Jie Liang

List of Publications by Year
in descending order

179 papers	2,217 citations	318942 23 h-index	340414 39 g-index
180 all docs	180 docs citations	180 times ranked	1948 citing authors

#	Article	IF	Citations
1	Color-Sensitivity-Based Rate-Distortion Optimization for H.265/HEVC. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 802-812.	5.6	4
2	Laplacian Pyramid Dense Network for Hyperspectral Pansharpening. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	2.7	32
3	Outage Analysis of NOMA-Enabled Backscatter Communications With Intelligent Reflecting Surfaces. IEEE Internet of Things Journal, 2022, 9, 15390-15400.	5.5	11
4	Virtual structured-light three-dimensional point cloud compression with geometric reshaping. Journal of Electronic Imaging, 2022, 31, .	0.5	0
5	Variable-Rate Deep Image Compression With Vision Transformers. IEEE Access, 2022, 10, 50323-50334.	2.6	5
6	Region-of-interest and channel attention-based joint optimization of image compression and computer vision. Neurocomputing, 2022, 500, 13-25.	3.5	14
7	MDC-NOMA: Multiple Description Coding-Based Nonorthogonal Multiple Access for Image Transmission. IEEE Systems Journal, 2021, 15, 3632-3641.	2.9	3
8	Stereoscopic Image Retargeting Based on Deep Convolutional Neural Network. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 4759-4770.	5.6	9
9	Learned Multi-Resolution Variable-Rate Image Compression With Octave-Based Residual Blocks. IEEE Transactions on Multimedia, 2021, 23, 3013-3021.	5.2	12
10	An extended context-based entropy hybrid modeling for image compression. Signal Processing: Image Communication, 2021, 95, 116244.	1.8	5
11	A Deeply Modulated Scheme for Variable-Rate Video Compression. , 2021, , .		6
12	NOMA-Based User Cooperation With Incremental Hybrid Forwarding Protocols. IEEE Open Journal of the Communications Society, 2021, 2, 2536-2546.	4.4	3
13	Censor-Based Cooperative Multi-Antenna Spectrum Sensing with Imperfect Reporting Channels. IEEE Transactions on Sustainable Computing, 2020, 5, 48-60.	2.2	16
14	Effects of Residual Hardware Impairments on Secure NOMA-Based Cooperative Systems. IEEE Access, 2020, 8, 2524-2536.	2.6	18
15	EAAT: Environment-Aware Adaptive Transmission for Split-Screen Video Streaming. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 4355-4367.	5.6	1
16	Light field all-in-focus image fusion based on spatially-guided angular information. Journal of Visual Communication and Image Representation, 2020, 72, 102878.	1.7	5
17	Synthesis-Distortion-Aware Hybrid Digital Analog Transmission for 3D Videos. IEEE Access, 2020, 8, 85128-85139.	2.6	5
18	Learned Variable-Rate Image Compression With Residual Divisive Normalization. , 2020, , .		11

