Slawomir J Nasuto

List of Publications by Year
in descending order

95 papers	2,260 citations	331538 21 h-index	243529 44 g-index
98 all docs	98 docs citations	98 times ranked	2662 citing authors

#	Article	IF	Citations
1	EMG signal filtering based on Empirical Mode Decomposition. Biomedical Signal Processing and Control, 2006, 1, 44-55.	3.5	149
2	A novel approach to the detection of synchronisation in EEG based on empirical mode decomposition. Journal of Computational Neuroscience, 2007, 23, 79-111.	0.6	149
3	Neuromantic â€" from Semi-Manual to Semi-Automatic Reconstruction of Neuron Morphology. Frontiers in Neuroinformatics, 2012, 6, 4.	1.3	141
4	Effects of dendritic morphology on CA3 pyramidal cell electrophysiology: a simulation study. Brain Research, 2002, 941, 11-28.	1.1	140
5	Emergence of a Small-World Functional Network in Cultured Neurons. PLoS Computational Biology, 2012, 8, e1002522.	1.5	132
6	Generation, description and storage of dendritic morphology data. Philosophical Transactions of the Royal Society B: Biological Sciences, 2001, 356, 1131-1145.	1.8	110
7	Neural correlates of emotional responses to music: An EEG study. Neuroscience Letters, 2014, 573, 52-57.	1.0	97
8	Search space pruning and global optimisation of multiple gravity assist spacecraft trajectories. Journal of Global Optimization, 2007, 38, 283-296.	1.1	90
9	Computer generation and quantitative morphometric analysis of virtual neurons. Anatomy and Embryology, 2001, 204, 283-301.	1.5	86
10	Empirical mode decomposition: a novel technique for the study of tremor time series. Medical and Biological Engineering and Computing, 2006, 44, 569-582.	1.6	85
11	Brain computer interface control via functional connectivity dynamics. Pattern Recognition, 2012, 45, 2123-2136.	5.1	83
12	Controlling a Mobile Robot with a Biological Brain. Defence Science Journal, 2010, 60, 5-14.	0.5	61
13	Automated Artifact Removal From the Electroencephalogram. Clinical EEG and Neuroscience, 2013, 44, 291-306.	0.9	55
14	Affective brainâ€"computer music interfacing. Journal of Neural Engineering, 2016, 13, 046022.	1.8	53
15	Music-induced emotions can be predicted from a combination of brain activity and acoustic features. Brain and Cognition, 2015, 101, 1-11.	0.8	42
16	Development of a wearable assistive soft robotic device for elbow rehabilitation. , 2015, , .		37
17	Electroencephalography reflects the activity of sub-cortical brain regions during approach-withdrawal behaviour while listening to music. Scientific Reports, 2019, 9, 9415.	1.6	36
18	Design and Development of Non-Contact Bio-Potential Electrodes for Pervasive Health Monitoring Applications. Biosensors, 2017, 7, 2.	2.3	35

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19	Design and Validation of Exoskeleton Actuated by Soft Modules toward Neurorehabilitationâ€"Vision-Based Control for Precise Reaching Motion of Upper Limb. Frontiers in Neuroscience, 2017, 11, 352.	1.4	32
20	Empirical Mode Decomposition and its Extensions Applied to EEG Analysis: A Review. Advances in Data Science and Adaptive Analysis, 2018, 10, 1840001.	0.2	29
21	Detection of neural correlates of self-paced motor activity using empirical mode decomposition phase locking analysis. Journal of Neuroscience Methods, 2009, 184, 54-70.	1.3	28
22	Investigating affect in algorithmic composition systems. Psychology of Music, 2015, 43, 831-854.	0.9	28
23	An Efficient Parameterization of Dynamic Neural Networks for Nonlinear System Identification. IEEE Transactions on Neural Networks, 2005, 16, 983-988.	4.8	23
24	Anticipation: Beyond synthetic biology and cognitive robotics. BioSystems, 2016, 148, 22-31.	0.9	23
25	Endogenous cholinergic tone modulates spontaneous network level neuronal activity in primary cortical cultures grown on multi-electrode arrays. BMC Neuroscience, 2013, 14, 38.	0.8	22
26	Generative topographic mapping applied to clustering and visualization of motor unit action potentials. BioSystems, 2005, 82, 273-284.	0.9	20
27	Changes in music tempo entrain movement related brain activity. , 2014, 2014, 4595-8.		20
28	Exploration of the neural correlates of cerebral palsy for sensorimotor BCI control. Frontiers in Neuroengineering, 2014, 7, 20.	4.8	20
29	Affective Calibration of Musical Feature Sets in an Emotionally Intelligent Music Composition System. ACM Transactions on Applied Perception, 2017, 14, 1-13.	1.2	20
30	Neural Correlates of True and False Memory in Mild Cognitive Impairment. PLoS ONE, 2012, 7, e48357.	1.1	20
31	Movement intention based Brain Computer Interface for Virtual Reality and Soft Robotics rehabilitation using novel autocorrelation analysis of EEG. , 2016, , .		18
32	Inferring structural connectivity using Ising couplings in models of neuronal networks. Scientific Reports, 2017, 7, 8156.	1.6	18
33	Personalised, Multi-Modal, Affective State Detection for Hybrid Brain-Computer Music Interfacing. IEEE Transactions on Affective Computing, 2020, 11, 111-124.	5.7	18
34	Single tap identification for fast BCI control. Cognitive Neurodynamics, 2011, 5, 21-30.	2.3	17
35	Directed Motor-Auditory EEG Connectivity Is Modulated by Music Tempo. Frontiers in Human Neuroscience, 2017, 11, 502.	1.0	17
36	Markov Model-Based Method to Analyse Time-Varying Networks in EEG Task-Related Data. Frontiers in Computational Neuroscience, 2018, 12, 76.	1.2	17

