Klaus-Robert MÃ¼ller

List of Publications by Year
in descending order

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424 papers	59,896 citations	2318 98 h-index	1155 229 g-index
453 all docs	453 docs citations	453 times ranked	34783 citing authors

#	Article	IF	Citations
1	From Clustering to Cluster Explanations via Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 1926-1940.	7.2	19
2	Building and Interpreting Deep Similarity Models. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 1149-1161.	9.7	27
3	Artificial intelligence and pathology: From principles to practice and future applications in histomorphology and molecular profiling. Seminars in Cancer Biology, 2022, 84, 129-143.	4.3	41
4	Towards robust explanations for deep neural networks. Pattern Recognition, 2022, 121, 108194.	5.1	20
5	Finding and removing Clever Hans: Using explanation methods to debug and improve deep models. Information Fusion, 2022, 77, 261-295.	11.7	42
6	Machine learning models predict the primary sites of head and neck squamous cell carcinoma metastases based on <scp>DNA</scp> methylation. Journal of Pathology, 2022, 256, 378-387.	2.1	19
7	Langevin Cooling for Unsupervised Domain Translation. IEEE Transactions on Neural Networks and Learning Systems, 2022, PP, 1-14.	7.2	0
8	Inverse design of 3d molecular structures with conditional generative neural networks. Nature Communications, 2022, 13, 973.	5.8	70
9	Harmoni: A method for eliminating spurious interactions due to the harmonic components in neuronal data. NeuroImage, 2022, 252, 119053.	2.1	9
10	xxAI - Beyond Explainable Artificial Intelligence. Lecture Notes in Computer Science, 2022, , 3-10.	1.0	15
11	Explaining theÂPredictions ofÂUnsupervised Learning Models. Lecture Notes in Computer Science, 2022, , 117-138.	1.0	8
12	Scrutinizing XAI using linear ground-truth data with suppressor variables. Machine Learning, 2022, 111, 1903-1923.	3.4	5
13	High-fidelity molecular dynamics trajectory reconstruction with bi-directional neural networks. Machine Learning: Science and Technology, 2022, 3, 025011.	2.4	6
14	An Ever-Expanding Humanities Knowledge Graph: The Sphaera Corpus at the Intersection of Humanities, Data Management, and Machine Learning. Datenbank-Spektrum, 2022, 22, 153-162.	1.2	3
15	Patient-level proteomic network prediction by explainable artificial intelligence. Npj Precision Oncology, 2022, 6, .	2.3	11
16	BIGDMLâ€"Towards accurate quantum machine learning force fields for materials. Nature Communications, 2022, 13, .	5.8	29
17	Toward Explainable Artificial Intelligence for Regression Models: A methodological perspective. IEEE Signal Processing Magazine, 2022, 39, 40-58.	4.6	30
18	Interpretability, Reproducibility, and Replicability [From the Guest Editors]. IEEE Signal Processing Magazine, 2022, 39, 5-7.	4.6	6

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19	Clustered Federated Learning: Model-Agnostic Distributed Multitask Optimization Under Privacy Constraints. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3710-3722.	7.2	316
20	Forecasting industrial aging processes with machine learning methods. Computers and Chemical Engineering, 2021, 144, 107123.	2.0	13
21	Immediate brain plasticity after one hour of brainâ€“computer interface (BCI). Journal of Physiology, 2021, 599, 2435-2451.	1.3	50
22	Dynamical strengthening of covalent and non-covalent molecular interactions by nuclear quantum effects at finite temperature. Nature Communications, 2021, 12, 442.	5.8	25
23	Machine learning of solvent effects on molecular spectra and reactions. Chemical Science, 2021, 12, 11473-11483.	3.7	47
24	Morphological and molecular breast cancer profiling through explainable machine learning. Nature Machine Intelligence, 2021, 3, 355-366.	8.3	72
25	Machine Learning Force Fields. Chemical Reviews, 2021, 121, 10142-10186.	23.0	528
26	Explaining Deep Neural Networks and Beyond: A Review of Methods and Applications. Proceedings of the IEEE, 2021, 109, 247-278.	16.4	455
27	Leaf-inspired homeostatic cellulose biosensors. Science Advances, 2021, 7, .	4.7	29
28	Towards CRISP-ML(Q): A Machine Learning Process Model with Quality Assurance Methodology. Machine Learning and Knowledge Extraction, 2021, 3, 392-413.	3.2	76
29	A Unifying Review of Deep and Shallow Anomaly Detection. Proceedings of the IEEE, 2021, 109, 756-795.	16.4	375
30	Robustifying models against adversarial attacks by Langevin dynamics. Neural Networks, 2021, 137, 1-17.	3.3	7
31	DeepCOMBI: explainable artificial intelligence for the analysis and discovery in genome-wide association studies. NAR Genomics and Bioinformatics, 2021, 3, lqab065.	1.5	18
32	Pruning by explaining: A novel criterion for deep neural network pruning. Pattern Recognition, 2021, 115, 107899.	5.1	104
33	Combining Machine Learning and Computational Chemistry for Predictive Insights Into Chemical Systems. Chemical Reviews, 2021, 121, 9816-9872.	23.0	287
34	Basis profile curve identification to understand electrical stimulation effects in human brain networks. PLoS Computational Biology, 2021, 17, e1008710.	1.5	17
35	Unification of sparse Bayesian learning algorithms for electromagnetic brain imaging with the majorization minimization framework. NeuroImage, 2021, 239, 118309.	2.1	15
36	A standing molecule as a coherent single-electron field emitter. , 2021, , .		0

#	Article	IF	Citations
37	SpookyNet: Learning force fields with electronic degrees of freedom and nonlocal effects. Nature Communications, 2021, 12, 7273.	5.8	108
38	Compact and Computationally Efficient Representation of Deep Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 772-785.	7.2	46
39	Robust and Communication-Efficient Federated Learning From Non-i.i.d. Data. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 3400-3413.	7.2	682
40	Improved physiological noise regression in fNIRS: A multimodal extension of the General Linear Model using temporally embedded Canonical Correlation Analysis. NeuroImage, 2020, 208, 116472.	2.1	68
41	Quantum chemical accuracy from density functional approximations via machine learning. Nature Communications, 2020, 11, 5223.	5.8	187
42	Molecular force fields with gradient-domain machine learning (GDML): Comparison and synergies with classical force fields. Journal of Chemical Physics, 2020, 153, 124109.	1.2	25
43	EEG-Based Assessment of Perceived Quality in Complex Natural Images. , 2020, , .		2
44	Risk estimation of SARS-CoV-2 transmission from bluetooth low energy measurements. Npj Digital Medicine, 2020, 3, 129.	5.7	25
45	EEG-Based Assessment of Perceived Realness in Stylized Face Images. , 2020, , .		4
46	Autonomous robotic nanofabrication with reinforcement learning. Science Advances, 2020, 6, .	4.7	40
47	An adaptive deep reinforcement learning framework enables curling robots with human-like performance in real-world conditions. Science Robotics, 2020, 5, .	9.9	42
48	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.	2.7	24
49	Sensorimotor Functional Connectivity: A Neurophysiological Factor Related to BCI Performance. Frontiers in Neuroscience, 2020, 14, 575081.	1.4	21
50	Resolving challenges in deep learning-based analyses of histopathological images using explanation methods. Scientific Reports, 2020, 10, 6423.	1.6	97
51	Ensemble learning of coarse-grained molecular dynamics force fields with a kernel approach. Journal of Chemical Physics, 2020, 152, 194106.	1.2	38
52	Exploring chemical compound space with quantum-based machine learning. Nature Reviews Chemistry, 2020, 4, 347-358.	13.8	184
53	Brain-Switches for Asynchronous Brainâ€“Computer Interfaces: A Systematic Review. Electronics (Switzerland), 2020, 9, 422.	1.8	27
54	Nonlinear interaction decomposition (NID): A method for separation of cross-frequency coupled sources in human brain. NeuroImage, 2020, 211, 116599.	2.1	10

