

Sung Wook Baik

List of Publications by Year in descending order

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Version: 2024-02-01

147
papers

7,965
citations

43973

48
h-index

56606

83
g-index

149
all docs

149
docs citations

149
times ranked

5496
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep-ReID: deep features and autoencoder assisted image patching strategy for person re-identification in smart cities surveillance. <i>Multimedia Tools and Applications</i> , 2024, 83, 15079-15100.	2.6	21
2	AI-Assisted Edge Vision for Violence Detection in IoT-Based Industrial Surveillance Networks. <i>IEEE Transactions on Industrial Informatics</i> , 2022, 18, 5359-5370.	7.2	39
3	An intelligent system for complex violence pattern analysis and detection. <i>International Journal of Intelligent Systems</i> , 2022, 37, 10400-10422.	3.3	22
4	Artificial Intelligence of Things-assisted two-stream neural network for anomaly detection in surveillance Big Video Data. <i>Future Generation Computer Systems</i> , 2022, 129, 286-297.	4.9	67
5	Enabling automation and edge intelligence over resource constraint IoT devices for smart home. <i>Neurocomputing</i> , 2022, 491, 494-506.	3.5	23
6	A Multi-Stream Sequence Learning Framework for Human Interaction Recognition. <i>IEEE Transactions on Human-Machine Systems</i> , 2022, 52, 435-444.	2.5	8
7	Learning to rank: An intelligent system for person reidentification. <i>International Journal of Intelligent Systems</i> , 2022, 37, 5924-5948.	3.3	12
8	Boosting energy harvesting via deep learning-based renewable power generation prediction. <i>Journal of King Saud University - Science</i> , 2022, 34, 101815.	1.6	33
9	An enhanced relation-aware global-local attention network for escaping human detection in indoor smoke scenarios. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2022, 186, 140-156.	4.9	9
10	Vision Transformer and Deep Sequence Learning for Human Activity Recognition in Surveillance Videos. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-10.	1.1	29
11	PMAL: A Proxy Model Active Learning Approach for Vision Based Industrial Applications. <i>ACM Transactions on Multimedia Computing, Communications and Applications</i> , 2022, 18, 1-18.	3.0	3
12	Efficient Short-Term Electricity Load Forecasting for Effective Energy Management. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 53, 102337.	1.7	21
13	A comprehensive survey of multi-view video summarization. <i>Pattern Recognition</i> , 2021, 109, 107567.	5.1	78
14	An Efficient Deep Learning Framework for Intelligent Energy Management in IoT Networks. <i>IEEE Internet of Things Journal</i> , 2021, 8, 3170-3179.	5.5	80
15	Multiview Summarization and Activity Recognition Meet Edge Computing in IoT Environments. <i>IEEE Internet of Things Journal</i> , 2021, 8, 9634-9644.	5.5	30
16	Conflux LSTMs Network: A Novel Approach for Multi-View Action Recognition. <i>Neurocomputing</i> , 2021, 435, 321-329.	3.5	41
17	CNN features with bi-directional LSTM for real-time anomaly detection in surveillance networks. <i>Multimedia Tools and Applications</i> , 2021, 80, 16979-16995.	2.6	133
18	Smart and intelligent energy monitoring systems: A comprehensive literature survey and future research guidelines. <i>International Journal of Energy Research</i> , 2021, 45, 3590-3614.	2.2	29

