Debin Zhao

List of Publications by Citations

187	3,887	32	55
papers	citations	h-index	g-index
227	4,931	4.6	5.79
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
187	Group-based sparse representation for image restoration. *IEEE Transactions on Image Processing*, **2014**, 23, 3336-51	8.7	395
186	Fast and robust text detection in images and video frames. *Image and Vision Computing*, **2005**, 23, 565-576	1.7	201
185	Learning Convolutional Networks for Content-Weighted Image Compression **2018**,		125
184	Image Restoration Using Joint Statistical Modeling in a Space-Transform Domain. *IEEE Transactions on Circuits and Systems for Video Technology*, **2014**, 24, 915-928	6.4	108
183	. *IEEE Transactions on Multimedia*, **2007**, 9, 445-454	6.6	101
182	Image Compressive Sensing Recovery via Collaborative Sparsity. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2012**, 2, 380-391	5.2	96
181	Image compressive sensing recovery using adaptively learned sparsifying basis via L0 minimization. *Signal Processing*, **2014**, 103, 114-126	4.4	88
180	Image interpolation via regularized local linear regression. *IEEE Transactions on Image Processing*, **2011**, 20, 3455-69	8.7	80
179	Progressive image denoising through hybrid graph Laplacian regularization: a unified framework. *IEEE Transactions on Image Processing*, **2014**, 23, 1491-503	8.7	79
178	An End-to-End Compression Framework Based on Convolutional Neural Networks. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 3007-3018	6.4	79
177	Joint video/depth rate allocation for 3D video coding based on view synthesis distortion model. *Signal Processing: Image Communication*, **2009**, 24, 666-681	2.8	74
176	Rate-GOP Based Rate Control for High Efficiency Video Coding. *IEEE Journal on Selected Topics in Signal Processing*, **2013**, 7, 1101-1111	7.5	73
175	Random Walk Graph Laplacian-Based Smoothness Prior for Soft Decoding of JPEG Images. *IEEE Transactions on Image Processing*, **2017**, 26, 509-524	8.7	72
174	Large vocabulary sign language recognition based on fuzzy decision trees. *IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans*, **2004**, 34, 305-314		72
173	Image Compressed Sensing using Convolutional Neural Network. *IEEE Transactions on Image Processing*, **2019**,	8.7	72
172	Object detection using spatial histogram features. *Image and Vision Computing*, **2006**, 24, 327-341	3.7	64
171	. *IEEE Transactions on Multimedia*, **2018**, 20, 379-391	6.6	62

170	Interpolation-dependent image downsampling. *IEEE Transactions on Image Processing*, **2011**, 20, 3291-6	8.7	58
169	Multiple Hypotheses Bayesian Frame Rate Up-Conversion by Adaptive Fusion of Motion-Compensated Interpolations. *IEEE Transactions on Circuits and Systems for Video Technology* , **2012**, 22, 1188-1198	6.4	53
168	. *IEEE Transactions on Multimedia*, **2015**, 17, 2338-2344	6.6	51
167	Distributed Wireless Visual Communication With Power Distortion Optimization. *IEEE Transactions on Circuits and Systems for Video Technology*, **2013**, 23, 1040-1053	6.4	49
166	Deep networks for compressed image sensing **2017**,		47
165	Wyner□iv-Based Multiview Video Coding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2008**, 18, 713-724	6.4	44
164	A Novel Rate Control Technique for Multiview Video Plus Depth Based 3D Video Coding. *IEEE Transactions on Broadcasting*, **2011**, 57, 562-571	4.7	43
163	No-reference perceptual image quality metric using gradient profiles for JPEG2000. *Signal Processing: Image Communication*, **2010**, 25, 502-516	2.8	43
162	. *IEEE Transactions on Consumer Electronics*, **2008**, 54, 2037-2044	4.8	38
161	**2019**,		37
160	Depth Super-Resolution via Joint Color-Guided Internal and External Regularizations. *IEEE Transactions on Image Processing*, **2019**, 28, 1636-1645	8.7	35
159	Data-Driven Soft Decoding of Compressed Images in Dual Transform-Pixel Domain. *IEEE Transactions on Image Processing*, **2016**, 25, 1649-59	8.7	34
158	Nonparametric background generation. *Journal of Visual Communication and Image Representation*, **2007**, 18, 253-263	2.7	34
157	Single image super-resolution with dilated convolution based multi-scale information learning inception module **2017**,		33
156	. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 1346-1357	6.4	32
155	WaveCast: Wavelet based wireless video broadcast using lossy transmission **2012**,		32
154	Image super-resolution via dual-dictionary learning and sparse representation **2012**,		32
153	. *IEEE Transactions on Multimedia*, **2019**, 21, 135-146	6.6	31