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55	Machine Learning for Molecular Simulation. Annual Review of Physical Chemistry, 2020, 71, 361-390.	4.8	456
56	Towards explaining anomalies: A deep Taylor decomposition of one-class models. Pattern Recognition, 2020, 101, 107198.	5.1	52
57	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.	1.1	0
58	Asymptotically unbiased estimation of physical observables with neural samplers. Physical Review E, 2020, 101, 023304.	0.8	56
59	On the Byzantine Robustness of Clustered Federated Learning. , 2020, , .		63
60	Mammography Image Quality Assurance Using Deep Learning. IEEE Transactions on Biomedical Engineering, 2020, 67, 3317-3326.	2.5	23
61	Learning Representations of Molecules and Materials with Atomistic Neural Networks. Lecture Notes in Physics, 2020, , 215-230.	0.3	7
62	Construction of Machine Learned Force Fields with Quantum Chemical Accuracy: Applications and Chemical Insights. Lecture Notes in Physics, 2020, , 277-307.	0.3	10
63	Accurate Molecular Dynamics Enabled by Efficient Physically Constrained Machine Learning Approaches. Lecture Notes in Physics, 2020, , 129-154.	0.3	7
64	Interpretable Deep Neural Network to Predict Estrogen Receptor Status from Haematoxylin-Eosin Images. Lecture Notes in Computer Science, 2020, , 16-37.	1.0	5
65	Benign Examples: Imperceptible Changes Can Enhance Image Translation Performance. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 5842-5850.	3.6	1
66	Kernel Methods for Quantum Chemistry. Lecture Notes in Physics, 2020, , 25-36.	0.3	3
67	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.	0.3	1
68	Canonical maximization of coherence: A novel tool for investigation of neuronal interactions between two datasets. NeuroImage, 2019, 201, 116009.	2.1	14
69	Rotation Invariant Clustering of 3D Cell Nuclei Shapes *. , 2019, 2019, 6022-6027.		0
70	Machine learning analysis of DNA methylation profiles distinguishes primary lung squamous cell carcinomas from head and neck metastases. Science Translational Medicine, 2019, 11, .	5.8	100
71	Optimizing for Measure of Performance in Max-Margin Parsing. IEEE Transactions on Neural Networks and Learning Systems, 2019, 31, 1-5.	7.2	0
72	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.	1.1	71

#	Article	IF	Citations
73	A new blind source separation framework for signal analysis and artifact rejection in functional Near-Infrared Spectroscopy. NeuroImage, 2019, 200, 72-88.	2.1	36
74	Enhancing sensorimotor BCI performance with assistive afferent activity: An online evaluation. NeuroImage, 2019, 199, 375-386.	2.1	30
75	Classification of structured validation data using stateless and stateful features. Computer Communications, 2019, 138, 54-66.	3.1	1
76	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.	1.2	81
77	sGDML: Constructing accurate and data efficient molecular force fields using machine learning. Computer Physics Communications, 2019, 240, 38-45.	3.0	137
78	Unmasking Clever Hans predictors and assessing what machines really learn. Nature Communications, 2019, 10, 1096.	5.8	602
79	Automating the search for a patentâ€™s prior art with a full text similarity search. PLoS ONE, 2019, 14, e0212103.	1.1	32
80	Explaining the unique nature of individual gait patterns with deep learning. Scientific Reports, 2019, 9, 2391.	1.6	158
81	N-ary decomposition for multi-class classification. Machine Learning, 2019, 108, 809-830.	3.4	22
82	Black-Box Decision based Adversarial Attack with Symmetric Î±-stable Distribution. , 2019, , .		2
83	Unifying machine learning and quantum chemistry with a deep neural network for molecular wavefunctions. Nature Communications, 2019, 10, 5024.	5.8	282
84	Sparse Binary Compression: Towards Distributed Deep Learning with minimal Communication. , 2019, , .		97
85	Using transfer learning from prior reference knowledge to improve the clustering of single-cell RNA-Seq data. Scientific Reports, 2019, 9, 20353.	1.6	23
86	Analyzing Neuroimaging Data Through Recurrent Deep Learning Models. Frontiers in Neuroscience, 2019, 13, 1321.	1.4	58
87	A Neural Network Model of Spatial Distortion Sensitivity for Video Quality Estimation. , 2019, , .		3
88	Entropy-Constrained Training of Deep Neural Networks. , 2019, , .		11
89	Estimation of distortion sensitivity for visual quality prediction using a convolutional neural network. , 2019, 91, 54-65.		16
90	SchNetPack: A Deep Learning Toolbox For Atomistic Systems. Journal of Chemical Theory and Computation, 2019, 15, 448-455.	2.3	240

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91	Towards Explainable Artificial Intelligence. Lecture Notes in Computer Science, 2019, , 5-22.	1.0	234
92	Layer-Wise Relevance Propagation: An Overview. Lecture Notes in Computer Science, 2019, , 193-209.	1.0	282
93	Explaining and Interpreting LSTMs. Lecture Notes in Computer Science, 2019, , 211-238.	1.0	44
94	Understanding Patch-Based Learning of Video Data by Explaining Predictions. Lecture Notes in Computer Science, 2019, , 297-309.	1.0	14
95	Quantum-Chemical Insights from Interpretable Atomistic Neural Networks. Lecture Notes in Computer Science, 2019, , 311-330.	1.0	25
96	Deep Transfer Learning for Whole-Brain FMRI Analyses. Lecture Notes in Computer Science, 2019, , 59-67.	1.0	13
97	Evaluating Recurrent Neural Network Explanations. , 2019, , .		32
98	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.	3.4	17
99	Simultaneous acquisition of EEG and NIRS during cognitive tasks for an open access dataset. Scientific Data, 2018, 5, 180003.	2.4	114
100	SchNet â€“ A deep learning architecture for molecules and materials. Journal of Chemical Physics, 2018, 148, 241722.	1.2	1,083
101	Open access repository for hybrid EEG-NIRS data. , 2018, , .		5
102	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.	5.6	25
103	Methods for interpreting and understanding deep neural networks. , 2018, 73, 1-15.		1,458
104	Support Vector Data Descriptions and k -Means Clustering: One Class?. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 3994-4006.	7.2	27
105	Deep Neural Networks for No-Reference and Full-Reference Image Quality Assessment. IEEE Transactions on Image Processing, 2018, 27, 206-219.	6.0	728
106	Motion-Based Rapid Serial Visual Presentation for Gaze-Independent Brain-Computer Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 334-343.	2.7	88
107	Computational analysis reveals histotype-dependent molecular profile and actionable mutation effects across cancers. Genome Medicine, 2018, 10, 83.	3.6	8
108	How are the Centered Kernel Principal Components Relevant to Regression Task? -An Exact Analysis. , 2018, , .		0

