Guosheng Yi

List of Publications by Year
in descending order

69 papers	450 citations	933410 10 h-index	888047 17 g-index
69 all docs	69 docs citations	69 times ranked	478 citing authors

#	Article	IF	Citations
1	Analysis of complexity and dynamic functional connectivity based on resting-state EEG in early Parkinson's disease patients with mild cognitive impairment. Cognitive Neurodynamics, 2022, 16, 309-323.	4.0	10
2	Disrupted Control Architecture of Brain Network in Disorder of Consciousness. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 400-409.	4.9	5
3	Epileptic Seizure Detection Using Brain-Rhythmic Recurrence Biomarkers and ONASNet-Based Transfer Learning. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 979-989.	4.9	12
4	Effects of dendritic properties on spike train correlations in biophysically-based model neurons. International Journal of Modern Physics B, 2022, 36, .	2.0	1
5	The passive properties of dendrites modulate the propagation of slowly-varying firing rate in feedforward networks. Neural Networks, 2022, 150, 377-391.	5.9	0
6	An EEG-based systematic explainable detection framework for probing and localizing abnormal patterns in Alzheimer's disease. Journal of Neural Engineering, 2022, 19, 036007.	3.5	2
7	Recognition of complex surfaces based on multiscale temporal networks. , 2022, , .		0
8	Bio-inspired computing: A deep learning algorithm with the spike-frequency adaptation. , 2022, , .		3
9	Frequency-Dependent Energy Demand of Dendritic Responses to Deep Brain Stimulation in Thalamic Neurons: A Model-Based Study. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3056-3068.	11.3	4
10	An Embedded Multi-Core Real-Time Simulation Platform of Basal Ganglia for Deep Brain Stimulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1328-1340.	4.9	6
11	Propagation of spiking regularity in feedforward networks with recurrent connections. International Journal of Modern Physics B, 2021, 35, 2150101.	2.0	0
12	Asymptotic Input-Output Relationship Predicts Electric Field Effect on Sublinear Dendritic Integration of AMPA Synapses. Neural Computation, 2021, 33, 1-37.	2.2	3
13	A Data Driven Experimental System for Individualized Brain Stimulation Design and Validation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1848-1857.	4.9	4
14	Improving EEG-based Alzheimer's Disease Identification with Generative Adversarial Learning. , 2021, , .		2
15	Effect of local excitation-inhibition ratio on word recognition in hierarchical spiking neural network. , 2021, , .		0
16	Deep Multi-scale Feature Fusion Convolutional Neural Network for Automatic Epilepsy Detection Using EEG Signals. , 2020, , .		7
17	Frequency-dependent response in cortical network with periodic electrical stimulation. Chaos, 2020, 30, 073130.	2.5	3
18	Model Predictive Control for Seizure Suppression Based on Nonlinear Auto-Regressive Moving-Average Volterra Model. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2173-2183.	4.9	12

#	ARTICLE	IF	CITATIONS
19	Modelling the Neurons Activated by Transcranial Magnetic Stimulation. , 2020, , .		0
20	EEG Sub-band Abnormality of Early-stage Parkinson's Disease with Mild Cognitive Impairment. , 2020, , .		0
21	Kilohertz waveforms optimized to produce closed-state Na+Âchannel inactivation eliminate onset response in nerve conduction block. PLoS Computational Biology, 2020, 16, e1007766.	3.2	12
22	Characterization of network switching in disorder of consciousness at multiple time scales. Journal of Neural Engineering, 2020, 17, 026024.	3.5	15
23	How the Macroscopic Electric Field Shape Spatio-temporal Response of Neurons by Electroconvulsive Therapy. , 2020, , .		0
24	A Real-time Simulation Platform Design Based on Neural Mass Model for Deep Brain Stimulation. , 2020, , .		0
25	Title is missing!. , 2020, 16, e1007766.		0
26	Title is missing!. , 2020, 16, e1007766.		0
27	Title is missing!. , 2020, 16, e1007766.		0
28	Title is missing!. , 2020, 16, e1007766.		0
29	Efficient Implementation of Cerebellar Purkinje Cell With the CORDIC Algorithm on LaCSNN. Frontiers in Neuroscience, 2019, 13, 1078.	2.8	4
30	Deep Transcranial Magnetic Stimulation: Improved Coil Design and Assessment of the Induced Fields Using Realistic Head Model. , 2019, , .		0
31	Modulation of neuronal input-output function by subthreshold electric fields from dendritic sublinear integration. , 2019, , .		0
32	Digital Implementation of the Spiking Neural Network and Its Digit Recognition. , 2019, , .		3
33	Robust closed-loop control of spike-and-wave discharges in a thalamocortical computational model of absence epilepsy. Scientific Reports, 2019, 9, 9093.	3.3	21
34	Average firing rate rather than temporal pattern determines metabolic cost of activity in thalamocortical relay neurons. Scientific Reports, 2019, 9, 6940.	3.3	13
35	Energy Cost of Action Potential Generation and Propagation in Thalamocortical Relay Neurons During Deep Brain Stimulation. IEEE Transactions on Biomedical Engineering, 2019, 66, 3457-3471.	4.2	6
36	Real-time implementation of the cerebellum neural network. , 2019, , .		1

