Klaus-Robert Mller

List of Publications by Year in Descending Order

411 papers	40,046 citations	87 h-index	195 g-index
452 ext. papers	50,130 ext. citations	5.7 avg, IF	7.91 L-index

#	Paper	IF	Citations
411	Towards robust explanations for deep neural networks. *Pattern Recognition*, **2022**, 121, 108194	7.7	4
410	Finding and removing Clever Hans: Using explanation methods to debug and improve deep models. *Information Fusion*, **2022**, 77, 261-295	16.7	7
409	Inverse design of 3d molecular structures with conditional generative neural networks.. *Nature Communications*, **2022**, 13, 973	17.4	3
408	Harmoni: a Method for Eliminating Spurious Interactions due to the Harmonic Components in Neuronal Data.. *NeuroImage*, **2022**, 119053	7.9	1
407	xxAI - Beyond Explainable Artificial Intelligence. *Lecture Notes in Computer Science*, **2022**, 3-10	0.9	2
406	Explaining the Predictions of Unsupervised Learning Models. *Lecture Notes in Computer Science*, **2022**, 117-138	0.9	3
405	Patient-level proteomic network prediction by explainable artificial intelligence. *Npj Precision Oncology*, **2022**, 6,	9.8	1
404	SpookyNet: Learning force fields with electronic degrees of freedom and nonlocal effects.. *Nature Communications*, **2021**, 12, 7273	17.4	19
403	Clustered Federated Learning: Model-Agnostic Distributed Multitask Optimization Under Privacy Constraints. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 3710-3722	10.3	72
402	Morphological and molecular breast cancer profiling through explainable machine learning. *Nature Machine Intelligence*, **2021**, 3, 355-366	22.5	20
401	Machine Learning Force Fields. *Chemical Reviews*, **2021**, 121, 10142-10186	68.1	147
400	. *Proceedings of the IEEE*, **2021**, 109, 247-278	14.3	112
399	Leaf-inspired homeostatic cellulose biosensors. *Science Advances*, **2021**, 7,	14.3	3
398	Towards CRISP-ML(Q): A Machine Learning Process Model with Quality Assurance Methodology. *Machine Learning and Knowledge Extraction*, **2021**, 3, 392-413	3.1	17
397	A Unifying Review of Deep and Shallow Anomaly Detection. *Proceedings of the IEEE*, **2021**, 109, 756-795	14.3	90
396	Robustifying models against adversarial attacks by Langevin dynamics. *Neural Networks*, **2021**, 137, 1-17	9.1	1
395	DeepCOMBI: explainable artificial intelligence for the analysis and discovery in genome-wide association studies. *NAR Genomics and Bioinformatics*, **2021**, 3, lqab065	3.7	3

394	Pruning by explaining: A novel criterion for deep neural network pruning. *Pattern Recognition*, **2021**, 115, 107899	7.7	25
393	Combining Machine Learning and Computational Chemistry for Predictive Insights Into Chemical Systems. *Chemical Reviews*, **2021**, 121, 9816-9872	68.1	53
392	Forecasting industrial aging processes with machine learning methods. *Computers and Chemical Engineering*, **2021**, 144, 107123	4	6
391	Immediate brain plasticity after one hour of brain-computer interface (BCI). *Journal of Physiology*, **2021**, 599, 2435-2451	3.9	19
390	Dynamical strengthening of covalent and non-covalent molecular interactions by nuclear quantum effects at finite temperature. *Nature Communications*, **2021**, 12, 442	17.4	13
389	Machine learning of solvent effects on molecular spectra and reactions. *Chemical Science*, **2021**, 12, 11473-11483	9.4	13
388	Artificial intelligence and pathology: From principles to practice and future applications in histomorphology and molecular profiling. *Seminars in Cancer Biology*, **2021**,	12.7	6
387	Basis profile curve identification to understand electrical stimulation effects in human brain networks. *PLoS Computational Biology*, **2021**, 17, e1008710	5	0
386	Unification of sparse Bayesian learning algorithms for electromagnetic brain imaging with the majorization minimization framework. *NeuroImage*, **2021**, 239, 118309	7.9	3
385	Optimizing for Measure of Performance in Max-Margin Parsing. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 2680-2684	10.3	
384	Resolving challenges in deep learning-based analyses of histopathological images using explanation methods. *Scientific Reports*, **2020**, 10, 6423	4.9	38
383	Ensemble learning of coarse-grained molecular dynamics force fields with a kernel approach. *Journal of Chemical Physics*, **2020**, 152, 194106	3.9	25
382	Exploring chemical compound space with quantum-based machine learning. *Nature Reviews Chemistry*, **2020**, 4, 347-358	34.6	87
381	Brain-Switches for Asynchronous Brain□Computer Interfaces: A Systematic Review. *Electronics (Switzerland)*, **2020**, 9, 422	2.6	14
380	Nonlinear interaction decomposition (NID): A method for separation of cross-frequency coupled sources in human brain. *NeuroImage*, **2020**, 211, 116599	7.9	6
379	Machine Learning for Molecular Simulation. *Annual Review of Physical Chemistry*, **2020**, 71, 361-390	15.7	193
378	Towards explaining anomalies: A deep Taylor decomposition of one-class models. *Pattern Recognition*, **2020**, 101, 107198	7.7	27
377	Features spaces and a learning system for structural-temporal data, and their application on a use case of real-time communication network validation data. *PLoS ONE*, **2020**, 15, e0228434	3.7	

