

# Vikrant Bhateja

## List of Publications by Year in descending order

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Version: 2024-02-01

155  
papers

2,596  
citations

331259

21  
h-index

377514

34  
g-index

170  
all docs

170  
docs citations

170  
times ranked

1173  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multimodal Medical Image Sensor Fusion Framework Using Cascade of Wavelet and Contourlet Transform Domains. IEEE Sensors Journal, 2015, 15, 6783-6790.	2.4	156
2	A modified PSNR metric based on HVS for quality assessment of color images. , 2011, , .		79
3	Entropy Index in Quantitative EEG Measurement for Diagnosis Accuracy. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1440-1450.	2.4	70
4	A Robust Polynomial Filtering Framework for Mammographic Image Enhancement From Biomedical Sensors. IEEE Sensors Journal, 2013, 13, 4147-4156.	2.4	61
5	A robust approach for denoising and enhancement of mammographic images contaminated with high density impulse noise. International Journal of Convergence Computing, 2013, 1, 38.	0.2	57
6	Computer Aided Detection of Brain Tumor in Magnetic Resonance Images. International Journal of Engineering and Technology, 2011, 3, 523-532.	0.1	57
7	Medical image fusion with Laplacian Pyramids. , 2014, , .		50
8	Deluge based Genetic Algorithm for feature selection. Evolutionary Intelligence, 2021, 14, 357-367.	2.3	49
9	Speckle suppression in SAR images employing modified anisotropic diffusion filtering in wavelet domain for environment monitoring. Measurement: Journal of the International Measurement Confederation, 2015, 74, 246-254.	2.5	47
10	Medical image fusion using combination of PCA and wavelet analysis. , 2014, , .		41
11	Combination of Wavelet Transform and Morphological Filtering for Enhancement of Magnetic Resonance Images. Communications in Computer and Information Science, 2011, , 460-474.	0.4	41
12	A New Framework for Smartphone Sensor-Based Human Activity Recognition Using Graph Neural Network. IEEE Sensors Journal, 2021, 21, 11461-11468.	2.4	40
13	Human visual system based unsharp masking for enhancement of mammographic images. Journal of Computational Science, 2017, 21, 387-393.	1.5	39
14	Multiple distortion pooling image quality assessment. International Journal of Convergence Computing, 2013, 1, 60.	0.2	38
15	A Composite Wavelets and Morphology Approach for ECG Noise Filtering. Lecture Notes in Computer Science, 2013, , 361-366.	1.0	35
16	A novel framework for edge detection of microcalcifications using a non-linear enhancement operator and morphological filter. , 2011, , .		33
17	Non-linear polynomial filters for edge enhancement of mammogram lesions. Computer Methods and Programs in Biomedicine, 2016, 129, 125-134.	2.6	33
18	Mutidimensional analysis of EEG features using advanced spectral estimates for diagnosis accuracy. , 2013, , .		32

#	ARTICLE	IF	CITATIONS
19	A Polynomial filtering model for enhancement of mammogram lesions. , 2013, , .		31
20	Improvement of masses detection in digital mammograms employing non-linear filtering. , 2013, , .		31
21	A full-reference image quality metric for objective evaluation in spatial domain. , 2011, , .		29
22	A comparative evaluation of various de-speckling algorithms for medical images. , 2012, , .		29
23	Human visual system based optimized mathematical morphology approach for enhancement of brain MR images. Journal of Ambient Intelligence and Humanized Computing, 2024, 15, 799-807.	3.3	29
24	An Improved Mammogram Classification Approach Using Back Propagation Neural Network. Advances in Intelligent Systems and Computing, 2018, , 369-376.	0.5	29
25	Medical Image Fusion in Wavelet and Ridgelet Domains. International Journal of Rough Sets and Data Analysis, 2015, 2, 78-91.	1.0	28
26	A non-iterative adaptive median filter for image denoising. , 2014, , .		27
27	An improved non-linear transformation function for enhancement of mammographic breast masses. , 2011, , .		26
28	Fast SSIM Index for Color Images Employing Reduced-Reference Evaluation. Advances in Intelligent Systems and Computing, 2014, , 451-458.	0.5	26
29	Despeckling of SAR Images via an Improved Anisotropic Diffusion Algorithm. Advances in Intelligent Systems and Computing, 2013, , 747-754.	0.5	26
30	A versatile denoising method for images contaminated with Gaussian noise. , 2012, , .		25
31	An integration of improved median and morphological filtering techniques for electrocardiogram signal processing. , 2013, , .		25
32	Despeckling of SAR images in contourlet domain using a new adaptive thresholding. , 2013, , .		25
33	A Novel Weighted Diffusion Filtering Approach for Speckle Suppression in Ultrasound Images. Advances in Intelligent Systems and Computing, 2014, , 459-466.	0.5	24
34	An Improved Local Statistics Filter for Denoising of SAR Images. Advances in Intelligent Systems and Computing, 2014, , 23-29.	0.5	23
35	Multispectral medical image fusion in Contourlet domain for computer based diagnosis of Alzheimer's disease. Review of Scientific Instruments, 2016, 87, 074303.	0.6	23
36	Optimizing feature selection in video-based recognition using Max-Min Ant System for the online video contextual advertisement user-oriented system. Journal of Computational Science, 2017, 21, 361-370.	1.5	23

