Xiaohai He

List of Publications by Year
in descending order

128 papers	1,781 citations	279701 23 h-index	360920 35 g-index
128 all docs	128 docs citations	128 times ranked	1283 citing authors

#	Article	IF	Citations
1	Real-world single image super-resolution: A brief review. Information Fusion, 2022, 79, 124-145.	11.7	133
2	CT-image of rock samples super resolution using 3D convolutional neural network. Computers and Geosciences, 2019, 133, 104314.	2.0	78
3	Adaptive Consistency Prior based Deep Network for Image Denoising. , 2021, , .		77
4	Accelerating multi-point statistics reconstruction method for porous media via deep learning. Acta Materialia, 2018, 159, 296-308.	3.8	72
5	An end-to-end three-dimensional reconstruction framework of porous media from a single two-dimensional image based on deep learning. Computer Methods in Applied Mechanics and Engineering, 2020, 368, 113043.	3.4	67
6	Reconstruction of porous media from extremely limited information using conditional generative adversarial networks. Physical Review E, 2019, 100, 033308.	0.8	60
7	Reconstruction of three-dimensional porous media from a single two-dimensional image using three-step sampling. Physical Review E, 2015, 91, 013308.	0.8	51
8	Single Image Super-Resolution Using Local Geometric Duality and Non-Local Similarity. IEEE Transactions on Image Processing, 2016, 25, 2168-2183.	6.0	50
9	Stable-phase method for hierarchical annealing in the reconstruction of porous media images. Physical Review E, 2014, 89, 013305.	0.8	48
10	Super-resolution of real-world rock microcomputed tomography images using cycle-consistent generative adversarial networks. Physical Review E, 2020, 101, 023305.	0.8	48
11	Slice-to-voxel stochastic reconstructions on porous media with hybrid deep generative model. Computational Materials Science, 2021, 186, 110018.	1.4	47
12	Single Image Super-Resolution via Adaptive Transform-Based Nonlocal Self-Similarity Modeling and Learning-Based Gradient Regularization. IEEE Transactions on Multimedia, 2017, 19, 1702-1717.	5.2	44
13	DPW-SDNet: Dual Pixel-Wavelet Domain Deep CNNs for Soft Decoding of JPEG-Compressed Images. , 2018, , .		40
14	Evaluation of Cross-Protocol Stability of a Fully Automated Brain Multi-Atlas Parcellation Tool. PLoS ONE, 2015, 10, e0133533.	1.1	35
15	Discriminative analysis of multivariate features from structural MRI and diffusion tensor images. Magnetic Resonance Imaging, 2014, 32, 1043-1051.	1.0	34
16	Single Image Super-Resolution via Adaptive High-Dimensional Non-Local Total Variation and Adaptive Geometric Feature. IEEE Transactions on Image Processing, 2016, 26, 1-1.	6.0	34
17	CISRDCNN: Super-resolution of compressed images using deep convolutional neural networks. Neurocomputing, 2018, 285, 204-219.	3.5	32
18	BPGAN: Brain PET synthesis from MRI using generative adversarial network for multi-modal Alzheimerâ€™s disease diagnosis. Computer Methods and Programs in Biomedicine, 2022, 217, 106676.	2.6	32