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19	SWIPT-Enabled Cooperative NOMA With *m*th Best Relay Selection. IEEE Open Journal of the Communications Society, 2020, 1, 1798-1807.	4.4	12
20	Deep Learning-Based Image Compression with Trellis Coded Quantization. , 2020, , .		8
21	Saliency Analysis and Gaussian Mixture Model-Based Detail Extraction Algorithm for Hyperspectral Pansharpening. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 5462-5476.	2.7	12
22	Fusion of hyperspectral and panchromatic images using structure tensor and matting model. Neurocomputing, 2020, 399, 237-246.	3.5	13
23	Improved hybrid layered image compression using deep learning and traditional codecs. Signal Processing: Image Communication, 2020, 82, 115774.	1.8	15
24	Super resolution of single depth image based on multi-dictionary learning with edge feature regularization. Multimedia Tools and Applications, 2020, 79, 34813-34834.	2.6	0
25	HDA Video Transmission Scheme for DASH. IEEE Access, 2020, 8, 58345-58356.	2.6	1
26	Variable-Rate Multi-Frequency Image Compression using Modulated Generalized Octave Convolution. , 2020, , .		10
27	Color-Sensitivity-Based Combined PSNR for Objective Video Quality Assessment. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1239-1250.	5.6	26
28	Distortion Estimation-Based Adaptive Power Allocation for Hybrid Digital–Analog Video Transmission. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1806-1818.	5.6	8
29	A Depth-Bin-Based Graphical Model for Fast View Synthesis Distortion Estimation. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1754-1766.	5.6	6
30	Pixel-Level View Synthesis Distortion Estimation for 3-D Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2019, , 1-1.	5.6	3
31	PEP Analysis of AF Relay NOMA Systems Employing Order Statistics of Cascaded Channels. Electronics (Switzerland), 2019, 8, 695.	1.8	2
32	Semiparametric Subsampling and Data Condensation for Large-Scale Data Analytics. , 2019, , .		0
33	Error Analysis of NOMA-Based User Cooperation with SWIPT. , 2019, , .		6
34	DSSLIC: Deep Semantic Segmentation-based Layered Image Compression. , 2019, , .		49
35	DCSN-Cast: Deep compressed sensing network for wireless video multicast. Signal Processing: Image Communication, 2019, 76, 56-67.	1.8	2
36	Weighting Quantization Matrices for HEVC/H.265-Coded RGB Videos. IEEE Access, 2019, 7, 36019-36032.	2.6	5

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37	Residual Hardware Impairments on Secure NOMA-Based Relay Systems. , 2019, , .		1
38	Compression Artifact Removal with Stacked Multi-Context Channel-Wise Attention Network. , 2019, , .		3
39	Censor-Based Multi-Antenna Cooperative Spectrum Sensing over Erroneous Feedback Channels. , 2019, , .		2
40	Local activity-driven structural-preserving filtering for noise removal and image smoothing. Signal Processing, 2019, 157, 62-72.	2.1	24
41	Simultaneous color-depth super-resolution with conditional generative adversarial networks. Pattern Recognition, 2019, 88, 356-369.	5.1	58
42	A real-time system for online learning-based visual transcription of piano music. Multimedia Tools and Applications, 2018, 77, 25513-25535.	2.6	11
43	Recursive Distortion Estimation for Hybrid Digital-Analog Video Transmission. , 2018, , .		3
44	Semi-Recurrent Cnn-Based Vae-Gan for Sequential Data Generation. , 2018, , .		11
45	Adaptive STBC Scheme for Soft Video Transmission with Multiple Antennas. Lecture Notes in Computer Science, 2018, , 767-775.	1.0	0
46	An Optimized Hybrid Unicast/Multicast Adaptive Video Streaming Scheme Over MBMS-Enabled Wireless Networks. IEEE Transactions on Broadcasting, 2018, 64, 791-802.	2.5	25
47	Unified Analysis of Diversity Reception in the Presence of Impulsive Noise. IEEE Transactions on Vehicular Technology, 2017, 66, 1408-1417.	3.9	12
48	Graph-Based Transform for 2D Piecewise Smooth Signals With Random Discontinuity Locations. IEEE Transactions on Image Processing, 2017, 26, 1679-1693.	6.0	8
49	Depth map up-sampling with fractal dimension and texture-depth boundary consistencies. Neurocomputing, 2017, 257, 185-192.	3.5	6
50	Joint Source-Channel Coding of JPEG 2000 Image Transmission Over Two-Way Multi-Relay Networks. IEEE Transactions on Image Processing, 2017, 26, 1-1.	6.0	10
51	Power and sub-channel optimization of JPEG 2000 image transmission over OFDM-based cognitive radio networks. Signal Processing: Image Communication, 2017, 58, 157-164.	1.8	5
52	QoE-driven optimization for cloud-assisted DASH-based scalable interactive multiview video streaming over wireless network. Signal Processing: Image Communication, 2017, 57, 157-172.	1.8	11
53	Adaptive residual-based distributed compressed sensing for soft video multicasting over wireless networks. Multimedia Tools and Applications, 2017, 76, 15587-15606.	2.6	3
54	A new combined PSNR for objective video quality assessment. , 2017, , .		5