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37	A novel approach for suppression of powerline interference and impulse noise in ECG signals. , 2013, , .		22
38	A no-reference image quality index for contrast and Sharpness measurement. , 2013, , .		22
39	Design of New Volterra Filter for Mammogram Enhancement. Advances in Intelligent Systems and Computing, 2013, , 143-151.	0.5	21
40	An improved medical image fusion approach using PCA and complex wavelets. , 2014, , .		21
41	Handwritten Arabic numerals recognition using convolutional neural network. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 5445-5457.	3.3	21
42	MMHAR-EnsemNet: A Multi-Modal Human Activity Recognition Model. IEEE Sensors Journal, 2021, 21, 11569-11576.	2.4	21
43	A Novel Full Reference Image Quality Index for Color Images. Advances in Intelligent and Soft Computing, 2012, , 245-253.	0.2	20
44	Volterra Filter design for edge enhancement of mammogram lesions. , 2013, , .		19
45	COFE-Net: An ensemble strategy for Computer-Aided Detection for COVID-19. Measurement: Journal of the International Measurement Confederation, 2022, 187, 110289.	2.5	19
46	A novel image denoising algorithm for suppressing mixture of speckle and impulse noise in spatial domain. , 2011, , .		18
47	A novel detection and removal scheme for denoising images corrupted with Gaussian outliers. , 2012, , .		18
48	Speckle reduction in ultrasound images using an improved conductance function based on Anisotropic Diffusion. , 2014, , .		18
49	Haralick Features-Based Classification of Mammograms Using SVM. Advances in Intelligent Systems and Computing, 2018, , 787-795.	0.5	18
50	Statistical Wavelets With Harmony Search- Based Optimal Feature Selection of EEG Signals for Motor Imagery Classification. IEEE Sensors Journal, 2021, 21, 14263-14271.	2.4	18
51	A New Unsharp Masking Algorithm for Mammography Using Non-linear Enhancement Function. Advances in Intelligent and Soft Computing, 2012, , 779-786.	0.2	17
52	A Non-Linear Approach to ECG Signal Processing using Morphological Filters. International Journal on Measurement Technologies and Instrumentation Engineering, 2013, 3, 46-59.	0.3	17
53	Bilateral despeckling filter in homogeneity domain for breast ultrasound images. , 2014, , .		17
54	A Modified Speckle Suppression Algorithm for Breast Ultrasound Images Using Directional Filters. Advances in Intelligent Systems and Computing, 2014, , 219-226.	0.5	17

