Xiaolin Wu

List of Publications by Year
in descending order

126 papers	2,075 citations	361045 20 h-index	276539 41 g-index
127 all docs	127 docs citations	127 times ranked	1454 citing authors

#	Article	IF	Citations
1	Data Acquisition and Preparation for Dual-Reference Deep Learning of Image Super-Resolution. IEEE Transactions on Image Processing, 2022, 31, 4393-4404.	6.0	6
2	NLRP3 Inhibition Ameliorates Severe Cutaneous Autoimmune Manifestations in a Mouse Model of Autoimmune Polyendocrinopathy-Candidiasis-Ectodermal Dystrophyâ€"Like Disease. Journal of Investigative Dermatology, 2021, 141, 1404-1415.	0.3	7
3	Ultra High Fidelity Deep Image Decompression With l_∞-Constrained Compression. IEEE Transactions on Image Processing, 2021, 30, 963-975.	6.0	12
4	Circulating MicroRNAs in Relation to Esophageal Adenocarcinoma Diagnosis and Survival. Digestive Diseases and Sciences, 2021, 66, 3831-3841.	1.1	3
5	Real-Time Deep Image Retouching Based on Learnt Semantics Dependent Global Transforms. IEEE Transactions on Image Processing, 2021, 30, 7378-7390.	6.0	5
6	Integration in oncogenes plays only a minor role in determining the in vivo distribution of HIV integration sites before or during suppressive antiretroviral therapy. PLoS Pathogens, 2021, 17, e1009141.	2.1	36
7	Rapid Whole Slide Imaging via Dual-Shot Deep Autofocusing. IEEE Transactions on Computational Imaging, 2021, 7, 124-136.	2.6	7
8	High Frequency Detail Accentuation in CNN Image Restoration. IEEE Transactions on Image Processing, 2021, 30, 8836-8846.	6.0	7
9	Attention-guided Image Compression by Deep Reconstruction of Compressive Sensed Saliency Skeleton. , 2021, , .		14
10	Exaggerated Learning For Clean-And-Sharp Image Restoration. , 2020, , .		1
11	An analytical pipeline for identifying and mapping the integration sites of HIV and other retroviruses. BMC Genomics, 2020, 21, 216.	1.2	21
12	Persistent Polyfunctional Chimeric Antigen Receptor T Cells That Target Glypican 3 Eliminate Orthotopic Hepatocellular Carcinomas in Mice. Gastroenterology, 2020, 158, 2250-2265.e20.	0.6	97
13	Radiation Drives the Evolution of Orthotopic Xenografts Initiated from Glioblastoma Stemâ€"like Cells. Cancer Research, 2019, 79, 6032-6043.	0.4	14
14	Real-Time High-Fidelity Compression for Extremely High Frame Rate Video Cameras. IEEE Transactions on Computational Imaging, 2018, 4, 172-180.	2.6	3
15	Learning-Based Restoration of Backlit Images. IEEE Transactions on Image Processing, 2018, 27, 976-986.	6.0	35
16	Locally Adaptive Rank-Constrained Optimal Tone Mapping. ACM Transactions on Graphics, 2018, 37, 1-10.	4.9	7
17	Single image haze removal using Gaussian mixture model and sparse optimization. , 2016, , .		0
18	Image Enhancement by Entropy Maximization and Quantization Resolution Upconversion. IEEE Transactions on Image Processing, 2016, 25, 4815-4828.	6.0	34

