

Klaus-Robert Müller

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Nonlinear Component Analysis as a Kernel Eigenvalue Problem. <i>Neural Computation</i> , 1998 , 10, 1299-1312	9.9	4789
410	An introduction to kernel-based learning algorithms. <i>IEEE Transactions on Neural Networks</i> , 2001 , 12, 181-201		2193
409	Optimizing Spatial filters for Robust EEG Single-Trial Analysis. <i>IEEE Signal Processing Magazine</i> , 2008 , 25, 41-56	9.4	1214
408	Fast and accurate modeling of molecular atomization energies with machine learning. <i>Physical Review Letters</i> , 2012 , 108, 058301	7.4	1099
407	On Pixel-Wise Explanations for Non-Linear Classifier Decisions by Layer-Wise Relevance Propagation. <i>PLoS ONE</i> , 2015 , 10, e0130140	3.7	1089
406	Methods for interpreting and understanding deep neural networks 2018 , 73, 1-15		760
405	Soft Margins for AdaBoost. <i>Machine Learning</i> , 2001 , 42, 287-320	4	744
404	Single-trial analysis and classification of ERP components--a tutorial. <i>NeuroImage</i> , 2011 , 56, 814-25	7.9	739
403	Input space versus feature space in kernel-based methods. <i>IEEE Transactions on Neural Networks</i> , 1999 , 10, 1000-17		701
402	Efficient BackProp. <i>Lecture Notes in Computer Science</i> , 2012 , 9-48	0.9	638
401	The BCI competition. III: Validating alternative approaches to actual BCI problems. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006 , 14, 153-9	4.8	612
400	Quantum-chemical insights from deep tensor neural networks. <i>Nature Communications</i> , 2017 , 8, 13890	17.4	600
399	The non-invasive Berlin Brain-Computer Interface: fast acquisition of effective performance in untrained subjects. <i>NeuroImage</i> , 2007 , 37, 539-50	7.9	598
398	SchNet - A deep learning architecture for molecules and materials. <i>Journal of Chemical Physics</i> , 2018 , 148, 241722	3.9	556
397	Kernel principal component analysis. <i>Lecture Notes in Computer Science</i> , 1997 , 583-588	0.9	499
396	Introduction to machine learning for brain imaging. <i>NeuroImage</i> , 2011 , 56, 387-99	7.9	464
395	Neurophysiological predictor of SMR-based BCI performance. <i>NeuroImage</i> , 2010 , 51, 1303-9	7.9	454

394	Machine learning of accurate energy-conserving molecular force fields. <i>Science Advances</i> , 2017 , 3, e1603015	11.5	451
393	Enhanced performance by a hybrid NIRS-EEG brain computer interface. <i>NeuroImage</i> , 2012 , 59, 519-29	7.9	445
392	Explaining nonlinear classification decisions with deep Taylor decomposition. <i>Pattern Recognition</i> , 2017 , 65, 211-222	7.7	427
391	Machine Learning Predictions of Molecular Properties: Accurate Many-Body Potentials and Nonlocality in Chemical Space. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2326-31	6.4	426
390	The BCI Competition 2003: progress and perspectives in detection and discrimination of EEG single trials. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 1044-51	5	422
389	Boosting bit rates in noninvasive EEG single-trial classifications by feature combination and multiclass paradigms. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 993-1002	5	418
388	Spatio-spectral filters for improving the classification of single trial EEG. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 1541-8	5	414
387	The connection between regularization operators and support vector kernels. <i>Neural Networks</i> , 1998 , 11, 637-649	9.1	411
386	Assessment and Validation of Machine Learning Methods for Predicting Molecular Atomization Energies. <i>Journal of Chemical Theory and Computation</i> , 2013 , 9, 3404-19	6.4	410
385	Finding density functionals with machine learning. <i>Physical Review Letters</i> , 2012 , 108, 253002	7.4	400
384	Review of the BCI Competition IV. <i>Frontiers in Neuroscience</i> , 2012 , 6, 55	5.1	394
383	Deep Neural Networks for No-Reference and Full-Reference Image Quality Assessment. <i>IEEE Transactions on Image Processing</i> , 2018 , 27, 206-219	8.7	371
382	Robustly estimating the flow direction of information in complex physical systems. <i>Physical Review Letters</i> , 2008 , 100, 234101	7.4	367
381	Machine learning of molecular electronic properties in chemical compound space. <i>New Journal of Physics</i> , 2013 , 15, 095003	2.9	366
380	Bypassing the Kohn-Sham equations with machine learning. <i>Nature Communications</i> , 2017 , 8, 872	17.4	353
379	Machine learning for real-time single-trial EEG-analysis: from brain-computer interfacing to mental state monitoring. <i>Journal of Neuroscience Methods</i> , 2008 , 167, 82-90	3	339
378	Towards adaptive classification for BCI. <i>Journal of Neural Engineering</i> , 2006 , 3, R13-23	5	318
377	Evaluating the Visualization of What a Deep Neural Network Has Learned. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2017 , 28, 2660-2673	10.3	314

376	Engineering support vector machine kernels that recognize translation initiation sites. <i>Bioinformatics</i> , 2000 , 16, 799-807	7.2	308
375	Unmasking Clever Hans predictors and assessing what machines really learn. <i>Nature Communications</i> , 2019 , 10, 1096	17.4	282
374	Towards exact molecular dynamics simulations with machine-learned force fields. <i>Nature Communications</i> , 2018 , 9, 3887	17.4	259
373	Combined optimization of spatial and temporal filters for improving brain-computer interfacing. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 2274-81	5	250
372	Robust and Communication-Efficient Federated Learning From Non-i.i.d. Data. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020 , 31, 3400-3413	10.3	243
371	The Berlin Brain-Computer Interface: accurate performance from first-session in BCI-naïve subjects. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 2452-62	5	231
370	Asymptotic statistical theory of overtraining and cross-validation. <i>IEEE Transactions on Neural Networks</i> , 1997 , 8, 985-96		227
369	The Berlin Brain-Computer Interface: EEG-based communication without subject training. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006 , 14, 147-52	4.8	223
368	The Berlin Brain-Computer Interface: Non-Medical Uses of BCI Technology. <i>Frontiers in Neuroscience</i> , 2010 , 4, 198	5.1	218
367	Benchmark data set for in silico prediction of Ames mutagenicity. <i>Journal of Chemical Information and Modeling</i> , 2009 , 49, 2077-81	6.1	208
366	A critical assessment of connectivity measures for EEG data: a simulation study. <i>NeuroImage</i> , 2013 , 64, 120-33	7.9	207
365	Myoelectric Control of Artificial Limbs: There a Need to Change Focus? [In the Spotlight]. <i>IEEE Signal Processing Magazine</i> , 2012 , 29, 152-150	9.4	196
364	Toward unsupervised adaptation of LDA for brain-computer interfaces. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 587-97	5	194
363	Machine Learning for Molecular Simulation. <i>Annual Review of Physical Chemistry</i> , 2020 , 71, 361-390	15.7	193
362	Interpretable deep neural networks for single-trial EEG classification. <i>Journal of Neuroscience Methods</i> , 2016 , 274, 141-145	3	183
361	Psychological predictors of SMR-BCI performance. <i>Biological Psychology</i> , 2012 , 89, 80-6	3.2	181
360	A regularized discriminative framework for EEG analysis with application to brain-computer interface. <i>NeuroImage</i> , 2010 , 49, 415-32	7.9	180
359	Towards zero training for brain-computer interfacing. <i>PLoS ONE</i> , 2008 , 3, e2967	3.7	179

