Xiaolin Huang

List of Publications by Year
in descending order

79 papers	1,801 citations	257101 24 h-index	288905 40 g-index
79 all docs	79 docs citations	79 times ranked	1563 citing authors

#	Article	IF	Citations
1	Concurrent monitoring of operating condition deviations and process dynamics anomalies with slow feature analysis. AICHE Journal, 2015, 61, 3666-3682.	1.8	217
2	Support Vector Machine Classifier With Pinball Loss. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 984-997.	9.7	214
3	Data-driven robust optimization based on kernel learning. Computers and Chemical Engineering, 2017, 106, 464-479.	2.0	136
4	Robust Multiframe Super-Resolution Employing Iteratively Re-Weighted Minimization. IEEE Transactions on Computational Imaging, 2016, 2, 42-58.	2.6	81
5	Varifocal-Net: A Chromosome Classification Approach Using Deep Convolutional Networks. IEEE Transactions on Medical Imaging, 2019, 38, 2569-2581.	5.4	65
6	Enhancing dynamic soft sensors based on DPLS: A temporal smoothness regularization approach. Journal of Process Control, 2015, 28, 17-26.	1.7	60
7	Robust Visual Tracking Revisited: From Correlation Filter to Template Matching. IEEE Transactions on Image Processing, 2018, 27, 2777-2790.	6.0	60
8	Pulmonary nodule segmentation with CT sample synthesis using adversarial networks. Medical Physics, 2019, 46, 1218-1229.	1.6	41
9	Embedding Bilateral Filter in Least Squares for Efficient Edge-Preserving Image Smoothing. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 23-35.	5.6	40
10	A Generalized Framework for Edge-Preserving and Structure-Preserving Image Smoothing. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 6631-6648.	9.7	39
11	Two-level â„"1 minimization for compressed sensing. Signal Processing, 2015, 108, 459-475.	2.1	34
12	Indefinite kernels in least squares support vector machines and principal component analysis. Applied and Computational Harmonic Analysis, 2017, 43, 162-172.	1.1	34
13	Universal Adversarial Attack on Attention and the Resulting Dataset DAmageNet. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, PP, 1-1.	9.7	34
14	Learning Tubule-Sensitive CNNs for Pulmonary Airway and Artery-Vein Segmentation in CT. IEEE Transactions on Medical Imaging, 2021, 40, 1603-1617.	5.4	33
15	Random Features for Kernel Approximation: A Survey on Algorithms, Theory, and Beyond. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7128-7148.	9.7	33
16	AirwayNet: A Voxel-Connectivity Aware Approach for Accurate Airway Segmentation Using Convolutional Neural Networks. Lecture Notes in Computer Science, 2019, , 212-220.	1.0	32
17	A deep learning based pipeline for optical coherence tomography angiography. Journal of Biophotonics, 2019, 12, e201900008.	1.1	31
18	Support vector machines with piecewise linear feature mapping. Neurocomputing, 2013, 117, 118-127.	3.5	30

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19	Robust Support Vector Machines for Classification with Nonconvex and Smooth Losses. Neural Computation, 2016, 28, 1217-1247.	1.3	29
20	Scale-Space Anisotropic Total Variation for Limited Angle Tomography. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 307-314.	2.7	29
21	Configuration of Continuous Piecewise-Linear Neural Networks. IEEE Transactions on Neural Networks, 2008, 19, 1431-1445.	4.8	27
22	Restoration of missing data in limited angle tomography based on Helgasonâ€"Ludwig consistency conditions. Biomedical Physics and Engineering Express, 2017, 3, 035015.	0.6	26
23	Hybrid CS-DMRI: Periodic Time-Variant Subsampling and Omnidirectional Total Variation Based Reconstruction. IEEE Transactions on Medical Imaging, 2017, 36, 2148-2159.	5.4	25
24	Generalized grouped contributions for hierarchical fault diagnosis with group Lasso. Control Engineering Practice, 2019, 93, 104193.	3.2	25
25	Dynamic 2-D/3-D Rigid Registration Framework Using Point-To-Plane Correspondence Model. IEEE Transactions on Medical Imaging, 2017, 36, 1939-1954.	5.4	24
26	A learningâ€based material decomposition pipeline for multiâ€energy xâ€ray imaging. Medical Physics, 2019, 46, 689-703.	1.6	24
27	Nonconvex penalties with analytical solutions for one-bit compressive sensing. Signal Processing, 2018, 144, 341-351.	2.1	21
28	Mixed-precision quantized neural networks with progressively decreasing bitwidth. Pattern Recognition, 2021, 111, 107647.	5.1	21
29	Data Consistent Artifact Reduction for Limited Angle Tomography with Deep Learning Prior. Lecture Notes in Computer Science, 2019, , 101-112.	1.0	20
30	Multi-modal self-paced learning for image classification. Neurocomputing, 2018, 309, 134-144.	3.5	19
31	Efficient and Robust Corner Detectors Based on Second-Order Difference of Contour. IEEE Signal Processing Letters, 2017, 24, 1393-1397.	2.1	17
32	Fixed-size Pegasos for hinge and pinball loss SVM. , 2013, , .		16
33	Online Robust Principal Component Analysis With Change Point Detection. IEEE Transactions on Multimedia, 2020, 22, 59-68.	5.2	16
34	Classification With Truncated <inline-formula> <tex-math notation="LaTeX">$\ell _{1}$ </tex-math> </inline-formula> Distance Kernel. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 2025-2030.	7.2	15
35	Material Decomposition Using Ensemble Learning for Spectral X-ray Imaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 194-204.	2.7	14
36	Modified Sparse Linear-Discriminant Analysis via Nonconvex Penalties. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4957-4966.	7.2	14

