Chang-Hwan Im

List of Publications by Year in Descending Order

194 papers	**3,388** citations	**32** h-index	**48** g-index
218 ext. papers	**4,277** ext. citations	**3.3** avg, IF	**5.67** L-index

#	Paper	IF	Citations
194	Classification of Individual's discrete emotions reflected in facial microexpressions using electroencephalogram and facial electromyogram. *Expert Systems With Applications*, **2022**, 188, 116101	7.8	0
193	Novel Hybrid Brain-Computer Interface for Virtual Reality Applications Using Steady-State Visual-Evoked Potential-Based Brain-Computer Interface and Electrooculogram-Based Eye Tracking for Increased Information Transfer Rate.. *Frontiers in Neuroinformatics*, **2022**, 16, 758537	3.9	3
192	Multipair transcranial temporal interference stimulation for improved focalized stimulation of deep brain regions: A simulation study.. *Computers in Biology and Medicine*, **2022**, 143, 105337	7	1
191	Enhanced Performance by Interpretable Low-Frequency Electroencephalogram Oscillations in the Machine Learning-Based Diagnosis of Post-traumatic Stress Disorder.. *Frontiers in Neuroinformatics*, **2022**, 16, 811756	3.9	
190	Novel Signal-to-Signal translation method based on StarGAN to generate artificial EEG for SSVEP-based brain-computer interfaces. *Expert Systems With Applications*, **2022**, 203, 117574	7.8	1
189	EEG response to game-craving according to personal preference for games. *Social Cognitive and Affective Neuroscience*, **2021**, 16, 995-1005	4	1
188	Comparative analysis of default mode networks in major psychiatric disorders using resting-state EEG. *Scientific Reports*, **2021**, 11, 22007	4.9	1
187	Influence of the Number of Channels and Classification Algorithm on the Performance Robustness to Electrode Shift in Steady-State Visual Evoked Potential-Based Brain-Computer Interfaces. *Frontiers in Neuroinformatics*, **2021**, 15, 750839	3.9	1
186	In-vivo estimation of tissue electrical conductivities of a rabbit eye for precise simulation of electric field distributions during ocular iontophoresis. *International Journal for Numerical Methods in Biomedical Engineering*, **2021**, e3540	2.6	0
185	Subject-Independent Functional Near-Infrared Spectroscopy-Based Brain-Computer Interfaces Based on Convolutional Neural Networks. *Frontiers in Human Neuroscience*, **2021**, 15, 646915	3.3	4
184	Multi-channel transorbital electrical stimulation for effective stimulation of posterior retina. *Scientific Reports*, **2021**, 11, 9745	4.9	3
183	A Hybrid Brain-Computer Interface for Real-Life Meal-Assist Robot Control. *Sensors*, **2021**, 21,	3.8	6
182	Estimation of Emotional Arousal Changes of a Group of Individuals During Movie Screening Using Steady-State Visual-Evoked Potential. *Frontiers in Neuroinformatics*, **2021**, 15, 731236	3.9	0
181	Classification of Gamers Using Multiple Physiological Signals: Distinguishing Features of Internet Gaming Disorder. *Frontiers in Psychology*, **2021**, 12, 714333	3.4	0
180	Performance enhancement of facial electromyogram-based facial-expression recognition for social virtual reality applications using linear discriminant analysis adaptation. *Virtual Reality*, **2021**, 1-14	6	2
179	Riemannian classifier enhances the accuracy of machine-learning-based diagnosis of PTSD using resting EEG. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2020**, 102, 109960	5.5	6
178	Altered Cortical Thickness-Based Individualized Structural Covariance Networks in Patients with Schizophrenia and Bipolar Disorder. *Journal of Clinical Medicine*, **2020**, 9,	5.1	7

177	Toward a compact hybrid brain-computer interface (BCI): Performance evaluation of multi-class hybrid EEG-fNIRS BCIs with limited number of channels. *PLoS ONE*, **2020**, 15, e0230491	3.7	16