#	Article	IF	Citations
109	Structuring Neural Networks for More Explainable Predictions. The Springer Series on Challenges in Machine Learning, 2018, , 115-131.	10.4	6
110	Towards exact molecular dynamics simulations with machine-learned force fields. Nature Communications, 2018, 9, 3887.	5.8	452
111	Wasserstein Stationary Subspace Analysis. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 1213-1223.	7.3	13
112	Eyes-closed hybrid brain-computer interface employing frontal brain activation. PLoS ONE, 2018, 13, e0196359.	1.1	12
113	Sharing hash codes for multiple purposes. Japanese Journal of Statistics and Data Science, 2018, 1, 215-246.	0.7	0
114	Capturing intensive and extensive DFT/TDDFT molecular properties with machine learning. European Physical Journal B, 2018, 91, 1.	0.6	48
115	Scoring of tumor-infiltrating lymphocytes: From visual estimation to machine learning. Seminars in Cancer Biology, 2018, 52, 151-157.	4.3	108
116	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, 1827.	2.1	23
117	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.	2.3	59
118	Transductive Regression for Data With Latent Dependence Structure. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 2743-2756.	7.2	6
119	Curly: An AI-based Curling Robot Successfully Competing in the Olympic Discipline of Curling. , 2018, , .		6
120	Accurate Maximum-Margin Training for Parsing With Context-Free Grammars. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 44-56.	7.2	6
121	Quantum-chemical insights from deep tensor neural networks. Nature Communications, 2017, 8, 13890.	5.8	884
122	A mathematical model for the two-learners problem. Journal of Neural Engineering, 2017, 14, 036005.	1.8	45
123	Shifting stimuli for brain computer interface based on rapid serial visual presentation. , 2017, , .		2
124	Machine learning of accurate energy-conserving molecular force fields. Science Advances, 2017, 3, e1603015.	4.7	695
125	Objective quality assessment of stereoscopic images with vertical disparity using EEG. Journal of Neural Engineering, 2017, 14, 046009.	1.8	24
126	Porosity estimation by semi-supervised learning with sparsely available labeled samples. Computers and Geosciences, 2017, 106, 33-48.	2.0	13

#	Article	IF	Citations
127	Explaining nonlinear classification decisions with deep Taylor decomposition. Pattern Recognition, 2017, 65, 211-222.	5.1	810
128	Bypassing the Kohn-Sham equations with machine learning. Nature Communications, 2017, 8, 872.	5.8	485
129	On robust parameter estimation in brainâ€“computer interfacing. Journal of Neural Engineering, 2017, 14, 061001.	1.8	15
130	Reinforcement learning for video encoder control in HEVC. , 2017, , .		12
131	Interpretable human action recognition in compressed domain. , 2017, , .		21
132	Open Access Dataset for EEG+NIRS Single-Trial Classification. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1735-1745.	2.7	148
133	Efficient Exact Inference With Loss Augmented Objective in Structured Learning. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2566-2579.	7.2	3
134	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.	2.5	109
135	Evaluating the Visualization of What a Deep Neural Network Has Learned. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2660-2673.	7.2	612
136	Hybrid EEG-NIRS brain-computer interface under eyes-closed condition. , 2017, , .		1
137	Editorial IEEE Brain Initiative Special issue on BMI/BCI Systems. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1685-1686.	2.7	3
138	Understanding and Comparing Deep Neural Networks for Age and Gender Classification. , 2017, , .		25
139	Why build an integrated EEG-NIRS? About the advantages of hybrid bio-acquisition hardware. , 2017, 2017, 4475-4478.		7
140	Real-time robustness evaluation of regression based myoelectric control against arm position change and donning/doffing. PLoS ONE, 2017, 12, e0186318.	1.1	47
141	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.	1.1	27
142	"What is relevant in a text document?": An interpretable machine learning approach. PLoS ONE, 2017, 12, e0181142.	1.1	157
143	Evaluation of a Compact Hybrid Brain-Computer Interface System. BioMed Research International, 2017, 2017, 1-11.	0.9	27
144	A convolutional neural network for steady state visual evoked potential classification under ambulatory environment. PLoS ONE, 2017, 12, e0172578.	1.1	214

#	Article	IF	Citations
145	ML2Motifâ€"Reliable extraction of discriminative sequence motifs from learning machines. PLoS ONE, 2017, 12, e0174392.	1.1	5
146	Learning from label proportions in brain-computer interfaces: Online unsupervised learning with guarantees. PLoS ONE, 2017, 12, e0175856.	1.1	29
147	Explaining Recurrent Neural Network Predictions in Sentiment Analysis. , 2017, , .		179
148	The Berlin Brain-Computer Interface: Progress Beyond Communication and Control. Frontiers in Neuroscience, 2016, 10, 530.	1.4	172
149	Higher order stationary subspace analysis. Journal of Physics: Conference Series, 2016, 699, 012021.	0.3	2
150	A better metric in kernel adaptive filtering. , 2016, , .		3
151	Neural network-based full-reference image quality assessment. , 2016, , .		17
152	Combining Multiple Hypothesis Testing with Machine Learning Increases the Statistical Power of Genome-wide Association Studies. Scientific Reports, 2016, 6, 36671.	1.6	53
153	Brain-Computer Interfacing for multimedia quality assessment. , 2016, , .		22
154	Alternative CSP approaches for multimodal distributed BCI data. , 2016, , .		3
155	Analyzing Classifiers: Fisher Vectors and Deep Neural Networks. , 2016, , .		107
156	Why Does a Hilbertian Metric Work Efficiently in Online Learning With Kernels?. IEEE Signal Processing Letters, 2016, 23, 1424-1428.	2.1	7
157	Ensembles of adaptive spatial filters increase BCI performance: an online evaluation. Journal of Neural Engineering, 2016, 13, 046003.	1.8	45
158	Understanding machineâ€learned density functionals. International Journal of Quantum Chemistry, 2016, 116, 819-833.	1.0	132
159	Effect of higher frequency on the classification of steady-state visual evoked potentials. Journal of Neural Engineering, 2016, 13, 016014.	1.8	110
160	Machine learning for BCI: towards analysing cognition. , 2016, , .		1
161	Brainâ€"computer interfacing under distraction: an evaluation study. Journal of Neural Engineering, 2016, 13, 056012.	1.8	19
162	Interpretable deep neural networks for single-trial EEG classification. Journal of Neuroscience Methods, 2016, 274, 141-145.	1.3	280