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55	Technical Advancements to Mobile Mammography Using Nonlinear Polynomial Filters and IEEE 21451-1 NCAP Information Model. IEEE Sensors Journal, 2015, 15, 2559-2566.	2.4	17
56	Unsharp masking approaches for HVS based enhancement of mammographic masses: A comparative evaluation. Future Generation Computer Systems, 2018, 82, 176-189.	4.9	17
57	Pre-Processing and Classification of Cough Sounds in Noisy Environment using SVM. , 2019, , .		17
58	Performance Improvement of Decision Median Filter for Suppression of Salt and Pepper Noise. Advances in Intelligent Systems and Computing, 2014, , 287-297.	0.5	17
59	A New Morphological Filtering Algorithm for Pre-Processing of Electrocardiographic Signals. Lecture Notes in Electrical Engineering, 2013, , 193-201.	0.3	17
60	Medical Image Fusion in Curvelet Domain Employing PCA and Maximum Selection Rule. Advances in Intelligent Systems and Computing, 2016, , 1-9.	0.5	17
61	A noise robust edge detector for color images using Hilbert Transform. , 2013, , .		16
62	A histogram based fuzzy ensemble technique for feature selection. Evolutionary Intelligence, 2019, 12, 713-724.	2.3	16
63	Data augmentation for cancer classification in oncogenomics: an improved KNN based approach. Evolutionary Intelligence, 2021, 14, 489-498.	2.3	16
64	A log-ratio based unsharp masking (UM) approach for enhancement of digital mammograms. , 2012, , .		15
65	Non-linear quality evaluation index for mammograms. , 2013, , .		15
66	An improved Directional Weighted Median Filter for restoration of images corrupted with high density impulse noise. , 2014, , .		15
67	An improved Unsharp Masking algorithm for enhancement of mammographic masses. , 2012, , .		14
68	Spatial filtering to detect brain sources from EEG measurements. , 2014, , .		14
69	Improved decision median filter for video sequences corrupted by impulse noise. , 2014, , .		14
70	Novel approaches towards slope and slant correction for tri-script handwritten word images. Imaging Science Journal, 2019, 67, 159-170.	0.2	14
71	Enhancement of Brain MR-T1/T2 Images Using Mathematical Morphology. Advances in Intelligent Systems and Computing, 2020, , 833-840.	0.5	14
72	Mammographic Image Enhancement using Double Sigmoid Transformation Function. , 2010, , .		14

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73	Energy optimization in WSNs employing rolling grey model. , 2014, , .		13
74	A comprehensive handwritten Indic script recognition system: a tree-based approach. Journal of Ambient Intelligence and Humanized Computing, 2024, 15, 943-960.	3.3	13
75	Ant Colony Optimization Based Anisotropic Diffusion Approach for Despeckling of SAR Images. Lecture Notes in Computer Science, 2016, , 389-396.	1.0	13
76	A Reconstruction Based Measure for Assessment of Mammogram Edge-Maps. Advances in Intelligent Systems and Computing, 2013, , 741-746.	0.5	13
77	Restoration Algorithm for Gaussian Corrupted MRI Using Non-local Averaging. Advances in Intelligent Systems and Computing, 2015, , 831-840.	0.5	13
78	Reduced reference IQA based on structural dissimilarity. , 2014, , .		12
79	Identification of Visual Evoked Potentials in EEG detection by empirical mode decomposition. , 2014, , .		12
80	PCA Based Medical Image Fusion in Ridgelet Domain. Advances in Intelligent Systems and Computing, 2015, , 475-482.	0.5	12
81	Combination of PCA and Contourlets for Multispectral Image Fusion. Advances in Intelligent Systems and Computing, 2017, , 577-585.	0.5	12
82	Noise Removal in EEG Signals Using SWT&acircledRICA Combinational Approach. Smart Innovation, Systems and Technologies, 2019, , 217-224.	0.5	12
83	A Novel Color Edge Detection Technique Using Hilbert Transform. Advances in Intelligent Systems and Computing, 2013, , 725-732.	0.5	12
84	ANN-Based Classification of Mammograms Using Nonlinear Preprocessing. Lecture Notes in Electrical Engineering, 2018, , 375-382.	0.3	12
85	A new model for performance evaluation of denoising algorithms based on image quality assessment. , 2012, , .		11
86	A no-reference contrast assessment index based on foreground and background. , 2013, , .		11
87	Despeckling of ultrasound images using non-linear conductance function. , 2014, , .		11
88	Directional order statistics filtering for suppression of salt and pepper noise. , 2014, , .		11
89	Combination of EEMD and Morphological Filtering for Baseline Wander Correction in EMG Signals. Lecture Notes in Electrical Engineering, 2018, , 365-373.	0.3	11
90	AFD-Net: Apple Foliar Disease multi classification using deep learning on plant pathology dataset. Plant and Soil, 2022, 477, 595-611.	1.8	11