176	Performance Improvement of Near-Infrared Spectroscopy-Based Brain-Computer Interface Using Regularized Linear Discriminant Analysis Ensemble Classifier Based on Bootstrap Aggregating. *Frontiers in Neuroscience*, **2020**, 14, 168	5.1	8
175	. *IEEE Access*, **2020**, 8, 62065-62075	3.5	10
174	Development of an Online Home Appliance Control System Using Augmented Reality and an SSVEP-Based Brain-Computer Interface **2020**,		6
173	Prediction of Individual User's Dynamic Ranges of EEG Features from Resting-State EEG Data for Evaluating Their Suitability for Passive Brain-Computer Interface Applications. *Sensors*, **2020**, 20,	3.8	3
172	Development of a Brain-Computer Interface Toggle Switch with Low False-Positive Rate Using Respiration-Modulated Photoplethysmography. *Sensors*, **2020**, 20,	3.8	7
171	Individually customized transcranial temporal interference stimulation for focused modulation of deep brain structures: a simulation study with different head models. *Scientific Reports*, **2020**, 10, 11730	4.9	12
170	Altered Cortical Functional Networks in Patients With Schizophrenia and Bipolar Disorder: A Resting-State Electroencephalographic Study. *Frontiers in Psychiatry*, **2020**, 11, 661	5	6
169	Performance Improvement of Near-Infrared Spectroscopy-Based Brain-Computer Interfaces Using Transcranial Near-Infrared Photobiomodulation With the Same Device. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2020**, 28, 2608-2614	4.8	2
168	Design of Wearable EEG Devices Specialized for Passive Brain-Computer Interface Applications. *Sensors*, **2020**, 20,	3.8	10
167	Interhemispheric and Intrahemispheric Connectivity From the Left Pars Opercularis Within the Language Network Is Modulated by Transcranial Stimulation in Healthy Subjects. *Frontiers in Human Neuroscience*, **2020**, 14, 63	3.3	1
166	Latent awareness: Early conscious access to motor preparation processes is linked to the readiness potential. *NeuroImage*, **2019**, 202, 116140	7.9	8
165	Machine-learning-based classification between post-traumatic stress disorder and major depressive disorder using P300 features. *NeuroImage: Clinical*, **2019**, 24, 102001	5.3	13
164	fNIRS Evidence for Recognizably Different Positive Emotions. *Frontiers in Human Neuroscience*, **2019**, 13, 120	3.3	37
163	Cortical volume and 40-Hz auditory-steady-state responses in patients with schizophrenia and healthy controls. *NeuroImage: Clinical*, **2019**, 22, 101732	5.3	15
162	Electroencephalography-based endogenous brain-computer interface for online communication with a completely locked-in patient. *Journal of NeuroEngineering and Rehabilitation*, **2019**, 16, 18	5.3	29
161	New Strategy for Finite Element Mesh Generation for Accurate Solutions of Electroencephalography Forward Problems. *Brain Topography*, **2019**, 32, 354-362	4.3	0
160	Machine-Learning-Based Detection of Craving for Gaming Using Multimodal Physiological Signals: Validation of Test-Retest Reliability for Practical Use. *Sensors*, **2019**, 19,	3.8	4

141	New Method for Pure-Tone Audiometry Using Electrooculogram: A Proof-of-Concept Study. *Sensors*, **2018**, 18,	3.8	2
140	Prediction Method of Walking Speed at Swing Phase using Soleus Electromyogram Signal at Previous Stance Phase. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 2308-2311	0.9	3
139	On the Feasibility of Using an Ear-EEG to Develop an Endogenous Brain-Computer Interface. *Sensors*, **2018**, 18,	3.8	7
138	Development of an electrooculogram-based human-computer interface using involuntary eye movement by spatially rotating sound for communication of locked-in patients. *Scientific Reports*, **2018**, 8, 9505	4.9	4
137	Performance Prediction for a Near-Infrared Spectroscopy-Brain-Computer Interface Using Resting-State Functional Connectivity of the Prefrontal Cortex. *International Journal of Neural Systems*, **2018**, 28, 1850023	6.2	13
