Elmar W Lang

List of Publications by Year
in descending order

52	450	840776	794594
papers	citations	11	19
		h-index	g-index

55	55	55	472
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A deep learning approach to radiation dose estimation. Physics in Medicine and Biology, 2020, 65, 035007.	3.0	50
2	Ensemble Empirical Mode Decomposition Analysis of EEG Data Collected during a Contour Integration Task. PLoS ONE, 2015, 10, e0119489.	2.5	34
3	EMDLAB: A toolbox for analysis of single-trial EEG dynamics using empirical mode decomposition. Journal of Neuroscience Methods, 2015, 253, 193-205.	2.5	33
4	Building a FP-CIT SPECT Brain Template Using a Posterization Approach. Neuroinformatics, 2015, 13, 391-402.	2.8	31
5	Median-based clustering for underdetermined blind signal processing. IEEE Signal Processing Letters, 2006, 13, 96-99.	3.6	25
6	Minimum Determinant Constraint for Non-negative Matrix Factorization. Lecture Notes in Computer Science, 2009, , 106-113.	1.3	22
7	Towards unique solutions of non-negative matrix factorization problems by a determinant criterion. , 2011, 21, 528-534.		17
8	On the empirical mode decomposition applied to the analysis of brain SPECT images. Expert Systems With Applications, 2012, 39, 13451-13461.	7.6	17
9	A green's function-based Bi-dimensional empirical mode decomposition. Information Sciences, 2016, 348, 305-321.	6.9	16
10	Parameterized reinforcement learning for optical system optimization. Journal Physics D: Applied Physics, 2021, 54, 305104.	2.8	15
11	Hybridizing sparse component analysis with genetic algorithms for microarray analysis. Neurocomputing, 2008, 71, 2356-2376.	5.9	14
12	On the use of clustering and local singular spectrum analysis to remove ocular artifacts from electroencephalograms. , 0, , .		13
13	A Nonnegative Blind Source Separation Model for Binary Test Data. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1439-1448.	5.4	13
14	Combined EMD-sLORETA Analysis of EEG Data Collected during a Contour Integration Task. PLoS ONE, 2016, 11, e0167957.	2.5	13
15	A comparison of methods for adapting 177Lu dose-voxel-kernels to tissue inhomogeneities. Physics in Medicine and Biology, 2019, 64, 245011.	3.0	13
16	Physarum Learner: A bio-inspired way of learning structure from data. Expert Systems With Applications, 2014, 41, 5353-5370.	7.6	10
17	Bidimensional ensemble empirical mode decomposition of functional biomedical images taken during a contour integration task. Biomedical Signal Processing and Control, 2014, 13, 218-236.	5.7	10
18	A Bayesian approach to the Lee–Seung update rules for NMF. Pattern Recognition Letters, 2014, 45, 251-256.	4.2	9

#	Article	IF	Citations
19	On the use of multi-dimensional scaling and electromagnetic tracking in high dose rate brachytherapy. Physics in Medicine and Biology, 2017, 62, 7959-7980.	3.0	9
20	Statistical Invariances in Artificial, Natural, and Urban Images. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1998, 53, 1009-1021.	1.5	8
21	A new Bayesian approach to nonnegative matrix factorization: Uniqueness and model order selection. Neurocomputing, 2014, 138, 142-156.	5.9	7
22	On the use of particle filters for electromagnetic tracking in high dose rate brachytherapy. Physics in Medicine and Biology, 2017, 62, 7617-7640.	3.0	7
23	Frequency-Resolved Dynamic Functional Connectivity Reveals Scale-Stable Features of Connectivity-States. Frontiers in Human Neuroscience, 2018, 12, 253.	2.0	7
24	Blind source separation using time-delayed signals. , 0, , .		5
25	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.	4.2	5
26	Directional emission of white light via selective amplification of photon recycling and Bayesian optimization of multi-layer thin films. Scientific Reports, 2022, 12, 5226.	3.3	5
27	Time series prediction using ICA algorithms. , 0, , .		4
28	Denoising using local ICA and kernel-PCA. , 0, , .		4
29	Mathematical modeling of human brain physiological data. Physical Review E, 2013, 88, 062711.	2.1	4
30	A recognition–verification system for noisy faces based on an empirical mode decomposition with Green's functions. Soft Computing, 2020, 24, 3809-3827.	3.6	4
31	A Constrained ICA-EMD Model for Group Level fMRI Analysis. Frontiers in Neuroscience, 2020, 14, 221.	2.8	4
32	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
33	Analysis of fMRI images with bi-dimensional empirical mode decomposition based-on Green's functions. Biomedical Signal Processing and Control, 2016, 30, 53-63.	5.7	3
34	Approximate diagonalization approach to blind source separation with a subset of matrices. , 2003, , .		2
35	Structure Learning for Bayesian Networks Using the Physarum Solver. , 2012, , .		2
36	Preoperative Assessment of Language Dominance through Combined Resting-State and Task-Based Functional Magnetic Resonance Imaging. Journal of Personalized Medicine, 2021, 11, 1342.	2.5	2

#	ARTICLE	IF	CITATIONS
37	3D spatial analysis of fMRI data: a comparison of ICA and GLM analysis on a word perception task. , 0, , .		1
38	Removing water artefacts from 2D protein NMR spectra using GEVD with congruent matrix pencils. , 2003, , .		1
39	SOMICA and geometric ICA. , 2003, , .		1
40	Local features in biomedical image clusters extracted with independent component analysis. , 0, , .		1
41	Postnonlinear blind source separation via linearization identification. , 0, , .		1
42	Kernel-PCA denoising of artifact-free protein NMR spectra. , 0, , .		1
43	MDSLAB: A toolbox for the analysis of point sets using multi-dimensional scaling, hartigan dip test and <i>Î±</i> -stable distributions. Biomedical Physics and Engineering Express, 2018, 4, 065030.	1.2	1
44	Rosetta:MSF:NN: Boosting performance of multi-state computational protein design with a neural network. PLoS ONE, 2021, 16, e0256691.	2.5	1
45	Learning Intuitive Physics and One-Shot Imitation Using State-Action-Prediction Self-Organizing Maps. Computational Intelligence and Neuroscience, 2021, 2021, 1-15.	1.7	1
46	Neural network signal analysis in immunology. , 2003, , .		0
47	Adaptive signal analysis of immunological data. , 2003, , .		0
48	An algorithm for automatic assignment of artifact-related independent components in biomedical signal analysis. , 0, , .		0
49	Model-free Region Of Interest Based Analysis of fMRI Data. , 0, , .		0
50	Robust stability analysis of Linsker-Type Hebbian learning multi-time scale neural networks under parametric uncertainties. , 2010, , .		0
51	Mining EEG scalp maps of independent components related to HCT tasks. , 2019, 2019, 3888-3891.		0
52	Functional Biomedical Images of Alzheimer's Disease a Green's Functionbased Empirical Mode Decomposition Study. Current Alzheimer Research, 2016, 13, 695-707.	1.4	0