

Alina Zare

List of Publications by Year in descending order

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134
papers

2,479
citations

304743

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233421

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143
all docs

143
docs citations

143
times ranked

2121
citing authors

#	ARTICLE	IF	CITATIONS
1	Multitarget Multiple-Instance Learning for Hyperspectral Target Detection. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	10
2	Histogram Layers for Texture Analysis. IEEE Transactions on Artificial Intelligence, 2022, 3, 541-552.	4.7	16
3	Learnable Adaptive Cosine Estimator (LACE) for Image Classification. , 2022, , .		1
4	Divergence Regulated Encoder Network for Joint Dimensionality Reduction and Classification. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
5	Evaluation of Postharvest Senescence of Broccoli via Hyperspectral Imaging. Plant Phenomics, 2022, .	5.9	3
6	Cross-layered distributed data-driven framework for enhanced smart grid cyber-physical security. IET Smart Grid, 2022, 5, 398-416.	2.2	6
7	Jointly Optimized Spatial Histogram UNET Architecture (JOSHUA) for Adipose Tissue Segmentation. BME Frontiers, 2022, 2022, .	4.5	2
8	New approach for measuring interconnectivity of fission gas pores in nuclear fuels from 2D micrographs. Journal of Materials Science, 2021, 56, 543-557.	3.7	4
9	A remote sensing derived data set of 100 million individual tree crowns for the National Ecological Observatory Network. ELife, 2021, 10, .	6.0	38
10	State Estimator and Machine Learning Analysis of Residual Differences to Detect and Identify FDI and Parameter Errors in Smart Grids. , 2021, , .		6
11	Geometric attentional dynamic graph convolutional neural networks for point cloud analysis. Neurocomputing, 2021, 432, 300-310.	5.9	32
12	A benchmark dataset for canopy crown detection and delineation in co-registered airborne RGB, LiDAR and hyperspectral imagery from the National Ecological Observation Network. PLoS Computational Biology, 2021, 17, e1009180.	3.2	19
13	A Network Parameter Database False Data Injection Correction Physics-Based Model: A Machine Learning Synthetic Measurement-Based Approach. Applied Sciences (Switzerland), 2021, 11, 8074.	2.5	4
14	Predictive models to identify Holstein cows at risk of metritis and clinical cure and reproductive/productive failure following antimicrobial treatment. Preventive Veterinary Medicine, 2021, 194, 105431.	1.9	5
15	Non-Invasive Heart Rate Estimation From Ballistocardiograms Using Bidirectional LSTM Regression. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 3396-3407.	6.3	8
16	Spectral Variability in Hyperspectral Data Unmixing: A comprehensive review. IEEE Geoscience and Remote Sensing Magazine, 2021, 9, 223-270.	9.6	92
17	The Weakly-Labeled Rand Index. , 2021, , .		1
18	Explainable Systematic Analysis for Synthetic Aperture Sonar Imagery. , 2021, , .		2

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19	RandCrowns: A Quantitative Metric for Imprecisely Labeled Tree Crown Delineation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 11229-11239.	4.9	1
20	Smart FDI Attack Design and Detection with Data Transmutation Framework for Smart Grids. , 2021, , .		1
21	Plants meet machines: Prospects in machine learning for plant biology. Applications in Plant Sciences, 2020, 8, e11371.	2.1	31
22	Hybrid data-driven physics model-based framework for enhanced cyber-physical smart grid security. IET Smart Grid, 2020, 3, 445-453.	2.2	23
23	Super resolution for root imaging. Applications in Plant Sciences, 2020, 8, e11374.	2.1	8
24	Root identification in minirhizotron imagery with multiple instance learning. Machine Vision and Applications, 2020, 31, 1.	2.7	16
25	Overcoming small minirhizotron datasets using transfer learning. Computers and Electronics in Agriculture, 2020, 175, 105466.	7.7	30
26	Cross-site learning in deep learning RGB tree crown detection. Ecological Informatics, 2020, 56, 101061.	5.2	82
27	Multiresolution Multimodal Sensor Fusion for Remote Sensing Data With Label Uncertainty. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2755-2769.	6.3	18
28	Ensemble CorrDet with adaptive statistics for bad data detection. IET Smart Grid, 2020, 3, 572-580.	2.2	17
29	RhizoVision Crown: An Integrated Hardware and Software Platform for Root Crown Phenotyping. Plant Phenomics, 2020, 2020, 3074916.	5.9	74
30	Addressing the Inevitable Imprecision: Multiple Instance Learning for Hyperspectral Image Analysis. Advances in Computer Vision and Pattern Recognition, 2020, , 141-185.	1.3	5
31	Weakly Supervised Minirhizotron Image Segmentation with MIL-CAM. Lecture Notes in Computer Science, 2020, , 433-449.	1.3	7
32	Individual Tree-Crown Detection in RGB Imagery Using Semi-Supervised Deep Learning Neural Networks. Remote Sensing, 2019, 11, 1309.	4.0	155
33	Peanut maturity classification using hyperspectral imagery. Biosystems Engineering, 2019, 188, 165-177.	4.3	23
34	Multiple Instance Choquet Integral with Binary Fuzzy Measures for Remote Sensing Classifier Fusion with Imprecise Labels. , 2019, , .		7
35	Developing Spectral Libraries Using Multiple Target Multiple Instance Adaptive Cosine/Coherence Estimator. , 2019, , .		3
36	Temporal Mapping of Hyperspectral Data. , 2019, , .		2