152	Stereoscopic video quality assessment based on visual attention and just-noticeable difference models. *Signal, Image and Video Processing*, **2016**, 10, 737-744	1.6	31
151	Fast encoder decision for texture coding in 3D-HEVC. *Signal Processing: Image Communication*, **2014** , 29, 951-961	2.8	28
150	Distributed Soft Video Broadcast (DCAST) with Explicit Motion **2012**,		28
149	A Spatio-Temporal Auto Regressive Model for Frame Rate Upconversion. *IEEE Transactions on Circuits and Systems for Video Technology*, **2009**, 19, 1289-1301	6.4	28
148	Face recognition based on face-specific subspace. *International Journal of Imaging Systems and Technology*, **2003**, 13, 23-32	2.5	28
147	Unsupervised Blind Image Quality Evaluation via Statistical Measurements of Structure, Naturalness, and Perception. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 30, 929-943	6.4	28
146	Layered Soft Video Broadcast for Heterogeneous Receivers. *IEEE Transactions on Circuits and Systems for Video Technology*, **2015**, 25, 1801-1814	6.4	27
145	Compressed Sensing Recovery via Collaborative Sparsity **2012**,		27
144	Compressive Sampling-Based Image Coding for Resource-Deficient Visual Communication. *IEEE Transactions on Image Processing*, **2016**, 25, 2844-2855	8.7	27
143	Packet Video Error Concealment With Auto Regressive Model. *IEEE Transactions on Circuits and Systems for Video Technology*, **2012**, 22, 12-27	6.4	26
142	Fast intra-encoding algorithm for High Efficiency Video Coding. *Signal Processing: Image Communication*, **2014**, 29, 935-944	2.8	25
141	Dual Frame Motion Compensation With Optimal Long-Term Reference Frame Selection and Bit Allocation. *IEEE Transactions on Circuits and Systems for Video Technology*, **2010**, 20, 325-339	6.4	25
140	Depth Restoration From RGB-D Data via Joint Adaptive Regularization and Thresholding on Manifolds. *IEEE Transactions on Image Processing*, **2019**, 28, 1068-1079	8.7	25
139	. *IEEE Transactions on Multimedia*, **2018**, 20, 675-686	6.6	23
138	Quality assessment for real out-of-focus blurred images. *Journal of Visual Communication and Image Representation*, **2017**, 46, 70-80	2.7	22
137	3D object retrieval with multi-feature collaboration and bipartite graph matching. *Neurocomputing*, **2016**, 195, 40-49	5.4	21
136	On Rate-Distortion Modeling and Extraction of H.264/SVC Fine-Granular Scalable Video. *IEEE Transactions on Circuits and Systems for Video Technology*, **2009**, 19, 323-336	6.4	21
135	Convolutional Neural Networks Based Intra Prediction for HEVC **2017**,		20

134	Neural Network Based Inter Prediction for HEVC **2018**,		20
133	Morphological representation of DCT coefficients for image compression. *IEEE Transactions on Circuits and Systems for Video Technology*, **2002**, 12, 819-823	6.4	18
132	. *IEEE Transactions on Multimedia*, **2020**, 22, 2024-2037	6.6	18
131	Learning discriminative features for fast frame-based action recognition. *Pattern Recognition*, **2013**, 46, 1832-1840	7.7	17
130	Inter-block consistent soft decoding of JPEG images with sparsity and graph-signal smoothness priors **2015**,		17
129	A Novel Error Concealment Method for Stereoscopic Video Coding **2007**,		17
128	Low-complexity and low-memory entropy coder for image compression. *IEEE Transactions on Circuits and Systems for Video Technology*, **2001**, 11, 1140-1145	6.4	17
127	Graph-Based Joint Dequantization and Contrast Enhancement of Poorly Lit JPEG Images. *IEEE Transactions on Image Processing*, **2019**, 28, 1205-1219	8.7	17
126	Spatially directional predictive coding for block-based compressive sensing of natural images **2013**,		16
125	Exploiting Image Local and Nonlocal Consistency for Mixed Gaussian-Impulse Noise Removal **2012**,		16
124	Statistical model, analysis and approximation of rate-distortion function in MPEG-4 FGS videos. *IEEE Transactions on Circuits and Systems for Video Technology*, **2006**, 16, 535-539	6.4	16
123	High-quality image restoration from partial random samples in spatial domain **2011**,		15
122	Transition movement models for large vocabulary continuous sign language recognition		15
121	Adaptive relevance feedback based on Bayesian inference for image retrieval. *Signal Processing*, **2005**, 85, 395-399	4.4	15
120	Low complexity encoder optimization for HEVC. *Journal of Visual Communication and Image Representation*, **2016**, 35, 120-131	2.7	14
119	RD-optimized interactive streaming of multiview video with multiple encodings. *Journal of Visual Communication and Image Representation*, **2010**, 21, 523-532	2.7	14
118	3D visual saliency detection model with generated disparity map. *Multimedia Tools and Applications* , **2017**, 76, 3087-3103	2.5	13
117	Prior-Based Quantization Bin Matching for Cloud Storage of JPEG Images. *IEEE Transactions on Image Processing*, **2018**, 27, 3222-3235	8.7	13

