Hongkai Xiong

List of Publications by Year in Descending Order

162 papers	1,382 citations	19 h-index	31 g-index
237 ext. papers	1,788 ext. citations	5.1 avg, IF	5.01 L-index

#	Paper	IF	Citations
162	Graph Neural Networks With Lifting-Based Adaptive Graph Wavelets. *IEEE Transactions on Signal and Information Processing Over Networks*, **2022**, 8, 63-77	2.8	
161	Lossless Compression for Video Streams with Frequency Prediction and Macro Block Merging **2021**,		1
160	Automatic Image Selection Model Based on Machine Learning for Endobronchial Ultrasound Strain Elastography Videos. *Frontiers in Oncology*, **2021**, 11, 673775	5.3	1
159	Multi-User Adaptive Video Delivery Over Wireless Networks: A Physical Layer Resource-Aware Deep Reinforcement Learning Approach. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 31, 798-815	6.4	4
158	Group Reidentification with Multigrained Matching and Integration. *IEEE Transactions on Cybernetics*, **2021**, 51, 1478-1492	10.2	10
157	Multi-Scale Structured Dictionary Learning for 3-D Point Cloud Attribute Compression. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 31, 2792-2807	6.4	2
156	General Bitwidth Assignment for Efficient Deep Convolutional Neural Network Quantization. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	4
155	RAPT360: Reinforcement Learning-Based Rate Adaptation for 360-degree Video Streaming with Adaptive Prediction and Tiling. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 1-1	6.4	5
154	Deep learning with convex probe endobronchial ultrasound multimodal imaging: A validated tool for automated intrathoracic lymph nodes diagnosis. *Endoscopic Ultrasound*, **2021**, 10, 361-371	3.6	1
153	Multiscale Representation Learning of Graph Data With Node Affinity. *IEEE Transactions on Signal and Information Processing Over Networks*, **2021**, 7, 30-44	2.8	1
152	Reversible Autoencoder: A CNN-Based Nonlinear Lifting Scheme for Image Reconstruction. *IEEE Transactions on Signal Processing*, **2021**, 69, 3117-3131	4.8	1
151	iPool--Information-Based Pooling in Hierarchical Graph Neural Networks. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	1
150	Partially-Connected Neural Architecture Search for Reduced Computational Redundancy. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2021**, 43, 2953-2970	13.3	6
149	Multi-Scale Graph Convolutional Network With Spectral Graph Wavelet Frame. *IEEE Transactions on Signal and Information Processing Over Networks*, **2021**, 7, 595-610	2.8	2
148	Imitating What You Need: An Adaptive Framework for Detector Distillation. *Lecture Notes in Computer Science*, **2021**, 89-101	0.9	
147	. *IEEE Transactions on Multimedia*, **2020**, 22, 2749-2763	6.6	14
146	Key-Point Sequence Lossless Compression for Intelligent Video Analysis. *IEEE MultiMedia*, **2020**, 27, 12-22	2.1	3

145	Probabilistic Tile Visibility-Based Server-Side Rate Adaptation for Adaptive 360-Degree Video Streaming. *IEEE Journal on Selected Topics in Signal Processing*, **2020**, 14, 161-176	7.5	10
144	Optimization-Based Decentralized Coded Caching for Files and Caches With Arbitrary Sizes. *IEEE Transactions on Communications*, **2020**, 68, 2090-2105	6.9	5
143	VERTICOX: Vertically Distributed Cox Proportional Hazards Model Using the Alternating Direction Method of Multipliers. *IEEE Transactions on Knowledge and Data Engineering*, **2020**, 1-1	4.2	4
142	. *IEEE Transactions on Multimedia*, **2020**, 22, 1874-1888	6.6	6
141	FedMax: Enabling a Highly-Efficient Federated Learning Framework **2020**,		6
140	Attribute Mix: Semantic Data Augmentation for Fine Grained Recognition **2020**,		5
139	Scalable Structured Compressive Video Sampling With Hierarchical Subspace Learning. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 30, 3528-3543	6.4	3
138	Depth Estimation From Light Field Using Graph-Based Structure-Aware Analysis. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 30, 4269-4283	6.4	7
137	REV-AE: A Learned Frame Set for Image Reconstruction **2020**,		1
136	Structure-Aware Graph Construction For Point Cloud Segmentation With Graph Convolutional Networks **2020**,		1
135	Rotation Equivariant Graph Convolutional Network for Spherical Image Classification **2020**,		6
134	Adaptive lossless compression of skeleton sequences. *Signal Processing: Image Communication*, **2020**, 80, 115659	2.8	0
133	A Server-Side Optimized Hybrid Multicast-Unicast Strategy for Multi-User Adaptive 360-Degree Video Streaming **2019**,		4
132	Joint Pricing and Cache Placement for Video Caching: A Game Theoretic Approach. *IEEE Journal on Selected Areas in Communications*, **2019**, 37, 1566-1583	14.2	8
131	Lossy Image Compression with Filter Bank Based Convolutional Networks **2019**,		1
130	Single and Sequential Viewports Prediction for 360-Degree Video Streaming **2019**,		6
129	Deep Reinforcement Learning-based Rate Adaptation for Adaptive 360-Degree Video Streaming **2019**,		13
128	Joint Pricing and Decision-Making for Heterogeneous User Demand in Cognitive Radio Networks. *IEEE Transactions on Cybernetics*, **2019**, 49, 3873-3886	10.2	4