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19	Soft binary segmentation-based backlit image enhancement. , 2015, , .		13
20	Optimal Backlight Modulation With Crosstalk Control in Stereoscopic Display. Journal of Display Technology, 2015, 11, 157-164.	1.3	6
21	Down-sampling based embedded compression in video systems. , 2015, , .		1
22	Sparsity Fine Tuning in Wavelet Domain With Application to Compressive Image Reconstruction. IEEE Transactions on Image Processing, 2014, 23, 5249-5262.	6.0	13
23	GPU-aided real-time image/video super resolution based on error feedback. , 2014, , .		4
24	Defeating Camcorder Piracy by Temporal Psychovisual Modulation. Journal of Display Technology, 2014, 10, 754-757.	1.3	25
25	Multiple Description Image Coding with Local Random Measurements. , 2014, , .		2
26	Sparsity fine tuning in wavelet domain with application to compressive image reconstruction. , 2014, , .		0
27	Generalized Equalization Model for Image Enhancement. IEEE Transactions on Multimedia, 2014, 16, 68-82.	5.2	113
28	Joint segmentation and pairing of multispectral chromosome images. Pattern Analysis and Applications, 2013, 16, 497-506.	3.1	3
29	Image enhancement revisited: From first order to second order statistics. , 2013, , .		9
30	OPtimal backlight scanning for 3D crosstalk reduction in LCD TV. , 2013, , .		0
31	Modeling Power-Constrained Optimal Backlight Dimming for Color Displays. Journal of Display Technology, 2013, 9, 656-665.	1.3	39
32	Sparsity-based soft decoding of compressed images in transform domain. , 2013, , .		8
33	LED Backlight Adjustment for Backward-Compatible Stereoscopic Display. IEEE Signal Processing Letters, 2013, 20, 1203-1206.	2.1	4
34	Temporal Psychovisual Modulation: A New Paradigm of Information Display [Exploratory DSP]. IEEE Signal Processing Magazine, 2013, 30, 136-141.	4.6	59
35	Context Modeling and Correction of Quantization Errors in Prediction Loop. , 2012, , .		0
36	Model-Assisted Adaptive Recovery of Compressed Sensing with Imaging Applications. IEEE Transactions on Image Processing, 2012, 21, 451-458.	6.0	42

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37	A hidden Markov model-based methodology for intra-field video deinterlacing. , 2011, , .		2
38	Progressive Quantization of Compressive Sensing Measurements. , 2011, , .		6
39	On sparse representations of color images. , 2011, , .		3
40	On Computation of Performance Bounds of Optimal Index Assignment. IEEE Transactions on Communications, 2011, 59, 3229-3233.	4.9	6
41	Adaptive Sequential Prediction of Multidimensional Signals With Applications to Lossless Image Coding. IEEE Transactions on Image Processing, 2011, 20, 36-42.	6.0	59
42	A Linear Programming Approach for Optimal Contrast-Tone Mapping. IEEE Transactions on Image Processing, 2011, 20, 1262-1272.	6.0	109
43	High-Fidelity Image Compression for High-Throughput and Energy-Efficient Cameras. , 2011, , .		3
44	L_2 restoration of L_∞-decoded images with context modeling. , 2011, , .		0
45	Multiple description video coding against both erasure and bit errors by compressive sensing. , 2011, , .		2
46	Index assignment optimization for joint source-channel MAP decoding. IEEE Transactions on Communications, 2010, 58, 901-910.	4.9	8
47	Achieving the rate-distortion bound with low-density generator matrix codes. IEEE Transactions on Communications, 2010, 58, 1643-1653.	4.9	14
48	On L_{infty} Properties of Multiresolution Scalar Quantizers. IEEE Transactions on Information Theory, 2010, 56, 5805-5810.	1.5	1
49	Color demosaicking with sparse representations. , 2010, , .		14
50	Joint color decrosstalk and demosaicking for CFA cameras. , 2010, , .		0
51	Image interpolation with hidden Markov model. , 2010, , .		5
52	Live demonstration: Spatial-temporal color video reproduction from noisy CFA sequence track: Digital signal processing. , 2010, , .		0
53	Edge-based image coding at low bit-rate. , 2010, , .		0
54	Adaptive structured recovery of compressive sensing via piecewise autoregressive modeling. , 2010, , .		2