358	Unifying machine learning and quantum chemistry with a deep neural network for molecular wavefunctions. <i>Nature Communications</i> , 2019 , 10, 5024	17.4	176
357	Subject-independent mental state classification in single trials. <i>Neural Networks</i> , 2009 , 22, 1305-12	9.1	171
356	Applicability domains for classification problems: Benchmarking of distance to models for Ames mutagenicity set. <i>Journal of Chemical Information and Modeling</i> , 2010 , 50, 2094-111	6.1	169
355	Boosting bit rates and error detection for the classification of fast-paced motor commands based on single-trial EEG analysis. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2003 , 11, 127-31	4.8	160
354	Constructing boosting algorithms from SVMs: an application to one-class classification. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2002 , 24, 1184-1199	13.3	156
353	Finding stationary subspaces in multivariate time series. <i>Physical Review Letters</i> , 2009 , 103, 214101	7.4	154
352	Machine-learning-based coadaptive calibration for brain-computer interfaces. <i>Neural Computation</i> , 2011 , 23, 791-816	2.9	148
351	Machine Learning Force Fields. <i>Chemical Reviews</i> , 2021 , 121, 10142-10186	68.1	147
350	Stationary common spatial patterns for brain-computer interfacing. <i>Journal of Neural Engineering</i> , 2012 , 9, 026013	5	143
349	Single trial classification of motor imagination using 6 dry EEG electrodes. <i>PLoS ONE</i> , 2007 , 2, e637	3.7	139
348	BCI Meeting 2005--workshop on BCI signal processing: feature extraction and translation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006 , 14, 135-8	4.8	138
347	SchNetPack: A Deep Learning Toolbox For Atomistic Systems. <i>Journal of Chemical Theory and Computation</i> , 2019 , 15, 448-455	6.4	135
346	The Berlin Brain-Computer Interface (BBCI) II: towards a new communication channel for online control in gaming applications. <i>Multimedia Tools and Applications</i> , 2007 , 33, 73-90	2.5	134
345	Transferring subspaces between subjects in brain--computer interfacing. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 2289-98	5	131
344	On the influence of high-pass filtering on ICA-based artifact reduction in EEG-ERP. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 4101-5	0.9	128
343	A convolutional neural network for steady state visual evoked potential classification under ambulatory environment. <i>PLoS ONE</i> , 2017 , 12, e0172578	3.7	128
342	Constructing descriptive and discriminative nonlinear features: Rayleigh coefficients in kernel feature spaces. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2003 , 25, 623-628	13.3	122
341	Co-adaptive calibration to improve BCI efficiency. <i>Journal of Neural Engineering</i> , 2011 , 8, 025009	5	120

340	A lower limb exoskeleton control system based on steady state visual evoked potentials. <i>Journal of Neural Engineering</i> , 2015 , 12, 056009	5	118
339	Divergence-based framework for common spatial patterns algorithms. <i>IEEE Reviews in Biomedical Engineering</i> , 2014 , 7, 50-72	6.4	117
338	The Berlin Brain-Computer Interface: Progress Beyond Communication and Control. <i>Frontiers in Neuroscience</i> , 2016 , 10, 530	5.1	115
337	TDSEP: An efficient algorithm for blind separation using time structure. <i>Perspectives in Neural Computing</i> , 1998 , 675-680		114
336	Toward a direct measure of video quality perception using EEG. <i>IEEE Transactions on Image Processing</i> , 2012 , 21, 2619-29	8.7	113
335	. <i>Proceedings of the IEEE</i> , 2021 , 109, 247-278	14.3	112
334	Towards Explainable Artificial Intelligence. <i>Lecture Notes in Computer Science</i> , 2019 , 5-22	0.9	111
333	Layer-Wise Relevance Propagation: An Overview. <i>Lecture Notes in Computer Science</i> , 2019 , 193-209	0.9	107
332	A novel mechanism for evoked responses in the human brain. <i>European Journal of Neuroscience</i> , 2007 , 25, 3146-54	3.5	101
331	. <i>Proceedings of the IEEE</i> , 2015 , 103, 926-943	14.3	98
330	Analysis of multimodal neuroimaging data. <i>IEEE Reviews in Biomedical Engineering</i> , 2011 , 4, 26-58	6.4	98
329	Understanding machine-learned density functionals. <i>International Journal of Quantum Chemistry</i> , 2016 , 116, 819-833	2.1	98
328	Artifact reduction in magnetoneurography based on time-delayed second-order correlations. <i>IEEE Transactions on Biomedical Engineering</i> , 2000 , 47, 75-87	5	91
327	A Unifying Review of Deep and Shallow Anomaly Detection. <i>Proceedings of the IEEE</i> , 2021 , 109, 756-795	14.3	90
326	Combining sparsity and rotational invariance in EEG/MEG source reconstruction. <i>NeuroImage</i> , 2008 , 42, 726-38	7.9	88
325	Exploring chemical compound space with quantum-based machine learning. <i>Nature Reviews Chemistry</i> , 2020 , 4, 347-358	34.6	87
324	Explaining Recurrent Neural Network Predictions in Sentiment Analysis 2017 ,		87
323	"What is relevant in a text document?": An interpretable machine learning approach. <i>PLoS ONE</i> , 2017 , 12, e0181142	3.7	84

322	Improving the Robustness of Myoelectric Pattern Recognition for Upper Limb Protheses by Covariate Shift Adaptation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2016 , 24, 961-970	4.8	83
321	Explaining the unique nature of individual gait patterns with deep learning. <i>Scientific Reports</i> , 2019 , 9, 2391	4.9	80
320	Modeling of molecular atomization energies using machine learning. <i>Journal of Cheminformatics</i> , 2012 , 4,	8.6	78
319	Modeling sparse connectivity between underlying brain sources for EEG/MEG. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 1954-63	5	78
318	Kernel-Based Nonlinear Blind Source Separation. <i>Neural Computation</i> , 2003 , 15, 1089-1124	2.9	76
317	Open Access Dataset for EEG+NIRS Single-Trial Classification. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017 , 25, 1735-1745	4.8	75
316	M3BA: A Mobile, Modular, Multimodal Biosignal Acquisition Architecture for Miniaturized EEG-NIRS-Based Hybrid BCI and Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 1199-1210	5.2	75
315	Classifying Rrug-likenessPwith kernel-based learning methods. <i>Journal of Chemical Information and Modeling</i> , 2005 , 45, 249-53	6.1	75
314	Orbital-free bond breaking via machine learning. <i>Journal of Chemical Physics</i> , 2013 , 139, 224104	3.9	74
313	Large-scale EEG/MEG source localization with spatial flexibility. <i>NeuroImage</i> , 2011 , 54, 851-9	7.9	74
312	Optimizing transition states via kernel-based machine learning. <i>Journal of Chemical Physics</i> , 2012 , 136, 174101	3.9	74
311	A data analysis competition to evaluate machine learning algorithms for use in brain-computer interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2003 , 11, 184-5	4.8	74
310	Clustered Federated Learning: Model-Agnostic Distributed Multitask Optimization Under Privacy Constraints. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2021 , 32, 3710-3722	10.3	72
309	Scoring of tumor-infiltrating lymphocytes: From visual estimation to machine learning. <i>Seminars in Cancer Biology</i> , 2018 , 52, 151-157	12.7	71
308	A new discriminative kernel from probabilistic models. <i>Neural Computation</i> , 2002 , 14, 2397-414	2.9	71
307	Quantum chemical accuracy from density functional approximations via machine learning. <i>Nature Communications</i> , 2020 , 11, 5223	17.4	70
306	Effect of higher frequency on the classification of steady-state visual evoked potentials. <i>Journal of Neural Engineering</i> , 2016 , 13, 016014	5	69
305	Analyzing Classifiers: Fisher Vectors and Deep Neural Networks 2016 ,		68