#	Article	IF	Citations
163	Identifying Individual Facial Expressions by Deconstructing a Neural Network. Lecture Notes in Computer Science, 2016, , 344-354.	1.0	18
164	Near-infrared spectroscopy (NIRS)-based eyes-closed brain-computer interface (BCI) using prefrontal cortex activation due to mental arithmetic. Scientific Reports, 2016, 6, 36203.	1.6	59
165	EEG-based BCI for the linear control of an upper-limb neuroprosthesis. Medical Engineering and Physics, 2016, 38, 1195-1204.	0.8	48
166	Multiscale temporal neural dynamics predict performance in a complex sensorimotor task. NeuroImage, 2016, 141, 291-303.	2.1	25
167	Decoding of top-down cognitive processing for SSVEP-controlled BMI. Scientific Reports, 2016, 6, 36267.	1.6	26
168	Controlling explanatory heatmap resolution and semantics via decomposition depth. , 2016, , .		9
169	Robust Statistical Detection of Power-Law Cross-Correlation. Scientific Reports, 2016, 6, 27089.	1.6	7
170	Block adaptive selection of multiple core transforms for video coding. , 2016, , .		2
171	The LDA beamformer: Optimal estimation of ERP source time series using linear discriminant analysis. NeuroImage, 2016, 129, 279-291.	2.1	41
172	Validity of Time Reversal for Testing Granger Causality. IEEE Transactions on Signal Processing, 2016, 64, 2746-2760.	3.2	53
173	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.	2.7	126
174	EEG-based usability assessment of 3D shutter glasses. Journal of Neural Engineering, 2016, 13, 016003.	1.8	9
175	Analyzing neuroimaging data with subclasses: A shrinkage approach. NeuroImage, 2016, 124, 740-751.	2.1	9
176	Layer-Wise Relevance Propagation for Neural Networks with Local Renormalization Layers. Lecture Notes in Computer Science, 2016, , 63-71.	1.0	154
177	Layer-Wise Relevance Propagation for Deep Neural Network Architectures. Lecture Notes in Electrical Engineering, 2016, , 913-922.	0.3	79
178	Explaining Predictions of Non-Linear Classifiers in NLP. , 2016, , .		55
179	On the influence of high-pass filtering on ICA-based artifact reduction in EEG-ERP. , 2015, 2015, 4101-5.		250
180	Machine Learning Methods of the Berlin Brain-Computer Interface. IFAC-PapersOnLine, 2015, 48, 447-452.	0.5	4

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181	Understanding kernel ridge regression: Common behaviors from simple functions to density functionals. International Journal of Quantum Chemistry, 2015, 115, 1115-1128.	1.0	89
182	Nonlinear gradient denoising: Finding accurate extrema from inaccurate functional derivatives. International Journal of Quantum Chemistry, 2015, 115, 1102-1114.	1.0	21
183	Three-Way Analysis of Spectrospatial Electromyography Data: Classification and Interpretation. PLoS ONE, 2015, 10, e0127231.	1.1	7
184	On Pixel-Wise Explanations for Non-Linear Classifier Decisions by Layer-Wise Relevance Propagation. PLoS ONE, 2015, 10, e0130140.	1.1	2,319
185	Towards Noninvasive Hybrid Brainâ€“Computer Interfaces: Framework, Practice, Clinical Application, and Beyond. Proceedings of the IEEE, 2015, 103, 926-943.	16.4	133
186	The Plurality of Human Brainâ€“Computer Interfacing [Scanning the Issue]. Proceedings of the IEEE, 2015, 103, 868-870.	16.4	3
187	Learning From More Than One Data Source: Data Fusion Techniques for Sensorimotor Rhythm-Based Brainâ€“Computer Interfaces. Proceedings of the IEEE, 2015, 103, 891-906.	16.4	75
188	Investigating effects of different artefact types on motor imagery BCI. , 2015, 2015, 1942-5.		8
189	Bringing BCI into everyday life: Motor imagery in a pseudo realistic environment. , 2015, , .		8
190	A kernel-based statistical analysis of the residual error in video coding. , 2015, , .		0
191	Fusing Simultaneous EEG and fMRI Using Functional and Anatomical Information. , 2015, , .		0
192	Tackling noise, artifacts and nonstationarity in BCI with robust divergences. , 2015, , .		4
193	Machine Learning Predictions of Molecular Properties: Accurate Many-Body Potentials and Nonlocality in Chemical Space. Journal of Physical Chemistry Letters, 2015, 6, 2326-2331.	2.1	575
194	Robust common spatial patterns based on Bhattacharyya distance and Gamma divergence. , 2015, , .		4
195	Identifying Granger causal relationships between neural power dynamics and variables of interest. NeuroImage, 2015, 111, 489-504.	2.1	18
196	Extracting latent brain states â€" Towards true labels in cognitive neuroscience experiments. NeuroImage, 2015, 120, 225-253.	2.1	11
197	EEG-based classification of video quality perception using steady state visual evoked potentials (SSVEPs). Journal of Neural Engineering, 2015, 12, 026012.	1.8	46
198	Machine learning and BCI. , 2015, , .		0

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199	Classifying directions in continuous arm movement from EEG signals. , 2015, , .		9
200	Concurrent Adaptation of Human and Machine Improves Simultaneous and Proportional Myoelectric Control. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 618-627.	2.7	69
201	Neurophysiological assessment of perceived image quality using steady-state visual evoked potentials. , 2015, , .		8
202	The need for novel informatics tools for integrating and planning research in molecular and cellular cognition. Learning and Memory, 2015, 22, 494-498.	0.5	8
203	Multivariate Machine Learning Methods for Fusing Multimodal Functional Neuroimaging Data. Proceedings of the IEEE, 2015, 103, 1507-1530.	16.4	79
204	A lower limb exoskeleton control system based on steady state visual evoked potentials. Journal of Neural Engineering, 2015, 12, 056009.	1.8	163
205	SVM2Motifâ€"Reconstructing Overlapping DNA Sequence Motifs by Mimicking an SVM Predictor. PLoS ONE, 2015, 10, e0144782.	1.1	5
206	Motor Imagery for Severely Motor-Impaired Patients: Evidence for Brain-Computer Interfacing as Superior Control Solution. PLoS ONE, 2014, 9, e104854.	1.1	69
207	Predicting BCI Subject Performance Using Probabilistic Spatio-Temporal Filters. PLoS ONE, 2014, 9, e87056.	1.1	62
208	True Zero-Training Brain-Computer Interfacing â€“ An Online Study. PLoS ONE, 2014, 9, e102504.	1.1	61
209	An Efficient ERP-Based Brain-Computer Interface Using Random Set Presentation and Face Familiarity. PLoS ONE, 2014, 9, e111157.	1.1	79
210	Channel selection for simultaneous and proportional myoelectric prosthesis control of multiple degrees-of-freedom. Journal of Neural Engineering, 2014, 11, 056008.	1.8	34
211	Neurally informed assessment of perceived natural texture image quality. , 2014, , .		13
212	Covariate shift adaptation in EMG pattern recognition for prosthetic device control. , 2014, 2014, 4370-3.		9
213	Data-driven multisubject neuroimaging analyses for naturalistic stimuli. , 2014, , .		0
214	Robust Common Spatial Filters with a Maxmin Approach. Neural Computation, 2014, 26, 349-376.	1.3	32
215	Optimizing the regularization for image reconstruction of cerebral diffuse optical tomography. Journal of Biomedical Optics, 2014, 19, 096006.	1.4	35
216	Towards an enhanced ERP speller based on the visual processing of face familiarity. , 2014, 2014, 1330-3.		0

