2006, 30, 285-300.	1.9	19
36	Wavelet Analysis of Electroencephalographic and Electro-Oculographic Changes During the Sleep Onset Period. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4006-10.	0.5	19

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37	A neural network for learning the meaning of objects and words from a featural representation. Neural Networks, 2015, 63, 234-253.	5.9	17
38	A theoretical analysis of the carotid body chemoreceptor response to O2 and CO2 pressure changes. Respiratory Physiology and Neurobiology, 2002, 130, 99-110.	1.6	16
39	A Computational Analysis of Neural Mechanisms Underlying the Maturation of Multisensory Speech Integration in Neurotypical Children and Those on the Autism Spectrum. Frontiers in Human Neuroscience, 2017, 11, 518.	2.0	16
40	Slow eye movements distribution during nocturnal sleep. Clinical Neurophysiology, 2011, 122, 1556-1561.	1.5	15
41	Development of a Bayesian Estimator for Audio-Visual Integration: A Neurocomputational Study. Frontiers in Computational Neuroscience, 2017, 11, 89.	2.1	15
42	The Directionality of Fronto-Posterior Brain Connectivity Is Associated with the Degree of Individual Autistic Traits. Brain Sciences, 2021, 11, 1443.	2.3	15
43	Integrating Information From Vision and Touch: A Neural Network Modeling Study. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 598-612.	3.2	14
44	A Lightweight Multi-Scale Convolutional Neural Network for P300 Decoding: Analysis of Training Strategies and Uncovering of Network Decision. Frontiers in Human Neuroscience, 2021, 15, 655840.	2.0	14
45	Automatic slow eye movement (SEM) detection of sleep onset in patients with obstructive sleep apnea syndrome (OSAS): Comparison between multiple sleep latency test (MSLT) and maintenance of wakefulness test (MWT). Sleep Medicine, 2010, 11, 253-257.	1.6	13
46	An integrated neural model of semantic memory, lexical retrieval and category formation, based on a distributed feature representation. Cognitive Neurodynamics, 2011, 5, 183-207.	4.0	13
47	Crossmodal Links between Vision and Touch in Spatial Attention: A Computational Modelling Study. Computational Intelligence and Neuroscience, 2010, 2010, 1-13.	1.7	12
48	Organization, Maturation, and Plasticity of Multisensory Integration: Insights from Computational Modeling Studies. Frontiers in Psychology, 2011, 2, 77.	2.1	12
49	Convolutional Neural Network for a P300 Brain-Computer Interface to Improve Social Attention in Autistic Spectrum Disorder. IFMBE Proceedings, 2020, , 1837-1843.	0.3	12
50	A Computational Model of the Lexical-Semantic System Based on a Grounded Cognition Approach. Frontiers in Psychology, 2010, 1, 221.	2.1	11
51	An improved algorithm for the automatic detection and characterization of slow eye movements. Medical Engineering and Physics, 2014, 36, 954-961.	1.7	11
52	From statistical regularities in multisensory inputs to peripersonal space representation and body ownership: Insights from a neural network model. European Journal of Neuroscience, 2021, 53, 611-636.	2.6	11
53	Deep learning-based EEG analysis: investigating P3 ERP components. Journal of Integrative Neuroscience, 2021, 20, 791-811.	1.7	11
54	Opioid-Induced Respiratory Depression: A Mathematical Model for Fentanyl. IEEE Transactions on Biomedical Engineering, 2004, 51, 1115-1128.	4.2	10