376	Asymptotically unbiased estimation of physical observables with neural samplers. *Physical Review E* , **2020**, 101, 023304	2.4	18
375	On the Byzantine Robustness of Clustered Federated Learning **2020**,		14
374	Kernel Methods for Quantum Chemistry. *Lecture Notes in Physics*, **2020**, 25-36	0.8	1
373	Learning Representations of Molecules and Materials with Atomistic Neural Networks. *Lecture Notes in Physics*, **2020**, 215-230	0.8	3
372	Construction of Machine Learned Force Fields with Quantum Chemical Accuracy: Applications and Chemical Insights. *Lecture Notes in Physics*, **2020**, 277-307	0.8	5
371	Accurate Molecular Dynamics Enabled by Efficient Physically Constrained Machine Learning Approaches. *Lecture Notes in Physics*, **2020**, 129-154	0.8	4
370	Interpretable Deep Neural Network to Predict Estrogen Receptor Status from Haematoxylin-Eosin Images. *Lecture Notes in Computer Science*, **2020**, 16-37	0.9	3
369	Robust and Communication-Efficient Federated Learning From Non-i.i.d. Data. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 3400-3413	10.3	243
368	Improved physiological noise regression in fNIRS: A multimodal extension of the General Linear Model using temporally embedded Canonical Correlation Analysis. *NeuroImage*, **2020**, 208, 116472	7.9	29
367	Quantum chemical accuracy from density functional approximations via machine learning. *Nature Communications*, **2020**, 11, 5223	17.4	70
366	Molecular force fields with gradient-domain machine learning (GDML): Comparison and synergies with classical force fields. *Journal of Chemical Physics*, **2020**, 153, 124109	3.9	11
365	**2020**,		1
364	Risk estimation of SARS-CoV-2 transmission from bluetooth low energy measurements. *Npj Digital Medicine*, **2020**, 3, 129	15.7	17
363	Autonomous robotic nanofabrication with reinforcement learning. *Science Advances*, **2020**, 6,	14.3	16
362	An adaptive deep reinforcement learning framework enables curling robots with human-like performance in real-world conditions. *Science Robotics*, **2020**, 5,	18.6	13
361	Enhanced Performance of a Brain Switch by Simultaneous Use of EEG and NIRS Data for Asynchronous Brain-Computer Interface. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2020**, 28, 2102-2112	4.8	10
360	Building and Interpreting Deep Similarity Models. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2020**, PP,	13.3	10
359	Sensorimotor Functional Connectivity: A Neurophysiological Factor Related to BCI Performance. *Frontiers in Neuroscience*, **2020**, 14, 575081	5.1	7

