Guang-Bin Huang

List of Publications by Year
in descending order

170 papers	42,504 citations

17440	11939
63 h-index	134 g-index

177 all docs	177 docs citations
177 times ranked	17687 citing authors

#	Article	IF	Citations
1	Efficient joint model learning, segmentation and model updating for visual tracking. Neural Networks, 2022, 147, 175-185.	5.9	5
2	Slice-Based Online Convolutional Dictionary Learning. IEEE Transactions on Cybernetics, 2021, 51, 5116-5129.	9.5	5
3	NOx Measurements in Vehicle Exhaust Using Advanced Deep ELM Networks. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	13
4	Dual distance adaptive multiview clustering. Neurocomputing, 2021, 441, 311-322.	5.9	5
5	Blind Noisy Image Quality Assessment Using Sub-Band Kurtosis. IEEE Transactions on Cybernetics, 2020, 50, 1146-1156.	9.5	26
6	Learning Representations With Local and Global Geometries Preserved for Machine Fault Diagnosis. IEEE Transactions on Industrial Electronics, 2020, 67, 2360-2370.	7.9	31
7	Unsupervised feature selection based extreme learning machine for clustering. Neurocomputing, 2020, 386, 198-207.	5.9	48
8	Unsupervised feature learning with sparse Bayesian auto-encoding based extreme learning machine. International Journal of Machine Learning and Cybernetics, 2020, 11, 1557-1569.	3.6	5
9	Simultaneously learning affinity matrix and data representations for machine fault diagnosis. Neural Networks, 2020, 122, 395-406.	5.9	7
10	ELM embedded discriminative dictionary learning for image classification. Neural Networks, 2020, 123, 331-342.	5.9	19
11	Special issue on extreme learning machine and deep learning networks. Neural Computing and Applications, 2020, 32, 14241-14245.	5.6	4
12	Learning local discriminative representations via extreme learning machine for machine fault diagnosis. Neurocomputing, 2020, 409, 275-285.	5.9	28
13	R-ELMNet: Regularized extreme learning machine network. Neural Networks, 2020, 130, 49-59.	5.9	16
14	Deep and wide feature based extreme learning machine for image classification. Neurocomputing, 2020, 412, 426-436.	5.9	23
15	Clustering via Adaptive and Locality-constrained Graph Learning and Unsupervised ELM. Neurocomputing, 2020, 401, 224-235.	5.9	7
16	Sparse Bayesian Learning for Extreme Learning Machine Auto-encoder. Proceedings in Adaptation, Learning and Optimization, 2020, , 319-327.	1.6	0
17	GenELM: Generative Extreme Learning Machine feature representation. Neurocomputing, 2019, 362, 41-50.	5.9	6
18	Learning Algorithms and Signal Processing for Brain-Inspired Computing [From the Guest Editors]. IEEE Signal Processing Magazine, 2019, 36, 12-15.	5.6	6