116	Context-based entropy coding in AVS video coding standard. *Signal Processing: Image Communication*, **2009**, 24, 263-276	2.8	13
115	Hierarchical residual learning for image denoising. *Signal Processing: Image Communication*, **2019**, 76, 243-251	2.8	12
114	Learning-based image restoration for compressed images. *Signal Processing: Image Communication*, **2012**, 27, 54-65	2.8	12
113	A Fast Inter Frame Prediction Algorithm for Multi-View Video Coding **2007**,		12
112	Face hallucination and recognition in social network services. *Journal of Supercomputing*, **2015**, 71, 2035-2049	2.5	11
111	Viewpoint-independent hand gesture recognition with Kinect. *Signal, Image and Video Processing*, **2014**, 8, 163-172	1.6	11
110	Rate Control for Hierarchical B-picture Coding with Scaling-factors **2007**,		11
109	Merge Mode for Deformable Block Motion Information Derivation. *IEEE Transactions on Circuits and Systems for Video Technology*, **2017**, 27, 2437-2449	6.4	10
108	. *IEEE Transactions on Multimedia*, **2018**, 20, 1622-1635	6.6	10
107	Side information generation with auto regressive model for low-delay distributed video coding. *Journal of Visual Communication and Image Representation*, **2012**, 23, 229-236	2.7	10
106	Low-Complexity Encoder Framework for Window-Level Rate Control Optimization. *IEEE Transactions on Industrial Electronics*, **2013**, 60, 1850-1858	8.9	10
105	Structural Group Sparse Representation for Image Compressive Sensing Recovery **2013**,		10
104	Quadratic □domain based rate control algorithm for HEVC **2013**,		10
103	Deinterlacing Using Hierarchical Motion Analysis. *IEEE Transactions on Circuits and Systems for Video Technology*, **2010**, 20, 673-686	6.4	10
102	Early Determination of Zero-Quantized 8 $,times,$8 DCT Coefficients. *IEEE Transactions on Circuits and Systems for Video Technology*, **2009**, 19, 1755-1765	6.4	10
101	Graph-Based Feature-Preserving Mesh Normal Filtering. *IEEE Transactions on Visualization and Computer Graphics*, **2021**, 27, 1937-1952	4	10
100	Perceptual image quality assessment combining free-energy principle and sparse representation **2016**,		9
99	CG-Cast: Scalable Wireless Image SoftCast Using Compressive Gradient. *IEEE Transactions on Circuits and Systems for Video Technology*, **2019**, 29, 1832-1843	6.4	9

98	Stereoscopic video quality assessment based on stereo just-noticeable difference model **2013**,		9
97	Synthetic data generation technique in Signer-independent sign language recognition. *Pattern Recognition Letters*, **2009**, 30, 513-524	4.7	9
96	. *IEEE Transactions on Consumer Electronics*, **2006**, 52, 888-895	4.8	9
95	Hierarchical frame based spatial□emporal recovery for video compressive sensing coding. *Neurocomputing*, **2016**, 174, 404-412	5.4	8
94	Sparsity-based soft decoding of compressed images in transform domain **2013**,		8
93	Joint just noticeable difference model based on depth perception for stereoscopic images **2011**,		8
92	Visual attention based image quality assessment **2011**,		8
91	Wyner□iv Switching Scheme for Multiple Bit-Rate Video Streaming. *IEEE Transactions on Circuits and Systems for Video Technology*, **2008**, 18, 569-581	6.4	8
90	Block-Wise Adaptive Motion Accuracy Based B-Picture Coding With Low-Complexity Motion Compensation. *IEEE Transactions on Circuits and Systems for Video Technology*, **2007**, 17, 1085-1090	6.4	8
89	Image Primitive Coding and Visual Quality Assessment. *Lecture Notes in Computer Science*, **2012**, 674-685	0.9	8
88	. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 1-1	6.4	8
87	Parallel In-Loop Filtering in HEVC Encoder on GPU. *IEEE Transactions on Consumer Electronics*, **2018**, 64, 276-284	4.8	8
86	Reduced reference stereoscopic image quality assessment based on entropy of classified primitives **2017**,		7
85	Enhanced inter prediction with localized weighted prediction in HEVC **2015**,		7
84	Lagrange multiplier based perceptual optimization for high efficiency video coding **2014**,		7
83	Distributed Video Coding Based on the Human Visual System. *IEEE Signal Processing Letters*, **2009**, 16, 985-988	3.2	7
82	B-picture coding in AVS video compression standard. *Signal Processing: Image Communication*, **2008**, 23, 31-41	2.8	7
81	Deeply pipelined DSP solution to deblocking filter for H.264/AVC. *IEEE Transactions on Consumer Electronics*, **2006**, 52, 1267-1274	4.8	7