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55	Improvement of H.264 SVC by model-based adaptive resolution upconversion. , 2010, , .		8
56	High frame rate video capture by multiple cameras with coded exposure. , 2010, , .		3
57	On Computation of Performance Bounds of Optimal Index Assignment. , 2010, , .		1
58	Spatial-Temporal Color Video Reconstruction From Noisy CFA Sequence. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 838-847.	5.6	12
59	Information Flows in Video Coding. , 2010, , .		4
60	Joint Color Decrosstalk and Demosaicking for CFA Cameras. IEEE Transactions on Image Processing, 2010, 19, 3181-3189.	6.0	11
61	Context-based bias removal of statistical models of wavelet coefficients for image denoising. , 2009, , .		1
62	Compressive-uniform hybrid sensing for image acquisition and communication. , 2009, , .		0
63	Model-based non-linear estimation for adaptive image restoration. , 2009, , .		3
64	New Results on Multiple Descriptions in the Wyner-Ziv Setting. IEEE Transactions on Information Theory, 2009, 55, 1701-1708.	1.5	1
65	On Properties of Locally Optimal Multiple Description Scalar Quantizers With Convex Cells. IEEE Transactions on Information Theory, 2009, 55, 5591-5606.	1.5	17
66	Low Bit-Rate Image Compression via Adaptive Down-Sampling and Constrained Least Squares Upconversion. IEEE Transactions on Image Processing, 2009, 18, 552-561.	6.0	82
67	Resource-Scalable Joint Source-Channel MAP and MMSE Estimation of Multiple Descriptions. IEEE Transactions on Signal Processing, 2009, 57, 279-288.	3.2	5
68	Edge-based dynamic ROI coding with standard compliance. , 2009, , .		0
69	Nonlocal back-projection for adaptive image enlargement. , 2009, , .		51
70	Learning-based recovery of compressive sensing with application in multiple description coding. , 2009, , .		3
71	Rate-distortion optimized network communication using general MDC. , 2009, , .		0
72	Model-Guided Adaptive Recovery of Compressive Sensing. , 2009, , .		31

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73	MDL context modeling of images with application to denoising. , 2009, , .		0
74	Rainbow Network Flow of Multiple Description Codes. IEEE Transactions on Information Theory, 2008, 54, 4565-4574.	1.5	16
75	Efficient Multiple-Description Image Coding Using Directional Lifting-Based Transform. IEEE Transactions on Circuits and Systems for Video Technology, 2008, 18, 646-656.	5.6	28
76	A compressive sensing approach of multiple descriptions for network multimedia communication. , 2008, , .		5
77	Trellis Quantization for Lâˆž-Constrained Compression with Integer Wavelets. , 2008, , .		0
78	Standard-compliant multiple description image coding by spatial multiplexing and constrained least-squares restoration. , 2008, , .		3
79	Lossy source coding for non-uniform sources using LDGM codes. , 2008, , .		2
80	Automatic tonal harmonization for multi-spectral mosaics. , 2008, , .		0
81	Can Lower Resolution Be Better?. Proceedings of the Data Compression Conference, 2008, , .	0.0	9
82	Context Quantization by Minimum Adaptive Code Length. , 2007, , .		15
83	Fast Generalized Motion Estimation and Superresolution. , 2007, , .		2
84	Context-based Arithmetic Coding Reexamined for DCT Video Compression. , 2007, , .		6
85	Multiple Descriptions with Side Informations Also Known At the Encoder. , 2007, , .		0
86	On Multi-Stage Sequential Coding of Correlated Sources. , 2007, , .		1
87	Edge-Guided Perceptual Image Coding via Adaptive Interpolation. , 2007, , .		3
88	Optimal Media Communication in Capacity Constrained Networks. , 2007, , .		0
89	Structure Preserving Image Interpolation via Adaptive 2D Autoregressive Modeling. , 2007, , .		1
90	On Design of Linear Minimum-Entropy Predictor. , 2007, , .		4

