

Alin M Achim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2865636/publications.pdf>

Version: 2024-02-01

110
papers

2,736
citations

304602

22
h-index

233338

45
g-index

112
all docs

112
docs citations

112
times ranked

2067
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel Bayesian multiscale method for speckle removal in medical ultrasound images. IEEE Transactions on Medical Imaging, 2001, 20, 772-783.	5.4	482
2	SAR image denoising via Bayesian wavelet shrinkage based on heavy-tailed modeling. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 1773-1784.	2.7	329
3	SAR image filtering based on the heavy-tailed Rayleigh model. IEEE Transactions on Image Processing, 2006, 15, 2686-2693.	6.0	149
4	Image denoising using bivariate $\hat{\alpha}$ -stable distributions in the complex wavelet domain. IEEE Signal Processing Letters, 2005, 12, 17-20.	2.1	132
5	Automatic contrast enhancement of low-light images based on local statistics of wavelet coefficients. , 2013, 23, 1856-1866.		123
6	Superpixel-Level CFAR Detectors for Ship Detection in SAR Imagery. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1397-1401.	1.4	112
7	A novel system for robust lane detection and tracking. Signal Processing, 2012, 92, 319-334.	2.1	99
8	Atmospheric Turbulence Mitigation Using Complex Wavelet-Based Fusion. IEEE Transactions on Image Processing, 2013, 22, 2398-2408.	6.0	93
9	Segmentation-Driven Image Fusion Based on Alpha-Stable Modeling of Wavelet Coefficients. IEEE Transactions on Multimedia, 2009, 11, 624-633.	5.2	86
10	Non-Gaussian model-based fusion of noisy images in the wavelet domain. Computer Vision and Image Understanding, 2010, 114, 54-65.	3.0	66
11	Adaptive-weighted bilateral filtering and other pre-processing techniques for optical coherence tomography. Computerized Medical Imaging and Graphics, 2014, 38, 526-539.	3.5	50
12	Compressive sensing for ultrasound RF echoes using α -Stable Distributions. , 2010, 2010, 4304-7.		47
13	Ship Wake Detection in SAR Images via Sparse Regularization. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1665-1677.	2.7	46
14	SVM-based texture classification in Optical Coherence Tomography. , 2013, , .		45
15	Line Detection as an Inverse Problem: Application to Lung Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2017, 36, 2045-2056.	5.4	44
16	The Effect of Pixel-Level Fusion on Object Tracking in Multi-Sensor Surveillance Video. , 2007, , .		39
17	Segmentation of noisy colour images using Cauchy distribution in the complex wavelet domain. IET Image Processing, 2011, 5, 159.	1.4	39
18	Compressive image fusion. , 2008, , .		37

#	ARTICLE	IF	CITATIONS
19	Video Super-Resolution Using Generalized Gaussian Markov Random Fields. IEEE Signal Processing Letters, 2012, 19, 63-66.	2.1	33
20	Undecimated Dual-Tree Complex Wavelet Transforms. Signal Processing: Image Communication, 2015, 35, 61-70.	1.8	33
21	Video Foreground Detection Based on Symmetric Alpha-Stable Mixture Models. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 1133-1138.	5.6	32
22	Dimensionality Reduction of Hyperspectral Images Using Empirical Mode Decompositions and Wavelets. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1821-1830.	2.3	32
23	Unsupervised video anomaly detection using feature clustering. IET Signal Processing, 2012, 6, 521.	0.9	31
24	Dual-tree complex wavelet coefficient magnitude modelling using the bivariate Cauchy-Rayleigh distribution for image denoising. Signal Processing, 2014, 105, 464-472.	2.1	30
25	Contrast Sensitivity of the Wavelet, Dual Tree Complex Wavelet, Curvelet, and Steerable Pyramid Transforms. IEEE Transactions on Image Processing, 2016, 25, 2739-2751.	6.0	26
26	Convergence Guarantees for Non-Convex Optimisation With Cauchy-Based Penalties. IEEE Transactions on Signal Processing, 2020, 68, 6159-6170.	3.2	26
27	Detection of Line Artifacts in Lung Ultrasound Images of COVID-19 Patients Via Nonconvex Regularization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2218-2229.	1.7	25
28	The Undecimated Dual Tree Complex Wavelet Transform and its application to bivariate image denoising using a Cauchy model. , 2012, , .		24
29	On Solving SAR Imaging Inverse Problems Using Nonconvex Regularization With a Cauchy-Based Penalty. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5828-5840.	2.7	23
30	Complex wavelet domain image fusion based on fractional lower order moments. , 2005, , .		21
31	Automated mitosis detection in histopathology based on non-gaussian modeling of complex wavelet coefficients. Neurocomputing, 2017, 237, 291-303.	3.5	17
32	Modeling and SAR imaging of the sea surface: A review of the state-of-the-art with simulations. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 187, 120-140.	4.9	17
33	Atmospheric Turbulence Mitigation for Sequences with Moving Objects Using Recursive Image Fusion. , 2018, , .		16
34	Image fusion via sparse regularization with non-convex penalties. Pattern Recognition Letters, 2020, 131, 355-360.	2.6	16
35	Reconstruction of Ultrasound RF Echoes Modeled as Stable Random Variables. IEEE Transactions on Computational Imaging, 2015, 1, 86-95.	2.6	15
36	River Planform Extraction From High-Resolution SAR Images via Generalized Gamma Distribution Superpixel Classification. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 3942-3955.	2.7	15