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37	Architecture for Neuronal Cell Control of a Mobile Robot. , 2008, , 23-31.		16
38	Revealing Ensemble State Transition Patterns in Multi-Electrode Neuronal Recordings Using Hidden Markov Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 345-355.	2.7	16
39	Extraction of motor unit action potentials from electromyographic signals through generative topographic mapping. Journal of the Franklin Institute, 2007, 344, 154-179.	1.9	15
40	Renormalized time scale for anticipating and lagging synchronization. Physical Review E, 2016, 93, 052229.	0.8	15
41	Neural and physiological data from participants listening to affective music. Scientific Data, 2020, 7, 177.	2.4	14
42	Experiments with an In-Vitro Robot Brain. Lecture Notes in Computer Science, 2011, , 1-15.	1.0	14
43	Relation between neuronal morphology and electrophysiology in the Kainate lesion model of Alzheimer's Disease. Neurocomputing, 2001, 38-40, 1477-1487.	3.5	13
44	Multiscale Evolving Complex Network Model of Functional Connectivity in Neuronal Cultures. IEEE Transactions on Biomedical Engineering, 2012, 59, 30-34.	2.5	12
45	Exploration of neural correlates of movement intention based on characterisation of temporal dependencies in electroencephalography. PLoS ONE, 2018, 13, e0193722.	1.1	12
46	Method for exploratory cluster analysis and visualisation of single-trial ERP ensembles. Journal of Neuroscience Methods, 2015, 250, 22-33.	1.3	10
47	Dynamics of Long-Range Temporal Correlations in Broadband EEG During Different Motor Execution and Imagery Tasks. Frontiers in Neuroscience, 2021, 15, 660032.	1.4	10
48	A feasible study of EEG-driven assistive robotic system for stroke rehabilitation. , 2012, , .		9
49	Modeling the Ongoing Dynamics of Short and Long-Range Temporal Correlations in Broadband EEG During Movement. Frontiers in Systems Neuroscience, 2019, 13, 66.	1.2	9
50	Historical and current machine intelligence. IEEE Instrumentation and Measurement Magazine, 2006, 9, 20-26.	1.2	8
51	Investigating Perceived Emotional Correlates of Rhythmic Density in Algorithmic Music Composition. ACM Transactions on Applied Perception, 2015, 12, 1-21.	1.2	8
52	Movement Intention Detection from Autocorrelation of EEG for BCI. Lecture Notes in Computer Science, 2015, , 212-221.	1.0	8
53	Emotion and Anticipation in an Enactive Framework for Cognition (Response to Andy Clark). Frontiers in Psychology, 2012, 3, 398.	1.1	7
54	Anticipation from sensation: using anticipating synchronization to stabilize a system with inherent sensory delay. Royal Society Open Science, 2018, 5, 171314.	1.1	7

