Brejesh Lall

List of Publications by Year
in descending order

101 papers	462 citations	1039880 9 h-index	996849 15 g-index
103 all docs	103 docs citations	103 times ranked	448 citing authors

#	Article	IF	Citations
1	Modeling and prediction of COVID-19 pandemic using Gaussian mixture model. Chaos, Solitons and Fractals, 2020, 138, 110023.	2.5	88
2	Assessing the correlation of genotypic and phenotypic responses of indica rice varieties under drought stress. Plant Physiology and Biochemistry, 2018, 127, 343-354.	2.8	16
3	Learning effective connectivity from fMRI using autoregressive hidden Markov model with missing data. Journal of Neuroscience Methods, 2017, 278, 87-100.	1.3	15
4	Deep Convolutional Neural Networks Based Framework for Estimation of Stomata Density and Structure from Microscopic Images. Lecture Notes in Computer Science, 2019, , 412-423.	1.0	14
5	A Novel Method for Removing Baseline Drifts in Multivariate Chemical Sensor. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7306-7316.	2.4	14
6	Parametric Video Compression Scheme Using AR Based Texture Synthesis. , 2008, , .		13
7	Improving Collaborative Filtering Based Recommenders Using Topic Modelling. , 2014, , .		13
8	ADAADepth: Adapting Data Augmentation and Attention for Self-Supervised Monocular Depth Estimation. IEEE Robotics and Automation Letters, 2021, 6, 7791-7798.	3.3	11
9	Performance analysis of diffusive molecular timing channels. IET Communications, 2019, 13, 3059-3067.	1.5	10
10	Effect of Molecular Noise in Diffusion-Based Molecular Communication. IEEE Wireless Communications Letters, 2014, 3, 489-492.	3.2	9
11	A Novel Hybrid Kinect-Variety-Based High-Quality Multiview Rendering Scheme for Glass-Free 3D Displays. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 2098-2117.	5.6	9
12	The dynamic programming high-order Dynamic Bayesian Networks learning for identifying effective connectivity in human brain from fMRI. Journal of Neuroscience Methods, 2017, 285, 33-44.	1.3	9
13	Angle of Arrival Distribution in an Underwater Acoustic Communication Channel With Incoherent Scattering. IEEE Access, 2020, 8, 133204-133211.	2.6	9
14	DFTNet: Deep Fish Tracker With Attention Mechanism in Unconstrained Marine Environments. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	2.4	9
15	Drought Stress Classification Using 3D Plant Models. , 2017, , .		8
16	Clustering short temporal behaviour sequences for customer segmentation using <scp>LDA</scp>. Expert Systems, 2018, 35, e12250.	2.9	8
17	Extending MOWL for Event Representation (E-MOWL). , 2013, , .		7
18	Automated ball tracking in tennis videos. , 2015, , .		7

#	Article	IF	Citations
19	Analysis of Signals via Non-Maximally Decimated Non-Uniform Filter Banks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3882-3895.	3.5	7
20	Molecular Communication: The First Arrival Position Channel. IEEE Wireless Communications Letters, 2019, 8, 508-511.	3.2	7
21	Riemannian Curvature of Deep Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1410-1416.	7.2	7
22	Design and analysis of matrix Wiener synthesis filter for multirate filter bank. Signal Processing, 2014, 102, 256-264.	2.1	6
23	imPlag: Detecting image plagiarism using hierarchical near duplicate retrieval. , 2015, , .		6
24	Adaptive image compression using saliency and KAZE features. , 2016, , .		6
25	Deep learning based frameworks for image super-resolution and noise-resilient super-resolution. , 2017, , .		6
26	A Noise-Resilient Super-Resolution Framework to Boost OCR Performance. , 2017, , .		6
27	Object Classification using Ensemble of Local and Deep Features. , 2017, , .		6
28	Statistical Modeling and Performance Analysis of Cooperative Communication in Frequency-Selective Underwater Acoustic Channel Using Vector Sensor. IEEE Sensors Journal, 2021, 21, 7367-7379.	2.4	6
29	Nrityantar. , 2018, , .		6
30	FD-OMAC: A Novel Full-Duplex Optical Media Access Control for IEEE 802.15.7. IEEE Access, 2021, 9, 148894-148910.	2.6	6
31	Optic Disc Detection Using Vessel Characteristics and Disc Features. , 2017, , .		5
32	Automatic Quantification of Stomata for High-Throughput Plant Phenotyping. , 2018, , .		5
33	Channel Characterization for Devices in a Turbulent Diffusive Environment: A Mobile Molecular Communication Approach. IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, 2019, 5, 222-232.	1.4	5
34	Video Compression Scheme Using DEMD Based Texture Synthesis. , 2011, , .		4
35	Kinect-Variety Fusion: A Novel Hybrid Approach for Artifacts-Free 3DTV Content Generation. , 2014, , .		4
36	Phenotyping of xylem vessels for drought stress analysis in rice. , 2017, , .		4