127	Robust Subspace Clustering with Compressed Data. *IEEE Transactions on Image Processing*, **2019**,	8.7	27
126	Optimization-based Decentralized Coded Caching for Files and Caches with Arbitrary Sizes **2019**,		2
125	PML-LocNet: Improving Object Localization with Prior-induced Multi-view Learning Network. *IEEE Transactions on Image Processing*, **2019**,	8.7	1
124	DNQ: Dynamic Network Quantization **2019**,		2
123	Integral Object Mining via Online Attention Accumulation **2019**,		48
122	Multiuser Video Streaming Rate Adaptation: A Physical Layer Resource-Aware Deep Reinforcement Learning Approach **2019**,		2
121	Sparse-to-Dense Depth Estimation in Videos via High-Dimensional Tensor Voting. *IEEE Transactions on Circuits and Systems for Video Technology*, **2019**, 29, 68-79	6.4	4
120	Weak to Strong Detector Learning for Simultaneous Classification and Localization. *IEEE Transactions on Circuits and Systems for Video Technology*, **2019**, 29, 418-432	6.4	6
119	. *IEEE Transactions on Multimedia*, **2018**, 20, 361-378	6.6	21
118	Fully Decomposable Compressive Sampling With Joint Optimization for Multidimensional Sparse Representation. *IEEE Transactions on Signal Processing*, **2018**, 66, 603-616	4.8	7
117	. *IEEE Transactions on Multimedia*, **2018**, 20, 965-984	6.6	80
116	Delay-Power-Rate-Distortion Optimization of Video Representations for Dynamic Adaptive Streaming. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 1648-1664	6.4	9
115	Pedestrian Detection with a Directly-Cascaded Deconvolution-Convolution Structure. *Lecture Notes in Computer Science*, **2018**, 370-380	0.9	
114	Deep Face Recognition Using Adaptively-Weighted Verification Loss Function. *Communications in Computer and Information Science*, **2018**, 182-192	0.3	
113	Privacy Preserving Federated Big Data Analysis. *Studies in Big Data*, **2018**, 49-82	0.9	6
112	Structurally Constrained Correlation Transfer for Zero-shot Learning **2018**,		1
111	**2018**,		1
110	Multi-scale Spatiotemporal Information Fusion Network for Video Action Recognition **2018**,		4

109	Server-Side Rate Adaptation for Multi-User 360-Degree Video Streaming **2018**,		5
108	Zigzag Learning for Weakly Supervised Object Detection **2018**,		48
107	Group Re-Identification **2018**,		12
106	Structured Semantic Representation for Visual Question Answering **2018**,		2
105	Transductive Video Segmentation on Tree-Structured Model. *IEEE Transactions on Circuits and Systems for Video Technology*, **2017**, 27, 992-1005	6.4	7
104	Endobronchial Ultrasound Elastography for Evaluation of Intrathoracic Lymph Nodes: A Pilot Study. *Respiration*, **2017**, 93, 327-338	3.7	28
103	Progressive Dictionary Learning With Hierarchical Predictive Structure for Low Bit-Rate Scalable Video Coding. *IEEE Transactions on Image Processing*, **2017**, 26, 2972-2987	8.7	4
102	Nonconvex Optimization with Alternating Direction Method of Multipliers for Tensor-Based Compressed Sensing with Group Sparsity **2017**,		1
101	Complementary Contextual Models with FM-Index for DNA Compression **2017**,		2
100	. *IEEE Transactions on Multimedia*, **2017**, 1-1	6.6	16
99	Structured Sparse Representation With Union of Data-Driven Linear and Multilinear Subspaces Model for Compressive Video Sampling. *IEEE Transactions on Signal Processing*, **2017**, 65, 5062-5077	4.8	17
98	Application of Quantitative Autofluorescence Bronchoscopy Image Analysis Method in Identifying Bronchopulmonary Cancer. *Technology in Cancer Research and Treatment*, **2017**, 16, 482-487	2.7	2
97	Multiple Semantic Matching on Augmented N -Partite Graph for Object Co-Segmentation. *IEEE Transactions on Image Processing*, **2017**, 26, 5825-5839	8.7	19
96	Optimal decentralized coded caching for heterogeneous files **2017**,		9
95	Multiscale dictionary learning for hierarchical sparse representation **2017**,		1
94	Reinforcement learning-based opportunistic routing for live video streaming over multi-hop wireless networks **2017**,		5
93	Neural Image Caption Generation with Global Feature Based Attention Scheme. *Lecture Notes in Computer Science*, **2017**, 51-61	0.9	
92	Sparse Representation With Spatio-Temporal Online Dictionary Learning for Promising Video Coding. *IEEE Transactions on Image Processing*, **2016**, 25, 4580-4595	8.7	10