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55	Convolutional neural network-based depth image artifact removal. , 2017, , .		11
56	Lapped convolutional neural networks for embedded systems. , 2017, , .		8
57	Single depth image super-resolution with multiple residual dictionary learning and refinement. , 2017, , .		8
58	Soft video multicasting over wireless networks based on BM3D and approximate message passing. , 2017, , .		0
59	Multi-Resolution Compressed Sensing Reconstruction Via Approximate Message Passing. IEEE Transactions on Computational Imaging, 2016, 2, 218-234.	2.6	4
60	Scalable Compression of Deep Neural Networks. , 2016, , .		1
61	Head pose estimation and its application in TV viewers' behavior analysis. , 2016, , .		3
62	Graph-Based Transform for 2D Piecewise Smooth Signals with Random Discontinuities. , 2016, , .		1
63	Early termination algorithm for the depth modeling mode in three-dimensional extension of high-efficiency video coding. Journal of Electronic Imaging, 2016, 25, 050503.	0.5	3
64	Modeling and Analysis of Wireless Channels via the Mixture of Gaussian Distribution. IEEE Transactions on Vehicular Technology, 2016, 65, 8309-8321.	3.9	56
65	Unified Analysis of Cooperative Spectrum Sensing Over Composite and Generalized Fading Channels. IEEE Transactions on Vehicular Technology, 2016, 65, 6949-6961.	3.9	30
66	Encoder-Driven Inpainting Strategy in Multiview Video Compression. IEEE Transactions on Image Processing, 2016, 25, 134-149.	6.0	19
67	A Hybrid Transmission Approach for DASH over MBMS in LTE Network. , 2015, , .		8
68	View Synthesis Distortion Estimation With a Graphical Model and Recursive Calculation of Probability Distribution. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 827-840.	5.6	20
69	Quantized dictionary for sparse representation. , 2015, , .		1
70	Multi-resolution compressed sensing reconstruction via approximate message passing. , 2015, , .		0
71	JPEG2000 image transmission over OFDM-based Cognitive Radio network. , 2015, , .		4
72	Performance analysis of energy detection over mixture gamma based fading channels with diversity reception. , 2015, , .		3

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73	Approximate message passing-based compressed sensing reconstruction with generalized elastic net prior. Signal Processing: Image Communication, 2015, 37, 19-33.	1.8	6
74	A Generalized Mixture of Gaussians for Fading Channels. , 2015, , .		8
75	A cloud-assisted DASH-based Scalable Interactive Multiview Video Streaming framework. , 2015, , .		7
76	QoE-Driven Cross-Layer Optimization for Wireless Dynamic Adaptive Streaming of Scalable Videos Over HTTP. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 451-465.	5.6	69
77	3D geometry representation using multiview coding of image tiles. , 2014, , .		7
78	Cooperative Downloading by Multivehicles in Urban VANET. International Journal of Distributed Sensor Networks, 2014, 10, 319514.	1.3	1
79	A unified approach for representing wireless channels using EM-based finite mixture of gamma distributions. , 2014, , .		7
80	Scheduling and resource allocation for wireless dynamic adaptive streaming of scalable videos over HTTP. , 2014, , .		17
81	Side information-aided compressed sensing reconstruction via approximate message passing. , 2014, , .		6
82	Multiple Description Coding With Randomly and Uniformly Offset Quantizers. IEEE Transactions on Image Processing, 2014, 23, 582-595.	6.0	24
83	Joint source-channel coding of JPEG2000 image transmission over coded cooperative networks. , 2014, , .		0
84	A Hybrid Transmission Approach for DASH over MBMS in LTE Network. , 2014, , .		0
85	Multimedia Sensor Networks. International Journal of Distributed Sensor Networks, 2014, 10, 573834.	1.3	0
86	Fast synthesized and predicted just noticeable distortion maps for perceptual multiview video coding. Journal of Visual Communication and Image Representation, 2013, 24, 700-707.	1.7	2
87	Relay selection in cognitive radio networks with interference constraints. IET Communications, 2013, 7, 922-930.	1.5	34
88	Multiple description coding with randomly offset quantizers. , 2013, , .		0
89	Distortion estimation for two-step view synthesis. , 2013, , .		1
90	Fast transmission distortion estimation and adaptive error protection for H.264/AVC-based embedded video conferencing systems. Signal Processing: Image Communication, 2013, 28, 417-429.	1.8	7