136	Altered Network Characteristics of Spike-Wave Discharges in Juvenile Myoclonic Epilepsy. *Clinical EEG and Neuroscience*, **2017**, 48, 111-117	2.3	11
135	Real-Time "Eye-Writing" Recognition Using Electrooculogram. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2017**, 25, 37-48	4.8	44
134	Brain Areas Responsible for Vigilance: An EEG Source Imaging Study. *Brain Topography*, **2017**, 30, 343-354	2.3	13
133	Clinical feasibility of brain-computer interface based on steady-state visual evoked potential in patients with locked-in syndrome: Case studies. *Psychophysiology*, **2017**, 54, 444-451	4.1	25
132	COMETS2: An advanced MATLAB toolbox for the numerical analysis of electric fields generated by transcranial direct current stimulation. *Journal of Neuroscience Methods*, **2017**, 277, 56-62	3	40
131	Development of an electrooculogram-based eye-computer interface for communication of individuals with amyotrophic lateral sclerosis. *Journal of NeuroEngineering and Rehabilitation*, **2017**, 14, 89	5.3	22
130	An emergency call system for patients in locked-in state using an SSVEP-based brain switch. *Psychophysiology*, **2017**, 54, 1632-1643	4.1	22
129	Performance enhancement of a brain-computer interface using high-density multi-distance NIRS. *Scientific Reports*, **2017**, 7, 16545	4.9	35
128	Disrupted cortical brain network in post-traumatic stress disorder patients: a resting-state electroencephalographic study. *Translational Psychiatry*, **2017**, 7, e1231	8.6	19
127	Global Electroencephalography Synchronization as a New Indicator for Tracking Emotional Changes of a Group of Individuals during Video Watching. *Frontiers in Human Neuroscience*, **2017**, 11, 577	3.3	6
126	Estimation of Symptom Severity Scores for Patients with Schizophrenia Using ERP Source Activations during a Facial Affect Discrimination Task. *Frontiers in Neuroscience*, **2017**, 11, 436	5.1	
125	Influence of spatial frequency and emotion expression on face processing in patients with panic disorder. *Journal of Affective Disorders*, **2016**, 197, 159-66	6.6	5
124	Disruption of the Posterior Medial Network during the Acute Stage of Transient Global Amnesia: A Preliminary Study. *Clinical EEG and Neuroscience*, **2016**, 47, 69-74	2.3	8

123	Detection of eye blink artifacts from single prefrontal channel electroencephalogram. *Computer Methods and Programs in Biomedicine*, **2016**, 124, 19-30	6.9	44
122	Dysfunctional Patterns of Gamma-Band Activity in Response to Human Faces Compared to Non-Facial Stimuli in Patients with Schizophrenia. *Psychiatry Investigation*, **2016**, 13, 349-59	3.1	4
121	Fast and Robust Real-Time Estimation of Respiratory Rate from Photoplethysmography. *Sensors*, **2016**, 16,	3.8	14
120	Data-Driven User Feedback: An Improved Neurofeedback Strategy considering the Interindividual Variability of EEG Features. *BioMed Research International*, **2016**, 2016, 3939815	3	9
119	Integrative Evaluation of Automated Massage Combined with Thermotherapy: Physical, Physiological, and Psychological Viewpoints. *BioMed Research International*, **2016**, 2016, 2826905	3	3
118	Automatic Identification of Interictal Epileptiform Discharges in Secondary Generalized Epilepsy. *Computational and Mathematical Methods in Medicine*, **2016**, 2016, 8701973	2.8	4
117	Removing the Interdependency between Horizontal and Vertical Eye-Movement Components in Electrooculograms. *Sensors*, **2016**, 16, 227	3.8	10
116	Transient Global Amnesia Deteriorates the Network Efficiency of the Theta Band. *PLoS ONE*, **2016**, 11, e0164884	3.7	5
115	An unsupervised eye blink artifact detection method for real-time electroencephalogram processing. *Physiological Measurement*, **2016**, 37, 401-17	2.9	27