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37	Adversarial Attack Type I: Cheat Classifiers by Significant Changes. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 1100-1109.	9.7	14
38	Indefinite Kernel Logistic Regression With Concave-Inexact-Convex Procedure. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 765-776.	7.2	13
39	Unsupervised Image Restoration With Quality-Task-Perception Loss. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 5736-5747.	5.6	11
40	Piecewise linear neural networks and deep learning. Nature Reviews Methods Primers, 2022, 2, .	11.8	11
41	Signal recovery for jointly sparse vectors with different sensing matrices. Signal Processing, 2015, 108, 451-458.	2.1	9
42	Pinball loss minimization for one-bit compressive sensing: Convex models and algorithms. Neurocomputing, 2018, 314, 275-283.	3.5	9
43	Quantile regression with â„"1â€"regularization and Gaussian kernels. Advances in Computational Mathematics, 2014, 40, 517-551.	0.8	8
44	Relevance attack on detectors. Pattern Recognition, 2022, 124, 108491.	5.1	8
45	Robust kernel canonical correlation analysis with applications to information retrieval. Engineering Applications of Artificial Intelligence, 2017, 64, 33-42.	4.3	7
46	Indefinite kernel spectral learning. Pattern Recognition, 2018, 78, 144-153.	5.1	7
47	A Double-Variational Bayesian Framework in Random Fourier Features for Indefinite Kernels. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 2965-2979.	7.2	7
48	Adaptive Temporal-Frequency Network for Time-Series Forecasting. IEEE Transactions on Knowledge and Data Engineering, 2020, , 1-1.	4.0	7
49	Multi-task classification with sequential instances and tasks. Signal Processing: Image Communication, 2018, 64, 59-67.	1.8	6
50	Toward Making Unsupervised Graph Hashing Discriminative. IEEE Transactions on Multimedia, 2020, 22, 760-774.	5.2	6
51	Colonoscopic Image Synthesis For Polyp Detector Enhancement Via Gan And Adversarial Training. , 2021, , .		6
52	DFR-ST: Discriminative feature representation with spatio-temporal cues for vehicle re-identification. Pattern Recognition, 2022, 131, 108887.	5.1	6
53	Coordinate Descent Algorithm for Ramp Loss Linear Programming Support Vector Machines. Neural Processing Letters, 2016, 43, 887-903.	2.0	5
54	Adaptive block coordinate DIRECT algorithm. Journal of Global Optimization, 2017, 69, 797-822.	1.1	5

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55	Robust mixed one-bit compressive sensing. Signal Processing, 2019, 162, 161-168.	2.1	5
56	Virtual cleaning and unwrapping of non-invasively digitized soiled bamboo scrolls. Scientific Reports, 2019, 9, 2311.	1.6	5
57	Group-sparsity-enforcing fault discrimination and estimation with dynamic process data. Journal of Process Control, 2021, 105, 236-249.	1.7	5
58	Learning in-place residual homogeneity for single image detail enhancement. Journal of Electronic Imaging, 2020, 29, 1.	0.5	5
59	Fast Signal Recovery From Saturated Measurements by Linear Loss and Nonconvex Penalties. IEEE Signal Processing Letters, 2018, 25, 1374-1378.	2.1	4
60	Type I Attack For Generative Models. , 2020, , .		4
61	Analysis of regularized least-squares in reproducing kernel KreÄn spaces. Machine Learning, 2021, 110, 1145-1173.	3.4	4
62	Image Quality Analysis of Limited Angle Tomography Using the Shift-Variant Data Loss Model. Informatik Aktuell, 2016, , 277-282.	0.4	4
63	Disparity-constrained stereo endoscopic image super-resolution. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 867-875.	1.7	4
64	Hierarchical Superpixel Segmentation by Parallel CRTrees Labeling. IEEE Transactions on Image Processing, 2022, 31, 4719-4732.	6.0	4
65	Self-paced least square semi-coupled dictionary learning for person re-identification. , 2017, , .		3
66	Non-destructive Digitization of Soiled Historical Chinese Bamboo Scrolls. , 2018, , .		3
67	Improving Generalization Capability of Multiorgan Segmentation Models Using Dual-Energy CT. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 79-86.	2.7	2
68	Towards a Unified Quadrature Framework for Large-Scale Kernel Machines. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7975-7988.	9.7	2
69	Discrete Locally-Linear Preserving Hashing. , 2018, , .		1
70	Sparse Slow Feature Analysis for Enhanced Control Monitoring and Fault Isolation. , 2019, , .		1
71	Edge-Aware Graph Attention Network for Ratio of Edge-User Estimation in Mobile Networks. , 2021, , .		1
72	One-Shot Distributed Algorithm for PCA With RBF Kernels. IEEE Signal Processing Letters, 2021, 28, 1465-1469.	2.1	1

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73	Towards Unbiased Random Features with Lower Variance For Stationary Indefinite Kernels. , 2021, , .		1
74	Robust Kernel Approximation for Classification. Lecture Notes in Computer Science, 2017, , 289-296.	1.0	1
75	Universal Adversarial Perturbation Generated by Attacking Layer-wise Relevance Propagation. , 2020, , .		0
76	ADVMIX: Data Augmentation for Accurate Scene Text Spotting. , 2021, , .		0
77	One-Shot Distributed Generalized Eigenvalue Problem (DGEP): Concept, Algorithm and Experiments. Applied Sciences (Switzerland), 2022, 12, 5128.	1.3	0
78	Toward Robust Histology-Prior Embedding for Endomicroscopy Image Classification. IEEE Transactions on Medical Imaging, 2022, 41, 3242-3252.	5.4	0
79	One-shot Distributed Algorithm for Generalized Eigenvalue Problem. , 2022, , .		0