Stefan Haufe

List of Publications by Year
in descending order

60 papers	5,676 citations	172457 29 h-index	189892 50 g-index
71 all docs	71 docs citations	71 times ranked	5878 citing authors

#	Article	IF	Citations
1	On the interpretation of weight vectors of linear models in multivariate neuroimaging. NeuroImage, 2014, 87, 96-110.	4.2	1,049
2	Single-trial analysis and classification of ERP components â€" A tutorial. NeuroImage, 2011, 56, 814-825.	4.2	946
3	Automatic Classification of Artifactual ICA-Components for Artifact Removal in EEG Signals. Behavioral and Brain Functions, 2011, 7, 30.	3.3	532
4	The Berlin Brainâ€"Computer Interface: Non-Medical Uses of BCI Technology. Frontiers in Neuroscience, 2010, 4, 198.	2.8	277
5	A critical assessment of connectivity measures for EEG data: A simulation study. NeuroImage, 2013, 64, 120-133.	4.2	276
6	The New York Headâ€"A precise standardized volume conductor model for EEG source localization and tES targeting. NeuroImage, 2016, 140, 150-162.	4.2	215
7	Consistency of EEG source localization and connectivity estimates. NeuroImage, 2017, 152, 590-601.	4.2	177
8	The Berlin Brain-Computer Interface: Progress Beyond Communication and Control. Frontiers in Neuroscience, 2016, 10, 530.	2.8	172
9	EEG potentials predict upcoming emergency brakings during simulated driving. Journal of Neural Engineering, 2011, 8, 056001.	3.5	167
10	Detection of braking intention in diverse situations during simulated driving based on EEG feature combination. Journal of Neural Engineering, 2015, 12, 016001.	3.5	109
11	Combining sparsity and rotational invariance in EEG/MEG source reconstruction. NeuroImage, 2008, 42, 726-738.	4.2	108
12	Electrophysiology-based detection of emergency braking intention in real-world driving. Journal of Neural Engineering, 2014, 11, 056011.	3.5	105
13	Modeling Sparse Connectivity Between Underlying Brain Sources for EEG/MEG. IEEE Transactions on Biomedical Engineering, 2010, 57, 1954-1963.	4.2	101
14	SPoC: A novel framework for relating the amplitude of neuronal oscillations to behaviorally relevant parameters. NeuroImage, 2014, 86, 111-122.	4.2	95
15	Large-scale EEG/MEG source localization with spatial flexibility. NeuroImage, 2011, 54, 851-859.	4.2	94
16	A Simulation Framework for Benchmarking EEG-Based Brain Connectivity Estimation Methodologies. Brain Topography, 2019, 32, 625-642.	1.8	93
17	Now You'll Feel It, Now You Won't: EEG Rhythms Predict the Effectiveness of Perceptual Masking. Journal of Cognitive Neuroscience, 2009, 21, 2407-2419.	2.3	85
18	Optimizing event-related potential based brainâ€"computer interfaces: a systematic evaluation of dynamic stopping methods. Journal of Neural Engineering, 2013, 10, 036025.	3.5	81

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19	Multivariate Machine Learning Methods for Fusing Multimodal Functional Neuroimaging Data. Proceedings of the IEEE, 2015, 103, 1507-1530.	21.3	79
20	Dimensionality reduction for the analysis of brain oscillations. NeuroImage, 2014, 101, 583-597.	4.2	74
21	Elucidating relations between fMRI, ECoG, and EEG through a common natural stimulus. NeuroImage, 2018, 179, 79-91.	4.2	64
22	Solving the EEG inverse problem based on spaceâ€“timeâ€“frequency structured sparsity constraints. NeuroImage, 2015, 118, 598-612.	4.2	58
23	Functional connectivity of EEG is subject-specific, associated with phenotype, and different from fMRI. NeuroImage, 2020, 218, 117001.	4.2	58
24	Validity of Time Reversal for Testing Granger Causality. IEEE Transactions on Signal Processing, 2016, 64, 2746-2760.	5.3	53
25	Pre-Stimulus Sensorimotor Rhythms Influence Brainâ€“Computer Interface Classification Performance. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 653-662.	4.9	47
26	Quantifying the Effect of Demixing Approaches on Directed Connectivity Estimated Between Reconstructed EEG Sources. Brain Topography, 2019, 32, 655-674.	1.8	46
27	Finding brain oscillations with power dependencies in neuroimaging data. NeuroImage, 2014, 96, 334-348.	4.2	40
28	Optimizing the regularization for image reconstruction of cerebral diffuse optical tomography. Journal of Biomedical Optics, 2014, 19, 096006.	2.6	35
29	Machine learning based brain signal decoding for intelligent adaptive deep brain stimulation. Experimental Neurology, 2022, 351, 113993.	4.1	35
30	The effect of linear mixing in the EEG on Hurst exponent estimation. NeuroImage, 2014, 99, 377-387.	4.2	33
31	Open Database of Epileptic EEG with MRI and Postoperational Assessment of Fociâ€”a Real World Verification for the EEG Inverse Solutions. Neuroinformatics, 2010, 8, 285-299.	2.8	30
32	Enhancing sensorimotor BCI performance with assistive afferent activity: An online evaluation. NeuroImage, 2019, 199, 375-386.	4.2	30
33	Temporal Signatures of Criticality in Human Cortical Excitability as Probed by Early Somatosensory Responses. Journal of Neuroscience, 2020, 40, 6572-6583.	3.6	25
34	Robust estimation of noise for electromagnetic brain imaging with the champagne algorithm. NeuroImage, 2021, 225, 117411.	4.2	24
35	Machine Learning for Health: Algorithm Auditing & Quality Control. Journal of Medical Systems, 2021, 45, 105.	3.6	23
36	Powerful Statistical Inference for Nested Data Using Sufficient Summary Statistics. Frontiers in Human Neuroscience, 2018, 12, 103.	2.0	22