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19	Batteries State of Health Estimation via Efficient Neural Networks With Multiple Channel Charging Profiles. IEEE Access, 2021, 9, 7797-7813.	2.6	54
20	Sequential Learning-Based Energy Consumption Prediction Model for Residential and Commercial Sectors. Mathematics, 2021, 9, 605.	1.1	35
21	Diving Deep into Short-Term Electricity Load Forecasting: Comparative Analysis and a Novel Framework. Mathematics, 2021, 9, 611.	1.1	23
22	An Efficient Anomaly Recognition Framework Using an Attention Residual LSTM in Surveillance Videos. Sensors, 2021, 21, 2811.	2.1	57
23	Efficient activity recognition using lightweight CNN and DS-GRU network for surveillance applications. Applied Soft Computing Journal, 2021, 103, 107102.	4.1	72
24	DB-Net: A novel dilated CNN based multi-step forecasting model for power consumption in integrated local energy systems. International Journal of Electrical Power and Energy Systems, 2021, 133, 107023.	3.3	67
25	QuickLook: Movie summarization using scene-based leading characters with psychological cues fusion. Information Fusion, 2021, 76, 24-35.	11.7	9
26	AB-Net: A Novel Deep Learning Assisted Framework for Renewable Energy Generation Forecasting. Mathematics, 2021, 9, 2456.	1.1	35
27	Atrous Convolutions and Residual GRU Based Architecture for Matching Power Demand with Supply. Sensors, 2021, 21, 7191.	2.1	14
28	Vision Sensor-Based Real-Time Fire Detection in Resource-Constrained IoT Environments. Computational Intelligence and Neuroscience, 2021, 2021, 1-15.	1.1	49
29	Raspberry Pi assisted face recognition framework for enhanced law-enforcement services in smart cities. Future Generation Computer Systems, 2020, 108, 995-1007.	4.9	127
30	Efficient CNN based summarization of surveillance videos for resource-constrained devices. Pattern Recognition Letters, 2020, 130, 370-375.	2.6	68
31	Egocentric visual scene description based on human-object interaction and deep spatial relations among objects. Multimedia Tools and Applications, 2020, 79, 15859-15880.	2.6	6
32	Cloud-Assisted Multiview Video Summarization Using CNN and Bidirectional LSTM. IEEE Transactions on Industrial Informatics, 2020, 16, 77-86.	7.2	101
33	Intelligent Embedded Vision for Summarization of Multiview Videos in IIoT. IEEE Transactions on Industrial Informatics, 2020, 16, 2592-2602.	7.2	60
34	Short-Term Prediction of Residential Power Energy Consumption via CNN and Multi-Layer Bi-Directional LSTM Networks. IEEE Access, 2020, 8, 123369-123380.	2.6	98
35	Towards Efficient Building Designing: Heating and Cooling Load Prediction via Multi-Output Model. Sensors, 2020, 20, 6419.	2.1	28
36	Electrical Energy Prediction in Residential Buildings for Short-Term Horizons Using Hybrid Deep Learning Strategy. Applied Sciences (Switzerland), 2020, 10, 8634.	1.3	54

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37	A Novel CNN-GRU-Based Hybrid Approach for Short-Term Residential Load Forecasting. IEEE Access, 2020, 8, 143759-143768.	2.6	254
38	One-Shot Learning for Surveillance Anomaly Recognition using Siamese 3D CNN. , 2020, , .		15
39	Event-Oriented 3D Convolutional Features Selection and Hash Codes Generation Using PCA for Video Retrieval. IEEE Access, 2020, 8, 196529-196540.	2.6	12
40	Towards Efficient Electricity Forecasting in Residential and Commercial Buildings: A Novel Hybrid CNN with a LSTM-AE based Framework. Sensors, 2020, 20, 1399.	2.1	112
41	Mining top-k frequent patterns from uncertain databases. Applied Intelligence, 2020, 50, 1487-1497.	3.3	18
42	Deep LSTM-Based Sequence Learning Approaches for Action and Activity Recognition. , 2020, , 127-150.		8
43	Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1419-1434.	5.9	279
44	An efficient computerized decision support system for the analysis and 3D visualization of brain tumor. Multimedia Tools and Applications, 2019, 78, 12723-12748.	2.6	19
45	Partially shaded sketch-based image search in real mobile device environments via sketch-oriented compact neural codes. Journal of Real-Time Image Processing, 2019, 16, 227-240.	2.2	2
46	Raspberry Pi assisted facial expression recognition framework for smart security in law-enforcement services. Information Sciences, 2019, 479, 416-431.	4.0	66
47	A Hybrid Approach Using Oversampling Technique and Cost-Sensitive Learning for Bankruptcy Prediction. Complexity, 2019, 2019, 1-12.	0.9	51
48	Personalized Movie Summarization Using Deep CNN-Assisted Facial Expression Recognition. Complexity, 2019, 2019, 1-10.	0.9	26
49	Improving Electric Energy Consumption Prediction Using CNN and Bi-LSTM. Applied Sciences (Switzerland), 2019, 9, 4237.	1.3	149
50	Movie scene segmentation using object detection and set theory. International Journal of Distributed Sensor Networks, 2019, 15, 155014771984527.	1.3	19
51	Action recognition using optimized deep autoencoder and CNN for surveillance data streams of non-stationary environments. Future Generation Computer Systems, 2019, 96, 386-397.	4.9	120
52	Energy-Efficient Deep CNN for Smoke Detection in Foggy IoT Environment. IEEE Internet of Things Journal, 2019, 6, 9237-9245.	5.5	127
53	Efficient Fire Detection for Uncertain Surveillance Environment. IEEE Transactions on Industrial Informatics, 2019, 15, 3113-3122.	7.2	184
54	Violence Detection Using Spatiotemporal Features with 3D Convolutional Neural Network. Sensors, 2019, 19, 2472.	2.1	124