114	Auditory evoked potential could reflect emotional sensitivity and impulsivity. *Scientific Reports*, **2016**, 6, 37683	4.9	25
113	Toward more intuitive brain-computer interfacing: classification of binary covert intentions using functional near-infrared spectroscopy. *Journal of Biomedical Optics*, **2016**, 21, 091303	3.5	29
112	Estimating Consumers' Subjective Preference Using Functional near Infrared Spectroscopy: A Feasibility Study. *Journal of Near Infrared Spectroscopy*, **2016**, 24, 433-441	1.5	6
111	Machine-learning-based diagnosis of schizophrenia using combined sensor-level and source-level EEG features. *Schizophrenia Research*, **2016**, 176, 314-319	3.6	56
110	Development of a hybrid mental spelling system combining SSVEP-based brain computer interface and webcam-based eye tracking. *Biomedical Signal Processing and Control*, **2015**, 21, 99-104	4.9	43
109	EEG-based neurocinematics: challenges and prospects. *Brain-Computer Interfaces*, **2015**, 2, 186-192	2	4
108	Localization of epileptogenic zones in Lennox-Gastaut syndrome (LGS) using graph theoretical analysis of ictal intracranial EEG: a preliminary investigation. *Brain and Development*, **2015**, 37, 29-36	2.2	8
107	What is the optimal anodal electrode position for inducing corticomotor excitability changes in transcranial direct current stimulation?. *Neuroscience Letters*, **2015**, 584, 347-50	3.3	10
106	Brain Networks Responsible for Sense of Agency: An EEG Study. *PLoS ONE*, **2015**, 10, e0135261	3.7	23

105	Neurocinematics based on passive BCI: Decoding temporal change of emotional arousal during video watching from multi-channel EEG **2015**,		1
104	Early visual processing deficits in patients with schizophrenia during spatial frequency-dependent facial affect processing. *Schizophrenia Research*, **2015**, 161, 314-21	3.6	23
103	Transcranial direct current stimulation on primary sensorimotor area has no effect in patients with drug-naïve restless legs syndrome: a proof-of-concept clinical trial. *Sleep Medicine*, **2015**, 16, 280-7	4.6	17
102	Correlation between Inter-Blink Interval and Episodic Encoding during Movie Watching. *PLoS ONE*, **2015**, 10, e0141242	3.7	16
101	Motor imagery learning across a sequence of trials in stroke patients. *Restorative Neurology and Neuroscience*, **2015**, 34, 635-45	2.8	10
100	Hemodynamic responses in rat brain during transcranial direct current stimulation: a functional near-infrared spectroscopy study. *Biomedical Optics Express*, **2014**, 5, 1812-21	3.5	21
99	Disruptions in small-world cortical functional connectivity network during an auditory oddball paradigm task in patients with schizophrenia. *Schizophrenia Research*, **2014**, 156, 197-203	3.6	47
98	P1-185: ALTERATION OF CORTICAL NEURONAL ACTIVITY DURING THE ACUTE STAGE OF TRANSIENT GLOBAL AMNESIA **2014**, 10, P367-P367		
97	Enhanced Template Matching Using Dynamic Positional Warping for Identification of Specific Patterns in Electroencephalogram. *Journal of Applied Mathematics*, **2014**, 2014, 1-7	1.1	16
96	Evaluation of various mental task combinations for near-infrared spectroscopy-based brain-computer interfaces. *Journal of Biomedical Optics*, **2014**, 19, 77005	3.5	68
95	Combined use of multiple computational intracranial EEG analysis techniques for the localization of epileptogenic zones in Lennox-Gastaut syndrome. *Clinical EEG and Neuroscience*, **2014**, 45, 169-78	2.3	11
94	Applied Mathematics in Biomedical Sciences and Engineering 2014. *Journal of Applied Mathematics*, **2014**, 2014, 1-2	1.1	
93	Causal influence of epileptic network during spike-and-wave discharge in juvenile myoclonic epilepsy. *Epilepsy Research*, **2014**, 108, 257-66	3	16