304	sGDML: Constructing accurate and data efficient molecular force fields using machine learning. <i>Computer Physics Communications</i> , 2019 , 240, 38-45	4.2	67
303	SPOC: a novel framework for relating the amplitude of neuronal oscillations to behaviorally relevant parameters. <i>NeuroImage</i> , 2014 , 86, 111-22	7.9	65
302	Understanding kernel ridge regression: Common behaviors from simple functions to density functionals. <i>International Journal of Quantum Chemistry</i> , 2015 , 115, 1115-1128	2.1	65
301	Integrating dynamic stopping, transfer learning and language models in an adaptive zero-training ERP speller. <i>Journal of Neural Engineering</i> , 2014 , 11, 035005	5	64
300	A resampling approach to estimate the stability of one-dimensional or multidimensional independent components. <i>IEEE Transactions on Biomedical Engineering</i> , 2002 , 49, 1514-25	5	64
299	Spatial filtering for robust myoelectric control. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 1436-43	5	61
298	Simultaneous acquisition of EEG and NIRS during cognitive tasks for an open access dataset. <i>Scientific Data</i> , 2018 , 5, 180003	8.2	60
297	Designing for uncertain, asymmetric control: Interaction design for brain-computer interfaces. <i>International Journal of Human Computer Studies</i> , 2009 , 67, 827-841	4.6	60
296	Temporal kernel CCA and its application in multimodal neuronal data analysis. <i>Machine Learning</i> , 2010 , 79, 5-27	4	60
295	Learning From More Than One Data Source: Data Fusion Techniques for Sensorimotor Rhythm-Based Brain-Computer Interfaces. <i>Proceedings of the IEEE</i> , 2015 , 103, 891-906	14.3	59
294	An efficient ERP-based brain-computer interface using random set presentation and face familiarity. <i>PLoS ONE</i> , 2014 , 9, e111157	3.7	58
293	Predicting BCI performance to study BCI illiteracy. <i>BMC Neuroscience</i> , 2009 , 10, P84	3.2	58
292	Relationship between neural and hemodynamic signals during spontaneous activity studied with temporal kernel CCA. <i>Magnetic Resonance Imaging</i> , 2010 , 28, 1095-103	3.3	58
291	From outliers to prototypes: Ordering data. <i>Neurocomputing</i> , 2006 , 69, 1608-1618	5.4	58
290	Layer-Wise Relevance Propagation for Neural Networks with Local Renormalization Layers. <i>Lecture Notes in Computer Science</i> , 2016 , 63-71	0.9	57
289	Motor imagery for severely motor-impaired patients: evidence for brain-computer interfacing as superior control solution. <i>PLoS ONE</i> , 2014 , 9, e104854	3.7	56
288	Annealed Competition of Experts for a Segmentation and Classification of Switching Dynamics. <i>Neural Computation</i> , 1996 , 8, 340-356	2.9	56
287	On optimal channel configurations for SMR-based brain-computer interfaces. <i>Brain Topography</i> , 2010 , 23, 186-93	4.3	55

286	Accurate solubility prediction with error bars for electrolytes: a machine learning approach. <i>Journal of Chemical Information and Modeling</i> , 2007 , 47, 407-24	6.1	55
285	. <i>Proceedings of the IEEE</i> , 2015 , 103, 1507-1530	14.3	54
284	Enhancing the signal-to-noise ratio of ICA-based extracted ERPs. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 601-7	5	53
283	Combining Machine Learning and Computational Chemistry for Predictive Insights Into Chemical Systems. <i>Chemical Reviews</i> , 2021 , 121, 9816-9872	68.1	53
282	Molecular force fields with gradient-domain machine learning: Construction and application to dynamics of small molecules with coupled cluster forces. <i>Journal of Chemical Physics</i> , 2019 , 150, 114102	3.9	51
281	Toward noninvasive brain-computer interfaces. <i>IEEE Signal Processing Magazine</i> , 2006 , 23, 128-126	9.4	51
280	Concurrent Adaptation of Human and Machine Improves Simultaneous and Proportional Myoelectric Control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015 , 23, 618-27	4.8	50
279	Sparse Binary Compression: Towards Distributed Deep Learning with minimal Communication 2019		50
278	Machine learning analysis of DNA methylation profiles distinguishes primary lung squamous cell carcinomas from head and neck metastases. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	49
277	Independent component analysis of noninvasively recorded cortical magnetic DC-fields in humans. <i>IEEE Transactions on Biomedical Engineering</i> , 2000 , 47, 594-9	5	49
276	True zero-training brain-computer interfacing--an online study. <i>PLoS ONE</i> , 2014 , 9, e102504	3.7	48
275	Measuring phase synchronization of superimposed signals. <i>Physical Review Letters</i> , 2005 , 94, 084102	7.4	48
274	Many-Body Descriptors for Predicting Molecular Properties with Machine Learning: Analysis of Pairwise and Three-Body Interactions in Molecules. <i>Journal of Chemical Theory and Computation</i> , 2018 , 14, 2991-3003	6.4	47
273	From machine learning to natural product derivatives that selectively activate transcription factor PPARgamma. <i>ChemMedChem</i> , 2010 , 5, 191-4	3.7	47
272	Improving the <i>Caenorhabditis elegans</i> genome annotation using machine learning. <i>PLoS Computational Biology</i> , 2007 , 3, e20	5	47
271	Near-infrared spectroscopy (NIRS)-based eyes-closed brain-computer interface (BCI) using prefrontal cortex activation due to mental arithmetic. <i>Scientific Reports</i> , 2016 , 6, 36203	4.9	45
270	Input-dependent estimation of generalization error under covariate shift. <i>Statistics & Risk Modeling</i> , 2005 , 23,		42
269	Berlin Brain-Computer Interface--the HCI communication channel for discovery. <i>International Journal of Human Computer Studies</i> , 2007 , 65, 460-477	4.6	41