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37	Multiple Instance Choquet Integral Classifier Fusion and Regression for Remote Sensing Applications. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 2741-2753.	6.3	29
38	Comparison of possibilistic fuzzy local information C-means and possibilistic K-nearest neighbors for synthetic aperture sonar image segmentation. , 2019, , .		5
39	Deep convolutional neural network target classification for underwater synthetic aperture sonar imagery. , 2019, , .		23
40	Hyperspectral tree crown classification using the multiple instance adaptive cosine estimator. PeerJ, 2019, 7, e6405.	2.0	6
41	Investigation of initialization strategies for the Multiple Instance Adaptive Cosine Estimator. , 2019, , .		1
42	Comparison of hand-held WEMI target detection algorithms. , 2019, , .		1
43	Evaluation of image features for discriminating targets from false positives in synthetic aperture sonar imagery. , 2019, , .		2
44	Discriminative Multiple Instance Hyperspectral Target Characterization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 2342-2354.	13.9	52
45	Complex Scene Classification of PoLSAR Imagery Based on a Self-Paced Learning Approach. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 4818-4825.	4.9	2
46	Multiple instance hybrid estimator for hyperspectral target characterization and sub-pixel target detection. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 146, 235-250.	11.1	46
47	A fully learnable context-driven object-based model for mapping land cover using multi-view data from unmanned aircraft systems. Remote Sensing of Environment, 2018, 216, 328-344.	11.0	20
48	Multiple Instance Dictionary Learning for Beat-to-Beat Heart Rate Monitoring From Ballistocardiograms. IEEE Transactions on Biomedical Engineering, 2018, 65, 2634-2648.	4.2	26
49	A fast target detection algorithm for underwater synthetic aperture sonar imagery. , 2018, , .		5
50	Fractal analysis of seafloor textures for target detection in synthetic aperture sonar imagery. , 2018, , .		2
51	Comparison of prescreening algorithms for target detection in synthetic aperture sonar imagery. , 2018, , .		1
52	Possibilistic fuzzy local information C-means with automated feature selection for seafloor segmentation. , 2018, , .		9
53	Quantitative evaluation of superpixel clustering. , 2018, , .		0
54	Sample spacing variations on the feature performance for subsurface object detection using handheld ground penetrating radar. , 2018, , .		0

