Guizhi Xu

List of Publications by Year
in descending order

141 papers	864 citations	777949 13 h-index	759306 22 g-index
142 all docs	142 docs citations	142 times ranked	923 citing authors

#	ARTICLE	IF	CITATIONS
1	Design of Transcranial Magnetic Stimulation Coils for Mouse With Improved Stimulus Focus and Intensity. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	2
2	Dynamic responses of neurons in different states under magnetic field stimulation. Journal of Computational Neuroscience, 2022, 50, 109-120.	0.6	5
3	Theoretical Analysis of Coupled Modified Hindmarsh-rose Model Under Transcranial Magnetic-acoustic Electrical Stimulation. International Journal of Circuits, Systems and Signal Processing, 2022, 16, 610-617.	0.2	0
4	Improving Cross-State and Cross-Subject Visual ERP-Based BCI With Temporal Modeling and Adversarial Training. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 369-379.	2.7	7
5	A fisher linear discriminant analysis classifier fused with naÃ¯ve Bayes for simultaneous detection in an asynchronous brain-computer interface. Journal of Neuroscience Methods, 2022, 371, 109496.	1.3	10
6	Complex spiking neural networks with synaptic time-delay based on anti-interference function. Cognitive Neurodynamics, 2022, 16, 1485-1503.	2.3	2
7	An Efficient Convolutional Neural Network Model for Brain MRI Segmentation. WSEAS Transactions on Biology and Biomedicine, 2022, 19, 77-84.	0.3	2
8	Finite-Time Synchronization of Fractional-Order Complex-Valued Cohen-Grossberg Neural Networks with Mixed Time Delays and State-Dependent Switching. Advances in Mathematical Physics, 2022, 2022, 1-23.	0.4	1
9	Corticospinal excitability modulation by pairing peripheral nerve stimulation with cortical states of movement initiation. Journal of Physiology, 2021, 599, 2471-2482.	1.3	11
10	The Effect of SOA on An Asynchronous ERP and VEP-Based BCI. IEEE Access, 2021, 9, 9972-9981.	2.6	5
11	Antiinterference Function of Scale-Free Spiking Neural Network Under AC Magnetic Field Stimulation. IEEE Transactions on Magnetics, 2021, 57, 1-5.	1.2	5
12	Brain Tumor Detection and Classification by Hybrid CNN-DWA Model Using MR Images. Current Medical Imaging, 2021, 17, 1248-1255.	0.4	14
13	Electroencephalogram (EEG) Based Imagined Speech Decoding and Recognition. Journal of Applied Materials and Technology, 2021, 2, 74-84.	1.4	5
14	Immediate and cumulative effects of high-frequency repetitive transcranial magnetic stimulation on cognition and neuronal excitability in mice. Neuroscience Research, 2021, 173, 90-98.	1.0	7
15	Effects of Transcranial Direct Current Stimulation on Stroke Based on Brain Functional Networks. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	0
16	Anti-injury function of complex spiking neural networks under targeted attack. Neurocomputing, 2021, 462, 260-271.	3.5	4
17	The effects of repetitive transcranial magnetic stimulation on the cognition and neuronal excitability of mice. Electromagnetic Biology and Medicine, 2020, 39, 9-19.	0.7	9
18	The dynamic properties of a brain network during working memory based on the algorithm of cross-frequency coupling. Cognitive Neurodynamics, 2020, 14, 215-228.	2.3	23