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19	Pattern density function for reconstruction of three-dimensional porous media from a single two-dimensional image. Physical Review E, 2016, 93, 012140.	0.8	30
20	Adjusted Non-Local Regression and Directional Smoothness for Image Restoration. IEEE Transactions on Multimedia, 2019, 21, 731-745.	5.2	30
21	An Iterative Framework of Cascaded Deblocking and Superresolution for Compressed Images. IEEE Transactions on Multimedia, 2018, 20, 1305-1320.	5.2	28
22	Improved multipoint statistics method for reconstructing three-dimensional porous media from a two-dimensional image via porosity matching. Physical Review E, 2018, 97, 063304.	0.8	28
23	Video Super-Resolution via Residual Learning. IEEE Access, 2018, 6, 23767-23777.	2.6	26
24	A novel social distancing analysis in urban public space: A new online spatio-temporal trajectory approach. Sustainable Cities and Society, 2021, 68, 102765.	5.1	26
25	Enhanced Non-Local Total Variation Model and Multi-Directional Feature Prediction Prior for Single Image Super Resolution. IEEE Transactions on Image Processing, 2019, 28, 3778-3793.	6.0	25
26	Diagnosis of Alzheimer's disease based on regional attention with sMRI gray matter slices. Journal of Neuroscience Methods, 2022, 365, 109376.	1.3	23
27	From Eyes to Face Synthesis: a New Approach for Human-Centered Smart Surveillance. IEEE Access, 2018, 6, 14567-14575.	2.6	22
28	Reduction of JPEG compression artifacts based on DCT coefficients prediction. Neurocomputing, 2020, 384, 335-345.	3.5	20
29	Sparse representation-based volumetric super-resolution algorithm for 3D CT images of reservoir rocks. Journal of Applied Geophysics, 2017, 144, 69-77.	0.9	19
30	Dictionary optimization and constraint neighbor embedding-based dictionary mapping for superdimension reconstruction of porous media. Physical Review E, 2019, 99, 062134.	0.8	19
31	Deep Wide-Activated Residual Network Based Joint Blocking and Color Bleeding Artifacts Reduction for 4:2:0 JPEG-Compressed Images. IEEE Signal Processing Letters, 2019, 26, 79-83.	2.1	19
32	An Efficient Approach for Differentiating Alzheimer's Disease from Normal Elderly Based on Multicenter MRI Using Gray-Level Invariant Features. PLoS ONE, 2014, 9, e105563.	1.1	18
33	Single image super resolution using local smoothness and nonlocal self-similarity priors. Signal Processing: Image Communication, 2016, 43, 68-81.	1.8	17
34	Robust distributed video coding for wireless multimedia sensor networks. Multimedia Tools and Applications, 2018, 77, 4453-4475.	2.6	17
35	A fast inter-prediction algorithm for HEVC based on temporal and spatial correlation. Multimedia Tools and Applications, 2015, 74, 11023-11043.	2.6	16
36	Markov prior-based block-matching algorithm for superdimension reconstruction of porous media. Physical Review E, 2018, 97, 043306.	0.8	16

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37	Multiple-point statistics method based on array structure for 3D reconstruction of Fontainebleau sandstone. Journal of Petroleum Science and Engineering, 2012, 100, 71-80.	2.1	15
38	Improved Low-Bitrate HEVC Video Coding Using Deep Learning Based Super-Resolution and Adaptive Block Patching. IEEE Transactions on Multimedia, 2019, 21, 3010-3023.	5.2	15
39	Rotation expanded dictionary-based single image super-resolution. Neurocomputing, 2016, 216, 1-17.	3.5	14
40	Nonlocal Similarity Modeling and Deep CNN Gradient Prior for Super Resolution. IEEE Signal Processing Letters, 2018, 25, 916-920.	2.1	12
41	Learning Image Profile Enhancement and Denoising Statistics Priors for Single-Image Super-Resolution. IEEE Transactions on Cybernetics, 2021, 51, 3535-3548.	6.2	12
42	An Improved Iterative Back-Projection Algorithm for Video Super-Resolution Reconstruction. , 2010, , .		11
43	A quality enhancement framework with noise distribution characteristics for high efficiency video coding. Neurocomputing, 2020, 411, 428-441.	3.5	11
44	Remote sensing image recovery via enhanced residual learning and dual-luminance scheme. Knowledge-Based Systems, 2021, 222, 107013.	4.0	11
45	A Feature-Enriched Deep Convolutional Neural Network for JPEG Image Compression Artifacts Reduction and its Applications. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 430-444.	7.2	11
46	SGCRSR: Sequential gradient constrained regression for single image super-resolution. Signal Processing: Image Communication, 2018, 66, 1-18.	1.8	10
47	Capturing the symptoms of malicious code in electronic documents by fileâ€™s entropy signal combined with machine learning. Applied Soft Computing Journal, 2019, 82, 105598.	4.1	10
48	EyesGAN: Synthesize human face from human eyes. Neurocomputing, 2020, 404, 213-226.	3.5	10
49	A reconstruction method for threeâ€dimensional pore space using multipleâ€point geology statistic based on statistical pattern recognition and microstructure characterization. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 97-110.	1.7	9
50	Joint Entity and Relation Extraction Based on Reinforcement Learning. IEEE Access, 2019, 7, 125688-125699.	2.6	9
51	Deep recursive network for image denoising with global non-linear smoothness constraint prior. Neurocomputing, 2021, 426, 147-161.	3.5	9
52	UAMNer: uncertainty-aware multimodal named entity recognition in social media posts. Applied Intelligence, 2022, 52, 4109-4125.	3.3	9
53	A New Framework for Container Code Recognition by Using Segmentation-Based and HMM-Based Approaches. International Journal of Pattern Recognition and Artificial Intelligence, 2015, 29, 1550004.	0.7	8
54	3D MRI image superâ€resolution for brain combining rigid and large diffeomorphic registration. IET Image Processing, 2017, 11, 1291-1301.	1.4	8

