Fabien Lotte

List of Publications by Year
in descending order

101 papers	9,360 citations	136885 32 h-index	118793 62 g-index
119 all docs	119 docs citations	119 times ranked	6208 citing authors

#	Article	IF	Citations
1	Towards Identifying Optimal Biased Feedback for Various User States and Traits in Motor Imagery BCI. IEEE Transactions on Biomedical Engineering, 2022, 69, 1101-1110.	2.5	13
2	When should MI-BCI feature optimization include prior knowledge, and which one?. Brain-Computer Interfaces, 2022, 9, 115-128.	0.9	8
3	Retrospective on the First Passive Brain-Computer Interface Competition on Cross-Session Workload Estimation. Frontiers in Neuroergonomics, 2022, 3, .	0.6	10
4	Riemannian Channel Selection for BCI With Between-Session Non-Stationarity Reduction Capabilities. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1158-1171.	2.7	3
5	A review of user training methods in brain computer interfaces based on mental tasks. Journal of Neural Engineering, 2021, 18, 011002.	1.8	55
6	Long-Term BCI Training of a Tetraplegic User: Adaptive Riemannian Classifiers and User Training. Frontiers in Human Neuroscience, 2021, 15, 635653.	1.0	27
7	Multi-Session Influence of Two Modalities of Feedback and Their Order of Presentation on MI-BCI User Training. Multimodal Technologies and Interaction, 2021, 5, 12.	1.7	15
8	Experimenters' Influence on Mental-Imagery based Brain-Computer Interface User Training. International Journal of Human Computer Studies, 2021, 149, 102603.	3.7	26
9	Guidelines to use Transfer Learning for Motor Imagery Detection: an experimental study. , 2021, , .		5
10	Apprendre Ã contrÃ´ler une interface cerveau-ordinateurÂ: le projet BrainConquest. Annales Des Mines - RÃ©alitÃ©s Industrielles, 2021, AoÃ»t 2021, 16-22.	0.0	0
11	BioPyC, an Open-Source Python Toolbox for Offline Electroencephalographic and Physiological Signals Classification. Sensors, 2021, 21, 5740.	2.1	6
12	Active inference as a unifying, generic and adaptive framework for a P300-based BCI. Journal of Neural Engineering, 2020, 17, 016054.	1.8	10
13	A physical learning companion for Mental-Imagery BCI User Training. International Journal of Human Computer Studies, 2020, 136, 102380.	3.7	15
14	Speed of Rapid Serial Visual Presentation of Pictures, Numbers and Words Affects Event-Related Potential-Based Detection Accuracy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 113-122.	2.7	16
15	Why we should systematically assess, control and report somatosensory impairments in BCI-based motor rehabilitation after stroke studies. NeuroImage: Clinical, 2020, 28, 102417.	1.4	22
16	Grand Challenges in Neurotechnology and System Neuroergonomics. Frontiers in Neuroergonomics, 2020, 1, .	0.6	21
17	Modern Machine-Learning Algorithms: For Classifying Cognitive and Affective States From Electroencephalography Signals. IEEE Systems, Man, and Cybernetics Magazine, 2020, 6, 29-38.	1.2	50
18	Detecting EEG outliers for BCI on the Riemannian manifold using spectral clustering. , 2020, 2020, 438-441.		5

#	ARTICLE	IF	CITATIONS
19	Channel Selection over Riemannian Manifold with Non-Stationarity Consideration for Brain-Computer Interface Applications. , 2020, , .		6
20	Consensus on the reporting and experimental design of clinical and cognitive-behavioural neurofeedback studies (CRED-nf checklist). Brain, 2020, 143, 1674-1685.	3.7	188
21	Neurofeedback: A challenge for integrative clinical neurophysiological studies. Neurophysiologie Clinique, 2020, 50, 1-3.	1.0	8
22	Assessing The Relevance Of Neurophysiological Patterns To Predict Motor Imagery-based BCI Users' Performance. , 2020, , .		4
23	Towards measuring states of epistemic curiosity through electroencephalographic signals. , 2020, , .		0
24	Characterizing Regularization Techniques for Spatial Filter Optimization in Oscillatory EEG Regression Problems. Neuroinformatics, 2019, 17, 235-251.	1.5	13
25	Towards Adaptive Classification using Riemannian Geometry approaches in Brain-Computer Interfaces. , 2019, , .		20
26	Monitoring Pilot's Mental Workload Using ERPs and Spectral Power with a Six-Dry-Electrode EEG System in Real Flight Conditions. Sensors, 2019, 19, 1324.	2.1	108
27	EEG neurofeedback research: A fertile ground for psychiatry?. L'Encephale, 2019, 45, 245-255.	0.3	33
28	Workshops of the seventh international brain-computer interface meeting: not getting lost in translation. Brain-Computer Interfaces, 2019, 6, 71-101.	0.9	8
29	Turning negative into positives! Exploiting 'negative' results in Brain–Machine Interface (BMI) research. Brain-Computer Interfaces, 2019, 6, 178-189.	0.9	9
30	Brain–Computer Interface Contributions to Neuroergonomics. , 2019, , 43-48.		32
31	A review of classification algorithms for EEG-based brain–computer interfaces: a 10 year update. Journal of Neural Engineering, 2018, 15, 031005.	1.8	1,282
32	Towards Robust Neuroadaptive HCI. , 2018, , .		19
33	Using Recent BCI Literature to Deepen our Understanding of Clinical Neurofeedback: A Short Review. Neuroscience, 2018, 378, 225-233.	1.1	45
34	A review of rapid serial visual presentation-based brain–computer interfaces. Journal of Neural Engineering, 2018, 15, 021001.	1.8	81
35	Neural Mechanisms of Social Emotion Perception: An EEG Hyper-Scanning Study. , 2018, , .		8
36	Editorial: Detection and Estimation of Working Memory States and Cognitive Functions Based on Neurophysiological Measures. Frontiers in Human Neuroscience, 2018, 12, 440.	1.0	3