268	A Note on Brain Actuated Spelling with the Berlin Brain-Computer Interface. <i>Lecture Notes in Computer Science</i> , 2007 , 759-768	0.9	41
267	Visual Interpretation of Kernel-Based Prediction Models. <i>Molecular Informatics</i> , 2011 , 30, 817-26	3.8	40
266	On the information and representation of non-Euclidean pairwise data. <i>Pattern Recognition</i> , 2006 , 39, 1815-1826	7.7	40
265	A large scale screening study with a SMR-based BCI: Categorization of BCI users and differences in their SMR activity. <i>PLoS ONE</i> , 2019 , 14, e0207351	3.7	39
264	Resolving challenges in deep learning-based analyses of histopathological images using explanation methods. <i>Scientific Reports</i> , 2020 , 10, 6423	4.9	38
263	A numerical study on learning curves in stochastic multilayer feedforward networks. <i>Neural Computation</i> , 1996 , 8, 1085-106	2.9	38
262	EEG-based classification of video quality perception using steady state visual evoked potentials (SSVEPs). <i>Journal of Neural Engineering</i> , 2015 , 12, 026012	5	37
261	Localizing and estimating causal relations of interacting brain rhythms. <i>Frontiers in Human Neuroscience</i> , 2010 , 4, 209	3.3	37
260	A probabilistic approach to classifying metabolic stability. <i>Journal of Chemical Information and Modeling</i> , 2008 , 48, 785-96	6.1	37
259	On-line learning in changing environments with applications in supervised and unsupervised learning. <i>Neural Networks</i> , 2002 , 15, 743-60	9.1	37
258	Motion-Based Rapid Serial Visual Presentation for Gaze-Independent Brain-Computer Interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018 , 26, 334-343	4.8	37
257	Finding brain oscillations with power dependencies in neuroimaging data. <i>NeuroImage</i> , 2014 , 96, 334-487.9	7.9	35
256	Finding stationary brain sources in EEG data. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 2810-3	0.9	35
255	Layer-Wise Relevance Propagation for Deep Neural Network Architectures. <i>Lecture Notes in Electrical Engineering</i> , 2016 , 913-922	0.2	35
254	Ensembles of adaptive spatial filters increase BCI performance: an online evaluation. <i>Journal of Neural Engineering</i> , 2016 , 13, 046003	5	35
253	Capturing intensive and extensive DFT/TDDFT molecular properties with machine learning. <i>European Physical Journal B</i> , 2018 , 91, 1	1.2	34
252	Stereoscopic depth increases intersubject correlations of brain networks. <i>NeuroImage</i> , 2014 , 100, 427-347.9	7.9	34
251	Identifying interactions in mixed and noisy complex systems. <i>Physical Review E</i> , 2006 , 73, 051913	2.4	34

250	Identification of nonstationary dynamics in physiological recordings. <i>Biological Cybernetics</i> , 2000 , 83, 73-84	2.8	34
249	Pyff - a pythonic framework for feedback applications and stimulus presentation in neuroscience. <i>Frontiers in Neuroscience</i> , 2010 , 4, 179	5.1	33
248	The LDA beamformer: Optimal estimation of ERP source time series using linear discriminant analysis. <i>NeuroImage</i> , 2016 , 129, 279-291	7.9	32
247	Feature extraction for change-point detection using stationary subspace analysis. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2012 , 23, 631-43	10.3	32
246	Kernel PCA Pattern Reconstruction via Approximate Pre-Images. <i>Perspectives in Neural Computing</i> , 1998 , 147-152		32
245	EEG-based BCI for the linear control of an upper-limb neuroprosthesis. <i>Medical Engineering and Physics</i> , 2016 , 38, 1195-1204	2.4	30
244	Predicting BCI subject performance using probabilistic spatio-temporal filters. <i>PLoS ONE</i> , 2014 , 9, e87056	5.7	30
243	ℓ_1 -penalized linear mixed-effects models for high dimensional data with application to BCI. <i>NeuroImage</i> , 2011 , 56, 2100-8	7.9	30
242	Combining Multiple Hypothesis Testing with Machine Learning Increases the Statistical Power of Genome-wide Association Studies. <i>Scientific Reports</i> , 2016 , 6, 36671	4.9	30
241	Validity of Time Reversal for Testing Granger Causality. <i>IEEE Transactions on Signal Processing</i> , 2016 , 64, 2746-2760	4.8	29
240	Single-trial analysis of the neural correlates of speech quality perception. <i>Journal of Neural Engineering</i> , 2013 , 10, 056003	5	29
239	Brain-Computer Interfaces [from the guest editors]. <i>IEEE Signal Processing Magazine</i> , 2008 , 25, 16-17	9.4	29
238	Improved physiological noise regression in fNIRS: A multimodal extension of the General Linear Model using temporally embedded Canonical Correlation Analysis. <i>NeuroImage</i> , 2020 , 208, 116472	7.9	29
237	. <i>IEEE Signal Processing Magazine</i> , 2013 , 30, 62-74	9.4	28
236	Optimizing the regularization for image reconstruction of cerebral diffuse optical tomography. <i>Journal of Biomedical Optics</i> , 2014 , 19, 96006	3.5	28
235	CSP patches: an ensemble of optimized spatial filters. An evaluation study. <i>Journal of Neural Engineering</i> , 2011 , 8, 025012	5	28
234	A consistency-based model selection for one-class classification 2004 ,		28
233	Towards explaining anomalies: A deep Taylor decomposition of one-class models. <i>Pattern Recognition</i> , 2020 , 101, 107198	7.7	27

232	Robust common spatial filters with a max-min approach. <i>Neural Computation</i> , 2014 , 26, 349-76	2.9	27
231	On Taxonomies for Multi-class Image Categorization. <i>International Journal of Computer Vision</i> , 2012 , 99, 281-301	10.6	27
230	A mathematical model for the two-learners problem. <i>Journal of Neural Engineering</i> , 2017 , 14, 036005	5	26
229	Channel selection for simultaneous and proportional myoelectric prosthesis control of multiple degrees-of-freedom. <i>Journal of Neural Engineering</i> , 2014 , 11, 056008	5	26
228	StructRank: a new approach for ligand-based virtual screening. <i>Journal of Chemical Information and Modeling</i> , 2011 , 51, 83-92	6.1	26
227	Estimating the domain of applicability for machine learning QSAR models: a study on aqueous solubility of drug discovery molecules. <i>Journal of Computer-Aided Molecular Design</i> , 2007 , 21, 485-98	4.2	26
226	Optimizing Spectral Filters for Single Trial EEG Classification. <i>Lecture Notes in Computer Science</i> , 2006 , 414-423	0.9	26
225	Ensemble learning of coarse-grained molecular dynamics force fields with a kernel approach. <i>Journal of Chemical Physics</i> , 2020 , 152, 194106	3.9	25
224	The effect of linear mixing in the EEG on Hurst exponent estimation. <i>NeuroImage</i> , 2014 , 99, 377-87	7.9	25
223	Estimating the domain of applicability for machine learning QSAR models: a study on aqueous solubility of drug discovery molecules. <i>Journal of Computer-Aided Molecular Design</i> , 2007 , 21, 651-64	4.2	25
222	BLIND SOURCE SEPARATION TECHNIQUES FOR DECOMPOSING EVENT-RELATED BRAIN SIGNALS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004 , 14, 773-791	2	25
221	Pruning by explaining: A novel criterion for deep neural network pruning. <i>Pattern Recognition</i> , 2021 , 115, 107899	7.7	25
220	. <i>IEEE Transactions on Multimedia</i> , 2013 , 15, 1001-1013	6.6	24
219	Real-time robustness evaluation of regression based myoelectric control against arm position change and donning/doffing. <i>PLoS ONE</i> , 2017 , 12, e0186318	3.7	23
218	Evaluation of a Compact Hybrid Brain-Computer Interface System. <i>BioMed Research International</i> , 2017 , 2017, 6820482	3	23
217	Distributed functions of detection and discrimination of vibrotactile stimuli in the hierarchical human somatosensory system. <i>Frontiers in Human Neuroscience</i> , 2014 , 8, 1070	3.3	23
216	A generalized framework for quantifying the dynamics of EEG event-related desynchronization. <i>PLoS Computational Biology</i> , 2009 , 5, e1000453	5	22
215	Learning from label proportions in brain-computer interfaces: Online unsupervised learning with guarantees. <i>PLoS ONE</i> , 2017 , 12, e0175856	3.7	22