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55	A New Approach for Construction of Geodemographic Segmentation Model and Prediction Analysis. Computational Intelligence and Neuroscience, 2019, 2019, 1-10.	1.1	10
56	A Robust Framework for Self-Care Problem Identification for Children with Disability. Symmetry, 2019, 11, 89.	1.1	21
57	Intelligent and Energy-Efficient Data Prioritization in Green Smart Cities: Current Challenges and Future Directions. IEEE Communications Magazine, 2019, 57, 60-65.	4.9	38
58	Cover the Violence: A Novel Deep-Learning-Based Approach Towards Violence-Detection in Movies. Applied Sciences (Switzerland), 2019, 9, 4963.	1.3	70
59	SPPC: a new tree structure for mining erasable patterns in data streams. Applied Intelligence, 2019, 49, 478-495.	3.3	17
60	Multi-grade brain tumor classification using deep CNN with extensive data augmentation. Journal of Computational Science, 2019, 30, 174-182.	1.5	513
61	Activity Recognition Using Temporal Optical Flow Convolutional Features and Multilayer LSTM. IEEE Transactions on Industrial Electronics, 2019, 66, 9692-9702.	5.2	127
62	DeepStar: Detecting Starring Characters in Movies. IEEE Access, 2019, 7, 9265-9272.	2.6	30
63	Deep features-based speech emotion recognition for smart affective services. Multimedia Tools and Applications, 2019, 78, 5571-5589.	2.6	123
64	CNN-based anti-spoofing two-tier multi-factor authentication system. Pattern Recognition Letters, 2019, 126, 123-131.	2.6	84
65	Intelligent Baby Behavior Monitoring using Embedded Vision in IoT for Smart Healthcare Centers. Journal of Artificial Intelligence and Systems, 2019, 1, 110-124.	0.7	52
66	Convolutional Neural Networks Based Fire Detection in Surveillance Videos. IEEE Access, 2018, 6, 18174-18183.	2.6	358
67	Action Recognition in Video Sequences using Deep Bi-Directional LSTM With CNN Features. IEEE Access, 2018, 6, 1155-1166.	2.6	519
68	Secure Surveillance Framework for IoT Systems Using Probabilistic Image Encryption. IEEE Transactions on Industrial Informatics, 2018, 14, 3679-3689.	7.2	219
69	Efficient Conversion of Deep Features to Compact Binary Codes Using Fourier Decomposition for Multimedia Big Data. IEEE Transactions on Industrial Informatics, 2018, 14, 3205-3215.	7.2	27
70	Medical Image Retrieval with Compact Binary Codes Generated in Frequency Domain Using Highly Reactive Convolutional Features. Journal of Medical Systems, 2018, 42, 24.	2.2	32
71	Early fire detection using convolutional neural networks during surveillance for effective disaster management. Neurocomputing, 2018, 288, 30-42.	3.5	300
72	Determining speaker attributes from stress-affected speech in emergency situations with hybrid SVM-DNN architecture. Multimedia Tools and Applications, 2018, 77, 4883-4907.	2.6	7