#	Article	IF	Citations
217	Multimodal imaging, non-stationarity and BCI. , 2014, , .		1
218	Finding brain oscillations with power dependencies in neuroimaging data. NeuroImage, 2014, 96, 334-348.	2.1	40
219	Electroencephalography/sonication-mediated human brainâ€“brain interfacing technology. Trends in Biotechnology, 2014, 32, 345-346.	4.9	4
220	Channel selection for simultaneous myoelectric prosthesis control. , 2014, , .		3
221	Information geometry meets BCI spatial filtering using divergences. , 2014, , .		2
222	Mean shrinkage improves the classification of ERP signals by exploiting additional label information. , 2014, , .		3
223	Optimizing spatial filters for the extraction of envelope-coupled neural oscillations. , 2014, , .		0
224	Integrating dynamic stopping, transfer learning and language models in an adaptive zero-training ERP speller. Journal of Neural Engineering, 2014, 11, 035005.	1.8	75
225	Stereoscopic depth increases intersubject correlations of brain networks. NeuroImage, 2014, 100, 427-434.	2.1	38
226	Divergence-Based Framework for Common Spatial Patterns Algorithms. IEEE Reviews in Biomedical Engineering, 2014, 7, 50-72.	13.1	145
227	Efficient Algorithms for Exact Inference in Sequence Labeling SVMs. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 870-881.	7.2	12
228	Toward exoskeleton control based on steady state visual evoked potentials. , 2014, , .		19
229	SPoC: A novel framework for relating the amplitude of neuronal oscillations to behaviorally relevant parameters. NeuroImage, 2014, 86, 111-122.	2.1	95
230	When brain and behavior disagree: Tackling systematic label noise in EEG data with machine learning. , 2014, , .		5
231	The effect of linear mixing in the EEG on Hurst exponent estimation. NeuroImage, 2014, 99, 377-387.	2.1	33
232	Distributed functions of detection and discrimination of vibrotactile stimuli in the hierarchical human somatosensory system. Frontiers in Human Neuroscience, 2014, 8, 1070.	1.0	24
233	Machine Learning for Visual Concept Recognition and Ranking for Images. Cognitive Technologies, 2014, , 211-223.	0.5	2
234	Assessment and Validation of Machine Learning Methods for Predicting Molecular Atomization Energies. Journal of Chemical Theory and Computation, 2013, 9, 3404-3419.	2.3	499

#	Article	IF	Citations
235	Integration of Multivariate Data Streams With Bandpower Signals. IEEE Transactions on Multimedia, 2013, 15, 1001-1013.	5.2	31
236	Analyzing Local Structure in Kernel-Based Learning: Explanation, Complexity, and Reliability Assessment. IEEE Signal Processing Magazine, 2013, 30, 62-74.	4.6	35
237	Machine learning of molecular electronic properties in chemical compound space. New Journal of Physics, 2013, 15, 095003.	1.2	482
238	Orbital-free bond breaking via machine learning. Journal of Chemical Physics, 2013, 139, 224104.	1.2	92
239	Neuromuscular electrical stimulation induced brain patterns to decode motor imagery. Clinical Neurophysiology, 2013, 124, 1824-1834.	0.7	27
240	Enhanced representation and multi-task learning for image annotation. Computer Vision and Image Understanding, 2013, 117, 466-478.	3.0	15
241	Multimodal imaging technique for rapid response brain-computer interface feedback. , 2013, , .		4
242	Tutorial on multimodal neuroimaging for brain-computer interfacing. , 2013, , .		0
243	Transferring Subspaces Between Subjects in Brain–Computer Interfacing. IEEE Transactions on Biomedical Engineering, 2013, 60, 2289-2298.	2.5	166
244	A critical assessment of connectivity measures for EEG data: A simulation study. NeuroImage, 2013, 64, 120-133.	2.1	276
245	Neural Networks for Computational Chemistry: Pitfalls and Recommendations. Materials Research Society Symposia Proceedings, 2013, 1523, 501.	0.1	0
246	Multiple Kernel Learning for Brain-Computer Interfacing. , 2013, 2013, 7048-51.		7
247	Single-trial analysis of the neural correlates of speech quality perception. Journal of Neural Engineering, 2013, 10, 056003.	1.8	36
248	Explorative data analysis for changes in neural activity. Journal of Neural Engineering, 2013, 10, 026018.	1.8	3
249	Zero Training for BCI â€“ Reality for BCI Systems Based on Event-Related Potentials. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	1
250	Special Issue on Advances in Kernel-Based Learning for Signal Processing [From the Guest Editors]. IEEE Signal Processing Magazine, 2013, 30, 14-15.	4.6	10
251	Directional Variance Adjustment: Bias Reduction in Covariance Matrices Based on Factor Analysis with an Application to Portfolio Optimization. PLoS ONE, 2013, 8, e67503.	1.1	3
252	Kernels, Pre-images and Optimization. , 2013, , 245-259.		10

#	Article	IF	Citations
253	Decoding Brain States during Auditory Perception by Supervising Unsupervised Learning. Journal of Computing Science and Engineering, 2013, 7, 112-121.	0.3	3
254	First study towards linear control of an upper-limb neuroprosthesis with an EEG-based Brain-Computer Interface. , 2012, 2012, 3269-73.		5
255	Brain-computer interfacing in discriminative and stationary subspaces. , 2012, 2012, 2873-6.		16
256	Finding Density Functionals with Machine Learning. Physical Review Letters, 2012, 108, 253002.	2.9	495
257	RuppetÂal.Reply:. Physical Review Letters, 2012, 109, .	2.9	20
258	Common Spatial Pattern Patches: Online evaluation on BCI-naive users. , 2012, 2012, 4744-7.		9
259	Quantifying spatiotemporal dynamics of twitter replies to news feeds. , 2012, , .		1
260	Stationary common spatial patterns for brainâ€“computer interfacing. Journal of Neural Engineering, 2012, 9, 026013.	1.8	176
261	Optimizing transition states via kernel-based machine learning. Journal of Chemical Physics, 2012, 136, 174101.	1.2	92
262	BCI Applications for the General Population. , 2012, , 364-372.		8
263	Myoelectric Control of Artificial Limbsâ€”Is There a Need to Change Focus? [In the Spotlight]. IEEE Signal Processing Magazine, 2012, 29, 152-150.	4.6	275
264	Simultaneous and proportional control of 2D wrist movements with myoelectric signals. , 2012, , .		26
265	Psychological predictors of SMR-BCI performance. Biological Psychology, 2012, 89, 80-86.	1.1	228
266	Enhanced performance by a hybrid NIRSâ€“EEG brain computer interface. NeuroImage, 2012, 59, 519-529.	2.1	595
267	Improved decoding of neural activity from fMRI signals using non-separable spatiotemporal deconvolutions. NeuroImage, 2012, 61, 1031-1042.	2.1	22
268	Efficient BackProp. Lecture Notes in Computer Science, 2012, , 9-48.	1.0	909
269	Deep Boltzmann Machines and the Centering Trick. Lecture Notes in Computer Science, 2012, , 621-637.	1.0	27
270	Pitfalls in EEG-Based Brain Effective Connectivity Analysis. Lecture Notes in Computer Science, 2012, , 202-209.	1.0	0