214	Explaining and Interpreting LSTMs. <i>Lecture Notes in Computer Science</i> , 2019 , 211-238	0.9	22
213	Analyzing Neuroimaging Data Through Recurrent Deep Learning Models. <i>Frontiers in Neuroscience</i> , 2019 , 13, 1321	5.1	22
212	Compact and Computationally Efficient Representation of Deep Neural Networks. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020 , 31, 772-785	10.3	22
211	Simultaneous and proportional control of 2D wrist movements with myoelectric signals 2012 ,		21
210	Deep Boltzmann Machines and the Centering Trick. <i>Lecture Notes in Computer Science</i> , 2012 , 621-637	0.9	21
209	Predicting lipophilicity of drug-discovery molecules using Gaussian process models. <i>ChemMedChem</i> , 2007 , 2, 1265-7	3.7	21
208	Explaining Predictions of Non-Linear Classifiers in NLP 2016 ,		21
207	Rupp et al. Reply:. <i>Physical Review Letters</i> , 2012 , 109,	7.4	20
206	Morphological and molecular breast cancer profiling through explainable machine learning. <i>Nature Machine Intelligence</i> , 2021 , 3, 355-366	22.5	20
205	Multiscale temporal neural dynamics predict performance in a complex sensorimotor task. <i>NeuroImage</i> , 2016 , 141, 291-303	7.9	19
204	Asymptotic properties of the Fisher kernel. <i>Neural Computation</i> , 2004 , 16, 115-37	2.9	19
203	SpookyNet: Learning force fields with electronic degrees of freedom and nonlocal effects.. <i>Nature Communications</i> , 2021 , 12, 7273	17.4	19
202	Immediate brain plasticity after one hour of brain-computer interface (BCI). <i>Journal of Physiology</i> , 2021 , 599, 2435-2451	3.9	19
201	A new blind source separation framework for signal analysis and artifact rejection in functional Near-Infrared Spectroscopy. <i>NeuroImage</i> , 2019 , 200, 72-88	7.9	18
200	Asymptotically unbiased estimation of physical observables with neural samplers. <i>Physical Review E</i> , 2020 , 101, 023304	2.4	18
199	Support Vector Data Descriptions and k -Means Clustering: One Class?. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2018 , 29, 3994-4006	10.3	18
198	Understanding and Comparing Deep Neural Networks for Age and Gender Classification 2017 ,		18
197	Nonlinear gradient denoising: Finding accurate extrema from inaccurate functional derivatives. <i>International Journal of Quantum Chemistry</i> , 2015 , 115, 1102-1114	2.1	18

196	New Methods for Splice Site Recognition. <i>Lecture Notes in Computer Science</i> , 2002 , 329-336	0.9	18
195	Assessing Perceived Image Quality Using Steady-State Visual Evoked Potentials and Spatio-Spectral Decomposition. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2018 , 28, 1694-1706	6.4	17
194	Decoding of top-down cognitive processing for SSVEP-controlled BMI. <i>Scientific Reports</i> , 2016 , 6, 36267	4.9	17
193	Machine learning models for lipophilicity and their domain of applicability. <i>Molecular Pharmaceutics</i> , 2007 , 4, 524-38	5.6	17
192	Optimal dyadic decision trees. <i>Machine Learning</i> , 2007 , 66, 209-241	4	17
191	Risk estimation of SARS-CoV-2 transmission from bluetooth low energy measurements. <i>Npj Digital Medicine</i> , 2020 , 3, 129	15.7	17
190	Towards CRISP-ML(Q): A Machine Learning Process Model with Quality Assurance Methodology. <i>Machine Learning and Knowledge Extraction</i> , 2021 , 3, 392-413	3.1	17
189	Objective quality assessment of stereoscopic images with vertical disparity using EEG. <i>Journal of Neural Engineering</i> , 2017 , 14, 046009	5	16
188	A Self-learning System for Detection of Anomalous SIP Messages. <i>Lecture Notes in Computer Science</i> , 2008 , 90-106	0.9	16
187	Adaptive Methods in BCI Research - An Introductory Tutorial. <i>The Frontiers Collection</i> , 2009 , 331-355	0.3	16
186	Autonomous robotic nanofabrication with reinforcement learning. <i>Science Advances</i> , 2020 , 6,	14.3	16
185	Spatio-temporal dynamics of multimodal EEG-fNIRS signals in the loss and recovery of consciousness under sedation using midazolam and propofol. <i>PLoS ONE</i> , 2017 , 12, e0187743	3.7	15
184	A new algorithm of non-Gaussian component analysis with radial kernel functions. <i>Annals of the Institute of Statistical Mathematics</i> , 2007 , 59, 57-75	1	15
183	Trading variance reduction with unbiasedness: the regularized subspace information criterion for robust model selection in kernel regression. <i>Neural Computation</i> , 2004 , 16, 1077-104	2.9	15
182	Approximate Joint Diagonalization Using a Natural Gradient Approach. <i>Lecture Notes in Computer Science</i> , 2004 , 89-96	0.9	15
181	Quantum-Chemical Insights from Interpretable Atomistic Neural Networks. <i>Lecture Notes in Computer Science</i> , 2019 , 311-330	0.9	15
180	Automating the search for a patent prior art with a full text similarity search. <i>PLoS ONE</i> , 2019 , 14, e0213703	3.7	14
179	Brain-Switches for Asynchronous Brain-Computer Interfaces: A Systematic Review. <i>Electronics (Switzerland)</i> , 2020 , 9, 422	2.6	14

178	On the Byzantine Robustness of Clustered Federated Learning 2020 ,		14
177	Improved decoding of neural activity from fMRI signals using non-separable spatiotemporal deconvolutions. <i>NeuroImage</i> , 2012 , 61, 1031-42	7.9	14
176	Brain-Computer Interfacing for multimedia quality assessment 2016 ,		14
175	Enhancing sensorimotor BCI performance with assistive afferent activity: An online evaluation. <i>NeuroImage</i> , 2019 , 199, 375-386	7.9	13
174	Improvement of Information Transfer Rates Using a Hybrid EEG-NIRS Brain-Computer Interface with a Short Trial Length: Offline and Pseudo-Online Analyses. <i>Sensors</i> , 2018 , 18,	3.8	13
173	Neuromuscular electrical stimulation induced brain patterns to decode motor imagery. <i>Clinical Neurophysiology</i> , 2013 , 124, 1824-34	4.3	13
172	Brain-computer interfacing in discriminative and stationary subspaces. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 2873-6	0.9	13
171	Asymptotic Bayesian generalization error when training and test distributions are different 2007 ,		13
170	. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 877-880	5	13
169	Injecting noise for analysing the stability of ICA components. <i>Signal Processing</i> , 2004 , 84, 255-266	4.4	13
168	Noise robust estimates of correlation dimension and K2 entropy. <i>Physical Review E</i> , 2001 , 64, 016112	2.4	13
167	An adaptive deep reinforcement learning framework enables curling robots with human-like performance in real-world conditions. <i>Science Robotics</i> , 2020 , 5,	18.6	13
166	2016 ,		13
165	Identifying Individual Facial Expressions by Deconstructing a Neural Network. <i>Lecture Notes in Computer Science</i> , 2016 , 344-354	0.9	13
164	Using transfer learning from prior reference knowledge to improve the clustering of single-cell RNA-Seq data. <i>Scientific Reports</i> , 2019 , 9, 20353	4.9	13
163	Dynamical strengthening of covalent and non-covalent molecular interactions by nuclear quantum effects at finite temperature. <i>Nature Communications</i> , 2021 , 12, 442	17.4	13
162	Machine learning of solvent effects on molecular spectra and reactions. <i>Chemical Science</i> , 2021 , 12, 11473-11483	9.4	13
161	Identifying Granger causal relationships between neural power dynamics and variables of interest. <i>NeuroImage</i> , 2015 , 111, 489-504	7.9	12