358	Compact and Computationally Efficient Representation of Deep Neural Networks. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 772-785	10.3	22
357	Mammography Image Quality Assurance Using Deep Learning. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 3317-3326	5	8
356	Machine learning analysis of DNA methylation profiles distinguishes primary lung squamous cell carcinomas from head and neck metastases. *Science Translational Medicine*, **2019**, 11,	17.5	49
355	A large scale screening study with a SMR-based BCI: Categorization of BCI users and differences in their SMR activity. *PLoS ONE*, **2019**, 14, e0207351	3.7	39
354	A new blind source separation framework for signal analysis and artifact rejection in functional Near-Infrared Spectroscopy. *NeuroImage*, **2019**, 200, 72-88	7.9	18
353	Enhancing sensorimotor BCI performance with assistive afferent activity: An online evaluation. *NeuroImage*, **2019**, 199, 375-386	7.9	13
352	Classification of structured validation data using stateless and stateful features. *Computer Communications*, **2019**, 138, 54-66	5.1	1
351	Molecular force fields with gradient-domain machine learning: Construction and application to dynamics of small molecules with coupled cluster forces. *Journal of Chemical Physics*, **2019**, 150, 114102	3.9	51
350	sGDML: Constructing accurate and data efficient molecular force fields using machine learning. *Computer Physics Communications*, **2019**, 240, 38-45	4.2	67
349	Unmasking Clever Hans predictors and assessing what machines really learn. *Nature Communications*, **2019**, 10, 1096	17.4	282
348	Automating the search for a patent's prior art with a full text similarity search. *PLoS ONE*, **2019**, 14, e0212703	3.7	14
347	Explaining the unique nature of individual gait patterns with deep learning. *Scientific Reports*, **2019**, 9, 2391	4.9	80
346	N-ary decomposition for multi-class classification. *Machine Learning*, **2019**, 108, 809-830	4	11
345	Rethinking BCI Paradigm and Machine Learning Algorithm as a Symbiosis: Zero Calibration, Guaranteed Convergence and High Decoding Performance. *Springer Briefs in Electrical and Computer Engineering*, **2019**, 63-73	0.4	1
344	Canonical maximization of coherence: A novel tool for investigation of neuronal interactions between two datasets. *NeuroImage*, **2019**, 201, 116009	7.9	5
343	Rotation Invariant Clustering of 3D Cell Nuclei Shapes. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 6022-6027	0.9	
342	Evaluating Recurrent Neural Network Explanations **2019**,		12
341	Towards Explainable Artificial Intelligence. *Lecture Notes in Computer Science*, **2019**, 5-22	0.9	111

340	Layer-Wise Relevance Propagation: An Overview. *Lecture Notes in Computer Science*, **2019**, 193-209	0.9	107
339	Explaining and Interpreting LSTMs. *Lecture Notes in Computer Science*, **2019**, 211-238	0.9	22
338	Understanding Patch-Based Learning of Video Data by Explaining Predictions. *Lecture Notes in Computer Science*, **2019**, 297-309	0.9	8
337	Quantum-Chemical Insights from Interpretable Atomistic Neural Networks. *Lecture Notes in Computer Science*, **2019**, 311-330	0.9	15
336	Deep Transfer Learning for Whole-Brain FMRI Analyses. *Lecture Notes in Computer Science*, **2019**, 59-67	0.9	7
335	Unifying machine learning and quantum chemistry with a deep neural network for molecular wavefunctions. *Nature Communications*, **2019**, 10, 5024	17.4	176
334	Sparse Binary Compression: Towards Distributed Deep Learning with minimal Communication **2019** ,		50
333	Using transfer learning from prior reference knowledge to improve the clustering of single-cell RNA-Seq data. *Scientific Reports*, **2019**, 9, 20353	4.9	13
332	Analyzing Neuroimaging Data Through Recurrent Deep Learning Models. *Frontiers in Neuroscience*, **2019**, 13, 1321	5.1	22
331	A Neural Network Model of Spatial Distortion Sensitivity for Video Quality Estimation **2019**,		3
330	Entropy-Constrained Training of Deep Neural Networks **2019**,		7
329	Estimation of distortion sensitivity for visual quality prediction using a convolutional neural network **2019**, 91, 54-65		9
328	SchNetPack: A Deep Learning Toolbox For Atomistic Systems. *Journal of Chemical Theory and Computation*, **2019**, 15, 448-455	6.4	135
327	Unsupervised Learning for Brain-Computer Interfaces Based on Event-Related Potentials: Review and Online Comparison [Research Frontier]. *IEEE Computational Intelligence Magazine*, **2018**, 13, 66-77	5.6	12
326	Simultaneous acquisition of EEG and NIRS during cognitive tasks for an open access dataset. *Scientific Data*, **2018**, 5, 180003	8.2	60
325	SchNet - A deep learning architecture for molecules and materials. *Journal of Chemical Physics*, **2018**, 148, 241722	3.9	556
324	Open access repository for hybrid EEG-NIRS data **2018**,		3
323	Assessing Perceived Image Quality Using Steady-State Visual Evoked Potentials and Spatio-Spectral Decomposition. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 1694-1706	6.4	17