#	Article	IF	Citations
271	Insights from Classifying Visual Concepts with Multiple Kernel Learning. PLoS ONE, 2012, 7, e38897.	1.1	7
272	A Scatter-Based Prototype Framework and Multi-Class Extension of Support Vector Machines. PLoS ONE, 2012, 7, e42947.	1.1	8
273	Review of the BCI Competition IV. Frontiers in Neuroscience, 2012, 6, 55.	1.4	686
274	Fast and Accurate Modeling of Molecular Atomization Energies with Machine Learning. Physical Review Letters, 2012, 108, 058301.	2.9	1,523
275	On Taxonomies for Multi-class Image Categorization. International Journal of Computer Vision, 2012, 99, 281-301.	10.9	29
276	Spatial Filtering for Robust Myoelectric Control. IEEE Transactions on Biomedical Engineering, 2012, 59, 1436-1443.	2.5	77
277	Toward a Direct Measure of Video Quality Perception Using EEG. IEEE Transactions on Image Processing, 2012, 21, 2619-2629.	6.0	159
278	Feature Extraction for Change-Point Detection Using Stationary Subspace Analysis. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 631-643.	7.2	40
279	Modeling of molecular atomization energies using machine learning. Journal of Cheminformatics, 2012, 4, .	2.8	2
280	Non-separable Spatiotemporal Brain Hemodynamics Contain Neural Information. Lecture Notes in Computer Science, 2012, , 140-147.	1.0	1
281	An Algebraic Method for Approximate Rank One Factorization of Rank Deficient Matrices. Lecture Notes in Computer Science, 2012, , 272-279.	1.0	1
282	StructRank: A New Approach for Ligand-Based Virtual Screening. Journal of Chemical Information and Modeling, 2011, 51, 83-92.	2.5	27
283	Analysis of Multimodal Neuroimaging Data. IEEE Reviews in Biomedical Engineering, 2011, 4, 26-58.	13.1	122
284	Machine-Learning-Based Coadaptive Calibration for Brain-Computer Interfaces. Neural Computation, 2011, 23, 791-816.	1.3	175
285	Uniqueness of Non-Gaussianity-Based Dimension Reduction. IEEE Transactions on Signal Processing, 2011, 59, 4478-4482.	3.2	9
286	Toward Unsupervised Adaptation of LDA for Brainâ€“Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2011, 58, 587-597.	2.5	246
287	â„“1-penalized linear mixed-effects models for high dimensional data with application to BCI. NeuroImage, 2011, 56, 2100-2108.	2.1	38
288	Large-scale EEG/MEG source localization with spatial flexibility. NeuroImage, 2011, 54, 851-859.	2.1	94

#	Article	IF	Citations
289	Introduction to machine learning for brain imaging. NeuroImage, 2011, 56, 387-399.	2.1	592
290	Co-adaptive calibration to improve BCI efficiency. Journal of Neural Engineering, 2011, 8, 025009.	1.8	143
291	Single-trial analysis and classification of ERP components â€" A tutorial. NeuroImage, 2011, 56, 814-825.	2.1	946
292	Visual Interpretation of Kernelâ€Based Prediction Models. Molecular Informatics, 2011, 30, 817-826.	1.4	46
293	Editorial: Charting Chemical Space: Challenges and Opportunities for Artificial Intelligence and Machine Learning. Molecular Informatics, 2011, 30, 751-751.	1.4	7
294	A new scatter-based multi-class support vector machine. , 2011, , .		1
295	Revealing the neural response to imperceptible peripheral flicker with machine learning. , 2011, 2011, 3692-5.		10
296	CSP patches: an ensemble of optimized spatial filters. An evaluation study. Journal of Neural Engineering, 2011, 8, 025012.	1.8	41
297	â„"1-Penalized Linear Mixed-Effects Models for BCI. Lecture Notes in Computer Science, 2011, , 26-35.	1.0	3
298	Applicability Domains for Classification Problems: Benchmarking of Distance to Models for Ames Mutagenicity Set. Journal of Chemical Information and Modeling, 2010, 50, 2094-2111.	2.5	202
299	Relationship between neural and hemodynamic signals during spontaneous activity studied with temporal kernel CCA. Magnetic Resonance Imaging, 2010, 28, 1095-1103.	1.0	72
300	On Optimal Channel Configurations for SMR-based Brainâ€"Computer Interfaces. Brain Topography, 2010, 23, 186-193.	0.8	68
301	Temporal kernel CCA and its application in multimodal neuronal data analysis. Machine Learning, 2010, 79, 5-27.	3.4	77
302	Modeling Sparse Connectivity Between Underlying Brain Sources for EEG/MEG. IEEE Transactions on Biomedical Engineering, 2010, 57, 1954-1963.	2.5	101
303	From Machine Learning to Natural Product Derivatives that Selectively Activate Transcription Factor PPARÎ³. ChemMedChem, 2010, 5, 191-194.	1.6	58
304	Truxillic acid derivatives act as peroxisome proliferator-activated receptor Î³ activators. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 2920-2923.	1.0	11
305	Localizing and Estimating Causal Relations of Interacting Brain Rhythms. Frontiers in Human Neuroscience, 2010, 4, 209.	1.0	38
306	Pyff â€" A Pythonic Framework for Feedback Applications and Stimulus Presentation in Neuroscience. Frontiers in Neuroscience, 2010, 4, 179.	1.4	37

#	Article	IF	Citations
307	The Berlin Brainâ€“Computer Interface: Non-Medical Uses of BCI Technology. Frontiers in Neuroscience, 2010, 4, 198.	1.4	277
308	Common spatial pattern patches - An optimized filter ensemble for adaptive brain-computer interfaces. , 2010, 2010, 4351-4.		15
309	Localization of class-related mu-rhythm desynchronization in motor imagery based Brain-Computer Interface sessions. , 2010, 2010, 5137-40.		2
310	Finding stationary brain sources in EEG data. , 2010, 2010, 2810-3.		51
311	Neurophysiological predictor of SMR-based BCI performance. NeuroImage, 2010, 51, 1303-1309.	2.1	576
312	A regularized discriminative framework for EEG analysis with application to brainâ€“computer interface. NeuroImage, 2010, 49, 415-432.	2.1	255
313	Machine-Learning Based Co-adaptive Calibration: A Perspective to Fight BCI Illiteracy. Lecture Notes in Computer Science, 2010, , 413-420.	1.0	12
314	Using Rest Class and Control Paradigms forÂBrain Computer Interfacing. Human-computer Interaction Series, 2010, , 55-70.	0.4	0
315	Automated ocular artifact removal: comparing regression and component-based methods. Nature Precedings, 2009, , .	0.1	5
316	A Generalized Framework for Quantifying the Dynamics of EEG Event-Related Desynchronization. PLoS Computational Biology, 2009, 5, e1000453.	1.5	31
317	Predicting BCI performance to study BCI illiteracy. BMC Neuroscience, 2009, 10, .	0.8	81
318	Securing IMS against novel threats. Bell Labs Technical Journal, 2009, 14, 243-257.	0.7	7
319	Designing for uncertain, asymmetric control: Interaction design for brainâ€“computer interfaces. International Journal of Human Computer Studies, 2009, 67, 827-841.	3.7	74
320	Improving BCI performance by task-related trial pruning. Neural Networks, 2009, 22, 1295-1304.	3.3	18
321	Recent advances in brainâ€“machine interfaces. Neural Networks, 2009, 22, 1201-1202.	3.3	23
322	Subject-independent mental state classification in single trials. Neural Networks, 2009, 22, 1305-1312.	3.3	220
323	A Maxmin Approach to Optimize Spatial Filters for EEG Single-Trial Classification. Lecture Notes in Computer Science, 2009, , 674-682.	1.0	7
324	Robust common spatial filters with a maxmin approach. , 2009, 2009, 2470-3.		9