#	Article	IF	Citations
19	Manifold Criterion Guided Transfer Learning via Intermediate Domain Generation. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 3759-3773.	11.3	82
20	Quantitative Analysis of Gas Phase IR Spectra Based on Extreme Learning Machine Regression Model. Sensors, 2019, 19, 5535.	3.8	11
21	Content-Insensitive Blind Image Blurriness Assessment Using Weibull Statistics and Sparse Extreme Learning Machine. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 516-527.	9.3	8
22	Face recognition using total loss function on face database with ID photos. Optics and Laser Technology, 2019, 110, 227-233.	4.6	9
23	Taste Recognition in E-Tongue Using Local Discriminant Preservation Projection. IEEE Transactions on Cybernetics, 2019, 49, 947-960.	9.5	37
24	ELM based smile detection using Distance Vector. Pattern Recognition, 2018, 79, 356-369.	8.1	35
25	Generating Word Embeddings from an Extreme Learning Machine for Sentiment Analysis and Sequence Labeling Tasks. Cognitive Computation, 2018, 10, 625-638.	5.2	42
26	An adaptive graph learning method based on dual data representations for clustering. Pattern Recognition, 2018, 77, 126-139.	8.1	25
27	Extreme Learning Machine for Joint Embedding and Clustering. Neurocomputing, 2018, 277, 78-88.	5.9	33
28	Data Driven Convolutional Sparse Coding for Visual Recognition. , 2018, , .		2
29	Octree-based Convolutional Autoencoder Extreme Learning Machine for 3D Shape Classification. , 2018, , .		3
30	Conditional Random Mapping for Effective ELM Feature Representation. Cognitive Computation, 2018, 10, 827-847.	5.2	7
31	An Automatic Identification System (AIS) Database for Maritime Trajectory Prediction and Data Mining. Proceedings in Adaptation, Learning and Optimization, 2018, , 241-257.	1.6	45
32	NMF-Based Image Quality Assessment Using Extreme Learning Machine. IEEE Transactions on Cybernetics, 2017, 47, 232-243.	9.5	68
33	Effective visual tracking by pairwise metric learning. Neurocomputing, 2017, 261, 266-275.	5.9	6
34	Efficient and Rapid Machine Learning Algorithms for Big Data and Dynamic Varying Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 2625-2626.	9.3	24
35	A theoretical study of the relationship between an ELM network and its subnetworks. , 2017, , .		3
36	A low-dimensional vector representation for words using an extreme learning machine. , 2017, , .		9

#	Article	IF	Citations
37	Compact Feature Representation for Image Classification Using ELMs. , 2017, , .		8
38	Elmnet: Feature learning using extreme learning machines. , 2017, , .		4
39	Large-Scale Automated Sleep Staging. Sleep, 2017, 40, .	1.1	86
40	Multi layer multi objective extreme learning machine. , 2017, , .		6
41	Dimension Reduction With Extreme Learning Machine. IEEE Transactions on Image Processing, 2016, 25, 3906-3918.	9.8	196
42	Learning Polychronous Neuronal Groups Using Joint Weight-Delay Spike-Timing-Dependent Plasticity. Neural Computation, 2016, 28, 2181-2212.	2.2	8
43	Fast and Accurate Spatiotemporal Fusion Based Upon Extreme Learning Machine. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 2039-2043.	3.1	62
44	Smile detection using Pair-wise Distance Vector and Extreme Learning Machine. , 2016, , .		11
45	Two-stage structured learning approach for stable occupancy detection. , 2016, , .		7
46	Extreme Learning Machine for Multilayer Perceptron. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 809-821.	11.3	1,087
47	Sparse Extreme Learning Machine for Regression. Proceedings in Adaptation, Learning and Optimization, 2016, , 471-490.	1.6	4
48	Driver Distraction Detection Using Semi-Supervised Machine Learning. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 1108-1120.	8.0	167
49	Guest editorial: Special issue on Extreme learning machine and applications (I). Neural Computing and Applications, 2016, 27, 1-2.	5.6	47
50	Gradient-based no-reference image blur assessment using extreme learning machine. Neurocomputing, 2016, 174, 310-321.	5.9	28
51	A Fast SVD-Hidden-nodes based Extreme Learning Machine for Large-Scale Data Analytics. Neural Networks, 2016, 77, 14-28.	5.9	34
52	Fusing audio, visual and textual clues for sentiment analysis from multimodal content. Neurocomputing, 2016, 174, 50-59.	5.9	372
53	Robust Extreme Learning Machine With its Application to Indoor Positioning. IEEE Transactions on Cybernetics, 2016, 46, 194-205.	9.5	97
54	Generic Object Recognition with Local Receptive Fields Based Extreme Learning Machine. Procedia Computer Science, 2015, 53, 391-399.	2.0	22