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55	An improved R-Î» rate control model based on joint spatial-temporal domain information and HVS characteristics. Multimedia Tools and Applications, 2021, 80, 345-366.	2.6	8
56	Hidden-Markov-Model-Based Segmentation Confidence Applied to Container Code Character Extraction. IEEE Transactions on Intelligent Transportation Systems, 2011, 12, 1147-1156.	4.7	7
57	Adaptive bit allocation scheme for extremely low-delay intraframe rate control in high efficiency video coding. Journal of Electronic Imaging, 2016, 25, 043008.	0.5	7
58	Reconstruction algorithm using exact tree projection for treeâ€structured compressive sensing. IET Signal Processing, 2016, 10, 566-573.	0.9	7
59	Adaptive image coding efficiency enhancement using deep convolutional neural networks. Information Sciences, 2020, 524, 298-317.	4.0	7
60	Weakly-supervised contrastive learning-based implicit degradation modeling for blind image super-resolution. Knowledge-Based Systems, 2022, 249, 108984.	4.0	7
61	Texture-intensity-based fast coding unit size determination method for high-efficiency video coding intracoding. Journal of Electronic Imaging, 2014, 23, 053005.	0.5	6
62	High-Order Statistical Modeling Based on a Decision Tree for Distributed Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1488-1502.	5.6	6
63	Visible Infrared Cross-Modality Person Re-Identification Network Based on Adaptive Pedestrian Alignment. IEEE Access, 2019, 7, 171485-171494.	2.6	6
64	Enhanced Separable Convolution Network for Lightweight JPEG Compression Artifacts Reduction. IEEE Signal Processing Letters, 2021, 28, 1280-1284.	2.1	6
65	A two-stage deep generative adversarial quality enhancement network for real-world 3D CT images. Expert Systems With Applications, 2022, 193, 116440.	4.4	6
66	Content-based group-of-picture size control in distributed video coding. Signal Processing: Image Communication, 2014, 29, 332-344.	1.8	5
67	Single image super-resolution based on deep learning and gradient transformation. , 2016, , .		5
68	Low bit rates image compression via adaptive block downsampling and super resolution. Journal of Electronic Imaging, 2016, 25, 013004.	0.5	5
69	Evaluating the morphological completeness of a training image. Physical Review E, 2017, 95, 053306.	0.8	5
70	A New Regularized Matrix Discriminant Analysis (R-MDA) Enabled Human-Centered EEG Monitoring Systems. IEEE Access, 2018, 6, 13911-13920.	2.6	5
71	Adaptive Gradient Information and BFGS Based Inter Frame Rate Control for High Efficiency Video Coding. Multimedia Tools and Applications, 2018, 77, 14557-14577.	2.6	5
72	A Fast DVC to HEVC Transcoding for Mobile Video Communication. , 2019, , .		5