92	Inconsistent outcomes of transcranial direct current stimulation may originate from anatomical differences among individuals: electric field simulation using individual MRI data. *Neuroscience Letters*, **2014**, 564, 6-10	3.3	112
91	Source activation of P300 correlates with negative symptom severity in patients with schizophrenia. *Brain Topography*, **2014**, 27, 307-17	4.3	22
90	COMETS: A MATLAB toolbox for simulating local electric fields generated by transcranial direct current stimulation (tDCS). *Biomedical Engineering Letters*, **2013**, 3, 39-46	3.6	73
89	Evaluation of feature extraction methods for EEG-based brain-computer interfaces in terms of robustness to slight changes in electrode locations. *Medical and Biological Engineering and Computing*, **2013**, 51, 571-9	3.1	35
88	A new dual-frequency stimulation method to increase the number of visual stimuli for multi-class SSVEP-based brain-computer interface (BCI). *Brain Research*, **2013**, 1515, 66-77	3.7	57

87	Implementation of a mental spelling system based on steady-state visual evoked potential (SSVEP) **2013**,		4
86	The influence of an educational course on language expression and treatment of gaming addiction for massive multiplayer online role-playing game (MMORPG) players. *Computers and Education*, **2013**, 63, 208-217	9.5	21
85	Development of a hybrid mental speller combining EEG-based brain-computer interface and webcam-based eye-tracking. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 2340-3	0.9	2
84	Source activation during facial emotion perception correlates with positive and negative symptoms scores of schizophrenia. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 6325-8	0.9	3
83	EEG-Based Brain-Computer Interfaces: A Thorough Literature Survey. *International Journal of Human-Computer Interaction*, **2013**, 29, 814-826	3.6	130
82	Positive and negative symptom scores are correlated with activation in different brain regions during facial emotion perception in schizophrenia patients: a voxel-based sLORETA source activity study. *Schizophrenia Research*, **2013**, 151, 165-74	3.6	15
81	Eyes-closed SSVEP-based BCI for binary communication of individuals with impaired oculomotor function **2013**,		2
80	An image-guided transcranial direct current stimulation system: a pilot phantom study. *Physiological Measurement*, **2013**, 34, 937-50	2.9	16
79	Classification of visual stimuli with different spatial patterns for single-frequency, multi-class SSVEP BCI. *Electronics Letters*, **2013**, 49, 1374-1376	1.1	8
78	Localization of epileptogenic zones in Lennox-Gastaut syndrome using frequency domain source imaging of intracranial electroencephalography: a preliminary investigation. *Physiological Measurement*, **2013**, 34, 247-63	2.9	6
77	Development of an "eyes-closed" brain-computer interface system for communication of patients with oculomotor impairment. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 2236-9	0.9	1
76	Inconsistent outcomes of transcranial direct current stimulation (tDCS) may be originated from the anatomical differences among individuals: a simulation study using individual MRI data. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 823-5	0.9	3
75	A new multimodal cortical source imaging algorithm for integrating simultaneously recorded EEG and MEG. *Inverse Problems in Science and Engineering*, **2013**, 21, 1074-1089	1.3	3
74	Classification of binary intentions for individuals with impaired oculomotor function: 'eyes-closed' SSVEP-based brain-computer interface (BCI). *Journal of Neural Engineering*, **2013**, 10, 026021	5	37
73	Reduced Frontal P3a Amplitude in Migraine Patients during the Pain-Free Period. *Journal of Clinical Neurology (Korea*, **2013**, 9, 43-50	1.7	8
72	Localization of ictal onset zones in Lennox-Gastaut syndrome (LGS) based on information theoretical time delay analysis of intracranial electroencephalography (iEEG). *Epilepsy Research*, **2012**, 99, 78-86	3	9