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73	Image steganography using uncorrelated color space and its application for security of visual contents in online social networks. <i>Future Generation Computer Systems</i> , 2018, 86, 951-960.	4.9	76
74	Integrating salient colors with rotational invariant texture features for image representation in retrieval systems. <i>Multimedia Tools and Applications</i> , 2018, 77, 4769-4789.	2.6	32
75	Object-oriented convolutional features for fine-grained image retrieval in large surveillance datasets. <i>Future Generation Computer Systems</i> , 2018, 81, 314-330.	4.9	28
76	Efficient algorithms for mining top-rank- k erasable patterns using pruning strategies and the subsume concept. <i>Engineering Applications of Artificial Intelligence</i> , 2018, 68, 1-9.	4.3	29
77	Video Retrieval System for Meniscal Surgery to Improve Health Care Services. <i>Journal of Sensors</i> , 2018, 2018, 1-10.	0.6	5
78	Machine learning-assisted signature and heuristic-based detection of malwares in Android devices. <i>Computers and Electrical Engineering</i> , 2018, 69, 828-841.	3.0	73
79	Oversampling Techniques for Bankruptcy Prediction: Novel Features from a Transaction Dataset. <i>Symmetry</i> , 2018, 10, 79.	1.1	61
80	Multi-scale contrast and relative motion-based key frame extraction. <i>Eurasip Journal on Image and Video Processing</i> , 2018, 2018, .	1.7	16
81	ARMâ€œAMO: An efficient association rule mining algorithm based on animal migration optimization. <i>Knowledge-Based Systems</i> , 2018, 154, 68-80.	4.0	76
82	A Cluster-Based Boosting Algorithm for Bankruptcy Prediction in a Highly Imbalanced Dataset. <i>Symmetry</i> , 2018, 10, 250.	1.1	65
83	Privacy-preserving image retrieval for mobile devices with deep features on the cloud. <i>Computer Communications</i> , 2018, 127, 75-85.	3.1	30
84	Facial appearance and texture feature-based robust facial expression recognition framework for sentiment knowledge discovery. <i>Cluster Computing</i> , 2018, 21, 549-567.	3.5	19
85	Saliency-weighted graphs for efficient visual content description and their applications in real-time image retrieval systems. <i>Journal of Real-Time Image Processing</i> , 2017, 13, 431-447.	2.2	26
86	Analysis of interaction trace maps for active authentication on smart devices. <i>Multimedia Tools and Applications</i> , 2017, 76, 4069-4087.	2.6	11
87	Image steganography for authenticity of visual contents in social networks. <i>Multimedia Tools and Applications</i> , 2017, 76, 18985-19004.	2.6	52
88	Efficient object-based surveillance image search using spatial pooling of convolutional features. <i>Journal of Visual Communication and Image Representation</i> , 2017, 45, 62-76.	1.7	19
89	Embedded deep vision in smart cameras for multi-view objects representation and retrieval. <i>Computers and Electrical Engineering</i> , 2017, 61, 297-311.	3.0	13
90	Speech Emotion Recognition from Spectrograms with Deep Convolutional Neural Network. , 2017, , .		222