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91	A reduced reference distortion estimation measure for color images. , 2014, , .		10
92	Prolonging the lifetime of wireless sensor networks using prediction based data reduction scheme. , 2014, , .		10
93	A New Contrast Measurement Index Based on Logarithmic Image Processing Model. Advances in Intelligent Systems and Computing, 2013, , 715-723.	0.5	10
94	Image similarity metric (ISIM): a reduced reference image quality assessment approach. CSI Transactions on ICT, 2015, 3, 1-11.	0.7	9
95	Weighted-PCA Based Multimodal Medical Image Fusion in Contourlet Domain. Advances in Intelligent Systems and Computing, 2016, , 597-605.	0.5	9
96	Multispectral medical image fusion scheme based on hybrid contourlet and shearlet transform domains. Review of Scientific Instruments, 2018, 89, 084301.	0.6	9
97	Propagation Analysis of COVID-19: An SIR Model-Based Investigation of the Pandemic. Arabian Journal for Science and Engineering, 2021, , 1-13.	1.7	9
98	A Reduced Reference Distortion Measure for Performance Improvement of Smart Cameras. IEEE Sensors Journal, 2015, 15, 2531-2540.	2.4	8
99	Arbitrary oriented multilingual text detection and segmentation using level set and Gaussian mixture model. Evolutionary Intelligence, 2021, 14, 881-894.	2.3	8
100	Skull Stripping of Brain MRI Using Mathematical Morphology. Smart Innovation, Systems and Technologies, 2020, , 775-780.	0.5	8
101	An Efficient Cluster-Based Routing Protocol for WSNs Using Time Series Prediction-Based Data Reduction Scheme. International Journal on Measurement Technologies and Instrumentation Engineering, 2013, 3, 18-34.	0.3	7
102	Combination of Wavelets and Hard Thresholding for Analysis of Cough Signals. , 2018, , .		7
103	Feature Fusion and Classification of EEG/EOG Signals. Advances in Intelligent Systems and Computing, 2019, , 793-799.	0.5	7
104	Non-Linear Filters for Mammogram Enhancement. Studies in Computational Intelligence, 2020, , .	0.7	7
105	An Edge Detection Approach for Images Contaminated with Gaussian and Impulse Noises. Lecture Notes in Electrical Engineering, 2013, , 523-533.	0.3	7
106	An Optimized Anisotropic Diffusion Approach for Despeckling of SAR Images. Communications in Computer and Information Science, 2016, , 134-140.	0.4	6
107	Intelligent Computing in Multidisciplinary Engineering Applications. Arabian Journal for Science and Engineering, 2018, 43, 3861-3862.	1.7	6
108	A Contrast Enhancement Model for X-Ray Mammograms Using Modified Local s-Curve Transformation Based on Multi-Objective Optimization. IEEE Sensors Journal, 2021, 21, 11543-11554.	2.4	6

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109	Two-stage multi-modal MR images fusion method based on Parametric Logarithmic Image Processing (PLIP) Model. Pattern Recognition Letters, 2020, 136, 25-30.	2.6	6
110	A Novel HVS Based Image Contrast Measurement Index. Lecture Notes in Electrical Engineering, 2013, , 545-555.	0.3	6
111	Differential Evolution and Deterministic Chaotic Series: A Detailed Study. Mendel, 2018, 24, .	0.5	6
112	A Novel Cluster Head Selection and Routing Scheme for Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2014, , 403-415.	0.5	5
113	Synthesis of flash and no-flash image pairs using guided image filtering. , 2015, , .		5
114	NSCT based multispectral medical image fusion model. , 2016, , .		5
115	Autoregressive Modeling-Based Feature Extraction of EEG/EOG Signals. Smart Innovation, Systems and Technologies, 2019, , 731-739.	0.5	5
116	Non-local Mean Filter for Suppression of Speckle Noise in Ultrasound Images. Smart Innovation, Systems and Technologies, 2019, , 225-232.	0.5	5
117	Multispectral Medical Image Fusion using PCA in Wavelet Domain. , 2016, , .		4
118	Kuan Modified Anisotropic Diffusion Approach for Speckle Filtering. Advances in Intelligent Systems and Computing, 2017, , 537-545.	0.5	4
119	A parallel max-min ant system algorithm for dynamic resource allocation to support QoS requirements. , 2017, , .		4
120	Visible-Infrared Image Fusion Method Using Anisotropic Diffusion. Advances in Intelligent Systems and Computing, 2018, , 525-532.	0.5	4
121	An ensemble approach for still image-based human action recognition. Neural Computing and Applications, 2022, 34, 19269-19282.	3.2	4
122	Artificial Neural Networks Based Fusion and Classification of EEG/EOG Signals. Advances in Intelligent Systems and Computing, 2019, , 141-148.	0.5	3
123	Enhancement of Retinal Images Using Morphological Filters. Advances in Intelligent Systems and Computing, 2021, , 351-357.	0.5	3
124	On Analysis of Suitable Wavelet Family for Processing of Cough Signals. Advances in Intelligent Systems and Computing, 2020, , 194-200.	0.5	3
125	Speckle Suppression and Enhancement Approaches for Processing of SAR Images: A Technical Review. Smart Innovation, Systems and Technologies, 2020, , 695-703.	0.5	3
126	Discrete Wavelet Transform-Based Fusion of Mammogram Images for Contrast Improvement. Lecture Notes in Electrical Engineering, 2022, , 203-210.	0.3	3