#	Article	IF	Citations
325	Finding Stationary Subspaces in Multivariate Time Series. Physical Review Letters, 2009, 103, 214101.	2.9	200
326	Benchmark Data Set for in Silico Prediction of Ames Mutagenicity. Journal of Chemical Information and Modeling, 2009, 49, 2077-2081.	2.5	260
327	Stationary Subspace Analysis. Lecture Notes in Computer Science, 2009, , 1-8.	1.0	7
328	Adaptive Methods in BCI Research - An Introductory Tutorial. The Frontiers Collection, 2009, , 331-355.	0.1	24
329	Detecting Mental States by Machine Learning Techniques: The Berlin Brainâ€“Computer Interface. The Frontiers Collection, 2009, , 113-135.	0.1	5
330	Using Rest Class and Control Paradigms for Brain Computer Interfacing. Lecture Notes in Computer Science, 2009, , 651-665.	1.0	4
331	Machine learning for real-time single-trial EEG-analysis: From brainâ€“computer interfacing to mental state monitoring. Journal of Neuroscience Methods, 2008, 167, 82-90.	1.3	413
332	The Berlin Brain-Computer Interface: Accurate performance from first-session in BCI-naive subjects. IEEE Transactions on Biomedical Engineering, 2008, 55, 2452-2462.	2.5	286
333	A Self-learning System for Detection of Anomalous SIP Messages. Lecture Notes in Computer Science, 2008, , 90-106.	1.0	24
334	Brain-Computer Interfaces [from the guest editors]. IEEE Signal Processing Magazine, 2008, 25, 16-17.	4.6	35
335	Combining sparsity and rotational invariance in EEG/MEG source reconstruction. NeuroImage, 2008, 42, 726-738.	2.1	108
336	Optimizing Spatial filters for Robust EEG Single-Trial Analysis. IEEE Signal Processing Magazine, 2008, 25, 41-56.	4.6	1,598
337	A Probabilistic Approach to Classifying Metabolic Stability. Journal of Chemical Information and Modeling, 2008, 48, 785-796.	2.5	39
338	Stopping conditions for exact computation of leave-one-out error in support vector machines. , 2008, , .		2
339	Robustly Estimating the Flow Direction of Information in Complex Physical Systems. Physical Review Letters, 2008, 100, 234101.	2.9	484
340	Towards Zero Training for Brain-Computer Interfacing. PLoS ONE, 2008, 3, e2967.	1.1	212
341	The Berlin Brain-Computer Interface. Lecture Notes in Computer Science, 2008, , 79-101.	1.0	16
342	Approximating the Best Linear Unbiased Estimator of Non-Gaussian Signals with Gaussian Noise. IEICE Transactions on Information and Systems, 2008, E91-D, 1577-1580.	0.4	0

#	Article	IF	Citations
343	Improving the Caenorhabditis elegans Genome Annotation Using Machine Learning. PLoS Computational Biology, 2007, 3, e20.	1.5	57
344	Asymptotic Bayesian generalization error when training and test distributions are different. , 2007, , .		18
345	The non-invasive Berlin Brainâ€“Computer Interface: Fast acquisition of effective performance in untrained subjects. NeuroImage, 2007, 37, 539-550.	2.1	790
346	Accurate Solubility Prediction with Error Bars for Electrolytes:â€‰ A Machine Learning Approach. Journal of Chemical Information and Modeling, 2007, 47, 407-424.	2.5	70
347	Predicting Lipophilicity of Drug-Discovery Molecules using Gaussian Process Models. ChemMedChem, 2007, 2, 1265-1267.	1.6	26
348	Berlin Brainâ€“Computer Interfaceâ€”The HCI communication channel for discovery. International Journal of Human Computer Studies, 2007, 65, 460-477.	3.7	56
349	A novel mechanism for evoked responses in the human brain. European Journal of Neuroscience, 2007, 25, 3146-3154.	1.2	123
350	Machine Learning Models for Lipophilicity and Their Domain of Applicability. Molecular Pharmaceutics, 2007, 4, 524-538.	2.3	24
351	Optimal dyadic decision trees. Machine Learning, 2007, 66, 209-241.	3.4	24
352	The Berlin Brain-Computer Interface (BBCI) â€“ towards a new communication channel for online control in gaming applications. Multimedia Tools and Applications, 2007, 33, 73-90.	2.6	167
353	Estimating the domain of applicability for machine learning QSAR models: a study on aqueous solubility of drug discovery molecules. Journal of Computer-Aided Molecular Design, 2007, 21, 485-498.	1.3	41
354	Estimating the domain of applicability for machine learning QSAR models: a study on aqueous solubility of drug discovery molecules. Journal of Computer-Aided Molecular Design, 2007, 21, 651-664.	1.3	31
355	A new algorithm of non-Gaussian component analysis with radial kernel functions. Annals of the Institute of Statistical Mathematics, 2007, 59, 57-75.	0.5	19
356	A Note on Brain Actuated Spelling with the Berlin Brain-Computer Interface. Lecture Notes in Computer Science, 2007, , 759-768.	1.0	57
357	Single Trial Classification of Motor Imagination Using 6 Dry EEG Electrodes. PLoS ONE, 2007, 2, e637.	1.1	170
358	Towards adaptive classification for BCI. Journal of Neural Engineering, 2006, 3, R13-R23.	1.8	360
359	Toward noninvasive brain-computer interfaces. IEEE Signal Processing Magazine, 2006, 23, 128-126.	4.6	67
360	On the information and representation of non-Euclidean pairwise data. Pattern Recognition, 2006, 39, 1815-1826.	5.1	49

#	Article	IF	Citations
361	Enhancing the Signal-to-Noise Ratio of ICA-Based Extracted ERPs. IEEE Transactions on Biomedical Engineering, 2006, 53, 601-607.	2.5	71
362	Combined Optimization of Spatial and Temporal Filters for Improving Brain-Computer Interfacing. IEEE Transactions on Biomedical Engineering, 2006, 53, 2274-2281.	2.5	318
363	The Berlin brain-computer interface: EEG-based communication without subject training. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 147-152.	2.7	264
364	BCI meeting 2005-workshop on BCI signal processing: feature extraction and translation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 135-138.	2.7	167
365	The BCI competition III: validating alternative approaches to actual BCI problems. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 153-159.	2.7	832
366	From outliers to prototypes: Ordering data. Neurocomputing, 2006, 69, 1608-1618.	3.5	69
367	Identifying interactions in mixed and noisy complex systems. Physical Review E, 2006, 73, 051913.	0.8	40
368	Importance-Weighted Cross-Validation for Covariate Shift. Lecture Notes in Computer Science, 2006, , 354-363.	1.0	17
369	Efficient Algorithms for Similarity Measures over Sequential Data: A Look Beyond Kernels. Lecture Notes in Computer Science, 2006, , 374-383.	1.0	5
370	A Novel Dimension Reduction Procedure for Searching Non-Gaussian Subspaces. Lecture Notes in Computer Science, 2006, , 149-156.	1.0	0
371	A Model Selection Method Based on Bound of Learning Coefficient. Lecture Notes in Computer Science, 2006, , 371-380.	1.0	2
372	Input-dependent estimation of generalization error under covariate shift. Statistics & Risk Modeling, 2005, 23, .	0.3	64
373	Spatio-Spectral Filters for Improving the Classification of Single Trial EEG. IEEE Transactions on Biomedical Engineering, 2005, 52, 1541-1548.	2.5	519
374	Inlier-based ICA with an application to superimposed images. International Journal of Imaging Systems and Technology, 2005, 15, 48-55.	2.7	7
375	Measuring Phase Synchronization of Superimposed Signals. Physical Review Letters, 2005, 94, 084102.	2.9	50
376	Classifying â€˜Drug-likeness' with Kernel-Based Learning Methods. Journal of Chemical Information and Modeling, 2005, 45, 249-253.	2.5	90
377	Robust ICA for Super-Gaussian Sources. Lecture Notes in Computer Science, 2004, , 217-224.	1.0	5
378	Asymptotic Properties of the Fisher Kernel. Neural Computation, 2004, 16, 115-137.	1.3	25