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91	Efficient visual attention driven framework for key frames extraction from hysteroscopy videos. Biomedical Signal Processing and Control, 2017, 33, 161-168.	3.5	43
92	Leukocytes Classification and Segmentation in Microscopic Blood Smear: A Resource-Aware Healthcare Service in Smart Cities. IEEE Access, 2017, 5, 3475-3489.	2.6	81
93	Endoscopic Image Classification and Retrieval using Clustered Convolutional Features. Journal of Medical Systems, 2017, 41, 196.	2.2	35
94	Mining erasable itemsets with subset and superset itemset constraints. Expert Systems With Applications, 2017, 69, 50-61.	4.4	31
95	Mobile-cloud assisted framework for selective encryption of medical images with steganography for resource-constrained devices. Multimedia Tools and Applications, 2017, 76, 3519-3536.	2.6	56
96	Endoscopic Image Classification and Retrieval using Clustered Convolutional Features. , 2017, 41, 1.		1
97	SiNC: Saliency-injected neural codes for representation and efficient retrieval of medical radiographs. PLoS ONE, 2017, 12, e0181707.	1.1	27
98	Data augmentation-assisted deep learning of hand-drawn partially colored sketches for visual search. PLoS ONE, 2017, 12, e0183838.	1.1	18
99	Visual saliency models for summarization of diagnostic hysteroscopy videos in healthcare systems. SpringerPlus, 2016, 5, 1495.	1.2	35
100	Evaluating the Suitability of Color Spaces for Image Steganography and Its Application in Wireless Capsule Endoscopy. , 2016, , .		7
101	Dempster-Shafer Fusion Based Gender Recognition for Speech Analysis Applications. , 2016, , .		10
102	Basis pursuit denoising-based image superresolution using a redundant set of atoms. Signal, Image and Video Processing, 2016, 10, 181-188.	1.7	10
103	A novel magic LSB substitution method (M-LSB-SM) using multi-level encryption and achromatic component of an image. Multimedia Tools and Applications, 2016, 75, 14867-14893.	2.6	127
104	Dual-Level Security based Cyclic18 Steganographic Method and its Application for Secure Transmission of Keyframes during Wireless Capsule Endoscopy. Journal of Medical Systems, 2016, 40, 114.	2.2	58
105	Multi-scale local structure patterns histogram for describing visual contents in social image retrieval systems. Multimedia Tools and Applications, 2016, 75, 12669-12692.	2.6	23
106	Divide-and-conquer based summarization framework for extracting affective video content. Neurocomputing, 2016, 174, 393-403.	3.5	34
107	Sparse coded image super-resolution using K-SVD trained dictionary based on regularized orthogonal matching pursuit. Bio-Medical Materials and Engineering, 2015, 26, S1399-S1407.	0.4	13
108	SSH: Salient Structures Histogram for Content Based Image Retrieval. , 2015, , .		10

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109	Audio-Visual and EEG-Based Attention Modeling for Extraction of Affective Video Content. , 2015, , .		5
110	Digital image super-resolution using adaptive interpolation based on Gaussian function. Multimedia Tools and Applications, 2015, 74, 8961-8977.	2.6	13
111	Image super-resolution using sparse coding over redundant dictionary based on effective image representations. Journal of Visual Communication and Image Representation, 2015, 26, 50-65.	1.7	25
112	Saliency-directed prioritization of visual data in wireless surveillance networks. Information Fusion, 2015, 24, 16-30.	11.7	86
113	Sparse Representations-Based Super-Resolution of Key-Frames Extracted from Frames-Sequences Generated by a Visual Sensor Network. Sensors, 2014, 14, 3652-3674.	2.1	21
114	Mobile-Cloud Assisted Video Summarization Framework for Efficient Management of Remote Sensing Data Generated by Wireless Capsule Sensors. Sensors, 2014, 14, 17112-17145.	2.1	34
115	Real-Time Strategy Generation System Using Case-Based Reasoning. , 2014, , .		1
116	Feature aggregation based visual attention model for video summarization. Computers and Electrical Engineering, 2014, 40, 993-1005.	3.0	44
117	Adaptive image data hiding using transformation and error replacement. Multimedia Tools and Applications, 2014, 73, 825-840.	2.6	6
118	Multi-kernel based adaptive interpolation for image super-resolution. Multimedia Tools and Applications, 2014, 72, 2063-2085.	2.6	18
119	Video summarization based tele-endoscopy: a service to efficiently manage visual data generated during wireless capsule endoscopy procedure. Journal of Medical Systems, 2014, 38, 109.	2.2	35
120	Feature Reduction and Noise Removal in SURF Framework for Efficient Object Recognition in Images. Lecture Notes in Electrical Engineering, 2013, , 529-535.	0.3	0
121	Prioritization of brain MRI volumes using medical image perception model and tumor region segmentation. Computers in Biology and Medicine, 2013, 43, 1471-1483.	3.9	38
122	Synchronized and efficient communication system based on Agent-Mediator framework for adaptive mixed reality space. , 2013, , .		2
123	Efficient visual attention based framework for extracting key frames from videos. Signal Processing: Image Communication, 2013, 28, 34-44.	1.8	134
124	Automatic Segmentation of Region of Interests in MR Images Using Saliency Information and Active Contours. Lecture Notes in Electrical Engineering, 2013, , 537-544.	0.3	2
125	MRT letter: Visual attention driven framework for hysteroscopy video abstraction. Microscopy Research and Technique, 2013, 76, 559-563.	1.2	11
126	Digital Image Magnification Using Gaussian-Edge Directed Interpolation. Lecture Notes in Electrical Engineering, 2013, , 545-552.	0.3	0