160	Unsupervised Learning for Brain-Computer Interfaces Based on Event-Related Potentials: Review and Online Comparison [Research Frontier]. <i>IEEE Computational Intelligence Magazine</i> , 2018 , 13, 66-77	5.6	12
159	Interpretable human action recognition in compressed domain 2017 ,		12
158	Neurally informed assessment of perceived natural texture image quality 2014 ,		12
157	Enhanced representation and multi-task learning for image annotation. <i>Computer Vision and Image Understanding</i> , 2013 , 117, 466-478	4.3	12
156	Improving BCI performance by task-related trial pruning. <i>Neural Networks</i> , 2009 , 22, 1295-304	9.1	12
155	Evaluating Recurrent Neural Network Explanations 2019 ,		12
154	The Berlin Brain-Computer Interface. <i>Lecture Notes in Computer Science</i> , 2008 , 79-101	0.9	12
153	Porosity estimation by semi-supervised learning with sparsely available labeled samples. <i>Computers and Geosciences</i> , 2017 , 106, 33-48	4.5	11
152	N-ary decomposition for multi-class classification. <i>Machine Learning</i> , 2019 , 108, 809-830	4	11
151	Extracting latent brain states--Towards true labels in cognitive neuroscience experiments. <i>NeuroImage</i> , 2015 , 120, 225-53	7.9	11
150	Toward exoskeleton control based on steady state visual evoked potentials 2014 ,		11
149	Common spatial pattern patches - an optimized filter ensemble for adaptive brain-computer interfaces. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 4351-4	0.9	11
148	Molecular force fields with gradient-domain machine learning (GDML): Comparison and synergies with classical force fields. <i>Journal of Chemical Physics</i> , 2020 , 153, 124109	3.9	11
147	Importance-Weighted Cross-Validation for Covariate Shift. <i>Lecture Notes in Computer Science</i> , 2006 , 354-363		11
146	Efficient algorithms for exact inference in sequence labeling SVMs. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2014 , 25, 870-81	10.3	10
145	On robust parameter estimation in brain-computer interfacing. <i>Journal of Neural Engineering</i> , 2017 , 14, 061001	5	10
144	Averaging and finite-size analysis for disorder: The Hopfield model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1996 , 232, 61-73	3.3	10
143	Machine-Learning Based Co-adaptive Calibration: A Perspective to Fight BCI Illiteracy. <i>Lecture Notes in Computer Science</i> , 2010 , 413-420	0.9	10

142	Enhanced Performance of a Brain Switch by Simultaneous Use of EEG and NIRS Data for Asynchronous Brain-Computer Interface. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020 , 28, 2102-2112	4.8	10
141	Building and Interpreting Deep Similarity Models. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2020 , PP,	13.3	10
140	Brain-computer interfacing under distraction: an evaluation study. <i>Journal of Neural Engineering</i> , 2016 , 13, 056012	5	10
139	Reinforcement learning for video encoder control in HEVC 2017 ,		9
138	Truxillic acid derivatives act as peroxisome proliferator-activated receptor gamma activators. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010 , 20, 2920-3	2.9	9
137	Estimation of distortion sensitivity for visual quality prediction using a convolutional neural network 2019 , 91, 54-65		9
136	Robust Ensemble Learning for Data Mining. <i>Lecture Notes in Computer Science</i> , 2000 , 341-344	0.9	9
135	Convex Cost Functions for Support Vector Regression. <i>Perspectives in Neural Computing</i> , 1998 , 99-104		9
134	The need for novel informatics tools for integrating and planning research in molecular and cellular cognition. <i>Learning and Memory</i> , 2015 , 22, 494-8	2.8	8
133	Special Issue on Advances in Kernel-Based Learning for Signal Processing [From the Guest Editors]. <i>IEEE Signal Processing Magazine</i> , 2013 , 30, 14-15	9.4	8
132	Robust common spatial filters with a maxmin approach. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 2470-3	0.9	8
131	Understanding Patch-Based Learning of Video Data by Explaining Predictions. <i>Lecture Notes in Computer Science</i> , 2019 , 297-309	0.9	8
130	Kernels, Pre-images and Optimization 2013 , 245-259		8
129	Mammography Image Quality Assurance Using Deep Learning. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 3317-3326	5	8
128	Eyes-closed hybrid brain-computer interface employing frontal brain activation. <i>PLoS ONE</i> , 2018 , 13, e0196359	3.7	8
127	Controlling explanatory heatmap resolution and semantics via decomposition depth 2016 ,		7
126	Covariate shift adaptation in EMG pattern recognition for prosthetic device control. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 4370-3	0.9	7
125	Insights from classifying visual concepts with multiple kernel learning. <i>PLoS ONE</i> , 2012 , 7, e38897	3.7	7

124	A scatter-based prototype framework and multi-class extension of support vector machines. <i>PLoS ONE</i> , 2012 , 7, e42947	3.7	7
123	Uniqueness of Non-Gaussianity-Based Dimension Reduction. <i>IEEE Transactions on Signal Processing</i> , 2011 , 59, 4478-4482	4.8	7
122	Revealing the neural response to imperceptible peripheral flicker with machine learning. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 3692-5	0.9	7
121	Common Spatial Pattern Patches: online evaluation on BCI-naive users. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 4744-7	0.9	7
120	Deep Transfer Learning for Whole-Brain fMRI Analyses. <i>Lecture Notes in Computer Science</i> , 2019 , 59-67	0.9	7
119	Sensorimotor Functional Connectivity: A Neurophysiological Factor Related to BCI Performance. <i>Frontiers in Neuroscience</i> , 2020 , 14, 575081	5.1	7
118	Entropy-Constrained Training of Deep Neural Networks 2019 ,		7
117	. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2018 , 12, 1213-1223	7.5	7
116	Finding and removing Clever Hans: Using explanation methods to debug and improve deep models. <i>Information Fusion</i> , 2022 , 77, 261-295	16.7	7
115	Learning to Predict the Leave-One-Out Error of Kernel Based Classifiers. <i>Lecture Notes in Computer Science</i> , 2001 , 331-338	0.9	7
114	Analyzing neuroimaging data with subclasses: A shrinkage approach. <i>NeuroImage</i> , 2016 , 124, 740-751	7.9	6
113	Neurophysiological assessment of perceived image quality using steady-state visual evoked potentials 2015 ,		6
112	Nonlinear interaction decomposition (NID): A method for separation of cross-frequency coupled sources in human brain. <i>NeuroImage</i> , 2020 , 211, 116599	7.9	6
111	Robust Statistical Detection of Power-Law Cross-Correlation. <i>Scientific Reports</i> , 2016 , 6, 27089	4.9	6
110	EEG-based usability assessment of 3D shutter glasses. <i>Journal of Neural Engineering</i> , 2016 , 13, 016003	5	6
109	Three-way analysis of spectrospatial electromyography data: classification and interpretation. <i>PLoS ONE</i> , 2015 , 10, e0127231	3.7	6
108	Securing IMS against novel threats. <i>Bell Labs Technical Journal</i> , 2009 , 14, 243-257	0.5	6
107	A Maxmin Approach to Optimize Spatial Filters for EEG Single-Trial Classification. <i>Lecture Notes in Computer Science</i> , 2009 , 674-682	0.9	6