91	A hybrid wavelet convolution network with sparse-coding for image super-resolution **2016**,		8
90	Compressed Video Coding with Multi-Kernel Gaussian Process Regression **2016**,		2
89	Complexity constrained representation selection for dynamic adaptive streaming **2016**,		1
88	Distributed wireless video caching placement for dynamic adaptive streaming **2016**,		3
87	Fused One-vs-All Features With Semantic Alignments for Fine-Grained Visual Categorization. *IEEE Transactions on Image Processing*, **2016**, 25, 878-92	8.7	28
86	VERTIcal Grid lOgistic regression (VERTIGO). *Journal of the American Medical Informatics Association: JAMIA*, **2016**, 23, 570-9	8.6	30
85	HEALER: homomorphic computation of ExAct Logistic rEgRession for secure rare disease variants analysis in GWAS. *Bioinformatics*, **2016**, 32, 211-8	7.2	37
84	RGB and HSV quantitative analysis of autofluorescence bronchoscopy used for characterization and identification of bronchopulmonary cancer. *Cancer Medicine*, **2016**, 5, 3023-3030	4.8	8
83	A cost minimization with light field in scene depth MAP estimation **2016**,		1
82	Picking Deep Filter Responses for Fine-Grained Image Recognition **2016**,		166
81	Compressive Tensor Sampling with Structured Sparsity **2016**,		2
80	. *IEEE Transactions on Multimedia*, **2016**, 18, 507-520	6.6	5
79	Multitask Learning of Compact Semantic Codebooks for Context-Aware Scene Modeling. *IEEE Transactions on Image Processing*, **2016**, 25, 5411-5426	8.7	2
78	Subspace Learning with Structured Sparsity for Compressive Video Sampling **2015**,		1
77	. *IEEE Transactions on Circuits and Systems for Video Technology*, **2015**, 25, 1665-1681	6.4	8
76	Dynamic Spectrum Access and Power Allocation for Cooperative Cognitive Radio Networks. *IEEE Transactions on Signal Processing*, **2015**, 63, 5637-5649	4.8	10
75	Generalized Context Modeling With Multi-Directional Structuring and MDL-Based Model Selection for Heterogeneous Data Compression. *IEEE Transactions on Signal Processing*, **2015**, 63, 5650-5664	4.8	2
74	Structure-Based Learning in Sampling, Representation and Analysis for Multimedia Big Data **2015**,		1