#	Article	IF	Citations
55	Estimating vigilance from EEG using manifold clustering guided by instantaneous lapse rate. , 2015, , .		2
56	Multifeature Extreme Ordinal Ranking Machine for Facial Age Estimation. Mathematical Problems in Engineering, 2015, 2015, 1-9.	1.1	1
57	What are Extreme Learning Machines? Filling the Gap Between Frank Rosenblattâ€™s Dream and John von Neumannâ€™s Puzzle. Cognitive Computation, 2015, 7, 263-278.	5.2	386
58	Cluster Regularized Extreme Learning Machine for Detecting Mixed-Type Distraction in Driving. , 2015, , .		9
59	Driver Drowsiness Detection Based on Novel Eye Openness Recognition Method and Unsupervised Feature Learning. , 2015, , .		16
60	New Trends of Learning in Computational Intelligence (Part II) [Guest Editorial]. IEEE Computational Intelligence Magazine, 2015, 10, 8-8.	3.2	4
61	New Trends of Learning in Computational Intelligence [Guest Editorial]. IEEE Computational Intelligence Magazine, 2015, 10, 16-17.	3.2	49
62	Extreme learning machines: new trends and applications. Science China Information Sciences, 2015, 58, 1-16.	4.3	85
63	An Energy-Efficient Nonvolatile In-Memory Computing Architecture for Extreme Learning Machine by Domain-Wall Nanowire Devices. IEEE Nanotechnology Magazine, 2015, 14, 998-1012.	2.0	71
64	Local Receptive Fields Based Extreme Learning Machine. IEEE Computational Intelligence Magazine, 2015, 10, 18-29.	3.2	299
65	Towards an intelligent framework for multimodal affective data analysis. Neural Networks, 2015, 63, 104-116.	5.9	173
66	Stacked Extreme Learning Machines. IEEE Transactions on Cybernetics, 2015, 45, 2013-2025.	9.5	112
67	Trends in extreme learning machines: A review. Neural Networks, 2015, 61, 32-48.	5.9	1,454
68	Multiple kernel extreme learning machine. Neurocomputing, 2015, 149, 253-264.	5.9	157
69	Compressed-Domain Ship Detection on Spaceborne Optical Image Using Deep Neural Network and Extreme Learning Machine. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1174-1185.	6.3	350
70	Gradient-Based No-Reference Image Blur Assessment Using Extreme Learning Machine. Proceedings in Adaptation, Learning and Optimization, 2015, , 223-232.	1.6	1
71	Detection of Driversâ€™ Distraction Using Semi-Supervised Extreme Learning Machine. Proceedings in Adaptation, Learning and Optimization, 2015, , 379-387.	1.6	12
72	Driver Workload Detection in On-Road Driving Environment Using Machine Learning. Proceedings in Adaptation, Learning and Optimization, 2015, , 389-398.	1.6	12

#	Article	IF	Citations
73	A fast learning algorithm for multi-layer extreme learning machine. , 2014, , .		16
74	Learning to Rank with Extreme Learning Machine. Neural Processing Letters, 2014, 39, 155-166.	3.2	32
75	An Insight into Extreme Learning Machines: Random Neurons, Random Features and Kernels. Cognitive Computation, 2014, 6, 376-390.	5.2	822
76	Random feature subspace ensemble based Extreme Learning Machine for liver tumor detection and segmentation. , 2014, 2014, 4675-8.		15
77	Sparse Extreme Learning Machine for Classification. IEEE Transactions on Cybernetics, 2014, 44, 1858-1870.	9.5	196
78	EmoSenticSpace: A novel framework for affective common-sense reasoning. Knowledge-Based Systems, 2014, 69, 108-123.	7.1	132
79	Sentic patterns: Dependency-based rules for concept-level sentiment analysis. Knowledge-Based Systems, 2014, 69, 45-63.	7.1	273
80	Weighted extreme learning machine for imbalance learning. Neurocomputing, 2013, 101, 229-242.	5.9	743
81	An extreme learning machine approach for speaker recognition. Neural Computing and Applications, 2013, 22, 417-425.	5.6	48
82	Computation using mismatch: Neuromorphic extreme learning machines. , 2013, , .		8
83	Silicon spiking neurons for hardware implementation of extreme learning machines. Neurocomputing, 2013, 102, 125-134.	5.9	66
84	Dynamic Extreme Learning Machine and Its Approximation Capability. IEEE Transactions on Cybernetics, 2013, 43, 2054-2065.	9.5	63
85	Liver tumor detection and segmentation using kernel-based extreme learning machine. , 2013, 2013, 3662-5.		33
86	Extreme Learning Machines [Trends & Controversies]. IEEE Intelligent Systems, 2013, 28, 30-59.	4.0	329
87	Voting base online sequential extreme learning machine for multi-class classification. , 2013, , .		5
88	FUZZY EXTREME LEARNING MACHINE FOR A CLASS OF FUZZY INFERENCE SYSTEMS. International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, 2013, 21, 51-61.	1.9	10
89	Receding Horizon Cache and Extreme Learning Machine based Reinforcement Learning. , 2012, , .		2
90	Credit risk evaluation with extreme learning machine. , 2012, , .		7