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73	Gray matter alteration in heroin-dependent men: An atlas-based magnetic resonance imaging study. Psychiatry Research - Neuroimaging, 2020, 304, 111150.	0.9	5
74	An enhanced siamese angular softmax network with dual joint-attention for person re-identification. Applied Intelligence, 2021, 51, 6148-6166.	3.3	5
75	Image deblocking via joint domain learning. Journal of Electronic Imaging, 2018, 27, 1.	0.5	5
76	Handwritten Numeral Recognition by Model Reconstruction Based on Manifold Learning. , 2008, , .		5
77	Feature separation and double causal comparison loss for visible and infrared person re-identification. Knowledge-Based Systems, 2022, 239, 108042.	4.0	5
78	Visual Perception Enhancement for HEVC Compressed Video Using a Generative Adversarial Network. , 2020, , .		4
79	Cross-modal multi-relationship aware reasoning for image-text matching. Multimedia Tools and Applications, 2022, 81, 12005-12027.	2.6	4
80	Compressed image restoration via deep deblocker driven unified framework. Knowledge-Based Systems, 2021, 228, 107268.	4.0	4
81	Application of Machine Vision in Classifying Gait Frailty Among Older Adults. Frontiers in Aging Neuroscience, 2021, 13, 757823.	1.7	4
82	A Novel Solution to the Cognitive Radio Decision Engine Based on Improved Multi-Objective Artificial Bee Colony Algorithm and Fuzzy Reasoning. Intelligent Automation and Soft Computing, 2017, 23, 643-651.	1.6	3
83	Treeâ€structured Bayesian compressive sensing via generalised inverse Gaussian distribution. IET Signal Processing, 2017, 11, 250-257.	0.9	3
84	Scalable Distributed Video Coding for Wireless Video Sensor Networks. IEICE Transactions on Information and Systems, 2018, E101.D, 20-27.	0.4	3
85	Zero-shot recognition with latent visual attributes learning. Multimedia Tools and Applications, 2020, 79, 27321-27335.	2.6	3
86	Single Remote Sensing Image Super-Resolution with an Adaptive Joint Constraint Model. Sensors, 2020, 20, 1276.	2.1	3
87	Adaptive scene-aware deep attention network for remote sensing image compression. Journal of Electronic Imaging, 2021, 30, .	0.5	3
88	Image Super-resolution Reconstruction Based on Sub-pixel Registration and Iterative Back Projection. , 2008, , .		3
89	Lightweight deep residual network for alzheimerâ€™s disease classification using sMRI slices. Journal of Intelligent and Fuzzy Systems, 2022, 42, 1885-1893.	0.8	3
90	Subframe video synchronization by matching trajectories. , 2013, , .		2