106	Inlier-based ICA with an application to superimposed images. <i>International Journal of Imaging Systems and Technology</i> , 2005 , 15, 48-55	2.5	6
105	Subspace information criterion for nonquadratic regularizers-Model selection for sparse regressors. <i>IEEE Transactions on Neural Networks</i> , 2002 , 13, 70-80		6
104	Why Does a Hilbertian Metric Work Efficiently in Online Learning With Kernels?. <i>IEEE Signal Processing Letters</i> , 2016 , 23, 1424-1428	3.2	6
103	Forecasting industrial aging processes with machine learning methods. <i>Computers and Chemical Engineering</i> , 2021 , 144, 107123	4	6
102	Artificial intelligence and pathology: From principles to practice and future applications in histomorphology and molecular profiling. <i>Seminars in Cancer Biology</i> , 2021 ,	12.7	6
101	Canonical maximization of coherence: A novel tool for investigation of neuronal interactions between two datasets. <i>NeuroImage</i> , 2019 , 201, 116009	7.9	5
100	Investigating effects of different artefact types on motor imagery BCI. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 1942-5	0.9	5
99	Bringing BCI into everyday life: Motor imagery in a pseudo realistic environment 2015 ,		5
98	Multiple kernel learning for brain-computer interfacing. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 7048-51	0.9	5
97	First study towards linear control of an upper-limb neuroprosthesis with an EEG-based Brain-Computer Interface. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 3269-73	0.9	5
96	Density Functionals with Quantum Chemical Accuracy: From Machine Learning to Molecular Dynamics		5
95	Model Selection Under Covariate Shift. <i>Lecture Notes in Computer Science</i> , 2005 , 235-240	0.9	5
94	Construction of Machine Learned Force Fields with Quantum Chemical Accuracy: Applications and Chemical Insights. <i>Lecture Notes in Physics</i> , 2020 , 277-307	0.8	5
93	Classifying directions in continuous arm movement from EEG signals 2015 ,		4
92	Opening the Black Box: Revealing Interpretable Sequence Motifs in Kernel-Based Learning Algorithms. <i>Lecture Notes in Computer Science</i> , 2015 , 137-153	0.9	4
91	Transductive Regression for Data With Latent Dependence Structure. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2018 , 29, 2743-2756	10.3	4
90	Why build an integrated EEG-NIRS? About the advantages of hybrid bio-acquisition hardware. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 4475-4478	0.9	4
89	Tackling noise, artifacts and nonstationarity in BCI with robust divergences 2015 ,		4

88	Multimodal imaging technique for rapid response brain-computer interface feedback 2013 ,		4
87	BCI Applications for the General Population 2012 , 364-372		4
86	SVM2Motif--Reconstructing Overlapping DNA Sequence Motifs by Mimicking an SVM Predictor. <i>PLoS ONE</i> , 2015 , 10, e0144782	3.7	4
85	ML2Motif-Reliable extraction of discriminative sequence motifs from learning machines. <i>PLoS ONE</i> , 2017 , 12, e0174392	3.7	4
84	Accurate Molecular Dynamics Enabled by Efficient Physically Constrained Machine Learning Approaches. <i>Lecture Notes in Physics</i> , 2020 , 129-154	0.8	4
83	Using Rest Class and Control Paradigms for Brain Computer Interfacing. <i>Lecture Notes in Computer Science</i> , 2009 , 651-665	0.9	4
82	Computational analysis reveals histotype-dependent molecular profile and actionable mutation effects across cancers. <i>Genome Medicine</i> , 2018 , 10, 83	14.4	4
81	Structuring Neural Networks for More Explainable Predictions. <i>The Springer Series on Challenges in Machine Learning</i> , 2018 , 115-131	7.3	4
80	Towards robust explanations for deep neural networks. <i>Pattern Recognition</i> , 2022 , 121, 108194	7.7	4
79	Accurate Maximum-Margin Training for Parsing With Context-Free Grammars. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2017 , 28, 44-56	10.3	3
78	Robust common spatial patterns based on Bhattacharyya distance and Gamma divergence 2015 ,		3
77	Open access repository for hybrid EEG-NIRS data 2018 ,		3
76	Electroencephalography/sonication-mediated human brain-brain interfacing technology. <i>Trends in Biotechnology</i> , 2014 , 32, 345-6	15.1	3
75	When brain and behavior disagree: Tackling systematic label noise in EEG data with machine learning 2014 ,		3
74	Machine Learning Methods of the Berlin Brain-Computer Interface. <i>IFAC-PapersOnLine</i> , 2015 , 48, 447-452.7		3
73	Directional variance adjustment: bias reduction in covariance matrices based on factor analysis with an application to portfolio optimization. <i>PLoS ONE</i> , 2013 , 8, e67503	3.7	3
72	Stationary Subspace Analysis. <i>Lecture Notes in Computer Science</i> , 2009 , 1-8	0.9	3
71	Data Set A is a Pattern Matching Problem. <i>Neural Processing Letters</i> , 1998 , 7, 43-47	2.4	3

70	Obtaining the Best Linear Unbiased Estimator of Noisy Signals by Non-Gaussian Component Analysis		3
69	Lernen mit Kernen. <i>Computer Science - Research and Development</i> , 1999 , 14, 154-163		3
68	Curly: An AI-based Curling Robot Successfully Competing in the Olympic Discipline of Curling 2018 ,		3
67	Decoding Brain States during Auditory Perception by Supervising Unsupervised Learning. <i>Journal of Computing Science and Engineering</i> , 2013 , 7, 112-121	1.8	3
66	Learning Representations of Molecules and Materials with Atomistic Neural Networks. <i>Lecture Notes in Physics</i> , 2020 , 215-230	0.8	3
65	Interpretable Deep Neural Network to Predict Estrogen Receptor Status from Haematoxylin-Eosin Images. <i>Lecture Notes in Computer Science</i> , 2020 , 16-37	0.9	3
64	ℓ_1 -Penalized Linear Mixed-Effects Models for BCI. <i>Lecture Notes in Computer Science</i> , 2011 , 26-35	0.9	3
63	Leaf-inspired homeostatic cellulose biosensors. <i>Science Advances</i> , 2021 , 7,	14.3	3
62	DeepCOMBI: explainable artificial intelligence for the analysis and discovery in genome-wide association studies. <i>NAR Genomics and Bioinformatics</i> , 2021 , 3, lqab065	3.7	3
61	A Neural Network Model of Spatial Distortion Sensitivity for Video Quality Estimation 2019 ,		3
60	Unification of sparse Bayesian learning algorithms for electromagnetic brain imaging with the majorization minimization framework. <i>NeuroImage</i> , 2021 , 239, 118309	7.9	3
59	Efficient Algorithms for Similarity Measures over Sequential Data: A Look Beyond Kernels. <i>Lecture Notes in Computer Science</i> , 2006 , 374-383	0.9	3
58	Inverse design of 3d molecular structures with conditional generative neural networks.. <i>Nature Communications</i> , 2022 , 13, 973	17.4	3
57	Explaining the Predictions of Unsupervised Learning Models. <i>Lecture Notes in Computer Science</i> , 2022 , 117-138	0.9	3
56	Shifting stimuli for brain computer interface based on rapid serial visual presentation 2017 ,		2
55	Channel selection for simultaneous myoelectric prosthesis control 2014 ,		2
54	Information geometry meets BCI spatial filtering using divergences 2014 ,		2
53	Editorial IEEE Brain Initiative Special issue on BMI/BCI Systems. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017 , 25, 1685-1686	4.8	2