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55	Interaction Among Humoral and Neurogenic Mechanisms in Ventilation Control During Exercise. Annals of Biomedical Engineering, 2004, 32, 1286-1299.	2.5	10
56	Effect of cushing response on systemic arterial pressure. IEEE Engineering in Medicine and Biology Magazine, 2009, 28, 63-71.	0.8	10
57	Detection of sleep onset by analysis of slow eye movements: A preliminary study of MSLT recordings. Sleep Medicine, 2009, 10, 637-640.	1.6	10
58	Learning the lexical aspects of a second language at different proficiencies: A neural computational study. Bilingualism, 2013, 16, 266-287.	1.3	9
59	Modulation of brain alpha rhythm and heart rate variability by attention-related mechanisms. AIMS Neuroscience, 2019, 6, 1-24.	2.3	9
60	A Neural Network Model Can Explain Ventriloquism Aftereffect and Its Generalization across Sound Frequencies. BioMed Research International, 2013, 2013, 1-17.	1.9	8
61	The Relationship between Oscillations in Brain Regions and Functional Connectivity: A Critical Analysis with the Aid of Neural Mass Models. Brain Sciences, 2021, 11, 487.	2.3	8
62	Mathematical modeling and parameter estimation of levodopa motor response in patients with parkinson disease. PLoS ONE, 2020, 15, e0229729.	2.5	7
63	Decoding sensorimotor information from superior parietal lobule of macaque via Convolutional Neural Networks. Neural Networks, 2022, 151, 276-294.	5.9	7
64	Object segmentation and recovery via neural oscillators implementing the similarity and prior knowledge gestalt rules. BioSystems, 2006, 85, 201-218.	2.0	6
65	Audiovisual Rehabilitation in Hemianopia: A Model-Based Theoretical Investigation. Frontiers in Computational Neuroscience, 2017, 11, 113.	2.1	6
66	Relationship between electroencephalographic data and comfort perception captured in a Virtual Reality design environment of an aircraft cabin. Scientific Reports, 2022, 12, .	3.3	6
67	A Neural Network Model of Multisensory Representation of Peripersonal Space: Effect of tool use. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2735-9.	0.5	5
68	Possible mechanisms underlying tilt aftereffect in the primary visual cortex: A critical analysis with the aid of simple computational models. Vision Research, 2008, 48, 1456-1470.	1.4	5
69	The baroreflex contribution to spontaneous heart rhythm assessed with a mathematical model in rats. Autonomic Neuroscience: Basic and Clinical, 2008, 138, 24-30.	2.8	5
70	Cross-sensory inhibition or unisensory facilitation: A potential neural architecture of modality switch effects. Journal of Mathematical Psychology, 2020, 99, 102438.	1.8	5
71	A Novel Method to Assess Motor Cortex Connectivity and Event Related Desynchronization Based on Mass Models. Brain Sciences, 2021, 11, 1479.	2.3	5
72	The formation of categories and the representation of feature saliency: Analysis with a computational model trained with an Hebbian paradigm. Journal of Integrative Neuroscience, 2013, 12, 401-425.	1.7	4

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73	Event-related brain potential signaling unexpected timing of feedback: A source localization analysis. , 2015, 2015, 618-21.		4
74	Audiovisual integration in hemianopia: A neurocomputational account based on cortico-collicular interaction. Neuropsychologia, 2016, 91, 120-140.	1.6	4
75	Explaining the Effect of Likelihood Manipulation and Prior Through a Neural Network of the Audiovisual Perception of Space. Multisensory Research, 2019, 32, 111-144.	1.1	4
76	EEG Motor Execution Decoding via Interpretable Sinc-Convolutional Neural Networks. IFMBE Proceedings, 2020, , 1113-1122.	0.3	4
77	Sensory fusion: A neurocomputational approach. , 2016, , .		2
78	Multisensory perceptual awareness: Categorical or graded?. Cortex, 2019, 120, 169-180.	2.4	2
79	A neural network model of peri-hand space representation and its plastic properties related to tool use. , 2008, , .		1
80	A Semantic Model to Study Neural Organization of Language in Bilingualism. Computational Intelligence and Neuroscience, 2010, 2010, 1-10.	1.7	1
81	Sensory Fusion. , 2011, , 23-62.		1
82	Modulation of EEG Theta and Alpha Power by an Internal Attention Task with and Without Visual Distractors. IFMBE Proceedings, 2020, , 1105-1112.	0.3	1
83	The Representation of Objects in the Brain, and Its Link with Semantic Memory and Language: a Conceptual Theory with the Support of a Neurocomputational Model. , 2010, , .		0
84	Mathematical Models for Computational Neuroscience. , 2014, , 311-332.		0
85	A Neural Network Model of Peripersonal Space Representation Around Different Body Parts. IFMBE Proceedings, 2018, , 217-220.	0.3	0
86	Neural Networks and Connectivity among Brain Regions. Brain Sciences, 2022, 12, 346.	2.3	0
87	Title is missing!. , 2020, 15, e0229729.		0
88	Title is missing!. , 2020, 15, e0229729.		0
89	Title is missing!. , 2020, 15, e0229729.		0
90	Title is missing!. , 2020, 15, e0229729.		0