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91	Measuring Crowd Collectiveness via Compressive Sensing. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2015, E98.A, 2263-2266.	0.2	2
92	Measuring Collectiveness in Crowded Scenes via Link Prediction. IEICE Transactions on Information and Systems, 2015, E98.D, 1617-1620.	0.4	2
93	Video super-resolution using joint regularization. , 2016, , .		2
94	Soft decoding of JPEG 2000 compressed images using bit-rate-driven deep convolutional neural networks. , 2017, , .		2
95	Machine learningâ€based H.264/AVC to HEVC transcoding via motion information reuse and coding mode similarity analysis. IET Image Processing, 2019, 13, 34-43.	1.4	2
96	An experimental study of relative total variation and probabilistic collaborative representation for iris recognition. Multimedia Tools and Applications, 2020, 79, 31783-31801.	2.6	2
97	Reconstruction of 3D greyscale image for reservoir rock from a single image based on pattern dictionary. Journal of Microscopy, 2021, 283, 202-218.	0.8	2
98	Extracting relational facts based on hybrid Syntax-Guided transformer and pointer network. Journal of Intelligent and Fuzzy Systems, 2021, 40, 12167-12183.	0.8	2
99	A nonlocal HEVC in-loop filter using CNN-based compression noise estimation. Applied Intelligence, 2022, 52, 17810-17828.	3.3	2
100	Unsupervised Real-World Image Super-Resolution via Dual Synthetic-to-Realistic and Realistic-to-Synthetic Translations. IEEE Signal Processing Letters, 2022, 29, 1282-1286.	2.1	2
101	A Video Coding System with Spatial-Temporal Down-/Up-Sampling and Super-Resolution Reconstruction. , 2016, , .		1
102	Long-Range Motion Trajectories Extraction of Articulated Human Using Mesh Evolution. IEEE Signal Processing Letters, 2016, 23, 507-511.	2.1	1
103	Single image super resolution based on feature enhancement. , 2017, , .		1
104	Towards Information Ecosystem for Urban Planningâ€"The Application of Video Data. Proceedings (mdpi), 2017, 1, 153.	0.2	1
105	Multiscale modeling algorithm for core images. Physical Review E, 2020, 101, 053303.	0.8	1
106	Super-resolution of compressed images using enhanced attention network. Journal of Electronic Imaging, 2021, 30, .	0.5	1
107	Pan-sharpening for compressed remote sensing images. Journal of Applied Remote Sensing, 2021, 15, .	0.6	1
108	Deep Deblocker Driven Adaptive Iteration Scheme for Compressed Image Recovery. , 2021, , .		1

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109	Video super-resolution network via enhanced deep feature extraction and residual up-down block. Journal of Electronic Imaging, 2021, 29, .	0.5	1
110	Similarity Evaluation of 3D Gray Rock Image Using Pattern Density Classification Function. , 2018, , .		1
111	A video compression artifact reduction approach combined with quantization parameters estimation. Journal of Supercomputing, 2022, 78, 13564-13582.	2.4	1
112	A novel fusion method of infrared and visual images based on Undecimated Discrete Wavelet Transform and saliency map. , 2016, , .		0
113	Study on Segmentation-Based HEVC Compression Performance. , 2016, , .		0
114	Depth-based distributed multi-view video coding with hierarchical Wyner-Ziv frames. , 2016, , .		0
115	Video super-resolution using multiple complementary priors. , 2017, , .		0
116	Error Resilient Video Coding for Wireless Visual Sensor Network â€. Proceedings (mdpi), 2017, 1, 134.	0.2	0
117	Error Resilient Video Coding for Wireless Visual Sensor Network. Proceedings (mdpi), 2017, 1, .	0.2	0
118	Mobile Video Communications Based on Cloud Transcoding. Proceedings (mdpi), 2017, 1, 143.	0.2	0
119	A New Progressively Refined Wyner-Ziv Video Coding for Low-Power Human-Centered Telehealth. IEEE Access, 2018, 6, 38315-38325.	2.6	0
120	An Iterative Filtering Algorithm for HEVC Intra Prediction Combined with Prediction Mode Characteristics. , 2020, , .		0
121	Enhanced wide-activated residual network for efficient and accurate image deblocking. Signal Processing: Image Communication, 2021, 96, 116283.	1.8	0
122	A Jointly Optimized Predictive-Adaptive Partitioned Block Transform for Video Coding. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 2161-2168.	0.2	0
123	Research on compression performance of ultrahigh-definition videos. Journal of Electronic Imaging, 2017, 26, 1.	0.5	0
124	Image compression via multiple sampling-rate downsampling and super-resolution upconversion. Journal of Electronic Imaging, 2018, 27, 1.	0.5	0
125	Super-resolution for remote sensing images via dual-domain network learning. Journal of Electronic Imaging, 2019, 28, 1.	0.5	0
126	Progressively refined scheme for wireless video sensor networks. Signal, Image and Video Processing, 0, , 1.	1.7	0

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127	Deep Feature Fusion Network for Compressed Video Super-Resolution. Neural Processing Letters, 0, , .	2.0	0
128	Sequential Enhancement for Compressed Video Using Deep Convolutional Generative Adversarial Network. Neural Processing Letters, 0, , 1.	2.0	0