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19	Analysis and design of nanofluid-filled power transformers. Electrical Engineering, 2020, 102, 321-329.	1.2	3
20	The Effect of the Graphic Structures of Humanoid Robot on N200 and P300 Potentials. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1944-1954.	2.7	6
21	Effects of tDCS on Brain Functional Network of Patients After Stroke. IEEE Access, 2020, 8, 205625-205634.	2.6	7
22	Self-Compassion Demonstrating a Dual Relationship with Pain Dependent on High-Frequency Heart Rate Variability. Pain Research and Management, 2020, 2020, 1-6.	0.7	10
23	The Study of Influence of Sound on Visual ERP-Based Brain Computer Interface. Sensors, 2020, 20, 1203.	2.1	10
24	Noise suppression ability and its mechanism analysis of scale-free spiking neural network under white Gaussian noise. PLoS ONE, 2020, 15, e0244683.	1.1	3
25	Automatic food detection in egocentric images using artificial intelligence technology. Public Health Nutrition, 2019, 22, 1-12.	1.1	62
26	Deep Learning Algorithm for Brain Tumor Detection and Analysis Using MR Brain Images. , 2019, , .		5
27	Inhibitory effect of ultrasonic stimulation on the voltage-dependent potassium currents in rat hippocampal CA1 neurons. BMC Neuroscience, 2019, 20, 3.	0.8	4
28	An adjustable degrees-of-freedom numerical method for computing the temperature distribution of electrical devices. Electrical Engineering, 2019, 101, 507-516.	1.2	3
29	Electroencephalogram Characteristics Induced by Different Magnetic Stimulation Modes of Acupuncture Point. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	2
30	Changes in Brain Functional Networks of Insomniacs Induced by Magnetic Stimulation at Acupoints. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.1	9
31	Improved Methods for Brain Tumor Detection and Analysis Using MR Brain Images. Biomedical and Pharmacology Journal, 2019, 12, 1621-1631.	0.2	2
32	Effect of Transcranial Ultrasonic–Magnetic Stimulation on Two Types of Neural Firing Behaviors in Modified Izhikevich Model. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	9
33	Magnetic Stimulation at Acupoint Could Improve Insomnia: a Experimental Study. , 2018, , .		0
34	Effects of Magnetic Stimulation on Insomnia Based on Brain Functional Networks. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	1
35	Effect of Transcranial Magnetic Stimulation of Acupuncture Point on Brain Network. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	3
36	Magnetic field analysis and optimum design of adjustable magnetic liquid damper. , 2017, , .		1

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37	Design and analysis of a novel 2-D magnetization structure for magnetic properties measurement in wide range of frequency. , 2017, , .		0
38	Reconstruction of acoustic inhomogeneous property in Magnetoacoustic Tomography with Magnetic Induction. International Journal of Applied Electromagnetics and Mechanics, 2017, 56, 131-140.	0.3	1
39	Core loss calculation of the soft ferrite cores in high frequency transformer under non-sinusoidal excitations. , 2017, , .		12
40	Electrical impedance tomography reconstruction using hybrid variation regularization algorithm. , 2016, , .		0
41	A hardware implementation method of the Aihara chaotic neural network. , 2016, , .		1
42	Acoustic source reconstruction in magnetoacoustic Imaging. , 2016, , .		0
43	A forward solution of acoustic inhomogeneity in magnetoacoustic tomography with magnetic induction base on GFEM. , 2016, , .		0
44	The application and design strategy of bio-inspired electromagnetic protection technology based on cell signal transduction. , 2016, , .		0
45	Ultrasound transducer and amplifier design in transcranial ultrasound stimulation system. , 2016, , .		1
46	Design of a new low-intensity focused ultrasound stimulation system with homogeneous magnetic field. , 2016, , .		1
47	The study of magnetoacoustic tomography with magnetic induction through vector source reconstruction based on real model of breast. , 2016, , .		0
48	Functional brain network analysis during auditory oddball task. , 2016, , .		6
49	Forward Solver in Magnetoacoustic Tomography With Magnetic Induction by Generalized Finite-Element Method. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	5
50	Design on Magnetic Coupling Resonance Wireless Energy Transmission and Monitoring System for Implanted Devices. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	19
51	Optimized Excitation Mode for Generalized Back Projection Algorithm in 3-D EIT. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	2
52	An Implementation of Generalized Back Projection Algorithm for the 2-D Anisotropic EIT Problem. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	2
53	Hemodynamic Parameter Estimation From Magnetic Resonance Perfusion Imaging With the Tikhonov Regularization Method. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	8
54	The anterior contralateral response improves performance in a single trial auditory oddball BMI. Biomedical Signal Processing and Control, 2015, 22, 74-84.	3.5	10

