Ana TomÃ©

List of Publications by Year in descending order

79 papers	953 citations	566801 15 h-index	610482 24 g-index
80 all docs	80 docs citations	80 times ranked	956 citing authors

#	Article	IF	Citations
1	KPCA denoising and the pre-image problem revisited. , 2008, 18, 568-580.		53
2	Automatic removal of high-amplitude artefacts from single-channel electroencephalograms. Computer Methods and Programs in Biomedicine, 2006, 83, 125-138.	2.6	52
3	Application of SVM-RFE on EEG signals for detecting the most relevant scalp regions linked to affective valence processing. Expert Systems With Applications, 2013, 40, 2102-2108.	4.4	41
4	GOOD: A global orthographic object descriptor for 3D object recognition and manipulation. Pattern Recognition Letters, 2016, 83, 312-320.	2.6	41
5	The generalized eigendecomposition approach to the blind source separation problem. , 2006, 16, 288-302.		36
6	Towards lifelong assistive robotics: A tight coupling between object perception and manipulation. Neurocomputing, 2018, 291, 151-166.	3.5	35
7	Denoising using local projective subspace methods. Neurocomputing, 2006, 69, 1485-1501.	3.5	34
8	Ensemble Empirical Mode Decomposition Analysis of EEG Data Collected during a Contour Integration Task. PLoS ONE, 2015, 10, e0119489.	1.1	34
9	EMDLAB: A toolbox for analysis of single-trial EEG dynamics using empirical mode decomposition. Journal of Neuroscience Methods, 2015, 253, 193-205.	1.3	33
10	SSA of biomedical signals: A linear invariant systems approach. Statistics and Its Interface, 2010, 3, 345-355.	0.2	30
11	Interactive Open-Ended Learning for 3D Object Recognition: An Approach and Experiments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 537-553.	2.0	29
12	3D object perception and perceptual learning in the RACE project. Robotics and Autonomous Systems, 2016, 75, 614-626.	3.0	29
13	How to Apply Nonlinear Subspace Techniques to Univariate Biomedical Time Series. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2433-2443.	2.4	24
14	Spectral turbulence measuring as feature extraction method from EEG on affective computing. Biomedical Signal Processing and Control, 2013, 8, 945-950.	3.5	24
15	Minimum Determinant Constraint for Non-negative Matrix Factorization. Lecture Notes in Computer Science, 2009, , 106-113.	1.0	22
16	A perceptual memory system for grounding semantic representations in intelligent service robots. , 2014, , .		19
17	Study on the usage feasibility of continuous-wave radar for emotion recognition. Biomedical Signal Processing and Control, 2020, 58, 101835.	3.5	19
18	Weighted Sliding Empirical Mode Decomposition for Online Analysis of Biomedical Time Series. Neural Processing Letters, 2013, 37, 21-32.	2.0	18

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19	A green's function-based Bi-dimensional empirical mode decomposition. Information Sciences, 2016, 348, 305-321.	4.0	16
20	Advances in EEG-Based Biometry. Lecture Notes in Computer Science, 2010, , 287-295.	1.0	15
21	Hybridizing sparse component analysis with genetic algorithms for microarray analysis. Neurocomputing, 2008, 71, 2356-2376.	3.5	14
22	On the use of clustering and local singular spectrum analysis to remove ocular artifacts from electroencephalograms. , 0, , .		13
23	Combined EMD-sLORETA Analysis of EEG Data Collected during a Contour Integration Task. PLoS ONE, 2016, 11, e0167957.	1.1	13
24	Interactive teaching and experience extraction for learning about objects and robot activities. , 2014, , .		12
25	EEG study on affective valence elicited by novel and familiar pictures using ERD/ERS and SVM-RFE. Medical and Biological Engineering and Computing, 2014, 52, 149-158.	1.6	12
26	Concurrent learning of visual codebooks and object categories in open-ended domains. , 2015, , .		12
27	Adaptive threshold spectrum sensing based on Expectation Maximization algorithm. Physical Communication, 2016, 21, 60-69.	1.2	12
28	Unsupervised feature extraction via kernel subspace techniques. Neurocomputing, 2011, 74, 820-830.	3.5	11
29	Blind source separation using a matrix pencil. , 2000, , .		10
30	Physarum Learner: A bio-inspired way of learning structure from data. Expert Systems With Applications, 2014, 41, 5353-5370.	4.4	10
31	Bidimensional ensemble empirical mode decomposition of functional biomedical images taken during a contour integration task. Biomedical Signal Processing and Control, 2014, 13, 218-236.	3.5	10
32	A logistic non-negative matrix factorization approach to binary data sets. Multidimensional Systems and Signal Processing, 2015, 26, 125-143.	1.7	10
33	Local-LDA: Open-Ended Learning of Latent Topics for 3D Object Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 2567-2580.	9.7	10
34	Individual EEG differences in affective valence processing in women with low and high neuroticism. Clinical Neurophysiology, 2013, 124, 1798-1806.	0.7	9
35	A Bayesian approach to the Lee–Seung update rules for NMF. Pattern Recognition Letters, 2014, 45, 251-256.	2.6	9
36	On the use of multi-dimensional scaling and electromagnetic tracking in high dose rate brachytherapy. Physics in Medicine and Biology, 2017, 62, 7959-7980.	1.6	9