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55	EEG dynamical network analysis method reveals the neural signature of visual-motor coordination. PLoS ONE, 2020, 15, e0231767.	1.1	7
56	Communicating neurons: A connectionist spiking neuron implementation of stochastic diffusion search. Neurocomputing, 2009, 72, 704-712.	3.5	6
57	Testing for significance of phase synchronisation dynamics in the EEG. Journal of Computational Neuroscience, 2013, 34, 411-432.	0.6	6
58	Investigating music tempo as a feedback mechanism for closed-loop BCI control. Brain-Computer Interfaces, 2014, 1, 158-169.	0.9	6
59	Assessment of inter-examiner agreement and variability in the manual classification of auditory brainstem response. BioMedical Engineering OnLine, 2012, 11, 86.	1.3	5
60	Towards human-computer music interaction: Evaluation of an affectively-driven music generator via galvanic skin response measures. , 2015, , .		5
61	Embedded Fuzzy Logic Controller for Positive and Negative Pressure Control in Pneumatic Soft Robots. , 2017, , .		5
62	Zombie Mouse in a Chinese Room. Philosophy and Technology, 2015, 28, 209-223.	2.6	4
63	Temporal Structure in Haptic Signaling Under a Cooperative Task. Frontiers in Human Neuroscience, 2019, 13, 372.	1.0	4
64	Integration of Visual and Joint Information to Enable Linear Reaching Motions. Scientific Reports, 2017, 7, 40869.	1.6	3
65	Synchronization-based control for a collaborative robot. Royal Society Open Science, 2020, 7, 201267.	1.1	3
66	Deep brain stimulation of the ventrointermediate nucleus of the thalamus to treat essential tremor improves motor sequence learning. Human Brain Mapping, 0, , .	1.9	3
67	Investigation of spatio-temporal dependencies in neuronal functional connectivity. , 2010, , .		2
68	Of (Zombie) Mice and Animats. Studies in Applied Philosophy, Epistemology and Rational Ethics, 2013, , 85-106.	0.2	2
69	A study of anticipatory non-autonomous systems. , 2013, , .		2
70	A Compact Low-Cost Electronic Hardware Design for Actuating Soft Robots. , 2015, , .		2
71	Steady state resource allocation analysis of the Stochastic Diffusion Search. Biologically Inspired Cognitive Architectures, 2015, 12, 65-76.	0.9	2
72	Synapses in Digital Medium: Computational Investigations of Neural Basis of Anticipation. Cognitive Systems Monographs, 2016, , 187-201.	0.1	2

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73	Milliseconds Matter: Temporal Order of Visuo-tactile Stimulation Affects the Ownership of a Virtual Hand. Lecture Notes in Computer Science, 2016, , 479-489.	1.0	2
74	A Compact Low-Cost Electronic Hardware Design for Actuating Soft Robots. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	2
75	Objective Empirical Mode Decomposition metric. , 2015, , .		1
76	Automated identification of neural correlates of continuous variables. Journal of Neuroscience Methods, 2015, 242, 65-71.	1.3	1
77	Feasibility study on EEG driven robotic system to realize efficient stroke rehabilitation. , 2015, , .		1
78	On the Phase Coupling of Two Components Mixing in Empirical Mode Decomposition. Advances in Data Science and Adaptive Analysis, 2016, 08, 1650004.	0.2	1
79	Anticipatory Engineering: Anticipation in Sensory-Motor Systems of Human. Cognitive Systems Monographs, 2016, , 275-282.	0.1	1
80	Machine Learning to Identify Neural Correlates of Music and Emotions. , 2014, , 89-103.		1
81	Anticipation in Neurocybernetics. , 2019, , 249-284.		1
82	Can Dynamic Functional Connectivity Be Used toÂDistinguish Between Resting-State andÂMotor Imagery inÂEEG-BCIs?. Studies in Computational Intelligence, 2022, , 688-699.	0.7	1
83	Single trial BCI operation via Wackermann parameters. , 2010, , .		0
84	Application of Poisson-based hidden Markov models to in vitro neuronal data. , 2010, , .		0
85	Spatio-temporal dependencies in functional connectivity in rodent cortical cultures. Paladyn, 2011, 2, .	1.9	0
86	Foundations of enactive cognitive science. Adaptive Behavior, 2013, 21, 139-141.	1.1	0
87	Implementation of a design concept of a moulded, soft battery cell. , 2016, , .		0
88	KurSL: Model of Anharmonic Coupled Oscillations Based on Kuramoto Coupling and Sturmâ€"Liouville Problem. Advances in Data Science and Adaptive Analysis, 2018, 10, 1840002.	0.2	0
89	Learning to Make Feelings: Expressive Performance as a Part of a Machine Learning Tool for Sound-Based Emotion Control. Lecture Notes in Computer Science, 2013, , 490-499.	1.0	0
90	Anticipating Synchronisation for Robot Control. Lecture Notes in Computer Science, 2016, , 424-428.	1.0	0

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91	Anticipation in Neurocybernetics. , 2019, , 1-36.		0
92	EEG dynamical network analysis method reveals the neural signature of visual-motor coordination. , 2020, 15, e0231767.		0
93	EEG dynamical network analysis method reveals the neural signature of visual-motor coordination. , 2020, 15, e0231767.		0
94	EEG dynamical network analysis method reveals the neural signature of visual-motor coordination. , 2020, 15, e0231767.		0
95	EEG dynamical network analysis method reveals the neural signature of visual-motor coordination. , 2020, 15, e0231767.		0