#	Article	IF	Citations
91	Self-Adaptive Evolutionary Extreme Learning Machine. Neural Processing Letters, 2012, 36, 285-305.	3.2	251
92	Discrete Wavelet Transform coefficients for emotion recognition from EEG signals. , 2012, 2012, 2251-4.		43
93	An Intelligent Scoring System and Its Application to Cardiac Arrest Prediction. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 1324-1331.	3.2	37
94	Extreme learning machines for intrusion detection. , 2012, , .		47
95	Fast Construction of Single-Hidden-Layer Feedforward Networks. , 2012, , 507-531.		1
96	Voting based extreme learning machine. Information Sciences, 2012, 185, 66-77.	6.9	311
97	Extreme Learning Machine for Regression and Multiclass Classification. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 513-529.	5.0	4,557
98	Universal Approximation of Extreme Learning Machine With Adaptive Growth of Hidden Nodes. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 365-371.	11.3	187
99	Global Convergence of Online BP Training With Dynamic Learning Rate. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 330-341.	11.3	69
100	Extreme Learning Machine with Adaptive Growth of Hidden Nodes and Incremental Updating of Output Weights. Lecture Notes in Computer Science, 2011, , 253-262.	1.3	7
101	Error tolerance based support vector machine for regression. Neurocomputing, 2011, 74, 771-782.	5.9	28
102	Face recognition based on extreme learning machine. Neurocomputing, 2011, 74, 2541-2551.	5.9	191
103	Advances in extreme learning machines (ELM2010). Neurocomputing, 2011, 74, 2411-2412.	5.9	22
104	Composite Function Wavelet Neural Networks with Differential Evolution and Extreme Learning Machine. Neural Processing Letters, 2011, 33, 251-265.	3.2	34
105	Patient Outcome Prediction with Heart Rate Variability and Vital Signs. Journal of Signal Processing Systems, 2011, 64, 265-278.	2.1	28
106	Extended sequential adaptive fuzzy inference system for classification problems. Evolving Systems, 2011, 2, 71-82.	3.9	77
107	Extreme learning machines: a survey. International Journal of Machine Learning and Cybernetics, 2011, 2, 107-122.	3.6	1,625
108	Face Recognition Based on Kernelized Extreme Learning Machine. Lecture Notes in Computer Science, 2011, , 263-272.	1.3	32