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55	Multiple-instance learning-based sonar image classification. Proceedings of SPIE, 2017, , .	0.8	3
56	Environmentally-adaptive target recognition for SAS imagery. , 2017, , .		1
57	Aggregation of Choquet integrals in GPR and EMI for handheld platform-based explosive hazard detection. Proceedings of SPIE, 2017, , .	0.8	4
58	Fourier features for explosive hazard detection using a wideband electromagnetic induction sensor. , 2017, , .		1
59	LBP features for hand-held ground penetrating radar. Proceedings of SPIE, 2017, , .	0.8	1
60	Binary fuzzy measures and Choquet integration for multi-source fusion. , 2017, , .		10
61	Hyperspectral unmixing with endmember variability using Partial Membership Latent Dirichlet Allocation. , 2017, , .		6
62	Partial Membership Latent Dirichlet Allocation for Soft Image Segmentation. IEEE Transactions on Image Processing, 2017, 26, 5590-5602.	9.8	35
63	Measures of the Shapley index for learning lower complexity fuzzy integrals. Granular Computing, 2017, 2, 303-319.	8.0	23
64	Map-guided hyperspectral image superpixel segmentation using proportion maps. , 2017, , .		2
65	Genetic programming based Choquet integral for multi-source fusion. , 2017, , .		6
66	Multiple instance hybrid estimator for learning target signatures. , 2017, , .		6
67	Possibilistic fuzzy local information C-Means for sonar image segmentation. , 2017, , .		17
68	Alternating angle minimization based unmixing with endmember variability. , 2016, , .		0
69	Multiple Instance Choquet integral for classifier fusion. , 2016, , .		17
70	Random projection below the JL limit. , 2016, , .		4
71	Partial membership latent Dirichlet allocation for image segmentation. , 2016, , .		2
72	Heart beat characterization from ballistocardiogram signals using extended functions of multiple instances. , 2016, 2016, 756-760.		14

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73	Adaptive coherence estimator (ACE) for explosive hazard detection using wideband electromagnetic induction (WEMI). Proceedings of SPIE, 2016, , .	0.8	10
74	Hyperspectral Unmixing With Endmember Variability via Alternating Angle Minimization. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4983-4993.	6.3	19
75	Buried object detection using handheld WEMI with task-driven extended functions of multiple instances. Proceedings of SPIE, 2016, , .	0.8	0
76	On the use of log-gabor features for subsurface object detection using ground penetrating radar. Proceedings of SPIE, 2016, , .	0.8	4
77	Multiple Instance Dictionary Learning using Functions of Multiple Instances. , 2016, , .		4
78	Instance influence estimation for hyperspectral target signature characterization using extended functions of multiple instances. Proceedings of SPIE, 2016, , .	0.8	2
79	Random projections fuzzy c-means (RPFCM) for big data clustering. , 2015, , .		13
80	Sand Ripple Characterization Using an Extended Synthetic Aperture Sonar Model and Parallel Sampling Method. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5547-5559.	6.3	6
81	Bayesian Fuzzy Clustering. IEEE Transactions on Fuzzy Systems, 2015, 23, 1545-1561.	9.8	53
82	Anomaly detection of subsurface objects using handheld ground-penetrating radar. Proceedings of SPIE, 2015, , .	0.8	2
83	Possibilistic context identification for SAS imagery. , 2015, , .		2
84	Multiple instance dictionary learning for subsurface object detection using handheld EMI. Proceedings of SPIE, 2015, , .	0.8	0
85	Functions of Multiple Instances for Learning Target Signatures. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 4670-4686.	6.3	36
86	Functions of multiple instances for sub-pixel target characterization in hyperspectral imagery. , 2015, , .		0
87	Foreword to the Special Issue on Hyperspectral Image and Signal Processing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1841-1843.	4.9	16
88	A human geospatial predictive analytics framework with application to finding medically underserved areas. , 2014, , .		2
89	Earth Movers Distance-Based Simultaneous Comparison of Hyperspectral Endmembers and Proportions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1910-1921.	4.9	7
90	Endmember Variability in Hyperspectral Analysis: Addressing Spectral Variability During Spectral Unmixing. IEEE Signal Processing Magazine, 2014, 31, 95-104.	5.6	292