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37	Sensorimotor Functional Connectivity: A Neurophysiological Factor Related to BCI Performance. Frontiers in Neuroscience, 2020, 14, 575081.	2.8	21
38	Alleviating the Influence of Weak Data Asymmetries on Granger-Causal Analyses. Lecture Notes in Computer Science, 2012, , 25-33.	1.3	20
39	Identifying Granger causal relationships between neural power dynamics and variables of interest. NeuroImage, 2015, 111, 489-504.	4.2	18
40	Unification of sparse Bayesian learning algorithms for electromagnetic brain imaging with the majorization minimization framework. NeuroImage, 2021, 239, 118309.	4.2	15
41	Identifying brain effective connectivity patterns from EEG: performance of Granger Causality, DTF, PDC and PSI on simulated data. BMC Neuroscience, 2011, 12, .	1.9	12
42	Predicting lethal courses in critically ill COVID-19 patients using a machine learning model trained on patients with non-COVID-19 viral pneumonia. Scientific Reports, 2021, 11, 13205.	3.3	12
43	Assessing Driversâ€™ Vigilance State During Monotonous Driving. , 2007, , .		12
44	Detection of multi-class emergency situations during simulated driving from ERP. , 2013, , .		10
45	Practicing fast-decision BCI using a "goalkeeper" paradigm. BMC Neuroscience, 2009, 10, P69.	1.9	9
46	Relationship between regional white matter hyperintensities and alpha oscillations in older adults. Neurobiology of Aging, 2022, 112, 1-11.	3.1	9
47	Tracking Deceased-Related Thinking With Neural Pattern Decoding of a Cortical-Basal Ganglia Circuit. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2017, 2, 421-429.	1.5	8
48	Ongoing monitoring of mindwandering in avoidant grief through cortico-basal-ganglia interactions. Social Cognitive and Affective Neuroscience, 2019, 14, 163-172.	3.0	8
49	Scrutinizing XAI using linear ground-truth data with suppressor variables. Machine Learning, 2022, 111, 1903-1923.	5.4	5
50	A benchmark for prediction of psychiatric multimorbidity from resting EEG data in a large pediatric sample. NeuroImage, 2022, 258, 119348.	4.2	5
51	Parameter interpretation, regularization and source localization in multivariate linear models. , 2014, , .		4
52	Brain-computer interface for smart vehicle: Detection of braking intention during simulated driving. , 2014, , .		4
53	Improving EEG Source Localization Through Spatio-Temporal Sparse Bayesian Learning. , 2018, , .		4
54	An extendable simulation framework for benchmarking EEG-based brain connectivity estimation methodologies. , 2015, 2015, 7562-5.		3

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55	Empirical Bayesian localization of event-related time-frequency neural activity dynamics. NeuroImage, 2022, 258, 119369.	4.2	3
56	Localization of class-related mu-rhythm desynchronization in motor imagery based Brain-Computer Interface sessions. , 2010, 2010, 5137-40.		2
57	A highly detailed FEM volume conductor model based on the ICBM152 average head template for EEG source imaging and TCS targeting. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 5744-7.	0.5	2
58	Decoding cognitive brain states. , 2013, , .		1
59	Estimating brain connectivity patterns from EEG: Performance of Granger Causality, PDC and PSI on simulated data. Neuroscience Letters, 2011, 500, e42.	2.1	0
60	Pitfalls in EEG-Based Brain Effective Connectivity Analysis. Lecture Notes in Computer Science, 2012, , 202-209.	1.3	0