52	. <i>Proceedings of the IEEE</i> , 2015 , 103, 868-870	14.3	2
51	Explorative data analysis for changes in neural activity. <i>Journal of Neural Engineering</i> , 2013 , 10, 026018	5	2
50	Robust ICA for Super-Gaussian Sources. <i>Lecture Notes in Computer Science</i> , 2004 , 217-224	0.9	2
49	Detecting Mental States by Machine Learning Techniques: The Berlin Brain-Computer Interface. <i>The Frontiers Collection</i> , 2009 , 113-135	0.3	2
48	DeepCOMBI: Explainable artificial intelligence for the analysis and discovery in genome-wide association studies		2
47	Higher order stationary subspace analysis. <i>Journal of Physics: Conference Series</i> , 2016 , 699, 012021	0.3	2
46	A better metric in kernel adaptive filtering 2016 ,		2
45	Alternative CSP approaches for multimodal distributed BCI data 2016 ,		2
44	xxAI - Beyond Explainable Artificial Intelligence. <i>Lecture Notes in Computer Science</i> , 2022 , 3-10	0.9	2
43	Classification of structured validation data using stateless and stateful features. <i>Computer Communications</i> , 2019 , 138, 54-66	5.1	1
42	Rethinking BCI Paradigm and Machine Learning Algorithm as a Symbiosis: Zero Calibration, Guaranteed Convergence and High Decoding Performance. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2019 , 63-73	0.4	1
41	Mean shrinkage improves the classification of ERP signals by exploiting additional label information 2014 ,		1
40	Efficient Exact Inference With Loss Augmented Objective in Structured Learning. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2017 , 28, 2566-2579	10.3	1
39	2017 ,		1
38	Localization of class-related mu-rhythm desynchronization in motor imagery based brain-computer interface sessions. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 5137-40	0.9	1
37	Automated ocular artifact removal: comparing regression and component-based methods. <i>Nature Precedings</i> , 2009 ,		1
36	A new scatter-based multi-class support vector machine 2011 ,		1
35	Stopping conditions for exact computation of leave-one-out error in support vector machines 2008 ,		1

34	Estimating Functions for Blind Separation when Sources Have Variance-Dependencies. <i>Lecture Notes in Computer Science</i> , 2004 , 136-143	0.9	1
33	Kernel Methods for Quantum Chemistry. <i>Lecture Notes in Physics</i> , 2020 , 25-36	0.8	1
32	A Model Selection Method Based on Bound of Learning Coefficient. <i>Lecture Notes in Computer Science</i> , 2006 , 371-380	0.9	1
31	Non-separable Spatiotemporal Brain Hemodynamics Contain Neural Information. <i>Lecture Notes in Computer Science</i> , 2012 , 140-147	0.9	1
30	PERFORMANCE COMPARISON OF LEARNING ALGORITHMS IN HOPFIELD NETWORKS 1992 , 961-964		1
29	Unification of Sparse Bayesian Learning Algorithms for Electromagnetic Brain Imaging with the Majorization Minimization Framework		1
28	An Algebraic Method for Approximate Rank One Factorization of Rank Deficient Matrices. <i>Lecture Notes in Computer Science</i> , 2012 , 272-279	0.9	1
27	Machine Learning for Visual Concept Recognition and Ranking for Images. <i>Cognitive Technologies</i> , 2014 , 211-223	2	1
26	2020 ,		1
25	Robustifying models against adversarial attacks by Langevin dynamics. <i>Neural Networks</i> , 2021 , 137, 1-179.1	9.1	1
24	Machine learning for BCI: towards analysing cognition 2016 ,		1
23	Harmoni: a Method for Eliminating Spurious Interactions due to the Harmonic Components in Neuronal Data.. <i>NeuroImage</i> , 2022 , 119053	7.9	1
22	Patient-level proteomic network prediction by explainable artificial intelligence. <i>Npj Precision Oncology</i> , 2022 , 6,	9.8	1
21	Support Vector Machines 2012 , 883-926		0
20	Object Boundary Detection and Classification with Image-Level Labels. <i>Lecture Notes in Computer Science</i> , 2017 , 153-164	0.9	0
19	Basis profile curve identification to understand electrical stimulation effects in human brain networks. <i>PLoS Computational Biology</i> , 2021 , 17, e1008710	5	0
18	Optimizing for Measure of Performance in Max-Margin Parsing. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020 , 31, 2680-2684	10.3	
17	Multifrequency Analysis of Brain-Computer Interfaces. <i>Trends in Augmentation of Human Performance</i> , 2015 , 49-60		

16	Features spaces and a learning system for structural-temporal data, and their application on a use case of real-time communication network validation data. <i>PLoS ONE</i> , 2020 , 15, e0228434	3.7
15	Rotation Invariant Clustering of 3D Cell Nuclei Shapes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2019 , 2019, 6022-6027	0.9
14	Towards an enhanced ERP speller based on the visual processing of face familiarity. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 1330-3	0.9
13	Pitfalls in EEG-Based Brain Effective Connectivity Analysis. <i>Lecture Notes in Computer Science</i> , 2012 , 202-209	0.9
12	Improving Network Models and Algorithmic Tricks. <i>Lecture Notes in Computer Science</i> , 2012 , 139-141	0.9
11	Unsupervised Decomposition Methods for Analysis of Multimodal Neural Data 2013 , 199-234	
10	Neural Networks for Computational Chemistry: Pitfalls and Recommendations. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1523, 501	
9	EEG-basierte Brain-Computer Interfaces zur Echtzeit-Dekodierung mentaler Zustände. <i>Klinische Neurophysiologie</i> , 2012 , 43, 213-218	0.2
8	Inequities in German research system. <i>Nature</i> , 1999 , 399, 13-13	50.4
7	Brain-Computer Interfaces and Visual Activity 1549-1570	
6	Brain-Computer Interfaces and Visual Activity 153-174	
5	Selecting Ridge Parameters in Infinite Dimensional Hypothesis Spaces. <i>Lecture Notes in Computer Science</i> , 2002 , 528-534	0.9
4	A Novel Dimension Reduction Procedure for Searching Non-Gaussian Subspaces. <i>Lecture Notes in Computer Science</i> , 2006 , 149-156	0.9
3	Using Rest Class and Control Paradigms for Brain Computer Interfacing. <i>Human-computer Interaction Series</i> , 2010 , 55-70	0.6
2	Sharing hash codes for multiple purposes. <i>Japanese Journal of Statistics and Data Science</i> , 2018 , 1, 215-246	4.6
1	Scrutinizing XAI using linear ground-truth data with suppressor variables. <i>Machine Learning</i> , 2018 , 101, 1-15	4