71	Development of an SSVEP-based BCI spelling system adopting a QWERTY-style LED keyboard. *Journal of Neuroscience Methods*, **2012**, 208, 59-65	3	172
70	Evaluation of local electric fields generated by transcranial direct current stimulation with an extracephalic reference electrode based on realistic 3D body modeling. *Physics in Medicine and Biology*, **2012**, 57, 2137-50	3.8	63

69	Electrophysiological correlates of object-repetition effects: sLORETA imaging with 64-channel EEG and individual MRI. *BMC Neuroscience*, **2012**, 13, 124	3.2	5
68	Reduced source activity of event-related potentials for affective facial pictures in schizophrenia patients. *Schizophrenia Research*, **2012**, 136, 150-9	3.6	34
67	Clinical implications of quantitative electroencephalography and current source density in patients with Alzheimer's disease. *Brain Topography*, **2012**, 25, 461-74	4.3	36
66	Increased Corticomuscular Coherence in Idiopathic REM Sleep Behavior Disorder. *Frontiers in Neurology*, **2012**, 3, 60	4.1	17
65	Auditory brain-computer interfaces (BCIs) and their practical applications. *Biomedical Engineering Letters*, **2012**, 2, 13-17	3.6	13
64	Influence of orientation and area of the extended cortical current source on the magnetoencephalography (MEG) inverse problem. *Biomedical Engineering Letters*, **2012**, 2, 124-128	3.6	
63	Mathematical Issues in the Inference of Causal Interactions among Multichannel Neural Signals. *Journal of Applied Mathematics*, **2012**, 2012, 1-14	1.1	2
62	Applied Mathematics in Biomedical Sciences and Engineering. *Journal of Applied Mathematics*, **2012**, 2012, 1-3	1.1	
61	Depth-dependent cerebral hemodynamic responses following direct cortical electrical stimulation (DCES) revealed by in vivo dual-optical imaging techniques. *Optics Express*, **2012**, 20, 6932-43	3.3	11
60	Soldering-based easy packaging of thin polyimide multichannel electrodes for neuro-signal recording. *Journal of Micromechanics and Microengineering*, **2012**, 22, 115017	2	5
59	Source imaging of P300 auditory evoked potentials and clinical correlations in patients with posttraumatic stress disorder. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2011**, 35, 1908-17	5.5	22
58	Localization of ictal onset zones in Lennox-Gastaut syndrome using directional connectivity analysis of intracranial electroencephalography. *Seizure: the Journal of the British Epilepsy Association*, **2011**, 20, 449-57	3.2	28
57	A Novel Array-Type Transcranial Direct Current Stimulation (tDCS) System for Accurate Focusing on Targeted Brain Areas. *IEEE Transactions on Magnetics*, **2011**, 47, 882-885	2	26
56	Evaluation of algorithms for intracranial EEG (iEEG) source imaging of extended sources: feasibility of using iEEG source imaging for localizing epileptogenic zones in secondary generalized epilepsy. *Brain Topography*, **2011**, 24, 91-104	4.3	21
55	The loudness dependence of the auditory evoked potential (LDAEP) as a predictor of the response to escitalopram in patients with generalized anxiety disorder. *Psychopharmacology*, **2011**, 213, 625-32	4.7	34
54	Quantitative model for the change of optical resonance in neural activity detection systems based on surface plasmon resonance. *Optics and Laser Technology*, **2011**, 43, 938-948	4.2	6
53	An improved technique to consider mismatches between fMRI and EEG/MEG sources for fMRI constrained EEG/MEG source imaging. *Biomedical Engineering Letters*, **2011**, 1, 32-41	3.6	5
52	An EEG-based real-time cortical functional connectivity imaging system. *Medical and Biological Engineering and Computing*, **2011**, 49, 985-95	3.1	8