73	FORESEE: Fully Outsourced secuRe gEnome Study basEd on homomorphic Encryption. *BMC Medical Informatics and Decision Making*, **2015**, 15 Suppl 5, S5	3.6	32
72	Interactive multiview video scheduling through bargaining **2015**,		1
71	Large Discriminative Structured Set Prediction Modeling With Max-Margin Markov Network for Lossless Image Coding. *IEEE Transactions on Image Processing*, **2014**, 23, 541-54	8.7	5
70	Data-driven hierarchical structure kernel for multiscale part-based object recognition. *IEEE Transactions on Image Processing*, **2014**, 23, 1765-78	8.7	2
69	Deformable Shape Preserving Video Retargeting With Salient Curve Matching. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2014**, 4, 82-94	5.2	7
68	Multiscale Edge Coding and Adaptive Lifting for Depth Maps Coding in 3-D Video **2014**,		1
67	Regional context model and dynamic Huffman binarization for adaptive entropy coding of multimedia **2014**,		2
66	DelayPower-Rate-Distortion Model for Wireless Video Communication Under Delay and Energy Constraints. *IEEE Transactions on Circuits and Systems for Video Technology*, **2014**, 24, 1170-1183	6.4	19
65	Dynamic rate allocation and opportunistic routing for scalable video multirate multicast over time-varying wireless networks **2014**,		2
64	Union of Data-Driven Subspaces via Subspace Clustering for Compressive Video Sampling **2014**,		3
63	HUGO: Hierarchical mUlti-reference Genome cOmpression for aligned reads. *Journal of the American Medical Informatics Association: JAMIA*, **2014**, 21, 363-73	8.6	14
62	. *IEEE Transactions on Wireless Communications*, **2014**, 13, 5768-5780	9.6	5
61	Gaussian Process Regression Based Prediction for Lossless Image Coding **2014**,		5
60	Figure/ground video segmentation using greedy transductive cosegmentation **2014**,		1
59	Spatio-temporal coherence for 3-D view synthesis with curve-based disparity warping **2014**,		2
58	Fused one-vs-all mid-level features for fine-grained visual categorization **2014**,		17
57	Delay-power-rate-distortion model for H.264 video coding **2013**,		1
56	A scalable depth coding with arc breakpoints based synthesis in 3-D video **2013**,		1

55	. *IEEE Transactions on Vehicular Technology*, **2013**, 62, 1827-1837	6.8	82
54	Sparse Spatio-Temporal Representation With Adaptive Regularized Dictionary Learning for Low Bit-Rate Video Coding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 710-728	6.4	19
53	An Adaptive Difference Distribution-based Coding with Hierarchical Tree Structure for DNA Sequence Compression **2013**, 2013, 371-380		2
52	A Structured Learning-Based Graph Matching Method for Tracking Dynamic Multiple Objects. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 534-548	6.4	13
51	Structured Set Intra Prediction With Discriminative Learning in a Max-Margin Markov Network for High Efficiency Video Coding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 1941-1956	6.4	2
50	Illumination compensation via low rank matrix completion for multiview video coding **2013**,		1
49	DNA-COMPACT: DNA COMpression based on a pattern-aware contextual modeling technique. *PLoS ONE*, **2013**, 8, e80377	3.7	19
48	3D tubular structure extraction using kernel-based superellipsoid model with Gaussian process regression **2012**,		3
47	Distributed Robust Optimization for Scalable Video Multirate Multicast Over Wireless Networks. *IEEE Transactions on Circuits and Systems for Video Technology*, **2012**, 22, 943-957	6.4	11
46	SEMI-SUPERVISED OBJECT RECOGNITION USING STRUCTURE KERNEL. *Proceedings International Conference on Image Processing*, **2012**, 2157-2160	1.6	
45	Privacy-Preserving Biometric System for Secure Fingerprint Authentication **2012**,		1
44	Prioritized Flow Optimization With Multi-Path and Network Coding Based Routing for Scalable Multirate Multicasting. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 259-273	6.4	10
43	An Error Resilient Video Coding Scheme Using Embedded Wyner Ziv Description With Decoder Side Non-Stationary Distortion Modeling. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 498-512	6.4	5
42	Reconstruction for Distributed Video Coding: A Context-Adaptive Markov Random Field Approach. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 1100-1114	6.4	8
41	A structured learning-based graph matching for dynamic multiple object tracking **2011**,		2
40	Conditional random field based side-information fusion for distributed multi-view video coding **2011**,		1
39	Lifetime and Distortion Optimization With Joint Source/Channel Rate Adaptation and Network Coding-Based Error Control in Wireless Video Sensor Networks. *IEEE Transactions on Vehicular Technology*, **2011**, 60, 1182-1194	6.8	24
38	Scalable Video Compression Framework With Adaptive Orientational Multiresolution Transform and Nonuniform Directional Filterbank Design. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 1085-1099	6.4	4