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91	The RSU Access Problem Based on Evolutionary Game Theory for VANET. International Journal of Distributed Sensor Networks, 2013, 9, 143024.	1.3	15
92	View interpolation confidence-aided compressed sensing of multiview images. , 2013, , .		3
93	Layered Source-Channel Coding over Two-Way Relay Networks. , 2013, , .		3
94	Rate-complexity tradeoff for client-side free viewpoint image rendering. , 2013, , .		1
95	M-channel multiple description coding based on uniformly offset quantizers with optimal deadzone. , 2013, , .		1
96	End-to-end distortion estimation for H.264 with unconstrained intra prediction. , 2012, , .		4
97	Just noticeable distortion map prediction for perceptual multiview video coding. , 2012, , .		0
98	Ztitch: A mobile phone application for immersive panorama creation, navigation, and social sharing. , 2012, , .		2
99	Optimizing frame structure with real-time computation for interactive multiview video streaming. , 2012, , .		0
100	Amplify-and-Forward Selection Cooperation over Rayleigh Fading Channels with Imperfect CSI. IEEE Transactions on Wireless Communications, 2012, 11, 199-209.	6.1	56
101	Noncoherent relay selection for bidirectional cooperative networks. , 2012, , .		3
102	Delay-Cognizant Interactive Streaming of Multiview Video With Free Viewpoint Synthesis. IEEE Transactions on Multimedia, 2012, 14, 1109-1126.	5.2	39
103	Relay selection in underlay cognitive radio networks. , 2012, , .		11
104	Noncausal directional intra prediction: Theoretical analysis and simulation. , 2012, , .		1
105	Relay Selection with Imperfect CSI in Bidirectional Cooperative Networks. IEEE Communications Letters, 2012, 16, 57-59.	2.5	17
106	Performance Analysis of Relay Selection With Feedback Delay and Channel Estimation Errors. IEEE Signal Processing Letters, 2011, 18, 67-70.	2.1	40
107	Effect of Feedback Delay on the Performance of Cooperative Networks with Relay Selection. IEEE Transactions on Wireless Communications, 2011, 10, 4161-4171.	6.1	47
108	Distortion exponents of two-way relaying networks with Multiple-Access Broadcast protocol. , 2011, , .		1