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37	Recent Advances in EEG-Based Neuroergonomics for Human–Computer Interaction. , 2018, , 275.		1
38	Defining and quantifying users' mental imagery-based BCI skills: a first step. Journal of Neural Engineering, 2018, 15, 046030.	1.8	47
39	SEREEGA: Simulating event-related EEG activity. Journal of Neuroscience Methods, 2018, 309, 13-24.	1.3	37
40	A Generic Framework for Adaptive EEG-Based BCI Training and Operation. , 2018, , 595-612.		10
41	Mind the Traps! Design Guidelines for Rigorous BCI Experiments. , 2018, , 613-634.		16
42	Neurofeedback: One of today's techniques in psychiatry?. L'Encephale, 2017, 43, 135-145.	0.3	77
43	When HCI Meets Neurotechnologies. , 2017, , .		3
44	Heading for new shores! Overcoming pitfalls in BCI design. Brain-Computer Interfaces, 2017, 4, 60-73.	0.9	73
45	On assessing neurofeedback effects: should double-blind replace neurophysiological mechanisms?. Brain, 2017, 140, e63-e63.	3.7	34
46	Riemannian Approaches in Brain-Computer Interfaces: A Review. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1753-1762.	2.7	243
47	User-Centered BCI Videogame Design. , 2017, , 225-250.		4
48	Unimodal Versus Bimodal EEG-fMRI Neurofeedback of a Motor Imagery Task. Frontiers in Human Neuroscience, 2017, 11, 193.	1.0	51
49	Scientific Outreach with Teegi, a Tangible EEG Interface to Talk about Neurotechnologies. , 2017, , .		9
50	Classifying EEG Signals during Stereoscopic Visualization to Estimate Visual Comfort. Computational Intelligence and Neuroscience, 2016, 2016, 1-11.	1.1	29
51	Towards a spatial ability training to improve Mental Imagery based Brain-Computer Interface (MI-BCI) performance: A Pilot study. , 2016, , .		6
52	Why standard brain-computer interface (BCI) training protocols should be changed: an experimental study. Journal of Neural Engineering, 2016, 13, 036024.	1.8	129
53	Human Learning for Brain-Computer Interfaces. , 2016, , 233-250.		4
54	Advances in user-training for mental-imagery-based BCI control. Progress in Brain Research, 2016, 228, 3-35.	0.9	101

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55	TOBE. , 2016, , .		56
56	Statistical Learning for BCIs. , 2016, , 185-205.		0
57	Framework for Electroencephalography-based Evaluation of User Experience. , 2016, , .		49
58	Towards Explanatory Feedback for User Training in Brain-Computer Interfaces. , 2015, , .		7
59	Electrocorticographic representations of segmental features in continuous speech. Frontiers in Human Neuroscience, 2015, 09, 97.	1.0	72
60	Predicting Mental Imagery-Based BCI Performance from Personality, Cognitive Profile and Neurophysiological Patterns. PLoS ONE, 2015, 10, e0143962.	1.1	129
61	Signal Processing Approaches to Minimize or Suppress Calibration Time in Oscillatory Activity-Based Brainâ€"Computer Interfaces. Proceedings of the IEEE, 2015, 103, 871-890.	16.4	202
62	Averaging covariance matrices for EEG signal classification based on the CSP: An empirical study. , 2015, , .		26
63	Towards improved BCI based on human learning principles. , 2015, , .		38
64	Synthetic Evidential Study as Augmented Collective Thought Process â€" Preliminary Report. Lecture Notes in Computer Science, 2015, , 13-22.	1.0	7
65	Continuous Tactile Feedback for Motor-Imagery Based Brain-Computer Interaction in a Multitasking Context. Lecture Notes in Computer Science, 2015, , 488-505.	1.0	29
66	Estimating Visual Comfort in Stereoscopic Displays Using Electroencephalography: A Proof-of-Concept. Lecture Notes in Computer Science, 2015, , 354-362.	1.0	4
67	User-Centred BCI Videogame Design. , 2015, , 1-26.		2
68	EEG-based workload estimation across affective contexts. Frontiers in Neuroscience, 2014, 8, 114.	1.4	87
69	Assessing the zone of comfort in stereoscopic displays using EEG. , 2014, , .		17
70	Teegi. , 2014, , .		32
71	Optimizing spatial filter pairs for EEG classification based on phase-synchronization. , 2014, , .		19
72	Workshops of the Fifth International Brain-Computer Interface Meeting: Defining the Future. Brain-Computer Interfaces, 2014, 1, 27-49.	0.9	35