#	Article	IF	Citations
37	A novel astrocyte-mediated self-repairing CPG neural network. , 2019, , .		1
38	Real-time implementation of the Purkinje network on digital neuromorphic system. , 2019, , .		1
39	Metabolic Cost of Dendritic Ca2+ Action Potentials in Layer 5 Pyramidal Neurons. Frontiers in Neuroscience, 2019, 13, 1221.	2.8	5
40	Modulations of dendritic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml109" display="inline" overflow="scroll" altimg="si109.gif"><mml:msup><mml:mrow><mml:mi mathvariant="normal">Ca</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math> spike with weak electric fields in layer 5 pyramidal cells. Neural Networks, 2019, 110, 8-18.	5.9	9
41	Modelling of the Electromagnetic Field Distributions Induced by Different Transcranial Magnetic Stimulation Coil Configurations. , 2018, , .		1
42	Effect of Neural Intrinsic Dynamics on Ionic Energy Consumptions in Action Potential Generations. , 2018, , .		0
43	Effect of inhibitory firing patterns on the stochastic resonance in feed-forward-loop neuronal network motifs. , 2018, , .		1
44	Twin Coil Design Considerations for Depth and Focality in Transcranial Magnetic Stimulation. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	5
45	Frequency-dependent antidromic activation in thalamocortical relay neurons: effects of synaptic inputs. Journal of Neural Engineering, 2018, 15, 056001.	3.5	16
46	Contributions of adaptation currents to dynamic spike threshold on slow timescales: Biophysical insights from conductance-based models. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 81-99.	3.3	1
47	The dynamical analysis of modified two-compartment neuron model and FPGA implementation. Physica A: Statistical Mechanics and Its Applications, 2017, 484, 199-214.	2.6	10
48	EEG-based functional networks evoked by acupuncture at ST 36: A data-driven thresholding study. International Journal of Modern Physics B, 2017, 31, 1750187.	2.0	4
49	Action potential initiation in a two-compartment model of pyramidal neuron mediated by dendritic Ca2+ spike. Scientific Reports, 2017, 7, 45684.	3.3	13
50	Estimation of key parameters in adaptive neuron model according to firing patterns based on improved particle swarm optimization algorithm. Modern Physics Letters B, 2017, 31, 1750060.	1.9	6
51	Complexity of resting-state EEG activity in the patients with early-stage Parkinsonâ€™s disease. Cognitive Neurodynamics, 2017, 11, 147-160.	4.0	41
52	Comprehensive Survey on Improved Focality and Penetration Depth of Transcranial Magnetic Stimulation Employing Multi-Coil Arrays. International Journal of Environmental Research and Public Health, 2017, 14, 1388.	2.6	11
53	Dendritic Properties Control Energy Efficiency of Action Potentials in Cortical Pyramidal Cells. Frontiers in Cellular Neuroscience, 2017, 11, 265.	3.7	22
54	The comparison of electric fields distribution applying various coil configurations in Deep Transcranial magnetic stimulation. , 2017, , .		1

#	Article	IF	Citations
55	Functional connectivity estimation with general linear model. , 2016, , .		0
56	Minimum energy control for a two-compartment neuron to extracellular electric fields. Communications in Nonlinear Science and Numerical Simulation, 2016, 40, 138-150.	3.3	8
57	Dynamics of spike threshold in a two-compartment neuron with passive dendrite. Communications in Nonlinear Science and Numerical Simulation, 2016, 40, 100-111.	3.3	11
58	Geometric properties-dependent neural synchrony modulated by extracellular subthreshold electric field. International Journal of Modern Physics B, 2016, 30, 1650142.	2.0	1
59	Modulation of spike coding by subthreshold extracellular electric fields and neuronal morphology. International Journal of Modern Physics B, 2015, 29, 1550148.	2.0	1
60	Input-output relation and energy efficiency in the neuron with different spike threshold dynamics. Frontiers in Computational Neuroscience, 2015, 9, 62.	2.1	22
61	Spike-frequency adaptation of a two-compartment neuron modulated by extracellular electric fields. Biological Cybernetics, 2015, 109, 287-306.	1.3	32
62	Action potential threshold of wide dynamic range neurons in rat spinal dorsal horn evoked by manual acupuncture at ST36. Neurocomputing, 2015, 166, 201-209.	5.9	2
63	Dependence of sinusoidal electric field effect on neuronal morphological properties. International Journal of Modern Physics B, 2015, 29, 1550092.	2.0	2
64	Spike initiating dynamics of the neuron with different adaptation mechanisms to extracellular electric fields. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 574-586.	3.3	10
65	Biophysical Insights into How Spike Threshold Depends on the Rate of Membrane Potential Depolarization in Type I and Type II Neurons. PLoS ONE, 2015, 10, e0130250.	2.5	10
66	EFFECTS OF EXTREMELY LOW-FREQUENCY MAGNETIC FIELDS ON THE RESPONSE OF A CONDUCTANCE-BASED NEURON MODEL. International Journal of Neural Systems, 2014, 24, 1450007.	5.2	15
67	Ordinal Pattern Based Complexity Analysis for EEG Activity Evoked by Manual Acupuncture in Healthy Subjects. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450018.	1.7	9
68	Multi-scale order recurrence quantification analysis of EEG signals evoked by manual acupuncture in healthy subjects. Cognitive Neurodynamics, 2013, 7, 79-88.	4.0	27
69	Effects of hyperpolarization-active cation current (Ih) on sublinear dendritic integration under applied electric fields. Nonlinear Dynamics, 0, , 1.	5.2	3