322	Methods for interpreting and understanding deep neural networks **2018**, 73, 1-15		760
321	Support Vector Data Descriptions and k -Means Clustering: One Class?. *IEEE Transactions on Neural Networks and Learning Systems*, **2018**, 29, 3994-4006	10.3	18
320	Capturing intensive and extensive DFT/TDDFT molecular properties with machine learning. *European Physical Journal B*, **2018**, 91, 1	1.2	34
319	Scoring of tumor-infiltrating lymphocytes: From visual estimation to machine learning. *Seminars in Cancer Biology*, **2018**, 52, 151-157	12.7	71
318	Improvement of Information Transfer Rates Using a Hybrid EEG-NIRS Brain-Computer Interface with a Short Trial Length: Offline and Pseudo-Online Analyses. *Sensors*, **2018**, 18,	3.8	13
317	Many-Body Descriptors for Predicting Molecular Properties with Machine Learning: Analysis of Pairwise and Three-Body Interactions in Molecules. *Journal of Chemical Theory and Computation*, **2018**, 14, 2991-3003	6.4	47
316	Transductive Regression for Data With Latent Dependence Structure. *IEEE Transactions on Neural Networks and Learning Systems*, **2018**, 29, 2743-2756	10.3	4
315	Curly: An AI-based Curling Robot Successfully Competing in the Olympic Discipline of Curling **2018**,		3
314	Deep Neural Networks for No-Reference and Full-Reference Image Quality Assessment. *IEEE Transactions on Image Processing*, **2018**, 27, 206-219	8.7	371
313	Motion-Based Rapid Serial Visual Presentation for Gaze-Independent Brain-Computer Interfaces. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2018**, 26, 334-343	4.8	37
312	Computational analysis reveals histotype-dependent molecular profile and actionable mutation effects across cancers. *Genome Medicine*, **2018**, 10, 83	14.4	4
311	Structuring Neural Networks for More Explainable Predictions. *The Springer Series on Challenges in Machine Learning*, **2018**, 115-131	7.3	4
310	Towards exact molecular dynamics simulations with machine-learned force fields. *Nature Communications*, **2018**, 9, 3887	17.4	259
309	. *IEEE Journal on Selected Topics in Signal Processing*, **2018**, 12, 1213-1223	7.5	7
308	Eyes-closed hybrid brain-computer interface employing frontal brain activation. *PLoS ONE*, **2018**, 13, e0196359	3.7	8
307	Sharing hash codes for multiple purposes. *Japanese Journal of Statistics and Data Science*, **2018**, 1, 215-246	465	
306	Accurate Maximum-Margin Training for Parsing With Context-Free Grammars. *IEEE Transactions on Neural Networks and Learning Systems*, **2017**, 28, 44-56	10.3	3
305	Quantum-chemical insights from deep tensor neural networks. *Nature Communications*, **2017**, 8, 13890	17.4	600