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55	Brain Responses Evoked by Different-Frequency Magnetic Stimulation at an Acupuncture Point. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	7
56	A Numerical Computation Forward Problem Model of Electrical Impedance Tomography Based on Generalized Finite Element Method. IEEE Transactions on Magnetics, 2014, 50, 1045-1048.	1.2	12
57	Stable Frequency Transmission Emerging from Spiking-Timing-Dependent Plasticity in Spiking Neural Network. Advances in Intelligent Systems and Computing, 2014, , 361-370.	0.5	0
58	Correlation dimension analysis of EEG signals induced by electrical acupuncture. , 2013, , .		1
59	Finite element modeling and analyzing for lumbar muscle electrical activity. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 33, 106-115.	0.5	0
60	Boundary image reconstruction based on the nonmonotonic and self-adaptive trust region method for electrical impedance tomography. Physiological Measurement, 2013, 34, 951-962.	1.2	3
61	Boundary Image Reconstruction Based on Trust Region Method for Electrical Impedance Tomography. , 2012, , .		0
62	Research on auditory BCI based on wavelet transform. , 2012, , .		2
63	Brain Evoked Potentials under Magnetic Stimulation at Acupuncture Point and at Mock Point. , 2012, , .		0
64	The Design and Research of a New Kind Small Size Resonator Used in Magnetic Coupling Resonance Wireless Energy Transmission System. IEEE Transactions on Magnetics, 2012, 48, 4030-4033.	1.2	8
65	The Application of Magnetic Resonance Perfusion Imaging in the Estimation of Brain Function Using SVD Method. IEEE Transactions on Magnetics, 2012, 48, 2850-2853.	1.2	3
66	Tissue Detection in MR Images Based on an Improved SVM. , 2012, , .		1
67	Forward Problem Model of Human Thorax during Breath in Electrical Impedance Tomography. , 2012, , .		1
68	Study of denoising algorithm for MR image based on Contourlet Transform. , 2012, , .		0
69	EEG Characteristics Under Magnetic Stimulation at Acupuncture Point and at Mock Point. IEEE Transactions on Magnetics, 2012, 48, 2857-2860.	1.2	2
70	Development of Electromagnetic Environment of Three Phase Power Lines for Bio-Effects Evaluation. , 2012, , .		0
71	On 2D Simulation Study of EIE Based on Sensitivity Matrix Algorithm. , 2012, , .		0
72	Motor Imagery BCI Research Based on Sample Entropy and SVM. , 2012, , .		15

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73	An Approach to 3-D EIT Based on Generalized Back-Projection Method via Node Analysis. , 2012, , .		1
74	EEG theta-band phase synchronization during electrical acupuncture in humans. , 2012, , .		1
75	Analysis of Double Eight-Figure Coil for Transcranial Magnetic Stimulation Based on Realistic Head Model. , 2012, , .		1
76	A Contrastive Studies between Magnetic Coupling Resonance and Electromagnetic Induction in Wireless Energy Transmission. , 2012, , .		4
77	A Node Jacobian Back-Projection Algorithm for Beast Imaging with Electrical Impedance Tomography. , 2012, , .		0
78	Analysis of Wireless Energy Transmission for Implantable Device Based on Coupled Magnetic Resonance. IEEE Transactions on Magnetics, 2012, 48, 723-726.	1.2	35
79	Computation of a 3-D Model for Lung Imaging With Electrical Impedance Tomography. IEEE Transactions on Magnetics, 2012, 48, 651-654.	1.2	19
80	Feature Extraction of Brain-Computer Interface based on Second Order Blind Identification and ICA. , 2011, , .		0
81	GA-SVM based feature selection and parameters optimization for BCI research. , 2011, , .		5
82	Motor Imagery BCI Research Based on Hilbert-Huang Transform and Genetic Algorithm. , 2011, , .		7
83	Implementation of Generalized Back Projection Algorithm in 3-D EIT. IEEE Transactions on Magnetics, 2011, 47, 1466-1469.	1.2	8
84	Design and FEM Analysis of a New Distributed Vernier Traveling Wave Induction Heater for Heating Moving Thin Strips. IEEE Transactions on Magnetics, 2011, 47, 2612-2615.	1.2	5
85	Enhanced Acoustic Emission Detection Induced by Electromagnetic Stimulation With External Magnetic Field. IEEE Transactions on Magnetics, 2011, 47, 3284-3287.	1.2	6
86	Activation of Cerebral Cortex Evoked by Magnetic Stimulation at Acupuncture Point. IEEE Transactions on Magnetics, 2011, 47, 3052-3055.	1.2	7
87	Tumor Detection in MR Images Using One-Class Immune Feature Weighted SVMs. IEEE Transactions on Magnetics, 2011, 47, 3849-3852.	1.2	46
88	Sample Entropy of EEG Based on Acupuncturing. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	3
89	Event-Related Potentials Responses of Acupuncturing Shenmen and Neiguan. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	0
90	Complexity Analysis of EEG Under Magnetic Stimulation at Acupoints. IEEE Transactions on Applied Superconductivity, 2010, 20, 1029-1032.	1.1	8