#	ARTICLE	IF	CITATIONS
109	Composite function wavelet neural networks with extreme learning machine. Neurocomputing, 2010, 73, 1405-1416.	5.9	84
110	Constructive hidden nodes selection of extreme learning machine for regression. Neurocomputing, 2010, 73, 3191-3199.	5.9	120
111	Two-stage extreme learning machine for regression. Neurocomputing, 2010, 73, 3028-3038.	5.9	90
112	Optimization method based extreme learning machine for classification. Neurocomputing, 2010, 74, 155-163.	5.9	799
113	Novel Weighting-Delay-Based Stability Criteria for Recurrent Neural Networks With Time-Varying Delay. IEEE Transactions on Neural Networks, 2010, 21, 91-106.	4.2	383
114	Robust Global Exponential Synchronization of Uncertain Chaotic Delayed Neural Networks via Dual-Stage Impulsive Control. IEEE Transactions on Systems, Man, and Cybernetics, 2010, 40, 831-844.	5.0	343
115	Novel Delay-Dependent Robust Stability Analysis for Switched Neutral-Type Neural Networks With Time-Varying Delays via SC Technique. IEEE Transactions on Systems, Man, and Cybernetics, 2010, 40, 1480-1491.	5.0	92
116	Systemical convergence rate analysis of convex incremental feedforward neural networks. Neurocomputing, 2009, 72, 2627-2635.	5.9	17
117	Ensemble of online sequential extreme learning machine. Neurocomputing, 2009, 72, 3391-3395.	5.9	302
118	Error Minimized Extreme Learning Machine With Growth of Hidden Nodes and Incremental Learning. IEEE Transactions on Neural Networks, 2009, 20, 1352-1357.	4.2	562
119	A constructive enhancement for Online Sequential Extreme Learning Machine. , 2009, , .		9
120	Online Sequential Fuzzy Extreme Learning Machine for Function Approximation and Classification Problems. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 1067-1072.	5.0	306
121	Incremental extreme learning machine with fully complex hidden nodes. Neurocomputing, 2008, 71, 576-583.	5.9	283
122	Enhanced random search based incremental extreme learning machine. Neurocomputing, 2008, 71, 3460-3468.	5.9	809
123	Reply to â€œComments on â€œThe Extreme Learning Machineâ€â€. IEEE Transactions on Neural Networks, 2008, 19, 1495-1496.	4.2	24
124	Patient classification based on pre-hospital heart rate variability. , 2008, , .		0
125	Extreme learning machine for multi-categories classification applications. , 2008, , .		36
126	Extreme Learning Machine based bacterial protein subcellular localization prediction. , 2008, , .		7

#	Article	IF	Citations
127	Grid-based large-scale Web3D collaborative virtual environment. , 2007, , .		11
128	Adaptive fuzzy fault-tolerant controller for aircraft autolanding under failures. IEEE Transactions on Aerospace and Electronic Systems, 2007, 43, 1586-1603.	4.7	30
129	Multicategory Classification Using An Extreme Learning Machine for Microarray Gene Expression Cancer Diagnosis. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2007, 4, 485-495.	3.0	202
130	Improved GAP-RBF network for classification problems. Neurocomputing, 2007, 70, 3011-3018.	5.9	32
131	Convex incremental extreme learning machine. Neurocomputing, 2007, 70, 3056-3062.	5.9	1,012
132	A Fast and Accurate Online Sequential Learning Algorithm for Feedforward Networks. IEEE Transactions on Neural Networks, 2006, 17, 1411-1423.	4.2	1,753
133	Real-Time Learning Capability of Neural Networks. IEEE Transactions on Neural Networks, 2006, 17, 863-878.	4.2	182
134	A New Machine Learning Paradigm for Terrain Reconstruction. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 382-386.	3.1	69
135	Universal Approximation Using Incremental Constructive Feedforward Networks With Random Hidden Nodes. IEEE Transactions on Neural Networks, 2006, 17, 879-892.	4.2	2,219
136	Classifying protein sequences using hydropathy blocks. Pattern Recognition, 2006, 39, 2293-2300.	8.1	67
137	Sequential Adaptive Fuzzy Inference System (SAFIS) for nonlinear system identification and prediction. Fuzzy Sets and Systems, 2006, 157, 1260-1275.	2.7	330
138	Dynamic temperature modeling of continuous annealing furnace using GGAP-RBF neural network. Neurocomputing, 2006, 69, 523-536.	5.9	27
139	Extreme learning machine: Theory and applications. Neurocomputing, 2006, 70, 489-501.	5.9	10,570
140	Complex-valued growing and pruning RBF neural networks for communication channel equalisation. IET Computer Vision, 2006, 153, 411.	1.3	28
141	Fuzzy Fault Tolerant Controller for Actuator Failures during Aircraft Autolanding. , 2006, , .		5
142	Can threshold networks be trained directly?. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 187-191.	2.2	235
143	Terrain Modeling Using Machine Learning Methods. , 2006, , .		0
144	CLASSIFICATION OF MENTAL TASKS FROM EEG SIGNALS USING EXTREME LEARNING MACHINE. International Journal of Neural Systems, 2006, 16, 29-38.	5.2	222