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109	JPEG XR optimization with graph-based soft decision quantization. , 2011, , .		3
110	Rectification-Based View Interpolation and Extrapolation for Multiview Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 693-707.	5.6	13
111	Relay Selection in Dual-Hop Vehicular Networks. IEEE Signal Processing Letters, 2011, 18, 134-137.	2.1	66
112	Perceptual multiview video coding using synthesized Just Noticeable Distortion maps. , 2011, , .		3
113	Ztitch. , 2011, , .		1
114	Distortion Exponents of Two-Way Relay Networks. IEEE Transactions on Signal Processing, 2011, 59, 4424-4437.	3.2	5
115	A three-layer scheme for M-channel multiple description image coding. Signal Processing, 2011, 91, 2277-2289.	2.1	5
116	System Distortion Exponents of Two-Way Relay Networks. , 2011, , .		1
117	Frame structure optimization for interactive multiview video streaming with bounded network delay. , 2011, , .		11
118	Optimizing frame structure for interactive multiview video streaming with viewsynthesis. , 2011, , .		3
119	GPU implementation of JPEG XR. , 2010, , .		1
120	An improved depth map estimation algorithm for view synthesis and multiview video coding. Proceedings of SPIE, 2010, , .	0.8	3
121	Cross-layer quality-driven adaptation for scheduling heterogeneous multimedia over 3G satellite networks. Wireless Networks, 2010, 16, 1143-1156.	2.0	0
122	Distortion Exponents for Multi-Relay Cooperative Networks with Limited Feedback. IEEE Transactions on Vehicular Technology, 2010, 59, 3417-3426.	3.9	2
123	Compressive sensing based multiview image coding with belief propagation. , 2010, , .		6
124	Outage Probability of Selection Cooperation with Channel Estimation Errors. , 2010, , .		4
125	Distortion Exponents for Multi-Relay Cooperative Networks with Limited Feedback. , 2010, , .		1
126	Distortion exponents of two-way relaying cooperative networks. , 2010, , .		4

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127	An improved rate-distortion model for multiview video coding. , 2010, , .		0
128	Distortion exponents of source transmission over two-way relaying cooperative networks. , 2010, , .		4
129	A three-layer algorithm for M-channel multiple description image coding. , 2010, , .		0
130	Exploiting Reception Diversity in Adaptive Packet Scheduling over Multimedia Broadcast/Multicast Networks. , 2010, , .		0
131	On the Distortion Exponents of Layered Broadcast Transmission in Multi-Relay Cooperative Networks. IEEE Transactions on Signal Processing, 2010, 58, 5340-5352.	3.2	6
132	Optimization of the end-to-end distortion of a Gaussian source in layered broadcast transmission. , 2010, , .		5
133	On the Performance of Pilot Symbol Assisted Modulation for Cooperative Systems with Imperfect Channel Estimation. , 2010, , .		13
134	Directional Lapped Transforms for Image Coding. IEEE Transactions on Image Processing, 2010, 19, 85-97.	6.0	27
135	Lloyd-Max quantization-based priority index assignment for the scalable extension of H.264/AVC. , 2010, , .		2
136	&#x03C1;-domain rate control for JPEG XR. , 2010, , .		2
137	Capacity of selection cooperation with channel estimation errors. , 2010, , .		0
138	Amplify-and-Forward Selection Cooperation with Channel Estimation Error. , 2010, , .		9
139	M-Channel Multiple Description Coding With Two-Rate Coding and Staggered Quantization. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 933-944.	5.6	16
140	Filter Banks for Prediction-Compensated Multiple Description Coding. IEEE Transactions on Signal Processing, 2009, 57, 1756-1767.	3.2	2
141	Multiple Description Coding With Prediction Compensation. IEEE Transactions on Image Processing, 2009, 18, 1037-1047.	6.0	29
142	Distortion exponents for decode-and-forward multi-relay cooperative networks. , 2009, , .		11
143	Downlink scheduling for multimedia multicast/broadcast over mobile wimax: connection-oriented multistate adaptation. IEEE Wireless Communications, 2009, 16, 72-79.	6.6	17
144	Multiview video coding using projective rectification-based view extrapolation and synthesis bias correction. , 2009, , .		9