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91	Design and analysis of resonant coupling wireless power transmission system. , 2010, , .		1
92	Study on the Feasibility to Detect Cancer Tumors by Combining Nanotechnology With SQUID. IEEE Transactions on Applied Superconductivity, 2010, 20, 1956-1959.	1.1	1
93	Three dimensional detection and imaging for human lung based on node back-projection algorithm with a 64 electrodes EIT system. , 2010, , .		1
94	Optimal design of energy transmission system for implantable device base on WiTricity. , 2010, , .		6
95	Simulation study of EIT inverse problem based on Bayesian method. , 2010, , .		0
96	Modeling and Experimental Analysis of Helical Resonator for Wireless Power Transmission System. , 2010, , .		1
97	Implementation of Generalized Back Projection Algorithm in 3D EIT Model. , 2010, , .		0
98	Circular Coil Array Model for Transcranial Magnetic Stimulation. IEEE Transactions on Applied Superconductivity, 2010, 20, 829-833.	1.1	25
99	Feature extraction of brain-computer interface based on improved multivariate adaptive autoregressive models. , 2010, , .		15
100	Analysis for Magnetic Stimulation Effects on Acupoint. IEEE Transactions on Applied Superconductivity, 2010, 20, 802-805.	1.1	1
101	Research of Acupuncturing Based on Hilbert-Huang Transform. Lecture Notes in Computer Science, 2010, , 131-138.	1.0	0
102	Effect of EEG with the Acupuncture of Neiguan and Shenmen. , 2009, , .		0
103	Somatosensory-evoked potentials and cortical activities evoked by magnetic stimulation on acupoint in human. , 2009, 2009, 3445-8.		2
104	Smoothness processing of infrared image based on AMSS. , 2009, 2009, 1420-3.		0
105	Effects of Electromagnetic Field of UHV Transmission Lines Exposure on Testis Tissue in Mice. IEEE Transactions on Magnetics, 2009, 45, 4853-4856.	1.2	4
106	Complexity Analysis of Magnetic Stimulation at the Acupoint of Zusanli (St36) on EEG. IEEE Transactions on Magnetics, 2009, 45, 4829-4832.	1.2	7
107	Optimization of Array Magnetic Coil Design for Functional Magnetic Stimulation Based on Improved Genetic Algorithm. IEEE Transactions on Magnetics, 2009, 45, 4849-4852.	1.2	26
108	Coupling and compensation analysis of transcutaneous Energy Transmission for implantable artificial heart. , 2009, , .		0