#	ARTICLE	IF	CITATIONS
145	Evolutionary extreme learning machine. Pattern Recognition, 2005, 38, 1759-1763.	8.1	714
146	Fully complex extreme learning machine. Neurocomputing, 2005, 68, 306-314.	5.9	368
147	Performance Evaluation of GAP-RBF Network in Channel Equalization. Neural Processing Letters, 2005, 22, 223-233.	3.2	17
148	Fast Modular Network Implementation for Support Vector Machines. IEEE Transactions on Neural Networks, 2005, 16, 1651-1663.	4.2	38
149	An Efficient Sequential RBF Network for Gene Expression-Based Multi-category classification. , 2005, , .		1
150	Using FCMC, FVS, and PCA Techniques for Feature Extraction of Multispectral Images. IEEE Geoscience and Remote Sensing Letters, 2005, 2, 108-112.	3.1	58
151	A Generalized Growing and Pruning RBF (GGAP-RBF) Neural Network for Function Approximation. IEEE Transactions on Neural Networks, 2005, 16, 57-67.	4.2	584
152	Neuron Selection for RBF Neural Network Classifier Based on Data Structure Preserving Criterion. IEEE Transactions on Neural Networks, 2005, 16, 1531-1540.	4.2	88
153	An Efficient Sequential Learning Algorithm for Growing and Pruning RBF (GAP-RBF) Networks. IEEE Transactions on Systems, Man, and Cybernetics, 2004, 34, 2284-2292.	5.0	325
154	Furnace Temperature Modeling for Continuous Annealing Process Based on Generalized Growing and Pruning RBF Neural Network. Lecture Notes in Computer Science, 2004, , 755-760.	1.3	3
155	Learning capability and storage capacity of two-hidden-layer feedforward networks. IEEE Transactions on Neural Networks, 2003, 14, 274-281.	4.2	641
156	Classification ability of single hidden layer feedforward neural networks. IEEE Transactions on Neural Networks, 2000, 11, 799-801.	4.2	202
157	Upper bounds on the number of hidden neurons in feedforward networks with arbitrary bounded nonlinear activation functions. IEEE Transactions on Neural Networks, 1998, 9, 224-229.	4.2	432
158	Ordering of Self-Organizing Maps in Multidimensional Cases. Neural Computation, 1998, 10, 19-23.	2.2	7
159	Comments on "Approximation capability in C(R/sup n/) by multilayer feedforward networks and related problems". IEEE Transactions on Neural Networks, 1998, 9, 714-715.	4.2	9
160	Self-adjustment of neuron impact width in growing and pruning rbf (GAP-RBF) neuron networks. , 0, , .		1
161	General approximation theorem on feedforward networks. , 0, , .		10
162	Time constrain optimal method to find the minimum architectures for feedforward neural networks. , 0, , .		0

#	Article	IF	Citations
163	Simplification of a specific two-hidden-layer feedforward networks. , 0, , .		0
164	QoS provisioning using IPv6 flow label in the internet. , 0, , .		10
165	A fast modular implementation for neural networks. , 0, , .		0
166	Extreme learning machine: a new learning scheme of feedforward neural networks. , 0, , .		1,082
167	Extreme learning machine: RBF network case. , 0, , .		83
168	A fast constructive learning algorithm for single-hidden-layer neural networks. , 0, , .		2
169	An efficient sequential RBF network for bio-medical classification problems. , 0, , .		4
170	Time series study of GGAP-RBF network: predictions of Nasdaq stock and nitrate contamination of drinking water. , 0, , .		18