304	A mathematical model for the two-learners problem. *Journal of Neural Engineering*, **2017**, 14, 036005	5	26
303	Shifting stimuli for brain computer interface based on rapid serial visual presentation **2017**,		2
302	Machine learning of accurate energy-conserving molecular force fields. *Science Advances*, **2017**, 3, e1603015	14.3	451
301	Objective quality assessment of stereoscopic images with vertical disparity using EEG. *Journal of Neural Engineering*, **2017**, 14, 046009	5	16
300	Porosity estimation by semi-supervised learning with sparsely available labeled samples. *Computers and Geosciences*, **2017**, 106, 33-48	4.5	11
299	Explaining nonlinear classification decisions with deep Taylor decomposition. *Pattern Recognition*, **2017**, 65, 211-222	7.7	427
298	Bypassing the Kohn-Sham equations with machine learning. *Nature Communications*, **2017**, 8, 872	17.4	353
297	Real-time robustness evaluation of regression based myoelectric control against arm position change and donning/doffing. *PLoS ONE*, **2017**, 12, e0186318	3.7	23
296	Spatio-temporal dynamics of multimodal EEG-fNIRS signals in the loss and recovery of consciousness under sedation using midazolam and propofol. *PLoS ONE*, **2017**, 12, e0187743	3.7	15
295	"What is relevant in a text document?": An interpretable machine learning approach. *PLoS ONE*, **2017**, 12, e0181142	3.7	84
294	Evaluation of a Compact Hybrid Brain-Computer Interface System. *BioMed Research International*, **2017**, 2017, 6820482	3	23
293	On robust parameter estimation in brain-computer interfacing. *Journal of Neural Engineering*, **2017**, 14, 061001	5	10
292	Reinforcement learning for video encoder control in HEVC **2017**,		9
291	Interpretable human action recognition in compressed domain **2017**,		12
290	Open Access Dataset for EEG+NIRS Single-Trial Classification. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2017**, 25, 1735-1745	4.8	75
289	Efficient Exact Inference With Loss Augmented Objective in Structured Learning. *IEEE Transactions on Neural Networks and Learning Systems*, **2017**, 28, 2566-2579	10.3	1
288	M3BA: A Mobile, Modular, Multimodal Biosignal Acquisition Architecture for Miniaturized EEG-NIRS-Based Hybrid BCI and Monitoring. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 1199-1210	5	75
287	Evaluating the Visualization of What a Deep Neural Network Has Learned. *IEEE Transactions on Neural Networks and Learning Systems*, **2017**, 28, 2660-2673	10.3	314

286	**2017**,		1
285	Editorial IEEE Brain Initiative Special issue on BMI/BCI Systems. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2017**, 25, 1685-1686	4.8	2
284	Understanding and Comparing Deep Neural Networks for Age and Gender Classification **2017**,		18
283	Why build an integrated EEG-NIRS? About the advantages of hybrid bio-acquisition hardware. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 4475-4478	0.9	4
282	A convolutional neural network for steady state visual evoked potential classification under ambulatory environment. *PLoS ONE*, **2017**, 12, e0172578	3.7	128
281	ML2Motif-Reliable extraction of discriminative sequence motifs from learning machines. *PLoS ONE*, **2017**, 12, e0174392	3.7	4
280	Learning from label proportions in brain-computer interfaces: Online unsupervised learning with guarantees. *PLoS ONE*, **2017**, 12, e0175856	3.7	22
279	Explaining Recurrent Neural Network Predictions in Sentiment Analysis **2017**,		87
278	Object Boundary Detection and Classification with Image-Level Labels. *Lecture Notes in Computer Science*, **2017**, 153-164	0.9	0
277	Analyzing neuroimaging data with subclasses: A shrinkage approach. *NeuroImage*, **2016**, 124, 740-751	7.9	6
276	Near-infrared spectroscopy (NIRS)-based eyes-closed brain-computer interface (BCI) using prefrontal cortex activation due to mental arithmetic. *Scientific Reports*, **2016**, 6, 36203	4.9	45
275	EEG-based BCI for the linear control of an upper-limb neuroprosthesis. *Medical Engineering and Physics*, **2016**, 38, 1195-1204	2.4	30
274	Multiscale temporal neural dynamics predict performance in a complex sensorimotor task. *NeuroImage*, **2016**, 141, 291-303	7.9	19
273	Decoding of top-down cognitive processing for SSVEP-controlled BMI. *Scientific Reports*, **2016**, 6, 36267	4.9	17
272	Controlling explanatory heatmap resolution and semantics via decomposition depth **2016**,		7
271	Robust Statistical Detection of Power-Law Cross-Correlation. *Scientific Reports*, **2016**, 6, 27089	4.9	6
270	The LDA beamformer: Optimal estimation of ERP source time series using linear discriminant analysis. *NeuroImage*, **2016**, 129, 279-291	7.9	32
269	Validity of Time Reversal for Testing Granger Causality. *IEEE Transactions on Signal Processing*, **2016**, 64, 2746-2760	4.8	29