80	Face identification from a single example image based on Face-Specific Subspace (FSS) **2002**,		7
79	. *IEEE Transactions on Multimedia*, **2020**, 22, 2307-2320	6.6	7
78	Group-based sparse representation for low lighting image enhancement **2016**,		7
77	Video Compressed Sensing Using a Convolutional Neural Network. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 31, 425-438	6.4	7
76	Multi-Scale Deep Networks for Image Compressed Sensing **2018**,		7
75	Optimal filter based on scale-invariance generation of natural images. *Journal of Supercomputing*, **2016**, 72, 5-23	2.5	6
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73	Motion vector refinement for frame rate up conversion on 3D video **2013**,		6
72	New distortion model for depth coding in 3DVC **2012**,		6
71	A ROI quality adjustable rate control scheme for low bitrate video coding **2009**,		6
70	A Spatio-Temporal Autoregressive Frame Rate Up Conversion Scheme. *Proceedings International Conference on Image Processing*, **2007**,	1.6	6
69	Fast multi reference frame motion estimation for high efficiency video coding **2013**,		5
68	Game theory based no-reference perceptual quality assessment for stereoscopic images. *Journal of Supercomputing*, **2015**, 71, 3337-3352	2.5	5
67	A Universal Rate Control Scheme for Video Transcoding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2012**, 22, 489-501	6.4	5
66	A joint encoder□decoder error control framework for stereoscopic video coding. *Journal of Visual Communication and Image Representation*, **2010**, 21, 975-985	2.7	5
65	Compressive Sensing Based Soft Video Broadcast Using Spatial and Temporal Sparsity. *Mobile Networks and Applications*, **2016**, 21, 1002-1012	2.9	5
64	Paragraph Generation Network with Visual Relationship Detection **2018**,		5
63	Joint gaze-correction and beautification of DIBR-synthesized human face via dual sparse coding **2014**,		4

62	Multi-scale Spatial Error Concealment via Hybrid Bayesian Regression **2012**,		4
61	Transductive Regression with Local and Global Consistency for Image Super-Resolution **2011**,		4
60	Building Emerging Pattern (EP) Random forest for recognition **2010**,		4
59	Witsenhausen Wyner Video Coding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2011**, 21, 1049-1060	6.4	4
58	Localizing the iris center by region growing search		4
57	An enhanced entropy coding scheme for HEVC. *Signal Processing: Image Communication*, **2016**, 44, 108-123	2.3	4
56	Big data driven decision making and multi-prior models collaboration for media restoration. *Multimedia Tools and Applications*, **2016**, 75, 12967-12982	2.5	3
55	HEVC compressed domain moving object detection and classfication **2016**,		3
54	Sparsity-based joint gaze correction and face beautification for conferencing video **2015**,		3
53	Distributed soft video broadcast with variable block size motion estimation **2013**,		3
52	Spatial and temporal pyramid-based real-time gesture recognition. *Journal of Real-Time Image Processing*, **2017**, 13, 599-611	1.9	3
51	Compressed Vision Information Restoration Based on Cloud Prior and Local Prior. *IEEE Access*, **2014**, 2, 1117-1127	3.5	3
50	Optimal entropy-constrained non-uniform scalar quantizer design for low bit-rate pixel domain DVC. *Multimedia Tools and Applications*, **2014**, 70, 1799-1824	2.5	3
49	Robust Stereo Matching Combining SIFT Descriptor with NCC under MRF Framework **2010**,		3
48	Image interpolation via regularized local linear regression **2010**,		3
47	Background aided surveillance-oriented distributed video coding **2010**,		3
46	Recognizing actions using salient features **2011**,		3
45	Universal Steganalysis Based on Statistical Models Using Reorganization of Block-based DCT Coefficients **2009**,		3