#	ARTICLE	IF	CITATIONS
37	Automatic contrast enhancement of low-light images based on local statistics of wavelet coefficients. , 2010, , .		14
38	Retracing in Correlative Light Electron Microscopy. Methods in Cell Biology, 2014, 124, 1-21.	0.5	14
39	Idioventricular low frequency oscillation in QT interval responds univocally to RR confusing kinds of mental stress. Integrative Psychological and Behavioral Science, 1999, 34, 10-18.	0.3	13
40	Robust obstacle detection based on a novel disparity calculation method and G-disparity. Computer Vision and Image Understanding, 2014, 123, 23-40.	3.0	13
41	Bayesian Video Super-Resolution With Heavy-Tailed Prior Models. IEEE Transactions on Circuits and Systems for Video Technology, 2014, 24, 905-914.	5.6	11
42	Automatic B-line detection in paediatric lung ultrasound. , 2016, , .		10
43	Statistical Multiscale Image Segmentation via Alpha-Stable Modeling. , 2007, , .		9
44	Statistical modelling for wavelet-domain image fusion. , 2008, , 119-138.		9
45	Gaze Location Prediction for Broadcast Football Video. IEEE Transactions on Image Processing, 2013, 22, 4918-4929.	6.0	9
46	Joint reconstruction of compressively sensed ultrasound RF echoes by exploiting temporal correlations. , 2013, , .		9
47	Ship Wake Detection in X-band SAR Images Using Sparse GMC Regularization. , 2019, , .		8
48	A Generalized Gaussian Extension to the Rician Distribution for SAR Image Modeling. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	8
49	A Novel Framework for Segmentation of Secretory Granules in Electron Micrographs. Medical Image Analysis, 2014, 18, 411-424.	7.0	7
50	Approximate Message Passing Reconstruction of Quantitative Acoustic Microscopy Images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 327-338.	1.7	7
51	Applied Multi-Dimensional Fusion. Computer Journal, 2007, 50, 646-659.	1.5	6
52	Multiscale Color-Texture Image Segmentation with Adaptive Region Merging. , 2007, , .		6
53	Context enhancement through image fusion: A multiresolution approach based on convolution of cauchy distributions. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	6
54	GMM-based efficient foreground detection with adaptive region update. , 2009, , .		6