268	Improving the Robustness of Myoelectric Pattern Recognition for Upper Limb Prostheses by Covariate Shift Adaptation. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2016**, 24, 961-970	4.8	83
267	EEG-based usability assessment of 3D shutter glasses. *Journal of Neural Engineering*, **2016**, 13, 016003	5	6
266	Explaining Predictions of Non-Linear Classifiers in NLP **2016**,		21
265	Layer-Wise Relevance Propagation for Neural Networks with Local Renormalization Layers. *Lecture Notes in Computer Science*, **2016**, 63-71	0.9	57
264	Layer-Wise Relevance Propagation for Deep Neural Network Architectures. *Lecture Notes in Electrical Engineering*, **2016**, 913-922	0.2	35
263	The Berlin Brain-Computer Interface: Progress Beyond Communication and Control. *Frontiers in Neuroscience*, **2016**, 10, 530	5.1	115
262	Higher order stationary subspace analysis. *Journal of Physics: Conference Series*, **2016**, 699, 012021	0.3	2
261	A better metric in kernel adaptive filtering **2016**,		2
260	**2016**,		13
259	Combining Multiple Hypothesis Testing with Machine Learning Increases the Statistical Power of Genome-wide Association Studies. *Scientific Reports*, **2016**, 6, 36671	4.9	30
258	Brain-Computer Interfacing for multimedia quality assessment **2016**,		14
257	Alternative CSP approaches for multimodal distributed BCI data **2016**,		2
256	Analyzing Classifiers: Fisher Vectors and Deep Neural Networks **2016**,		68
255	Why Does a Hilbertian Metric Work Efficiently in Online Learning With Kernels?. *IEEE Signal Processing Letters*, **2016**, 23, 1424-1428	3.2	6
254	Ensembles of adaptive spatial filters increase BCI performance: an online evaluation. *Journal of Neural Engineering*, **2016**, 13, 046003	5	35
253	Understanding machine-learned density functionals. *International Journal of Quantum Chemistry*, **2016**, 116, 819-833	2.1	98
252	Effect of higher frequency on the classification of steady-state visual evoked potentials. *Journal of Neural Engineering*, **2016**, 13, 016014	5	69
251	Machine learning for BCI: towards analysing cognition **2016**,		1

250	Brain-computer interfacing under distraction: an evaluation study. *Journal of Neural Engineering*, **2016**, 13, 056012	5	10
249	Interpretable deep neural networks for single-trial EEG classification. *Journal of Neuroscience Methods*, **2016**, 274, 141-145	3	183
248	Identifying Individual Facial Expressions by Deconstructing a Neural Network. *Lecture Notes in Computer Science*, **2016**, 344-354	0.9	13
247	Machine Learning Predictions of Molecular Properties: Accurate Many-Body Potentials and Nonlocality in Chemical Space. *Journal of Physical Chemistry Letters*, **2015**, 6, 2326-31	6.4	426
246	Robust common spatial patterns based on Bhattacharyya distance and Gamma divergence **2015**,		3
245	Identifying Granger causal relationships between neural power dynamics and variables of interest. *NeuroImage*, **2015**, 111, 489-504	7.9	12
244	Extracting latent brain states--Towards true labels in cognitive neuroscience experiments. *NeuroImage*, **2015**, 120, 225-53	7.9	11
243	EEG-based classification of video quality perception using steady state visual evoked potentials (SSVEPs). *Journal of Neural Engineering*, **2015**, 12, 026012	5	37
242	Classifying directions in continuous arm movement from EEG signals **2015**,		4
241	Multifrequency Analysis of Brain-Computer Interfaces. *Trends in Augmentation of Human Performance*, **2015**, 49-60		
240	Concurrent Adaptation of Human and Machine Improves Simultaneous and Proportional Myoelectric Control. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2015**, 23, 618-27	4.8	50
239	Neurophysiological assessment of perceived image quality using steady-state visual evoked potentials **2015**,		6
238	The need for novel informatics tools for integrating and planning research in molecular and cellular cognition. *Learning and Memory*, **2015**, 22, 494-8	2.8	8
237	. *Proceedings of the IEEE*, **2015**, 103, 1507-1530	14.3	54
236	A lower limb exoskeleton control system based on steady state visual evoked potentials. *Journal of Neural Engineering*, **2015**, 12, 056009	5	118
235	Opening the Black Box: Revealing Interpretable Sequence Motifs in Kernel-Based Learning Algorithms. *Lecture Notes in Computer Science*, **2015**, 137-153	0.9	4
234	On the influence of high-pass filtering on ICA-based artifact reduction in EEG-ERP. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 4101-5	0.9	128
233	Machine Learning Methods of the Berlin Brain-Computer Interface. *IFAC-PapersOnLine*, **2015**, 48, 447-452	0.7	3