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145	Rate-distortion analysis of rectification-based view interpolation for multiview video coding. , 2009, , .		3
146	GPU-aided directional image/video interpolation for real time resolution upconversion. , 2009, , .		6
147	View interpolation based multiple description coding of multiview images. , 2009, , .		2
148	Projective rectification-based view interpolation for multiview video coding and free viewpoint generation. , 2009, , .		9
149	Directional Lapped Transforms for Image Coding. Proceedings of the Data Compression Conference, 2008, , .	0.0	5
150	A two-stage algorithm for multiple description predictive coding. Canadian Conference on Electrical and Computer Engineering, 2008, , .	0.0	3
151	Prediction-compensated multiple description coding with optimal weighted reconstruction. Canadian Conference on Electrical and Computer Engineering, 2008, , .	0.0	0
152	Filter Banks for Prediction-Compensated Multiple Description Coding. Proceedings of the Data Compression Conference, 2008, , .	0.0	4
153	M-Channel Multiple Description Coding with Two-Rate Predictive Coding and Staggered Quantization. Proceedings of the Data Compression Conference, 2008, , .	0.0	3
154	Lowcomplexity M-channel multiple description coding with two-rate predictive coding and staggered quantization. , 2008, , .		3
155	H.264 Intra Frame Coding and JPEG 2000-based Predictive Multiple Description Image Coding. , 2007, , .		4
156	Undersampled Boundary Pre-/Postfilters for Low Bit-Rate DCT-Based Block Coders. IEEE Transactions on Image Processing, 2007, 16, 428-441.	6.0	10
157	Wiener Filter-Based Error Resilient Time-Domain Lapped Transform. IEEE Transactions on Image Processing, 2007, 16, 491-502.	6.0	9
158	Multiple Description Image Codingwith Prediction Compensation. , 2007, , .		4
159	Error resilient pre/post-filtering for DCT-based block coding systems. IEEE Transactions on Image Processing, 2006, 15, 30-39.	6.0	17
160	Error resilient DCT image coding with pre/post-filtering and Wiener filtering. , 2005, 5960, 1215.		1
161	Optimal block boundary pre/postfiltering for wavelet-based image and video compression. IEEE Transactions on Image Processing, 2005, 14, 2151-2158.	6.0	9
162	Windows Media Video 9: overview and applications. Signal Processing: Image Communication, 2004, 19, 851-875.	1.8	86

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163	Lapped transform via time-domain pre- and post-filtering. IEEE Transactions on Signal Processing, 2003, 51, 1557-1571.	3.2	136
164	DCT-based general structure for linear-phase paraunitary filterbanks. IEEE Transactions on Signal Processing, 2003, 51, 1572-1580.	3.2	13
165	Error resilient pre-/post-filtering for DCT-based block coding systems. , 2003, , .		2
166	Adaptive runlength coding. IEEE Signal Processing Letters, 2003, 10, 61-64.	2.1	26
167	On efficient implementation of oversampled linear phase perfect reconstruction filter banks. , 2003, , .		3
168	DCT-based general structure for linear phase paraunitary filter banks. , 2002, , .		5
169	Fast multiplierless approximations of the DCT with the lifting scheme. IEEE Transactions on Signal Processing, 2001, 49, 3032-3044.	3.2	242
170	Application of wavelet transform in travelling wave protection. International Journal of Electrical Power and Energy Systems, 2000, 22, 537-542.	3.3	45
171	<title>Fast multiplierless approximation of the DCT with the lifting scheme</title>. , 2000, , .		13
172	Adaptive travelling wave protection algorithm using two correlation functions. IEEE Transactions on Power Delivery, 1999, 14, 126-131.	2.9	33
173	A wavelet multiresolution analysis approach to fault detection and classification in transmission lines. International Journal of Electrical Power and Energy Systems, 1998, 20, 327-332.	3.3	63
174	Approximating the DCT with the lifting scheme: systematic design and applications. , 0, , .		5
175	Further results on DCT-based linear phase paraunitary filter banks. , 0, , .		5
176	Error resilient pre-/post-filtering for DCT-based block coding systems. , 0, , .		0
177	Optimal block boundary pre/post-filtering for wavelet-based image and video compression. , 0, , .		2
178	Wiener Filtering for Generalized Error Resilient Time Domain Lapped Transform. , 0, , .		3
179	Two-Dimensional Wiener Filters for Error Resilient Time Domain Lapped Transform. , 0, , .		3