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73	The Mind-Mirror: See your brain in action in your head using EEG and augmented reality. , 2014, , .		35
74	A Tutorial on EEG Signal-processing Techniques for Mental-state Recognition in Brain–Computer Interfaces. , 2014, , 133-161.		103
75	Two Brains, One Game: Design and Evaluation of a Multiuser BCI Video Game Based on Motor Imagery. IEEE Transactions on Games, 2013, 5, 185-198.	1.7	135
76	Guest Editorial: Brain/neuronal - Computer game interfaces and interaction. IEEE Transactions on Games, 2013, 5, 77-81.	1.7	35
77	Flaws in current human training protocols for spontaneous Brain-Computer Interfaces: lessons learned from instructional design. Frontiers in Human Neuroscience, 2013, 7, 568.	1.0	225
78	Brain computer interface vs walking interface in VR. , 2012, , .		8
79	Combining BCI with Virtual Reality: Towards New Applications and Improved BCI. Biological and Medical Physics Series, 2012, , 197-220.	0.3	69
80	Exploring two novel features for EEG-based brain–computer interfaces: Multifractal cumulants and predictive complexity. Neurocomputing, 2012, 79, 87-94.	3.5	52
81	Brain-Computer Interfaces: Beyond Medical Applications. Computer, 2012, 45, 26-34.	1.2	272
82	Comparative study of band-power extraction techniques for Motor Imagery classification. , 2011, , .		60
83	Regularizing Common Spatial Patterns to Improve BCI Designs: Unified Theory and New Algorithms. IEEE Transactions on Biomedical Engineering, 2011, 58, 355-362.	2.5	817
84	Brain-computer interfaces for 3D games. , 2011, , .		22
85	Using scalp electrical biosignals to control an object by concentration and relaxation tasks: Design and evaluation. , 2011, 2011, 6299-302.		11
86	Learning from other subjects helps reducing Brain-Computer Interface calibration time. , 2010, , .		110
87	Spatially Regularized Common Spatial Patterns for EEG Classification. , 2010, , .		43
88	OpenViBE: An Open-Source Software Platform to Design, Test, and Use Brain–Computer Interfaces in Real and Virtual Environments. Presence: Teleoperators and Virtual Environments, 2010, 19, 35-53.	0.3	572
89	Exploring Large Virtual Environments by Thoughts Using a Brain–Computer Interface Based on Motor Imagery and High-Level Commands. Presence: Teleoperators and Virtual Environments, 2010, 19, 54-70.	0.3	53
90	Comparison of designs towards a subject-independent brain-computer interface based on motor imagery. , 2009, 2009, 4543-6.		46

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91	A performance model of selection techniques for p300-based brain-computer interfaces. , 2009, , .		3
92	FuRIA: An Inverse Solution Based Feature Extraction Algorithm Using Fuzzy Set Theory for Brainâ€"Computer Interfaces. IEEE Transactions on Signal Processing, 2009, 57, 3253-3263.	3.2	45
93	Towards ambulatory brain-computer interfaces. , 2009, , .		38
94	Classifying EEG for brain computer interfaces using Gaussian processes. Pattern Recognition Letters, 2008, 29, 354-359.	2.6	77
95	Brain-Computer Interfaces, Virtual Reality, and Videogames. Computer, 2008, 41, 66-72.	1.2	294
96	Pattern rejection strategies for the design of self-paced EEG-based Brain-Computer Interfaces. , 2008, , .		7
97	FuRIA: A Novel Feature Extraction Algorithm for Brain-Computer Interfaces using Inverse Models and Fuzzy Regions of Interest. , 2007, , .		9
98	Studying the Use of Fuzzy Inference Systems for Motor Imagery Classification. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 322-324.	2.7	27
99	A review of classification algorithms for EEG-based brainâ€"computer interfaces. Journal of Neural Engineering, 2007, 4, R1-R13.	1.8	2,130
100	Classification of movement intention by spatially filtered electromagnetic inverse solutions. Physics in Medicine and Biology, 2006, 51, 1971-1989.	1.6	79
101	A BCI challenge for the signal-processing community: considering the user in the loop. , 0, , 143-172.		7