Munchurl Kim

List of Publications by Year
in descending order

65 papers	1,770 citations	394421 19 h-index	315739 38 g-index
65 all docs	65 docs citations	65 times ranked	1317 citing authors

#	Article	IF	Citations
1	Fast CU Splitting and Pruning for Suboptimal CU Partitioning in HEVC Intra Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 1555-1564.	8.3	270
2	A Novel Fast CU Encoding Scheme Based on Spatiotemporal Encoding Parameters for HEVC Inter Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 422-435.	8.3	125
3	CNN-based in-loop filtering for coding efficiency improvement. , 2016, , .		111
4	A Deep Convolutional Neural Network with Selection Units for Super-Resolution. , 2017, , .		80
5	A Frame-Level Rate Control Scheme Based on Texture and Nontexture Rate Models for High Efficiency Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2014, 24, 465-479.	8.3	77
6	A Novel Image Quality Assessment With Globally and Locally Consilient Visual Quality Perception. IEEE Transactions on Image Processing, 2016, 25, 2392-2406.	9.8	76
7	Learning-Based Just-Noticeable-Quantization- Distortion Modeling for Perceptual Video Coding. IEEE Transactions on Image Processing, 2018, 27, 3178-3193.	9.8	61
8	A Novel DCT-Based JND Model for Luminance Adaptation Effect in DCT Frequency. IEEE Signal Processing Letters, 2013, 20, 893-896.	3.6	60
9	A Real-Time Convolutional Neural Network for Super-Resolution on FPGA With Applications to 4K UHD 60 fps Video Services. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 2521-2534.	8.3	59
10	An HEVC-Compliant Perceptual Video Coding Scheme Based on JND Models for Variable Block-Sized Transform Kernels. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 1786-1800.	8.3	58
11	An Automatic Recommendation Scheme of TV Program Contents for (IP)TV Personalization. IEEE Transactions on Broadcasting, 2011, 57, 674-684.	3.2	53
12	Modeling Rates and Distortions Based on a Mixture of Laplacian Distributions for Inter-Predicted Residues in Quadtree Coding of HEVC. IEEE Signal Processing Letters, 2011, 18, 571-574.	3.6	50
13	A Novel Generalized DCT-Based JND Profile Based on an Elaborate CM-JND Model for Variable Block-Sized Transforms in Monochrome Images. IEEE Transactions on Image Processing, 2014, 23, 3227-3240.	9.8	48
14	HEVC-Based Perceptually Adaptive Video Coding Using a DCT-Based Local Distortion Detection Probability Model. IEEE Transactions on Image Processing, 2016, 25, 3343-3357.	9.8	47
15	A DCT-Based Total JND Profile for Spatiotemporal and Foveated Masking Effects. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 1196-1207.	8.3	45
16	Single Image Super-Resolution Using Global Regression Based on Multiple Local Linear Mappings. IEEE Transactions on Image Processing, 2017, 26, 1300-1314.	9.8	41
17	Super-Interpolation With Edge-Orientation-Based Mapping Kernels for Low Complex Upscaling. IEEE Transactions on Image Processing, 2016, 25, 469-483.	9.8	34
18	A perceptual quality assessment metric using temporal complexity and disparity information for stereoscopic video. , 2011, , .		32

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19	LDA-Based Unified Topic Modeling for Similar TV User Grouping and TV Program Recommendation. IEEE Transactions on Cybernetics, 2015, 45, 1476-1490.	9.5	32
20	An All-Zero Block Detection Scheme for Low-Complexity HEVC Encoders. IEEE Transactions on Multimedia, 2016, 18, 1257-1268.	7.2	27
21	A Novel Just-Noticeable-Difference-Based Saliency-Channel Attention Residual Network for Full-Reference Image Quality Predictions. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 2602-2616.	8.3	25
22	No-Reference PSNR Estimation for HEVC Encoded Video. IEEE Transactions on Broadcasting, 2013, 59, 20-27.	3.2	22
23	Automatic and personalized recommendation of TV program contents using sequential pattern mining for smart TV user interaction. Multimedia Systems, 2013, 19, 527-542.	4.7	20
24	UPSNet: Unsupervised Pan-Sharpening Network With Registration Learning Between Panchromatic and Multi-Spectral Images. IEEE Access, 2020, 8, 201199-201217.	4.2	19
25	SIPSA-Net: Shift-Invariant Pan Sharpening with Moving Object Alignment for Satellite Imagery. , 2021, , .		19
26	A Novel No-Reference PSNR Estimation Method With Regard to Deblocking Filtering Effect in H.264/AVC Bitstreams. IEEE Transactions on Circuits and Systems for Video Technology, 2014, 24, 320-330.	8.3	18
27	2X Super-Resolution Hardware Using Edge-Orientation-Based Linear Mapping for Real-Time 4K UHD 60 fps Video Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1274-1278.	3.0	18
28	Fast Computation of Integer DCT-V, DCT-VIII, and DST-VII for Video Coding. IEEE Transactions on Image Processing, 2019, 28, 5839-5851.	9.8	16
29	Learning-Based Low-Complexity Reverse Tone Mapping With Linear Mapping. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 400-414.	8.3	15
30	S3: A Spectral-Spatial Structure Loss for Pan-Sharpening Networks. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 829-833.	3.1	15
31	PeaceGAN: A GAN-Based Multi-Task Learning Method for SAR Target Image Generation with a Pose Estimator and an Auxiliary Classifier. Remote Sensing, 2021, 13, 3939.	4.0	15
32	Fast decision of CU partitioning based on SAO parameter, motion and PU/TU split information for HEVC. , 2013, , .		13
33	DCT-QM: A DCT-Based Quality Degradation Metric for Image Quality Optimization Problems. IEEE Transactions on Image Processing, 2016, 25, 4916-4930.	9.8	12
34	A CU-Level Rate and Distortion Estimation Scheme for RDO of Hardware-Friendly HEVC Encoders Using Low-Complexity Integer DCTs. IEEE Transactions on Image Processing, 2016, 25, 3787-3800.	9.8	12
35	SPAM-Net: A CNN-Based SAR Target Recognition Network With Pose Angle Marginalization Learning. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 701-714.	8.3	12
36	A Frame-Level Constant Bit-Rate Control Using Recursive Bayesian Estimation for Versatile Video Coding. IEEE Access, 2020, 8, 227255-227269.	4.2	12