44	Arithmetic coding using hierarchical dependency context model for H.264/AVC video coding. *Multimedia Tools and Applications*, **2016**, 75, 7351-7370	2.5	2
43	Joint Gaze Correction and Face Beautification for Conference Video Using Dual Sparsity Prior. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 9601-9611	8.9	2
42	Multiple Description Image Coding with Local Random Measurements **2014**,		2
41	Improved disparity vector derivation in 3D-HEVC **2013**,		2
40	Rate control for consistent visual quality of H.264/AVC encoding. *Signal Processing: Image Communication*, **2013**, 28, 20-33	2.8	2
39	Region-of-interest based coding scheme for synthesized video **2015**,		2
38	Spatial-temporal recovery for hierarchical frame based video compressed sensing **2015**,		2
37	A fast intra optimization algorithm for HEVC **2014**,		2
36	Simplified AMVP for High Efficiency Video Coding **2012**,		2
35	Up-sampling Dependent Frame Rate Reduction for Low Bit-Rate Video Coding **2011**,		2
34	Side information extrapolation with temporal and spatial consistency **2011**,		2
33	High-quality image interpolation via local autoregressive and nonlocal 3-D sparse regularization **2012**,		2
32	Direct Mode Coding for B Pictures using Virtual Reference Picture **2007**,		2
31	Learning informative features for spatial histogram-based object detection		2
30	A Fast Intra Mode Decision Algorithm for AVS to H.264 Transcoding **2006**,		2
29	Automatic moving object extraction in MPEG video		2
28	Context-based 2D-VLC for video coding		2
27	Video indexing by motion activity maps		2

26	Mesh Denoising with Local Guided Normal Filtering and Non-local Similarity. *Communications in Computer and Information Science*, **2017**, 176-184	0.3	2
25	An Efficient Deep Convolutional Laplacian Pyramid Architecture for Cs Reconstruction At Low Sampling Ratios **2018**,		2
24	Model-based low bit-rate video coding for resource-deficient wireless visual communication. *Neurocomputing*, **2015**, 162, 180-190	5.4	1
23	Quad-tree based inter-view motion prediction **2015**,		1
22	Multi-scale face hallucination based on frequency bands analysis **2013**,		1
21	Progressive Image Restoration through Hybrid Graph Laplacian Regularization **2013**,		1
20	Quality assessment for out-of-focus blurred images **2015**,		1
19	Reference image based method of region of interest enhancement for haze image **2015**,		1
18	Low bit-rate video coding via mode-dependent adaptive regression for wireless visual communications **2012**,		1
17	Viewpoint-independent hand gesture recognition system **2012**,		1
16	Estimation of end-to-end distortion of virtual view for error-resilient depth map coding **2013**,		1
15	A parallel context model for level information in CABAC **2011**,		1
14	Auto-regressive model based error concealment scheme for stereoscopic video coding **2011**,		1
13	Fast disparity estimation utilizing depth information for multiview video coding **2011**,		1
12	A high efficient error concealment scheme based on auto-regressive model for video coding **2009**,		1
11	Effective algorithms for fast transcoding of AVS to H.264/AVC in the spatial domain. *Multimedia Tools and Applications*, **2007**, 35, 175-202	2.5	1
10	DSP Implementation of Deblocking Filter for AVS **2007**,		1
9	Interacting multiple model particle filter to adaptive visual tracking		1

8	High-resolution Depth Maps Imaging via Attention-based Hierarchical Multi-modal Fusion. *IEEE Transactions on Image Processing*, **2021**, PP,	8.7	1
7	Neural Network-based Enhancement to Inter Prediction for Video Coding. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 1-1	6.4	1
6	Noise-Aware Super-Resolution of Depth Maps Via Graph-Based Plug-And-Play Framework **2018**,		1
5	NormalNet: Learning-based Mesh Normal Denoising via Local Partition Normalization. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 1-1	6.4	1
4	Up-sampling oriented frame rate reduction. *Signal Processing: Image Communication*, **2013**, 28, 254-266	2.8	0
3	Semisupervised learning-based depth estimation with semantic inference guidance. *Science China Technological Sciences*,1	3.5	0
2	Corrections to A Spatio-Temporal Auto Regressive Model for Frame Rate Up-Conversion[Sep 09 1289-1301]. *IEEE Transactions on Circuits and Systems for Video Technology*, **2010**, 20, 161-161	6.4	
1	FGS Coding Using Cycle-Based Leaky Prediction Through Multiple Leaky Factors. *IEEE Transactions on Circuits and Systems for Video Technology*, **2008**, 18, 1201-1211	6.4	