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91	Spatial and Spectral Unmixing Using the Beta Compositional Model. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1994-2003.	4.9	63
92	An integrated graph cuts segmentation and piece-wise convex unmixing approach for hyperspectral imaging. , 2014, , .		4
93	Extended Functions of Multiple Instances for target characterization. , 2014, , .		7
94	Sampling Piecewise Convex Unmixing and Endmember Extraction. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 1655-1665.	6.3	44
95	Piecewise Convex Multiple-Model Endmember Detection and Spectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2853-2862.	6.3	44
96	Multi-image texton selection for sonar image seabed co-segmentation. Proceedings of SPIE, 2013, , .	0.8	7
97	Comparing Fuzzy, Probabilistic, and Possibilistic Partitions Using the Earth Mover's Distance. IEEE Transactions on Fuzzy Systems, 2013, 21, 766-775.	9.8	22
98	A framework for computing crowd emotions using agent based modeling. , 2013, , .		6
99	Subpixel target detection in hyperspectral imagery using piece-wise convex spatial-spectral unmixing, possibilistic and fuzzy clustering, and co-registered LiDAR. , 2013, , .		4
100	Algorithms for Multispectral and Hyperspectral Image Analysis. Journal of Electrical and Computer Engineering, 2013, 2013, 1-2.	0.9	6
101	Simultaneous Band-weighting and Spectral Unmixing for Multiple Endmember Sets. , 2013, , .		0
102	WHISPERS 2013: 5th Workshop on Hyperspectral Image and Signal Processing ? Evolution in Remote Sensing [Conference Reports]. IEEE Geoscience and Remote Sensing Magazine, 2013, 1, 50-53.	9.6	0
103	Spectral unmixing using the beta compositional model. , 2013, , .		2
104	Bootstrapping for Piece-Wise Convex Endmember Distribution Detection. , 2012, , .		6
105	Hyperspectral image analysis with piece-wise convex endmember estimation and spectral unmixing. , 2012, , .		2
106	Agent-based rumor spreading models for human geography applications. , 2012, , .		3
107	Endmember extraction using the physics-based multi-mixture pixel model. , 2012, , .		7
108	Spectral Unmixing Cluster Validity Index for Multiple Sets of Endmembers. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1282-1295.	4.9	16

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109	A sparsity promoting bilinear unmixing model. , 2012, , .		13
110	Using physics-based macroscopic and microscopic mixture models for hyperspectral pixel unmixing. Proceedings of SPIE, 2012, , .	0.8	18
111	Multi-Modal Change Detection, Application to the Detection of Flooded Areas: Outcome of the 2009â€”2010 Data Fusion Contest. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 331-342.	4.9	149
112	Directly Measuring Material Proportions Using Hyperspectral Compressive Sensing. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 323-327.	3.1	9
113	Sub-pixel target spectra estimation and detection using functions of multiple instances. , 2011, , .		7
114	Multiclass subpixel target detection using functions of multiple instances. , 2011, , .		1
115	Spatial-spectral unmixing using fuzzy local information. , 2011, , .		16
116	Rebuilding the injured brain: use of MRS in clinical regenerative medicine. Proceedings of SPIE, 2011, , .	0.8	0
117	Piece-wise convex spatial-spectral unmixing of hyperspectral imagery using possibilistic and fuzzy clustering. , 2011, , .		18
118	An Investigation of Likelihoods and Priors for Bayesian Endmember Estimation. , 2011, , .		4
119	Quantifying the benefit of airborne and ground sensor fusion for target detection. Proceedings of SPIE, 2010, , .	0.8	0
120	L1-endmembers: a robust endmember detection and spectral unmixing algorithm. Proceedings of SPIE, 2010, , .	0.8	5
121	PCE: Piecewise Convex Endmember Detection. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2620-2632.	6.3	75
122	Robust Endmember detection using L_1 norm factorization. , 2010, , .		0
123	A comparison of deterministic and probabilistic approaches to endmember representation. , 2010, , .		4
124	Pattern Recognition Using Functions of Multiple Instances. , 2010, , .		10
125	Spatially-smooth piece-wise convex endmember detection. , 2010, , .		13
126	Multiple model endmember detection based on spectral and spatial information. , 2010, , .		7

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127	Context-based endmember detection for hyperspectral imagery. , 2009, , .		5
128	Vegetation Mapping for Landmine Detection Using Long-Wave Hyperspectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 172-178.	6.3	38
129	Hyperspectral Band Selection and Endmember Detection Using Sparsity Promoting Priors. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 256-260.	3.1	82
130	Endmember detection using the Dirichlet process. , 2008, , .		6
131	Sparsity promoting iterated constrained endmember detection with integrated band selection. , 2007, , .		3
132	SPICE: a sparsity promoting iterated constrained endmember extraction algorithm with applications to landmine detection from hyperspectral imagery. , 2007, , .		1
133	Sparsity Promoting Iterated Constrained Endmember Detection in Hyperspectral Imagery. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 446-450.	3.1	135
134	Sensor fusion for airborne landmine detection. , 2006, , .		2