#	Reference	IF	Cites
37	Joint Source and Flow Optimization for Scalable Video Multirate Multicast Over Hybrid Wired/Wireless Coded Networks. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 550-564	6.4	9
36	Joint Coding/Routing Optimization for Distributed Video Sources in Wireless Visual Sensor Networks. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 141-155	6.4	26
35	Priority Belief Propagation-Based Inpainting Prediction With Tensor Voting Projected Structure in Video Compression. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 1115-1129	6.4	9
34	Correlated Data Gathering on Dynamic Network Coding Policy and Opportunistic Routing in Wireless Sensor Network **2011**,		3
33	Global Correlated Data Gathering in Wireless Sensor Networks with Compressive Sensing and Randomized Gossiping **2011**,		1
32	Super-resolution reconstruction with prior manifold on primitive patches for video compression **2011**,		1
31	A generic video coding framework based on anisotropic diffusion and spatio-temporal completion **2010**,		3
30	Image super-resolution with sparse representation prior on primitive patches **2010**,		1
29	Subgraphs Matching-Based Side Information Generation for Distributed Multiview Video Coding. *Eurasip Journal on Advances in Signal Processing*, **2010**, 2009,	1.9	7
28	Joint Coding/Routing Optimization for Correlated Sources in Wireless Visual Sensor Networks **2009** ,		7
27	A Learning-Based Framework for Low Bit-Rate Image and Video Coding. *Lecture Notes in Computer Science*, **2009**, 232-244	0.9	1
26	A Cross-Resolution Leaky Prediction Scheme for In-Band Wavelet Video Coding With Spatial Scalability. *IEEE Transactions on Circuits and Systems for Video Technology*, **2008**, 18, 516-521	6.4	4
25	On Non-sequential Context Modeling with Application to Executable Data Compression. *Proceedings of the Data Compression Conference*, **2008**,		3
24	Side information generation with constrained relaxation for distributed multi-view video coding **2008**,		1
23	2-D dual multiresolution decomposition through NUDFB and its application **2008**,		1
22	Monitoring and Troubleshooting in Operational IP-TV System. *IEEE Transactions on Broadcasting*, **2007**, 53, 711-718	4.7	5
21	Computational Graph Model for 3D Cells Tracking in Zebra Fish Datasets. *AIP Conference Proceedings*, **2007**,	0	2
20	A 3D Self-Adjust Region Growing Method for Axon Extraction **2007**,		1

19	Incorporating Primal Sketch Based Learning Into Low Bit-Rate Image Compression **2007**,		5
18	Graph Theory Application in Cell Nuleus Segmentation, Tracking and Identification **2007**,		8
17	A New Deblocking Algorithm Based on Adjusted Contourlet Transform **2006**,		3
16	A Context-Based Error Detection Strategy into H.264/AVC CABAC **2006**,		2
15	Quality-fluctuation-constrained rate allocation for MCTF-based video coding **2006**, 6077, 504		
14	A Novel Coarse-to-Fine Adaptation Segmentation Approach for Cellular Image Analysis. *Lecture Notes in Computer Science*, **2006**, 762-771	0.9	
13	A joint rate control scheme for H.264 encoding of multiple video sequences. *IEEE Transactions on Consumer Electronics*, **2005**, 51, 617-623	4.8	19
12	An Improved Update Operator for H.264 Scalable Extension **2005**,		1
11	Mode-based temporal filtering for in-band wavelet video coding with spatial scalability **2005**, 5960, 355		0
10	Rate control for real-time video network transmission on end-to-end rate-distortion and application-oriented QoS. *IEEE Transactions on Broadcasting*, **2005**, 51, 122-132	4.7	19
9	Design and implementation of an end-to-end system for DTV multicasting to home over broadband IP access network. *IEEE Transactions on Broadcasting*, **2005**, 51, 348-353	4.7	5
8	Contourlet Image Coding Based on Adjusted SPIHT. *Lecture Notes in Computer Science*, **2005**, 629-640	0.9	1
7	A Cross-Resolution Leaky Prediction Scheme for In-Band Wavelet Video Coding with Spatial Scalability. *Lecture Notes in Computer Science*, **2005**, 156-167	0.9	
6	A Study on Motion Prediction and Coding for In-Band Motion Compensated Temporal Filtering. *Lecture Notes in Computer Science*, **2005**, 983-988	0.9	
5	An error resilience scheme on an end-to-end distortion analysis for video transmission over Internet. *IEEE Transactions on Consumer Electronics*, **2004**, 50, 715-722	4.8	4
4	Design and implementation of multiplexing rate control in broadband access network TV transmission system. *IEEE Transactions on Consumer Electronics*, **2004**, 50, 849-855	4.8	6
3	Implementation of digital HDTV encoder with parallel sub-picture encoding modules and its joint bit-allocation strategy. *IEEE Transactions on Consumer Electronics*, **2003**, 48, 898-907	4.8	2
2	An error spreading scheme for video streaming over the Internet. *IEEE Transactions on Consumer Electronics*, **2003**, 49, 990-994	4.8	

LIST OF PUBLICATIONS