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127	Bilateral Filtering in Wavelet Domain for Synthesis of Flash and No-Flash Image Pairs. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 797-805.	0.5	2
128	An Improved Kuan Algorithm for Despeckling of SAR Images. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 663-672.	0.5	2
129	Suppression of Speckle Noise in Ultrasound Images Using Bilateral Filter. <i>Smart Innovation, Systems and Technologies</i> , 2019, , 735-741.	0.5	2
130	Continuous Wavelets for Pre-processing and Analysis of Cough Signals. <i>Smart Innovation, Systems and Technologies</i> , 2020, , 711-718.	0.5	2
131	An Evaluation of Contrast Enhancement of Brain MR Images Using Morphological Filters. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 571-577.	0.5	2
132	AWGN Suppression Algorithm in EMG Signals Using Ensemble Empirical Mode Decomposition. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 515-524.	0.5	2
133	Multi-exposure Image Fusion Method Using Anisotropic Diffusion. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 893-900.	0.5	2
134	Multi-scale Retinex with Chromacity Preservation (MSRCP)-Based Contrast Enhancement of Microscopy Images. <i>Smart Innovation, Systems and Technologies</i> , 2022, , 313-321.	0.5	2
135	Rayleigh based bilateral filtering for flash and no-flash image pairs. , 2015, , .		1
136	Wavelet-based medical image fusion via a non-linear operator. , 2016, , .		1
137	GSM Based Automated Detection Model for Improvised Explosive Devices. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 673-681.	0.5	1
138	Baseline Correction in EMG Signals Using Mathematical Morphology and Canonical Correlation Analysis. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 581-589.	0.5	1
139	Glaucoma Detection Using Morphological Filters and GLCM Features. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 627-635.	0.5	1
140	Region Labeling Based Brain Tumor Segmentation from MR Images. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 825-831.	0.5	1
141	Improved Non-Linear Polynomial Filters for Contrast Enhancement of Breast Tumors. <i>Smart Innovation, Systems and Technologies</i> , 2016, , 461-468.	0.5	1
142	Non-Linear Polynomial Filters for Contrast Enhancement of Mammograms. <i>Studies in Computational Intelligence</i> , 2020, , 123-162.	0.7	1
143	Non-Linear Enhancement Techniques for Mammograms. <i>Studies in Computational Intelligence</i> , 2020, , 55-62.	0.7	1
144	Enhancement of Synthetic-Aperture Radar (SAR) Images Based on Dynamic Unsharp Masking. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 857-863.	0.5	1

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145	Contrast Enhancement of CT-Scan Images of Lungs Using Morphological Filters. Lecture Notes in Electrical Engineering, 2022, , 241-247.	0.3	1
146	Multi-focus Image Fusion Method Using 2D-Wavelet Analysis and PCA. Smart Innovation, Systems and Technologies, 2018, , 616-623.	0.5	0
147	Localization of Optic Cup-Disc in Retinal Images Using Morphological Filters for Glaucoma Detection. Smart Innovation, Systems and Technologies, 2021, , 817-824.	0.5	0
148	Evolutionary intelligence techniques for humanized computing. Evolutionary Intelligence, 2021, 14, 203-203.	2.3	0
149	Modified Non Linear Diffusion Approach for Multiplicative Noise. Advances in Intelligent Systems and Computing, 2017, , 343-350.	0.5	0
150	Medical Image Fusion in Wavelet and Ridgelet Domains. , 2017, , 711-723.		0
151	Human Visual System Based Unsharp Masking for Enhancement of Mammograms. Studies in Computational Intelligence, 2020, , 199-222.	0.7	0
152	Non-Linear Polynomial Filters for Edge Enhancement of Mammograms. Studies in Computational Intelligence, 2020, , 163-197.	0.7	0
153	Contrast Stretching Techniques for Enhancement of Mammograms. Studies in Computational Intelligence, 2020, , 35-45.	0.7	0
154	Mobile Mammography: Technological Improvements Using Non-Linear Polynomial Filters. Studies in Computational Intelligence, 2020, , 225-231.	0.7	0
155	Segmentation of Microscopy Images Using Guided Filter and Otsu Thresholding. Lecture Notes in Electrical Engineering, 2022, , 233-239.	0.3	0