#	Article	IF	Citations
37	Capacity of Dual Hop Underwater Acoustic Communication Using Vector Sensors. , 2018, , .		4
38	Estimation of Source Wavelet From Seismic Traces Using Groebner Bases. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6282-6291.	2.7	4
39	Evolving Air Pollution Monitoring Systems for Green 5G: From Cloud to Edge. , 2020, , .		4
40	A Data-Driven Framework for Deploying Sensors in Environment Sensing Application. IEEE Transactions on Industrial Informatics, 2021, 17, 4055-4064.	7.2	4
41	A Recursive Method for Estimating Missing Data in Spatio-Temporal Applications. IEEE Transactions on Industrial Informatics, 2022, 18, 2714-2723.	7.2	4
42	Space-Time Super-Resolution Using Deep Learning Based Framework. Lecture Notes in Computer Science, 2017, , 582-590.	1.0	4
43	Cyclostationary signals in multirate linear systems. , 2010, , .		3
44	Parameterized variety for multi-view multi-exposure image synthesis and high dynamic range stereo reconstruction. , 2012, , .		3
45	Saliency map based image steganography. , 2013, , .		3
46	Ontology driven contextual tagging of multimedia data. , 2014, , .		3
47	Novel methods for Implementation of Efficient Median Filter. , 2017, , .		3
48	Denoising of preâ€stack seismic data using subspace estimation methods. IET Signal Processing, 2018, 12, 992-999.	0.9	3
49	Memorabilityâ€based image compression. IET Image Processing, 2019, 13, 1490-1501.	1.4	3
50	Analysis of Underwater Acoustic Channel based on Angle of Arrival Distribution. , 2020, , .		3
51	Multimodal Sensor Fusion Using Symmetric Skip Autoencoder Via an Adversarial Regulariser. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 1146-1157.	2.3	3
52	A Stochastic Model for Characterizing Fluctuations in Chemical Sensing. IEEE Transactions on Signal Processing, 2021, 69, 1938-1951.	3.2	3
53	Reconsideration of carrier sensing range for wireless ad hoc networks. , 2009, , .		2
54	Issues in the Implementation of General Dual-Rate Systems. , 2009, , .		2

#	Article	IF	Citations
55	Content-aware seamless stereoscopic 3D compositing. , 2014, , .		2
56	Use of leaf colour for drought stress analysis in rice. , 2015, , .		2
57	A real-time ball trajectory follower using Robot Operating System. , 2015, , .		2
58	Analysis of Optimal Carrier Sensing Range in Wireless Ad Hoc Networks with Order Dependent Capture Capability. Wireless Personal Communications, 2015, 81, 445-472.	1.8	2
59	Salient keypoint selection for object representation. , 2016, , .		2
60	Linear in the parameter model for Homomorphic filter: Volterra series based approach. , 2016, , .		2
61	Zero-Shot Normalization Driven Multi-Speaker Text to Speech Synthesis. IEEE/ACM Transactions on Audio Speech and Language Processing, 2022, 30, 1679-1693.	4.0	2
62	IIR deconvolution from noisy observations using Kalman filtering. , 2010, , .		1
63	Mitigation of exposed terminals problem with differential capture capable receivers. , 2010, , .		1
64	Image Analogy Based Document Image Compression. , 2011, , .		1
65	Dynamic texture synthesis for video compression. , 2013, , .		1
66	Matrix adaptive synthesis filter for uniform filter bank. , 2013, , .		1
67	Revisiting distributed transmit power control in ad hoc wireless networks with ODC capability. , 2013, , .		1
68	Detecting and Correlating Video-Based Event Patterns: An Ontology Driven Approach. , 2014, , .		1
69	A novel method for low power hand gesture recognition in smart consumer applications. , 2016, , .		1
70	Characterizing Empirical Mode Decomposition Algorithm Using Signal Processing Techniques. Circuits, Systems, and Signal Processing, 2018, 37, 2969-2996.	1.2	1
71	BER of Dual-Hop Underwater Acoustic Communication Using Vector Sensors. , 2018, , .		1
72	UnDispNet: Unsupervised Learning for Multi-Stage Monocular Depth Prediction. , 2019, , .		1