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91	Image Coding on Quincunx Lattice with Adaptive Lifting and Interpolation. , 2007, , .		23
92	Lagrangian Optimization of Two-Description Scalar Quantizers. IEEE Transactions on Information Theory, 2007, 53, 3990-4012.	1.5	20
93	Alphabet Partitioning Techniques for Semiadaptive Huffman Coding of Large Alphabets. IEEE Transactions on Communications, 2007, 55, 436-443.	4.9	4
94	Temporal color video demosaicking via motion estimation and data fusion. IEEE Transactions on Circuits and Systems for Video Technology, 2006, 16, 231-240.	5.6	21
95	Optimal Multicast with Erasure Correction Coding. , 2006, , .		0
96	Efficient Algorithm for Globally Optimal Uneven Erasure-Protected Packetization of Scalable Code Streams. , 2006, , .		0
97	Length-constrained MAP decoding of variable-length encoded Markov sequences. IEEE Transactions on Communications, 2006, 54, 1259-1266.	4.9	5
98	Joint Source-Channel Decoding of Multiple Description Quantized and Variable Length Coded Markov Sequences. , 2006, , .		1
99	Improvement of Color Video Demosaicking in Temporal Domain. IEEE Transactions on Image Processing, 2006, 15, 3138-3151.	6.0	16
100	On Optimal Index Assignment for MAP Decoding of Markov Sequences. , 2006, , .		5
101	Index Assignment Optimization for Joint Source-Channel MAP Decoding. , 2006, , .		1
102	Multiple Descriptions in the Wyner-Ziv Setting. , 2006, , .		5
103	Wavelet coding of volumetric medical images for high throughput and operability. IEEE Transactions on Medical Imaging, 2005, 24, 719-727.	5.4	33
104	Image interpolation using texture orientation map and kernel Fisher discriminant. , 2005, , .		5
105	Rainbow network problems and multiple description coding. , 2005, , .		11
106	On multirate optimality of JPEG2000 code stream. IEEE Transactions on Image Processing, 2005, 14, 2012-2023.	6.0	17
107	A new framework of LSB steganalysis of digital media. IEEE Transactions on Signal Processing, 2005, 53, 3936-3947.	3.2	50
108	Wavelet coding of volumetric medical images with high throughput and operability. , 2004, 2004, 3245-9.		0

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109	Multiresolution polygonal approximation of digital curves. , 2004, , .		7
110	Monotonicity-Based Fast Algorithms for MAP Estimation of Markov Sequences Over Noisy Channels. IEEE Transactions on Information Theory, 2004, 50, 1539-1544.	1.5	23
111	Primary-Consistent Soft-Decision Color Demosaicking for Digital Cameras (Patent Pending). IEEE Transactions on Image Processing, 2004, 13, 1263-1274.	6.0	139
112	Multiresolution Modeling and Estimation of Multisensor Data. IEEE Transactions on Signal Processing, 2004, 52, 3170-3182.	3.2	39
113	Detection of LSB steganography via sample pair analysis. IEEE Transactions on Signal Processing, 2003, 51, 1995-2007.	3.2	377
114	On embedded scalable code stream of minimum expected distortion for variable rate channels. , 0, , .		0
115	Temporal color video demosaicking via motion estimation and optimal data fusing. , 0, , .		0
116	Lagrangian global optimization of two-description scalar quantizers. , 0, , .		3
117	Lossless compression of color mosaic images. , 0, , .		12
118	Buffer size reduction through buffer sharing for streaming applications. , 0, , .		2
119	Multi-dimensional Average-Interpolating Refinement on Arbitrary Lattices. , 0, , .		1
120	Clustering by principal curve with tree structure. , 0, , .		1
121	Globally Optimal Uneven Erasure-Protected Multi-Group Packetization of Scalable Codes. , 0, , .		5
122	On Global Optimality of Gradient Descent Algorithms for Fixed-Rate Scalar Multiple Description Quantizer Design. , 0, , .		3
123	On Cross Correlation Based Discrete Time Delay Estimation. , 0, , .		9
124	Joint Source-Channel Decoding of Multiple Description Quantized Markov Sequences. , 0, , .		2
125	Optimal Index Assignment for Multiple Description Lattice Vector Quantization. , 0, , .		21
126	A Practical Approach to Joint Network-Source Coding. , 0, , .		2