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109	Detection of magnetic nanoparticles with magnetoencephalography. Journal of Magnetism and Magnetic Materials, 2008, 320, 1472-1478.	1.0	13
110	Three dimensional electrical impedance tomography in thorax complete model. , 2008, 2008, 466-9.		0
111	Development of acupuncture-reading with EEG, MRI and PET. , 2008, , .		2
112	Enhancement of Infrared Image Based on the Retinex Theory. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3315-8.	0.5	6
113	A 128-Electrode Three Dimensional Electrical Impedance Tomography System. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4386-9.	0.5	9
114	To Detect Lung Ventilation with Multi-frequency EIT System. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4161-4.	0.5	1
115	Electromagnetic Field Simulation of 3D Realistic Head Model During Transcranial Magnetic Stimulation. , 2007, , .		7
116	Research on Event Related Potential Elicited by Number Recognizing and Arithmetic Calculating. , 2007, , .		3
117	Feature Extraction of Mental Task in BCI Based on the Method of Approximate Entropy. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1941-4.	0.5	7
118	3D Reconstruction of Head MRI Based on One Class Support Vector Machine with Immune Algorithm. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6016-9.	0.5	8
119	An ERP Study of Face Expression. , 2007, , .		2
120	A New Algorithm to Reconstruct EIT Images: Node-Back-Projection Algorithm. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4390-3.	0.5	5
121	Effect of Magnetic Stimulation at SHENMEN Point on the Electroencephalogram. , 2007, , .		1
122	3D realistic head model simulation based on transcranial magnetic stimulation. , 2006, Suppl, 6469-72.		9
123	Resistivity Parameters Estimation Based on 2D Real Head Model Using Improved Differential Evolution Algorithm. , 2006, Suppl, 6720-3.		1
124	Event-Related Potential Studies of Attention to Shape Under Different Stimuli Tasks. , 2006, Suppl, 6618-21.		3
125	Forward Problem of Three Dimensional EIT in Thorax Model. , 2006, Suppl, 6627-30.		4
126	Multi-frequency EIT Hardware System Based on DSP. , 2006, Suppl, 6677-80.		10

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127	Using Polynomial Curve Fitting Method to Improve Image Quality in EIT. , 2006, Suppl, 6769-72.		5
128	Adaptive Template Filtering Method for MRI. , 2006, 2006, 1371-4.		5
129	Combining Nonlinear Dimensionality Reduction with Wavelet Network to Solve EEG Inverse Problem. , 2006, 2006, 4245-8.		4
130	Threshold Optimization of Adaptive Template Filtering for MRI Based on Intelligent Optimization Algorithm. , 2006, 2006, 4763-6.		1
131	Tissue Conductivity Estimation in Two-Dimension Head Model Based on Support Vector Machine. , 2006, 2006, 1130-3.		1
132	Classifying the multiplicity of the EEG source models using sphere-shaped support vector Machines. IEEE Transactions on Magnetics, 2005, 41, 1912-1915.	1.2	14
133	3-D electrical impedance tomography forward problem with finite element method. IEEE Transactions on Magnetics, 2005, 41, 1832-1835.	1.2	35
134	A novel combination method of electrical impedance tomography inverse problem for brain imaging. IEEE Transactions on Magnetics, 2005, 41, 1848-1851.	1.2	39
135	The Acquisition Hardware System with Direct Digital Synthesis and Filtered Back-Projection Imaging in Electrical Impedance Tomography. , 2005, 2005, 7758-61.		6
136	Electrical Characteristics of Real Head Model Based on Electrical Impedance Tomography. IEEE Transactions on Applied Superconductivity, 2004, 14, 1617-1620.	1.1	3
137	EEG source reconstruction based on the boundary-element method and weighted minimum norm approaches. IEEE Transactions on Magnetics, 2003, 39, 1547-1550.	1.2	7
138	Magnetostrictive and magnetic properties of the pseudobinary compounds PrxTb1â˜'xFe2 and Pr0.15TbxDy0.85â˜'xFe2. Journal of Applied Physics, 1998, 83, 7753-7756.	1.1	29
139	Magnetic Field Analysis of the Realistic Head Model Based on Transcranial Magnetic Stimulation. , 0, , .		0
140	Using Polynomial Curve Fitting Method to Improve Image Quality in EIT. , 0, , .		3
141	Repetitive transcranial magnetic stimulation enhances the neuronal excitability of mice by regulating dynamic characteristics of Granule cellsâ€™ Ion channels. Cognitive Neurodynamics, 0, , .	2.3	0