Tiejun Huang

List of Publications by Year
in descending order

80 papers	1,907 citations	279798 23 h-index	289244 40 g-index
80 all docs	80 docs citations	80 times ranked	1515 citing authors

#	Article	IF	Citations
1	Sequential Deep Trajectory Descriptor for Action Recognition With Three-Stream CNN. IEEE Transactions on Multimedia, 2017, 19, 1510-1520.	7.2	171
2	Probabilistic Multi-Task Learning for Visual Saliency Estimation in Video. International Journal of Computer Vision, 2010, 90, 150-165.	15.6	117
3	Video Coding for Machines: A Paradigm of Collaborative Compression and Intelligent Analytics. IEEE Transactions on Image Processing, 2020, 29, 8680-8695.	9.8	110
4	Overview of the MPEG-CDVS Standard. IEEE Transactions on Image Processing, 2016, 25, 179-194.	9.8	95
5	Background-Modeling-Based Adaptive Prediction for Surveillance Video Coding. IEEE Transactions on Image Processing, 2014, 23, 769-784.	9.8	89
6	Learning Discriminative Subspaces on Random Contrasts for Image Saliency Analysis. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1095-1108.	11.3	76
7	Finding the Secret of Image Saliency in the Frequency Domain. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 2428-2440.	13.9	71
8	Optimizing the Hierarchical Prediction and Coding in HEVC for Surveillance and Conference Videos With Background Modeling. IEEE Transactions on Image Processing, 2014, 23, 4511-4526.	9.8	57
9	Visual Saliency with Statistical Priors. International Journal of Computer Vision, 2014, 107, 239-253.	15.6	55
10	Compact Descriptors for Visual Search. IEEE MultiMedia, 2014, 21, 30-40.	1.7	55
11	Representing Visual Objects in HEVC Coding Loop. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2014, 4, 5-16.	3.6	53
12	Robust multiple cameras pedestrian detection with multi-view Bayesian network. Pattern Recognition, 2015, 48, 1760-1772.	8.1	48
13	AVS2 ? Making Video Coding Smarter [Standards in a Nutshell]. IEEE Signal Processing Magazine, 2015, 32, 172-183.	5.6	44
14	Depth-Preserving Warping for Stereo Image Retargeting. IEEE Transactions on Image Processing, 2015, 24, 2811-2826.	9.8	42
15	The IEEE 1857 Standard: Empowering Smart Video Surveillance Systems. IEEE Intelligent Systems, 2014, 29, 30-39.	4.0	41
16	Rate-adaptive Compact Fisher Codes for Mobile Visual Search. IEEE Signal Processing Letters, 2014, 21, 195-198.	3.6	37
17	Learning Complementary Saliency Priors for Foreground Object Segmentation in Complex Scenes. International Journal of Computer Vision, 2015, 111, 153-170.	15.6	37
18	HNIP: Compact Deep Invariant Representations for Video Matching, Localization, and Retrieval. IEEE Transactions on Multimedia, 2017, 19, 1968-1983.	7.2	34

#	Article	IF	Citations
19	Selective Eigenbackground for Background Modeling and Subtraction in Crowded Scenes. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 1849-1864.	8.3	33
20	Weighted Component Hashing of Binary Aggregated Descriptors for Fast Visual Search. IEEE Transactions on Multimedia, 2015, 17, 828-842.	7.2	33
21	Reconstruction of natural visual scenes from neural spikes with deep neural networks. Neural Networks, 2020, 125, 19-30.	5.9	33
22	Spike Camera and Its Coding Methods. , 2017, , .		30
23	Automatic interesting object extraction from images using complementary saliency maps. , 2010, , .		29
24	Multi-Task Rank Learning for Visual Saliency Estimation. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 623-636.	8.3	29
25	Compact Deep Invariant Descriptors for Video Retrieval. , 2017, , .		29
26	Low-complexity and high-efficiency background modeling for surveillance video coding. , 2012, , .		26
27	Estimating Visual Saliency Through Single Image Optimization. IEEE Signal Processing Letters, 2013, 20, 845-848.	3.6	25
28	Toward the Next Generation of Retinal Neuroprosthesis: Visual Computation with Spikes. Engineering, 2020, 6, 449-461.	6.7	23
29	Rate-Performance-Loss Optimization for Inter-Frame Deep Feature Coding From Videos. IEEE Transactions on Image Processing, 2017, 26, 5743-5757.	9.8	21
30	Salient region detection and segmentation for general object recognition and image understanding. Science China Information Sciences, 2011, 54, 2461-2470.	4.3	19
31	Toward Knowledge as a Service Over Networks: A Deep Learning Model Communication Paradigm. IEEE Journal on Selected Areas in Communications, 2019, 37, 1349-1363.	14.0	19
32	Digital Retina: A Way to Make the City Brain More Efficient by Visual Coding. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 4147-4161.	8.3	19
33	Cost-Sensitive Rank Learning From Positive and Unlabeled Data for Visual Saliency Estimation. IEEE Signal Processing Letters, 2010, 17, 591-594.	3.6	18
34	Fast and Efficient Transcoding Based on Low-Complexity Background Modeling and Adaptive Block Classification. IEEE Transactions on Multimedia, 2013, 15, 1769-1785.	7.2	17
35	Video Copy-Detection and Localization with a Scalable Cascading Framework. IEEE MultiMedia, 2013, 20, 72-86.	1.7	15
36	Content-based copy detection through multimodal feature representation and temporal pyramid matching. ACM Transactions on Multimedia Computing, Communications and Applications, 2013, 10, 1-20.	4.3	15