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127	e-Learning System That Provides Personalized Adaptive Contents in Real-Time. <i>Advanced Science Letters</i> , 2013, 19, 2581-2584.	0.2	0
128	Anisotropic Diffusion based Brain MRI Segmentation and 3D Reconstruction. <i>International Journal of Computational Intelligence Systems</i> , 2012, 5, 494.	1.6	21
129	Video summarization using a network of radial basis functions. <i>Multimedia Systems</i> , 2012, 18, 483-497.	3.0	15
130	Generalized parallelization methodology for heterogeneous HPC platforms. , 2012, , .		0
131	Multi-scale Information Maximization Based Visual Attention Modeling for Video Summarization. , 2012, , .		0
132	Detection of 3D perceptual changes in robot navigation using cloud computing. , 2012, , .		3
133	Interactive 3D visualization of social network data using cloud computing. , 2012, , .		0
134	Video Stabilization by Detecting Intentional and Unintentional Camera Motions. , 2012, , .		12
135	Adaptive key frame extraction for video summarization using an aggregation mechanism. <i>Journal of Visual Communication and Image Representation</i> , 2012, 23, 1031-1040.	1.7	149
136	In-Situ Leak Detection of Plasma Processing Chamber Using Neural Network and Optical Emission Spectroscopy. <i>Materials and Manufacturing Processes</i> , 2011, 26, 218-222.	2.7	6
137	Use of Neural Network and Genetic Algorithm to Model Scanning Electron Microscopy for Enhanced Image of Material Surfaces. <i>Materials and Manufacturing Processes</i> , 2011, 26, 382-387.	2.7	6
138	Neural network modeling of inter-characteristics of silicon nitride film deposited by using a plasma-enhanced chemical vapor deposition. <i>Expert Systems With Applications</i> , 2011, 38, 11437-11441.	4.4	6
139	A Study on the Generation of OLAP Data Cube Based on 3D Visualization Interaction. , 2011, , .		2
140	A Cartoon Image Classification System Using MPEG-7 Descriptors. <i>Lecture Notes in Computer Science</i> , 2011, , 368-375.	1.0	0
141	IGC: An Image Genre Classification System. <i>Lecture Notes in Computer Science</i> , 2011, , 360-367.	1.0	3
142	Immersive modeling system (IMMS) for personal electronic products using a multi-modal interface. <i>CAD Computer Aided Design</i> , 2010, 42, 387-401.	1.4	15
143	Texture feature representation in dynamic environments. , 2010, , .		0
144	Distributed Data Mining System Based on Multi-agent Communication Mechanism. <i>Lecture Notes in Computer Science</i> , 2010, , 100-109.	1.0	1

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145	In-Situ Detection of Plasma Processing Equipment Using a V-Mask Control Chart. Materials and Manufacturing Processes, 2009, 24, 1418-1422.	2.7	0
146	Online model modification for adaptive texture recognition in image sequences. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2002, 32, 625-639.	3.4	10
147	Evaluation of Adaptive NN-RBF Classifier Using Gaussian Mixture Density Estimates. Lecture Notes in Computer Science, 2000, , 463-472.	1.0	2