#	Article	IF	Citations
379	Trading Variance Reduction with Unbiasedness: The Regularized Subspace Information Criterion for Robust Model Selection in Kernel Regression. Neural Computation, 2004, 16, 1077-1104.	1.3	22
380	Approximate Joint Diagonalization Using a Natural Gradient Approach. Lecture Notes in Computer Science, 2004, , 89-96.	1.0	25
381	A consistency-based model selection for one-class classification. , 2004, , .		38
382	BLIND SOURCE SEPARATION TECHNIQUES FOR DECOMPOSING EVENT-RELATED BRAIN SIGNALS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 773-791.	0.7	32
383	The BCI Competition 2003: Progress and Perspectives in Detection and Discrimination of EEG Single Trials. IEEE Transactions on Biomedical Engineering, 2004, 51, 1044-1051.	2.5	535
384	Boosting Bit Rates in Noninvasive EEG Single-Trial Classifications by Feature Combination and Multiclass Paradigms. IEEE Transactions on Biomedical Engineering, 2004, 51, 993-1002.	2.5	506
385	Injecting noise for analysing the stability of ICA components. Signal Processing, 2004, 84, 255-266.	2.1	13
386	Estimating Functions for Blind Separation when Sources Have Variance-Dependencies. Lecture Notes in Computer Science, 2004, , 136-143.	1.0	7
387	Boosting bit rates and error detection for the classification of fast-paced motor commands based on single-trial EEG analysis. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2003, 11, 127-131.	2.7	178
388	Constructing descriptive and discriminative nonlinear features: rayleigh coefficients in kernel feature spaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2003, 25, 623-628.	9.7	158
389	A data analysis competition to evaluate machine learning algorithms for use in brain-computer interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2003, 11, 184-185.	2.7	101
390	Kernel-Based Nonlinear Blind Source Separation. Neural Computation, 2003, 15, 1089-1124.	1.3	100
391	A resampling approach to estimate the stability of one-dimensional or multidimensional independent components. IEEE Transactions on Biomedical Engineering, 2002, 49, 1514-1525.	2.5	71
392	A New Discriminative Kernel from Probabilistic Models. Neural Computation, 2002, 14, 2397-2414.	1.3	88
393	Subspace information criterion for nonquadratic regularizers-Model selection for sparse regressors. IEEE Transactions on Neural Networks, 2002, 13, 70-80.	4.8	6
394	Constructing boosting algorithms from SVMs: an application to one-class classification. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2002, 24, 1184-1199.	9.7	197
395	On-line learning in changing environments with applications in supervised and unsupervised learning. Neural Networks, 2002, 15, 743-760.	3.3	48
396	New Methods for Splice Site Recognition. Lecture Notes in Computer Science, 2002, , 329-336.	1.0	28

#	Article	IF	Citations
397	Selecting Ridge Parameters in Infinite Dimensional Hypothesis Spaces. Lecture Notes in Computer Science, 2002, , 528-534.	1.0	0
398	An introduction to kernel-based learning algorithms. IEEE Transactions on Neural Networks, 2001, 12, 181-201.	4.8	2,811
399	Soft Margins for AdaBoost. Machine Learning, 2001, 42, 287-320.	3.4	1,000
400	Noise robust estimates of correlation dimension andK2entropy. Physical Review E, 2001, 64, 016112.	0.8	14
401	Learning to Predict the Leave-One-Out Error of Kernel Based Classifiers. Lecture Notes in Computer Science, 2001, , 331-338.	1.0	12
402	Artifact reduction in magnetoneurography based on time-delayed second-order correlations. IEEE Transactions on Biomedical Engineering, 2000, 47, 75-87.	2.5	106
403	Independent component analysis of noninvasively recorded cortical magnetic DC-fields in humans. IEEE Transactions on Biomedical Engineering, 2000, 47, 594-599.	2.5	56
404	Identification of nonstationary dynamics in physiological recordings. Biological Cybernetics, 2000, 83, 73-84.	0.6	42
405	Engineering support vector machine kernels that recognize translation initiation sites. Bioinformatics, 2000, 16, 799-807.	1.8	373
406	Robust Ensemble Learning for Data Mining. Lecture Notes in Computer Science, 2000, , 341-344.	1.0	14
407	Inequities in German research system. Nature, 1999, 399, 13-13.	13.7	0
408	Lernen mit Kernen. Computer Science - Research and Development, 1999, 14, 154-163.	0.9	4
409	Input space versus feature space in kernel-based methods. IEEE Transactions on Neural Networks, 1999, 10, 1000-1017.	4.8	953
410	Data Set A is a Pattern Matching Problem. Neural Processing Letters, 1998, 7, 43-47.	2.0	3
411	The connection between regularization operators and support vector kernels. Neural Networks, 1998, 11, 637-649.	3.3	505
412	Nonlinear Component Analysis as a Kernel Eigenvalue Problem. Neural Computation, 1998, 10, 1299-1319.	1.3	6,336
413	Kernel PCA Pattern Reconstruction via Approximate Pre-Images. Perspectives in Neural Computing, 1998, , 147-152.	0.1	60
414	Convex Cost Functions for Support Vector Regression. Perspectives in Neural Computing, 1998, , 99-104.	0.1	16

#	Article	IF	Citations
415	TDSEP â€" an efficient algorithm for blind separation using time structure. Perspectives in Neural Computing, 1998, , 675-680.	0.1	185
416	Asymptotic statistical theory of overtraining and cross-validation. IEEE Transactions on Neural Networks, 1997, 8, 985-996.	4.8	274
417	Averaging and finite-size analysis for disorder: The Hopfield model. Physica A: Statistical Mechanics and Its Applications, 1996, 232, 61-73.	1.2	13
418	A Numerical Study on Learning Curves in Stochastic Multilayer Feedforward Networks. Neural Computation, 1996, 8, 1085-1106.	1.3	51
419	Annealed Competition of Experts for a Segmentation and Classification of Switching Dynamics. Neural Computation, 1996, 8, 340-356.	1.3	75
420	PERFORMANCE COMPARISON OF LEARNING ALGORITHMS IN HOPFIELD NETWORKS. , 1992, , 961-964.		2
421	Obtaining the Best Linear Unbiased Estimator of Noisy Signals by Non-Gaussian Component Analysis. , 0, , .		3
422	B 17 Maschinelles Lernen, Mustererkennung in der Bildverarbeitung. , 0, , .		0
423	Brain-Computer Interfaces and Visual Activity. , 0, , 1549-1570.		0
424	Brain-Computer Interfaces and Visual Activity. , 0, , 153-174.		0