232	Understanding kernel ridge regression: Common behaviors from simple functions to density functionals. *International Journal of Quantum Chemistry*, **2015**, 115, 1115-1128	2.1	65
231	Nonlinear gradient denoising: Finding accurate extrema from inaccurate functional derivatives. *International Journal of Quantum Chemistry*, **2015**, 115, 1102-1114	2.1	18
230	Three-way analysis of spectrospatial electromyography data: classification and interpretation. *PLoS ONE*, **2015**, 10, e0127231	3.7	6
229	On Pixel-Wise Explanations for Non-Linear Classifier Decisions by Layer-Wise Relevance Propagation. *PLoS ONE*, **2015**, 10, e0130140	3.7	1089
228	. *Proceedings of the IEEE*, **2015**, 103, 926-943	14.3	98
227	. *Proceedings of the IEEE*, **2015**, 103, 868-870	14.3	2
226	Learning From More Than One Data Source: Data Fusion Techniques for Sensorimotor Rhythm-Based Brain Computer Interfaces. *Proceedings of the IEEE*, **2015**, 103, 891-906	14.3	59
225	Investigating effects of different artefact types on motor imagery BCI. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 1942-5	0.9	5
224	Bringing BCI into everyday life: Motor imagery in a pseudo realistic environment **2015**,		5
223	Tackling noise, artifacts and nonstationarity in BCI with robust divergences **2015**,		4
222	SVM2Motif--Reconstructing Overlapping DNA Sequence Motifs by Mimicking an SVM Predictor. *PLoS ONE*, **2015**, 10, e0144782	3.7	4
221	Finding brain oscillations with power dependencies in neuroimaging data. *NeuroImage*, **2014**, 96, 334-48	7.9	35
220	Electroencephalography/sonication-mediated human brain-brain interfacing technology. *Trends in Biotechnology*, **2014**, 32, 345-6	15.1	3
219	Channel selection for simultaneous myoelectric prosthesis control **2014**,		2
218	Information geometry meets BCI spatial filtering using divergences **2014**,		2
217	Mean shrinkage improves the classification of ERP signals by exploiting additional label information **2014**,		1
216	Integrating dynamic stopping, transfer learning and language models in an adaptive zero-training ERP speller. *Journal of Neural Engineering*, **2014**, 11, 035005	5	64
215	Stereoscopic depth increases intersubject correlations of brain networks. *NeuroImage*, **2014**, 100, 427-34	7.9	34

214	Divergence-based framework for common spatial patterns algorithms. *IEEE Reviews in Biomedical Engineering*, **2014**, 7, 50-72	6.4	117
213	Efficient algorithms for exact inference in sequence labeling SVMs. *IEEE Transactions on Neural Networks and Learning Systems*, **2014**, 25, 870-81	10.3	10
212	Toward exoskeleton control based on steady state visual evoked potentials **2014**,		11
211	SPoC: a novel framework for relating the amplitude of neuronal oscillations to behaviorally relevant parameters. *NeuroImage*, **2014**, 86, 111-22	7.9	65
210	When brain and behavior disagree: Tackling systematic label noise in EEG data with machine learning **2014**,		3
209	The effect of linear mixing in the EEG on Hurst exponent estimation. *NeuroImage*, **2014**, 99, 377-87	7.9	25
208	Distributed functions of detection and discrimination of vibrotactile stimuli in the hierarchical human somatosensory system. *Frontiers in Human Neuroscience*, **2014**, 8, 1070	3.3	23
207	Motor imagery for severely motor-impaired patients: evidence for brain-computer interfacing as superior control solution. *PLoS ONE*, **2014**, 9, e104854	3.7	56
206	Predicting BCI subject performance using probabilistic spatio-temporal filters. *PLoS ONE*, **2014**, 9, e87056	3.7	30
205	True zero-training brain-computer interfacing--an online study. *PLoS ONE*, **2014**, 9, e102504	3.7	48
204	An efficient ERP-based brain-computer interface using random set presentation and face familiarity. *PLoS ONE*, **2014**, 9, e111157	3.7	58
203	Channel selection for simultaneous and proportional myoelectric prosthesis control of multiple degrees-of-freedom. *Journal of Neural Engineering*, **2014**, 11, 056008	5	26
202	Neurally informed assessment of perceived natural texture image quality **2014**,		12
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