#	Article	IF	Citations
73	Plants Stress Response Detection by Selecting Minimal Bands of Hyperspectral Images. , 2019, , .		1
74	Extraction of Phenotypic Traits for Drought Stress Study Using Hyperspectral Images. Lecture Notes in Computer Science, 2017, , 608-614.	1.0	1
75	Image Annotation Using Latent Components and Transmedia Association. Lecture Notes in Computer Science, 2017, , 493-500.	1.0	1
76	Statistical Characterization of the Angle of Arrival in an Underwater Channel Due to Scattering From the Sea Surface Modeled as Sum of Sinusoids. IEEE Transactions on Vehicular Technology, 2022, 71, 1562-1574.	3.9	1
77	Projective Fisher Information for Natural Gradient Descent. IEEE Transactions on Artificial Intelligence, 2023, 4, 304-314.	3.4	1
78	Statistical Optimization of FPN Hyperparameters for improved Pedestrian Detection. , 2022, , .		1
79	Generalising the Polyphase Identity. , 2009, , .		0
80	Designing the inverse of an LPTV system using ℋ<inf>∞</inf> optimization. , 2010, , .		0
81	Generalised pseudocirculants: Dual-rate systems, cyclostationary signals. , 2010, , .		0
82	Mixed H$_2$/H$_\infty$ design of non-uniform filter banks using an efficient realisation of synthesis stage. , 2010, , .		0
83	Parametric Video Compression Using Epitome Based Texture Synthesis. , 2011, , .		0
84	A novel variety-based 3DTV content generation scheme for casually captured sparse photo collections. , 2013, , .		0
85	Sparse representation based classifier to assess video quality. , 2015, , .		0
86	Parametric coding of texture in multi-view videos for 3DTV. , 2015, , .		0
87	Linear-in-the-parameter model for an ideal voltage comparator. , 2016, , .		0
88	Incremental Learning of Non-stationary Temporal Causal Networks for Telecommunication Domain. Lecture Notes in Computer Science, 2017, , 501-508.	1.0	0
89	Path Gain Characterization of Shallow Water Acoustic Channel. , 2017, , .		0
90	Time-domain Complexity Analysis of Impulse Noise Sources for xDSL/PLC Systems. , 2018, , .		0

#	Article	IF	Citations
91	Need of Time-domain Pre-processing of Impulse Noises for PLC/xDSL Systems. , 2018, , .		0
92	Joint Image Classification and Annotation Prediction Using Iterative Learning on Local Neighbourhood. , 2018, , .		0
93	Time-varying Spectral Entropy Based Analysis of Impulse Noises. , 2019, , .		0
94	A Novel Solution to Prevent Diesel Pilferage at Telecom Tower Site. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 89-99.	2.4	0
95	A Novel Thresholding Methodology Using WSI EMD and Adaptive Homomorphic Filter. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 590-594.	2.2	0
96	Assessment of Impact of Beamwidth of Directional Antennas on Successful Transmissions in mmWave Adhoc 5G Networks. IETE Journal of Research, 2020, , 1-8.	1.8	0
97	Improved Polynomial Neural Networks with Normalised Activations. , 2020, , .		0
98	Pedestrian Behavior Analytics on Dashcam Videos in Chaotic Environments. IEEE Sensors Journal, 2021, 21, 15660-15669.	2.4	0
99	Theoretical Characterization of Deep Neural Networks. Studies in Computational Intelligence, 2020, , 25-63.	0.7	0
100	Doppler Spectrum for Sea Surface Motion in an Underwater Acoustic Sensor Network. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 2577-2583.	2.6	0
101	On the efficacy of Pedestrian Detection in Indian Road Scenario. , 2022, , .		0