#	Article	IF	Citations
37	Free-view gait recognition. PLoS ONE, 2019, 14, e0214389.	2.5	15
38	Fast MPEG-CDVS Encoder With GPU-CPU Hybrid Computing. IEEE Transactions on Image Processing, 2018, 27, 2201-2216.	9.8	13
39	Excitation-Inhibition Balanced Neural Networks for Fast Signal Detection. Frontiers in Computational Neuroscience, 2020, 14, 79.	2.1	13
40	Mediaprinting: Identifying Multimedia Content for Digital Rights Management. Computer, 2010, 43, 28-35.	1.1	12
41	Unraveling neural coding of dynamic natural visual scenes via convolutional recurrent neural networks. Patterns, 2021, 2, 100350.	5.9	12
42	A background model based method for transcoding surveillance videos captured by stationary camera. , 2010, , .		10
43	PKUBench: A context rich mobile visual search benchmark. , 2011, , .		10
44	A secure media streaming mechanism combining encryption, authentication, and transcoding. Signal Processing: Image Communication, 2009, 24, 825-833.	3.2	9
45	A Low Complexity Interest Point Detector. IEEE Signal Processing Letters, 2015, 22, 172-176.	3.6	9
46	Measuring Visual Surprise Jointly from Intrinsic and Extrinsic Contexts for Image Saliency Estimation. International Journal of Computer Vision, 2016, 120, 44-60.	15.6	9
47	Perceptual Temporal Incoherence-Guided Stereo Video Retargeting. IEEE Transactions on Image Processing, 2020, 29, 5767-5782.	9.8	9
48	Neural System Identification With Spike-Triggered Non-Negative Matrix Factorization. IEEE Transactions on Cybernetics, 2022, 52, 4772-4783.	9.5	9
49	Single and Multiple View Detection, Tracking and Video Analysis in Crowded Environments. , 2012, , .		8
50	Latent linkage semantic kernels for collective classification of link data. Journal of Intelligent Information Systems, 2006, 26, 269-301.	3.9	7
51	A Fast and Performance-Maintained Transcoding Method Based on Background Modeling for Surveillance Video. , 2012, , .		7
52	Fixed-point Gaussian Mixture Model for analysis-friendly surveillance video coding. Computer Vision and Image Understanding, 2016, 142, 65-79.	4.7	7
53	Revealing Fine Structures of the Retinal Receptive Field by Deep-Learning Networks. IEEE Transactions on Cybernetics, 2022, 52, 39-50.	9.5	6
54	Hybrid Coding of Spatiotemporal Spike Data for a Bio-Inspired Camera. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 2837-2851.	8.3	6

#	Article	IF	Citations
55	Hierarchical multi-VLAD for image retrieval. , 2015, , .		5
56	Temporal Attentive Network for Action Recognition. , 2018, , .		5
57	Multiscale video sequence matching for near-duplicate detection and retrieval. Multimedia Tools and Applications, 2019, 78, 311-336.	3.9	5
58	Generating vocabulary for global feature representation towards commerce image retrieval. , 2011, , .		4
59	An efficient coding framework for compact descriptors extracted from video sequence. , 2015, , .		4
60	Multi-camera Pedestrian Detection with Multi-view Bayesian Network Model. , 2012, , .		4
61	Representing the dynamics of high-dimensional data with non-redundant wavelets. Patterns, 2022, 3, 100424.	5.9	4
62	Decoding Pixel-Level Image Features From Two-Photon Calcium Signals of Macaque Visual Cortex. Neural Computation, 2022, 34, 1369-1397.	2.2	4
63	Streaming of Governed Content - Time for a Standard. , 2008, , .		3
64	Multi-view gait recognition with incomplete training data. , 2014, , .		3
65	Component hashing of variable-length binary aggregated descriptors for fast image search. , 2014, , .		3
66	TASC. ACM Transactions on Information Systems, 2015, 33, 1-34.	4.9	3
67	PA-Search: Predicting units adaptive motion search for surveillance video coding. Computer Vision and Image Understanding, 2018, 170, 14-27.	4.7	3
68	Perceptual Temporal Incoherence Aware Stereo Video Retargeting. , 2018, , .		3
69	Robust and discriminative image authentication based on sparse coding. , 2011, , .		2
70	Learning from mobile contexts to minimize the mobile location search latency. Signal Processing: Image Communication, 2013, 28, 368-385.	3.2	2
71	Image saliency estimation via random walk guided by informativeness and latent signal correlations. Signal Processing: Image Communication, 2015, 38, 3-14.	3.2	2
72	Image Saliency Analysis Based on Retina Simulation. , 2017, , .		2

#	Article	IF	Citations
73	A Multi-Block N-ary trie structure for exact r-neighbour search in hamming space. , 2017, , .		2
74	End-Edge-Cloud Collaborative System: A Video Big Data Processing and Analysis Architecture. , 2020, , .		2
75	Robust Collective Classification with Contextual Dependency Network Models. Lecture Notes in Computer Science, 2006, , 173-180.	1.3	2
76	Overview of IEEE 1857.3: Systems of advanced audio and video coding. , 2014, , .		1
77	Depth-based local feature selection for mobile visual search. , 2016, , .		1
78	Deep regional feature pooling for video matching. , 2017, , .		1
79	Allocating DNN Layers Computation Between Front-End Devices and The Cloud Server for Video Big Data Processing. , 2021, , .		1
80	Joint optimization of JPEG quantization table and coefficient thresholding for low bitrate mobile visual search. , 2014, , .		0