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37	Brain Connectivity Studies on Structure-Function Relationships: A Short Survey with an Emphasis on Machine Learning. Computational Intelligence and Neuroscience, 2021, 2021, 1-31.	1.1	9
38	dAMUSE—A new tool for denoising and blind source separation. , 2005, 15, 400-421.		8
39	Separation of water artifacts in 2D NOESY protein spectra using congruent matrix pencils. Neurocomputing, 2006, 69, 497-522.	3.5	8
40	A tool to automatically analyze electromagnetic tracking data from high dose rate brachytherapy of breast cancer patients. PLoS ONE, 2017, 12, e0183608.	1.1	8
41	Interactive Open-Ended Object, Affordance and Grasp Learning for Robotic Manipulation. , 2019, , .		8
42	A NMF-based extraction of physically meaningful components from sensory data of metal casting processes. Journal of Manufacturing Systems, 2020, 54, 62-73.	7.6	8
43	Information processing models for sleep staging. Expert Systems With Applications, 1993, 6, 399-409.	4.4	7
44	Automated solvent artifact removal and base plane correction of multidimensional NMR protein spectra by AUREMOL-SSA. Journal of Biomolecular NMR, 2010, 47, 101-111.	1.6	7
45	A new Bayesian approach to nonnegative matrix factorization: Uniqueness and model order selection. Neurocomputing, 2014, 138, 142-156.	3.5	7
46	An orthographic descriptor for 3D object learning and recognition. , 2016, , .		7
47	On the use of particle filters for electromagnetic tracking in high dose rate brachytherapy. Physics in Medicine and Biology, 2017, 62, 7617-7640.	1.6	7
48	Frequency-Resolved Dynamic Functional Connectivity Reveals Scale-Stable Features of Connectivity-States. Frontiers in Human Neuroscience, 2018, 12, 253.	1.0	7
49	ERP correlates of error processing during performance on the Halstead Category Test. International Journal of Psychophysiology, 2016, 106, 97-105.	0.5	6
50	On the use of simulated annealing to automatically assign decorrelated components in second-order blind source separation. IEEE Transactions on Biomedical Engineering, 2006, 53, 810-820.	2.5	5
51	An interactive open-ended learning approach for 3D object recognition. , 2014, , .		5
52	An Adaptive Object Perception System Based on Environment Exploration and Bayesian Learning. , 2015, , .		5
53	Non-negative sub-tensor ensemble factorization (NsTEF) algorithm. A new incremental tensor factorization for large data sets.. Signal Processing, 2018, 144, 77-86.	2.1	5
54	Machine Learning Methods for Radar-Based People Detection and Tracking. Lecture Notes in Computer Science, 2019, , 412-423.	1.0	5

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55	On the use of backward adaptation in a perceptual audio coder. IEEE Transactions on Speech and Audio Processing, 2000, 8, 488-490.	2.0	4
56	Denoising using local ICA and kernel-PCA. , 0, , .		4
57	Cognitive bio-radar: The natural evolution of bio-signals measurement. Journal of Medical Systems, 2016, 40, 219.	2.2	4
58	A multi-variate blind source separation algorithm. Computer Methods and Programs in Biomedicine, 2017, 151, 91-99.	2.6	4
59	A recognition–verification system for noisy faces based on an empirical mode decomposition with Green's functions. Soft Computing, 2020, 24, 3809-3827.	2.1	4
60	Greedy Kernel PCA Applied to Single-Channel EEG Recordings. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5441-4.	0.5	3
61	Single-channel electroencephalogram analysis using non-linear subspace techniques. , 2007, , .		3
62	Person identification using VEP signals and SVM classifiers. , 2010, , .		3
63	Visual detection of vehicles using a bag-of-features approach. , 2013, , .		3
64	Analysis of fMRI images with bi-dimensional empirical mode decomposition based-on Green's functions. Biomedical Signal Processing and Control, 2016, 30, 53-63.	3.5	3
65	Approximate diagonalization approach to blind source separation with a subset of matrices. , 2003, , .		2
66	Blind detection of cyclostacionary signals taking advantage of cyclic spectrum leakage. , 2014, , .		2
67	Blind detection of cyclostacionary signals taking advantage of cyclic spectrum leakage. , 2014, , .		2
68	Object Learning and Grasping Capabilities for Robotic Home Assistants. Lecture Notes in Computer Science, 2017, , 279-293.	1.0	2
69	Removing water artefacts from 2D protein NMR spectra using GEVD with congruent matrix pencils. , 2003, , .		1
70	Kernel-PCA denoising of artifact-free protein NMR spectra. , 0, , .		1
71	Concurrent 3D Object Category Learning and Recognition Based on Topic Modelling and Human Feedback. , 2016, , .		1
72	Extracting control variables of casting processes with NMF and rule extraction. Expert Systems With Applications, 2021, 180, 115118.	4.4	1

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73	Machine Learning Methods for Radar-Based People Detection and Tracking by Mobile Robots. Advances in Intelligent Systems and Computing, 2020, , 379-391.	0.5	1
74	An algorithm for automatic assignment of artifact-related independent components in biomedical signal analysis. , 0, , .		0
75	Mining EEG scalp maps of independent components related to HCT tasks. , 2019, 2019, 3888-3891.		0
76	Greedy KPCA in Biomedical Signal Processing. Lecture Notes in Computer Science, 2007, , 486-495.	1.0	0
77	Feature Extraction Using Linear and Non-linear Subspace Techniques. Lecture Notes in Computer Science, 2009, , 115-124.	1.0	0
78	Functional Biomedical Images of Alzheimer's Disease a Green's Functionbased Empirical Mode Decomposition Study. Current Alzheimer Research, 2016, 13, 695-707.	0.7	0
79	Energy Based Clustering Method to Estimate Channel Occupation of LTE in Unlicensed Spectrum. Lecture Notes in Computer Science, 2017, , 325-332.	1.0	0