51	Classification of selective attention to auditory stimuli: toward vision-free brain-computer interfacing. *Journal of Neuroscience Methods*, **2011**, 197, 180-5	3	79
50	Dysfunctional gamma-band activity during face structural processing in schizophrenia patients. *Schizophrenia Research*, **2010**, 119, 191-7	3.6	29
49	Estimation of directional coupling between cortical areas using Near-Infrared Spectroscopy (NIRS). *Optics Express*, **2010**, 18, 5730-9	3.3	25
48	Global synchronization index as a biological correlate of cognitive decline in Alzheimer's disease. *Neuroscience Research*, **2010**, 66, 333-9	2.9	32
47	EEG-based real-time dynamic neuroimaging. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 5385-8	0.9	1
46	An electrofusion chip with a cell delivery system driven by surface tension. *Journal of Micromechanics and Microengineering*, **2009**, 19, 015004	2	23
45	Spatiotemporospectral characteristics of scalp ictal EEG in mesial temporal lobe epilepsy with hippocampal sclerosis. *Brain Research*, **2009**, 1287, 206-19	3.7	22
44	Numerical computation of inductance of complex coil systems. *International Journal of Applied Electromagnetics and Mechanics*, **2009**, 29, 15-23	0.4	3
43	An Improved Particle Swarm Optimization Algorithm Mimicking Territorial Dispute Between Groups for Multimodal Function Optimization Problems. *IEEE Transactions on Magnetics*, **2008**, 44, 1046-1049	2	38
42	Point Collocation Mesh-Free Method Using FMLSRKM for Solving Axisymmetric Laplace Equation. *IEEE Transactions on Magnetics*, **2008**, 44, 1234-1237	2	8
41	A New Neuronal Electrical Source Model Considering Electrophysiology to Simulate Realistic Electroencephalography (EEG) Forward Signals. *IEEE Transactions on Magnetics*, **2008**, 44, 1434-1437	2	
40	Decreased EEG synchronization and its correlation with symptom severity in Alzheimer's disease. *Neuroscience Research*, **2008**, 62, 112-7	2.9	60
39	Determination of optimal electrode positions for transcranial direct current stimulation (tDCS). *Physics in Medicine and Biology*, **2008**, 53, N219-25	3.8	68
38	Analysis of a nanopositioning actuator using numerical and analytic methods. *Smart Materials and Structures*, **2008**, 17, 025025	3.4	6
37	Magnetoencephalography source localization using improved simplex method. *Inverse Problems in Science and Engineering*, **2008**, 16, 499-510	1.3	5
36	Spatial resolution of EEG cortical source imaging revealed by localization of retinotopic organization in human primary visual cortex. *Journal of Neuroscience Methods*, **2007**, 161, 142-54	3	41
35	Source localization of periodic sharp wave complexes using independent component analysis in sporadic Creutzfeldt-Jakob disease. *Brain Research*, **2007**, 1143, 228-37	3.7	19
34	Estimation of Brain Electrical Sources Using Multilevel Source Space Model. *IEEE Transactions on Magnetics*, **2007**, 43, 1697-1700	2	2

33	Estimation of Solution Accuracy From Leadfield Matrix in Magnetoencephalography. *IEEE Transactions on Magnetics*, **2007**, 43, 1701-1704	2	4
32	Reconstruction of Continuous and Focalized Brain Functional Source Images From Electroencephalography. *IEEE Transactions on Magnetics*, **2007**, 43, 1709-1712	2	3
31	Precise Estimation of Brain Electrical Sources Using Anatomically Constrained Area Source (ACAS) Localization. *IEEE Transactions on Magnetics*, **2007**, 43, 1713-1716	2	8
30	Dealing with mismatched fMRI activations in fMRI constrained EEG cortical source imaging: a simulation study assuming various mismatch types. *Medical and Biological Engineering and Computing*, **2007**, 45, 79-90	3.1	5
29	An EEG-based real-time cortical rhythmic activity monitoring system. *Physiological Measurement*, **2007**, 28, 1101-13	2.9	16
28	Estimation of Solution Accuracy in Magnetoencephalography by using the Condition Number from a Leadfield Matrix **2007**, 2710-2713		