#	ARTICLE	IF	CITATIONS
55	Medical image fusion using the convolution of Meridian distributions. , 2010, 2010, 3727-30.		6
56	Reconstruction of compressively sampled ultrasound images using dual prior information. , 2014, , .		6
57	Super-Resolution in Optical Coherence Tomography. , 2018, 2018, 1-4.		6
58	Textural Feature Analysis of Optical Coherence Tomography Phantoms. Electronics (Switzerland), 2022, 11, 669.	1.8	6
59	Statistical Image Fusion with Generalised Gaussian and Alpha-Stable Distributions. , 2007, , .		5
60	Mitigating the effects of atmospheric distortion using DT-CWT fusion. , 2012, , .		5
61	Dimensionality reduction of hyperspectral images with wavelet based Empirical Mode Decomposition. , 2011, , .		4
62	Retinal image registration based on multiscale products and optic disc detection. , 2011, 2011, 6242-5.		4
63	Joint video fusion and super resolution based on Markov random fields. , 2014, , .		4
64	Sparse Bayesian Learning for non-Gaussian sources. , 2015, 45, 2-12.		4
65	Superpixel-guided CFAR detection of ships at sea in SAR imagery. , 2017, , .		4
66	Representation Learning via Cauchy Convolutional Sparse Coding. IEEE Access, 2021, 9, 100447-100459.	2.6	4
67	A novel lane feature extraction algorithm implemented on the TMS320DM6437 DSP platform. , 2009, , .		3
68	Adaptive-weighted bilateral filtering for optical coherence tomography. , 2013, , .		3
69	Medical ultrasound image reconstruction using compressive sampling and l_1 -norm minimization. , 2014, , .		3
70	Recurrence quantification analysis of denoised index returns via alpha-stable modeling of wavelet coefficients: detecting switching volatility regimes. Studies in Nonlinear Dynamics and Econometrics, 2016, 20, .	0.2	3
71	The Effect Of Sea State On Ship Wake Detectability In Simulated Sar Imagery. , 2020, , .		3
72	Detection Of Ship Wakes In Sar Imagery Using Cauchy Regularisation. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
73	Modelling Sea Clutter In Sar Images Using Laplace-Rician Distribution. , 2020, , .		3
74	Bivariate wavelet shrinkage using alpha-stable distributions. , 2005, , .		2
75	Automatic object detection based on adaptive background subtraction using symmetric alpha stable distribution. , 2008, , .		2
76	Exploiting spatial domain and wavelet domain cumulants for fusion of SAR and optical images. , 2010, , .		2
77	Temporal registration for low-quality retinal images of the murine eye. , 2010, 2010, 6272-5.		2
78	Gaze location prediction for broadcast football video using Bayesian integration of low level features and top-down cues. , 2013, , .		2
79	Feature-based registration for correlative light and electron microscopy images. , 2014, , .		2
80	Joint denoising and contrast enhancement for light microscopy image sequences. , 2014, , .		2
81	Superpixel-based statistical anomaly detection for sense and avoid. , 2015, , .		2
82	A novel approach to identifying merging/splitting events in time-lapse microscopy. , 2016, , .		2
83	Multimodal Retinal Image Registration and Fusion Based on Sparse Regularization via a Generalized Minimax-concave Penalty. , 2019, , .		2
84	Exploiting the Dual-Tree Complex Wavelet Transform for Ship Wake Detection in SAR Imagery. , 2021, , .		2
85	Energy Efficient Video Fusion with Heterogeneous CPU-FPGA Devices. , 2016, , .		2
86	Cauchyâ€“Rician Model for Backscattering in Urban SAR Images. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	2
87	Sparse Regularization with a Non-Convex Penalty for SAR Imaging and Autofocusing. Remote Sensing, 2022, 14, 2190.	1.8	2
88	QT & RR variability spots the earliest autonomic deregulation in diabetes. Integrative Psychological and Behavioral Science, 2002, 37, 151-160.	0.3	1
89	Statistical Model-based fusion of noisy multi-band images in the wavelet domain. , 2007, , .		1
90	Active contour based segmentation for insulin granule cores in electron micrographs of beta islet cells. , 2012, 2012, 5339-42.		1

#	ARTICLE	IF	CITATIONS
91	A novel decision fusion approach to improving classification accuracy of hyperspectral images. , 2012, , .		1
92	Curvelet fusion of panchromatic and SAR satellite imagery using fractional lower order moments. , 2013, , .		1
93	Video super-resolution using low rank matrix completion. , 2013, , .		1
94	Reconstruction of compressively sensed ultrasound RF echoes by exploiting non-Gaussianity and temporal structure. , 2015, , .		1
95	RJMCMC-based tracking of vesicles in fluorescence time-lapse microscopy. , 2015, , .		1
96	Super-Resolution OCT Using Sparse Representations and Heavy-Tailed Models. , 2019, 2019, 5585-5588.		1
97	Autoregressive Model-Based Reconstruction of Quantitative Acoustic Maps From RF Signals Sampled at Innovation Rate. IEEE Transactions on Computational Imaging, 2020, 6, 993-1006.	2.6	1
98	Non-Convex Super-Resolution Of Oct Images Via Sparse Representation. , 2021, , .		1
99	Insulin Granule Segmentation in 3-D TEM Beta Cell Tomograms. , 2013, , .		1
100	SAR Speckle Mitigation by Fusing Statistical Information from Spatial and Wavelet Domains. , 2007, , 794-803.		1
101	A Simulation Study to Evaluate the Performance of the Cauchy Proximal Operator in Despeckling SAR Images of the Sea Surface. , 2020, , .		1
102	Comments on "A closed-form nonparametric Bayesian estimator in the wavelet domain of images using an approximate \hat{L} -stable prior". Pattern Recognition Letters, 2007, 28, 1845-1847.	2.6	0
103	Vision-based detection of personal rapid transit guideway. , 2009, , .		0
104	Scalable fusion using a 3D dual tree wavelet transform. , 2011, , .		0
105	Gaze location prediction in broadcast football video. , 2012, , .		0
106	Curvelet domain image fusion of OCT and fundus imagery using convolution of Meridian distributions. , 2013, , .		0
107	Better than "0 recovery via blind identification. , 2015, , .		0
108	Line detection in speckle images using Radon transform and \hat{L} regularization. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
109	Regularisation With a Dictionary of Lines for Medical Ultrasound Image Deconvolution. , 2019, , .		0
110	Correction to "Ship Wake Detection in SAR Images via Sparse Regularization". IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6122-6123.	2.7	0