Alois SchlÃ¶gl

List of Publications by Year
in descending order

34 papers	**5,803** citations	279798 **23** h-index	414414 **32** g-index
36 all docs	**36** docs citations	**36** times ranked	**5546** citing authors

#	Article	IF	Citations
1	The BCI competition III: validating alternative approaches to actual BCI problems. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 153-159.	4.9	832
2	Review of the BCI Competition IV. Frontiers in Neuroscience, 2012, 6, 55.	2.8	686
3	The BCI Competition 2003: Progress and Perspectives in Detection and Discrimination of EEG Single Trials. IEEE Transactions on Biomedical Engineering, 2004, 51, 1044-1051.	4.2	535
4	Robustly Estimating the Flow Direction of Information in Complex Physical Systems. Physical Review Letters, 2008, 100, 234101.	7.8	484
5	Characterization of four-class motor imagery EEG data for the BCI-competition 2005. Journal of Neural Engineering, 2005, 2, L14-L22.	3.5	393
6	Time Domain Parameters as a feature for EEG-based Brain–Computer Interfaces. Neural Networks, 2009, 22, 1313-1319.	5.9	353
7	An E-Health Solution for Automatic Sleep Classification according to Rechtschaffen and Kales: Validation Study of the Somnolyzer 24 Ã— 7 Utilizing the Siesta Database. Neuropsychobiology, 2005, 51, 115-133.	1.9	251
8	Enhancement of Left-Right Sensorimotor EEG Differences During Feedback-Regulated Motor Imagery. Journal of Clinical Neurophysiology, 1999, 16, 373-382.	1.7	247
9	Synaptic mechanisms of pattern completion in the hippocampal CA3 network. Science, 2016, 353, 1117-1123.	12.6	203
10	Toward Self-Paced Brain–Computer Communication: Navigation Through Virtual Worlds. IEEE Transactions on Biomedical Engineering, 2008, 55, 675-682.	4.2	186
11	BCI meeting 2005-workshop on BCI signal processing: feature extraction and translation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 135-138.	4.9	167
12	BioSig: The Free and Open Source Software Library for Biomedical Signal Processing. Computational Intelligence and Neuroscience, 2011, 2011, 1-12.	1.7	161
13	Analyzing event-related EEG data with multivariate autoregressive parameters. Progress in Brain Research, 2006, 159, 135-147.	1.4	142
14	Stimfit: quantifying electrophysiological data with Python. Frontiers in Neuroinformatics, 2014, 8, 16.	2.5	138
15	Artifact Processing in Computerized Analysis of Sleep EEG – A Review. Neuropsychobiology, 1999, 40, 150-157.	1.9	134
16	Directed Cortical Information Flow during Human Object Recognition: Analyzing Induced EEG Gamma-Band Responses in Brain's Source Space. PLoS ONE, 2007, 2, e684.	2.5	127
17	A comparison of multivariate autoregressive estimators. Signal Processing, 2006, 86, 2426-2429.	3.7	119
18	Detection of movement-related patterns in ongoing single-channel electrocorticogram. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2003, 11, 276-281.	4.9	108

#	Article	IF	Citations
19	BioSig: A Free and Open Source Software Library for BCI Research. Computer, 2008, 41, 44-50.	1.1	107
20	Hemodynamic and autonomic changes induced by Ironman: prediction of competition time by blood pressure variability. Journal of Applied Physiology, 2005, 99, 1728-1735.	2.5	80
21	Comparison of Evaluation Metrics in Classification Applications with Imbalanced Datasets. , 2008, , .		72
22	A Deconvolution-Based Method with High Sensitivity and Temporal Resolution for Detection of Spontaneous Synaptic Currents InÂVitro andÂInÂVivo. Biophysical Journal, 2012, 103, 1429-1439.	0.5	54
23	Study of discriminant analysis applied to motor imagery bipolar data. Medical and Biological Engineering and Computing, 2007, 45, 61-68.	2.8	35
24	Selective Routing of Spatial Information Flow from Input to Output in Hippocampal Granule Cells. Neuron, 2020, 107, 1212-1225.e7.	8.1	34
25	Sequential effects in continued visual search: Using fixationâ€related potentials to compare distractor processing before and after target detection. Psychophysiology, 2014, 51, 385-395.	2.4	27
26	Lexical memory search during N400: cortical couplings in auditory comprehension. NeuroReport, 2004, 15, 1209-1213.	1.2	24
27	Adaptive Methods in BCI Research - An Introductory Tutorial. The Frontiers Collection, 2009, , 331-355.	0.2	24
28	Semantic memory retrieval: cortical couplings in object recognition in the N400 window. European Journal of Neuroscience, 2005, 21, 1139-1143.	2.6	20
29	Recent advances in modeling and analysis of bioelectric and biomagnetic sources. Biomedizinische Technik, 2010, 55, 65-76.	0.8	16
30	How connectivity rules and synaptic properties shape the efficacy of pattern separation in the entorhinal cortexâ€"dentate gyrusâ€"CA3 network. Nature Computational Science, 2021, 1, 830-842.	8.0	13
31	Comparison of adaptive features with linear discriminant classifier for Brain computer Interfaces. , 2008, 2008, 173-6.		10
32	The History and Challenges of SCP-ECG: The Standard Communication Protocol for Computer-Assisted Electrocardiography. Hearts, 2021, 2, 384-409.	0.9	8
33	MOD: A novel machine-learning optimal-filtering method for accurate and efficient detection of subthreshold synaptic events in vivo. Journal of Neuroscience Methods, 2021, 357, 109125.	2.5	4
34	Autonomic dysfunction in PD during sleep. Movement Disorders, 2012, 27, 454-454.	3.9	2