27	Magnetoencephalography Source Localization using Improved Simplex Method **2007**, 2726-2729		
26	Multimodal function optimization based on particle swarm optimization. *IEEE Transactions on Magnetics*, **2006**, 42, 1095-1098	2	119
25	. *IEEE Transactions on Magnetics*, **2006**, 42, 1379-1382	2	1
24	Enhancing accuracy in magneto-and electroencephalography focal source localization. *IEEE Transactions on Magnetics*, **2006**, 42, 1387-1390	2	2
23	A technique to consider mismatches between fMRI and EEG/MEG sources for fMRI-constrained EEG/MEG source imaging: a preliminary simulation study. *Physics in Medicine and Biology*, **2006**, 51, 6005-21	3.8	7
22	Functional cortical source imaging from simultaneously recorded ERP and fMRI. *Journal of Neuroscience Methods*, **2006**, 157, 118-23	3	23
21	Numerical emulator for walk-through metal detectors using 3-D indirect boundary integral equation method. *IEEE Transactions on Instrumentation and Measurement*, **2005**, 54, 1166-1170	5.2	2
20	Magnetoencephalography cortical source imaging using spherical mapping. *IEEE Transactions on Magnetics*, **2005**, 41, 1984-1987	2	7
19	fMRI-constrained MEG source imaging and consideration of fMRI invisible sources. *Human Brain Mapping*, **2005**, 26, 110-8	5.9	27
18	Anatomically constrained dipole adjustment (ANACONDA) for accurate MEG/EEG focal source localizations. *Physics in Medicine and Biology*, **2005**, 50, 4931-53	3.8	8
17	Fast and robust localization of brain electrical sources using evolution strategies: Monte-carlo simulation and phantom experiment studies. *International Journal of Applied Electromagnetics and Mechanics*, **2004**, 20, 197-203	0.4	3
16	Three-dimensional constrained optimization of modular toroid-type SMES using co-evolutionary algorithm. *International Journal of Applied Electromagnetics and Mechanics*, **2004**, 20, 105-114	0.4	1

15	Multiresolutive reconstruction of magnetoencephalography source distribution. *IEEE Transactions on Magnetics*, **2004**, 40, 1100-1103	2	2
14	Efficient technique for 3-D finite element analysis of skin effect in current-carrying conductors. *IEEE Transactions on Magnetics*, **2004**, 40, 1326-1329	2	9
13	Novel multidipole searching technique for magnetoencephalography source localization. *IEEE Transactions on Magnetics*, **2004**, 40, 627-630	2	3
12	A novel algorithm for multimodal function optimization based on evolution strategy. *IEEE Transactions on Magnetics*, **2004**, 40, 1224-1227	2	29
11	Assessment criteria for MEG/EEG cortical patch tests. *Physics in Medicine and Biology*, **2003**, 48, 2561-73	3.8	23
10	Electromagnetic topology optimization using large-step markov chain method with novel local optimization algorithm. *International Journal of Applied Electromagnetics and Mechanics*, **2003**, 18, 259-267	0.4	1
9	Characteristic analysis of planar motor using the volume integral equation method. *International Journal of Applied Electromagnetics and Mechanics*, **2003**, 17, 259-269	0.4	2
8	Hybrid genetic algorithm for electromagnetic topology optimization. *IEEE Transactions on Magnetics*, **2003**, 39, 2163-2169	2	70
7	Optimal design of gas circuit breaker for increasing the small current interruption capacity. *IEEE Transactions on Magnetics*, **2003**, 39, 1749-1752	2	8
6	Novel technique for current density distribution analysis of solidly modeled coil. *IEEE Transactions on Magnetics*, **2002**, 38, 505-508	2	10
5	Optimization of the coil shape in deflection yoke considering practical coil winding processes. *IEEE Transactions on Magnetics*, **2002**, 38, 1077-1080	2	3
4	Magnetic field analysis of 2-D permanent magnet array for planar motor. *IEEE Transactions on Magnetics*, **2001**, 37, 3762-3766	2	53
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