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37	A Low Complexity Mode Decision Method for Spatial Scalability Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 88-95.	8.3	11
38	Hybrid Codec-Based Intra-Frame Joint Rate Control for Stereoscopic Video. IEEE Signal Processing Letters, 2011, 18, 543-546.	3.6	10
39	A Joint Rate Control Scheme in a Hybrid Stereoscopic Video Codec System for 3DTV Broadcasting. IEEE Transactions on Broadcasting, 2013, 59, 265-280.	3.2	10
40	Hierarchical Extended Bilateral Motion Estimation-Based Frame Rate Upconversion Using Learning-Based Linear Mapping. IEEE Transactions on Image Processing, 2018, 27, 5918-5932.	9.8	10
41	A Hybrid Stereoscopic Video Coding Scheme Based on MPEG-2 and HEVC for 3DTV Services. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 1542-1554.	8.3	9
42	Image super-resolution based on convolution neural networks using multi-channel input. , 2016, , .		8
43	Deep Predictive Video Compression Using Mode-Selective Uni- and Bi-Directional Predictions Based on Multi-Frame Hypothesis. IEEE Access, 2021, 9, 72-85.	4.2	8
44	Learning of Counting Crowded Birds of Various Scales via Novel Density Activation Maps. IEEE Access, 2020, 8, 155296-155305.	4.2	7
45	Learning-Based JND-Directed HDR Video Preprocessing for Perceptually Lossless Compression With HEVC. IEEE Access, 2020, 8, 228605-228618.	4.2	7
46	A novel SSIM index for image quality assessment using a new luminance adaptation effect model in pixel intensity domain. , 2015, , .		5
47	Just-noticeable-quantization-distortion based preprocessing for perceptual video coding. , 2017, , .		5
48	Pan-Sharpening With Color-Aware Perceptual Loss And Guided Re-Colorization. , 2020, , .		4
49	Pseudo-Supervised Learning for Semantic Multi-Style Transfer. IEEE Access, 2021, 9, 7930-7942.	4.2	4
50	Structural-Information-Based Robust Corner Point Extraction for Camera Calibration Under Lens Distortions and Compression Artifacts. IEEE Access, 2021, 9, 151037-151048.	4.2	4
51	Graph-based object detection and tracking in H.264/AVC bitstreams for surveillance video. , 2011, , .		3
52	Topic-tracking-based dynamic user modeling with TV recommendation applications. Applied Intelligence, 2016, 44, 771-792.	5.3	3
53	A Selective Protection Scheme for Scalable Video Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 1733-1746.	8.3	2
54	Object tracking based on online partial instance learning with multiple local strong classifiers. , 2014, , .		2

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55	A Novel Rate and Distortion Estimation Method Using Particle Filtering Based Prediction for Intra-Predictive Coding of Deep Block Partitioning Structures. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 782-797.	8.3	2
56	A CNN-Based Multi-scale Super-Resolution Architecture on FPGA for 4K/8K UHD Applications. Lecture Notes in Computer Science, 2020, , 739-744.	1.3	2
57	An extended AMVP scheme in HEVC with MPEG-2 for a hybrid stereoscopic encoder. , 2012, , .		1
58	Adaptive loop filtering based interview video coding in an hybrid video codec with MPEG-2 and HEVC for stereosopic video coding. , 2013, , .		1
59	Low complexity object detection and tracking with inter-layer graph mapping and intra-layer graph refinement in H.264/SVC bitstreams. Pattern Recognition Letters, 2013, 34, 1531-1539.	4.2	1
60	Performance analysis of hierarchical transform coding with a large kernel for video codecs. IET Image Processing, 2014, 8, 12-22.	2.5	1
61	Single Image Super-Resolution Using Lightweight CNN with Maxout Units. Lecture Notes in Computer Science, 2019, , 471-487.	1.3	1
62	The MPEG Musical Slide Show Application Format: Enriching the MP3 Experience [Standards in a Nutshell]. IEEE Signal Processing Magazine, 2011, 28, 136-141.	5.6	0
63	Side information extraction based on motion trajectory learning for distributed video coding. , 2012, , .		0
64	A novel image quality assessment based on an adaptive feature for image characteristics and distortion types. , 2015, , .		0
65	Special issue on realistic and immersive media technologies. ETRI Journal, 2022, 44, 7-9.	2.0	0