Prashanth Reddy Marpu

List of Publications by Year
in descending order

91 papers	3,316 citations	218677 26 h-index	149698 56 g-index
91 all docs	91 docs citations	91 times ranked	3652 citing authors

#	Article	IF	Citations
1	Generalized Composite Kernel Framework for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4816-4829.	6.3	439
2	Simultaneous extraction of roads and buildings in remote sensing imagery with convolutional neural networks. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 130, 139-149.	11.1	304
3	Linear Versus Nonlinear PCA for the Classification of Hyperspectral Data Based on the Extended Morphological Profiles. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 447-451.	3.1	273
4	Temperature-land cover interactions: The inversion of urban heat island phenomenon in desert city areas. Remote Sensing of Environment, 2013, 130, 136-152.	11.0	184
5	Probability distributions of wind speed in the UAE. Energy Conversion and Management, 2015, 93, 414-434.	9.2	168
6	Semisupervised Self-Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4032-4044.	6.3	164
7	Classification of Remote Sensing Optical and LiDAR Data Using Extended Attribute Profiles. IEEE Journal on Selected Topics in Signal Processing, 2012, 6, 856-865.	10.8	139
8	Hierarchical graph-based segmentation for extracting road networks from high-resolution satellite images. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 126, 245-260.	11.1	113
9	Automatic Generation of Standard Deviation Attribute Profiles for Spectralâ€"Spatial Classification of Remote Sensing Data. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 293-297.	3.1	106
10	A Novel Technique for Optimal Feature Selection in Attribute Profiles Based on Genetic Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3514-3528.	6.3	105
11	Evolution of the rainfall regime in the United Arab Emirates. Journal of Hydrology, 2014, 514, 258-270.	5.4	101
12	Experimental investigation and artificial neural networks ANNs modeling of electrically-enhanced membrane bioreactor for wastewater treatment. Journal of Water Process Engineering, 2016, 11, 88-97.	5.6	95
13	Spectralâ€"Spatial Classification of Multispectral Images Using Kernel Feature Space Representation. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 288-292.	3.1	65
14	Urban climate modifications in hot desert cities: The role of land cover, local climate, and seasonality. Geophysical Research Letters, 2015, 42, 9980-9989.	4.0	61
15	Artificial neural network based model for retrieval of the direct normal, diffuse horizontal and global horizontal irradiances using SEVIRI images. Solar Energy, 2013, 89, 1-16.	6.1	59
16	Improving Change Detection Results of IR-MAD by Eliminating Strong Changes. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 799-803.	3.1	54
17	Classification of hyperspectral data using extended attribute profiles based on supervised and unsupervised feature extraction techniques. International Journal of Image and Data Fusion, 2012, 3, 269-298.	1.7	54
18	Capital cost estimation of RO plants: GCC countries versus southern Europe. Desalination, 2014, 347, 103-111.	8.2	48

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19	Automatic extraction of faults and fractal analysis from remote sensing data. Nonlinear Processes in Geophysics, 2007, 14, 131-138.	1.3	46
20	Validation of UWG and ENVI-Met Models in an Abu Dhabi District, Based on Site Measurements. Sustainability, 2019, 11, 4378.	3.2	44
21	Improved classification of drainage networks using junction angles and secondary tributary lengths. Geomorphology, 2015, 239, 41-47.	2.6	39
22	Longâ€term projections of temperature, precipitation and soil moisture using nonâ€stationary oscillation processes over the <scp>UAE</scp> region. International Journal of Climatology, 2015, 35, 4606-4618.	3.5	37
23	River basin salinization as a form of aridity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17635-17642.	7.1	33
24	Investigation of aerosol optical, physical, and radiative characteristics of a severe dust storm observed over UAE. Remote Sensing of Environment, 2015, 169, 404-417.	11.0	32
25	Ground subsidence monitoring with SAR interferometry techniques in the rural area of Al Wagan, UAE. Remote Sensing of Environment, 2018, 216, 276-288.	11.0	32
26	Mapping of the Solar Irradiance in the UAE Using Advanced Artificial Neural Network Ensemble. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3668-3680.	4.9	30
27	Object-based classification with features extracted by a semi-automatic feature extraction algorithm â€“ SEaTH. Geocarto International, 2011, 26, 211-226.	3.5	26
28	Regional frequency analysis at ungauged sites using a two-stage resampling generalized ensemble framework. Advances in Water Resources, 2015, 84, 103-111.	3.8	25
29	Water Budget Analysis in Arid Regions, Application to the United Arab Emirates. Water (Switzerland), 2016, 8, 415.	2.7	22
30	Toward a Near Real-Time Product of Air Temperature Maps from Satellite Data and <i>In Situ</i> Measurements in Arid Environments. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3093-3104.	4.9	19
31	The Generalized Additive Model for the Assessment of the Direct, Diffuse, and Global Solar Irradiances Using SEVIRI Images, With Application to the UAE. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1553-1566.	4.9	19
32	Impact of river network type on the time of concentration. Arabian Journal of Geosciences, 2017, 10, 1.	1.3	19
33	Estimation of the traffic related anthropogenic heat release using BTEX measurements â€“ A case study in Abu Dhabi. Urban Climate, 2018, 24, 311-325.	5.7	19
34	Towards Automatic Extraction and Updating of VGI-Based Road Networks Using Deep Learning. Remote Sensing, 2019, 11, 1012.	4.0	18
35	MeznSatâ€”A 3U CubeSat for Monitoring Greenhouse Gases Using Short Wave Infra-Red Spectrometry: Mission Concept and Analysis. Aerospace, 2019, 6, 118.	2.2	17
36	Hyperspectral data classification using an ensemble of class-dependent neural networks. , 2009, , .		15

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37	Validation of Thermal Models for Photovoltaic Cells under Hot Desert Climates. Energy Procedia, 2014, 57, 136-143.	1.8	14
38	Hyperspectral Data Dimensionality Reduction and the Impact of Multi-seasonal Hyperion EO-1 Imagery on Classification Accuracies of Tropical Forest Species. Photogrammetric Engineering and Remote Sensing, 2014, 80, 773-784.	0.6	14
39	A Study of Local Climate Zones in Abu Dhabi with Urban Weather Stations and Numerical Simulations. Sustainability, 2020, 12, 156.	3.2	14
40	Discrimination of peatlands in tropical swamp forests using dual-polarimetric SAR and Landsat ETM data. International Journal of Image and Data Fusion, 2010, 1, 257-270.	1.7	12
41	An Automatic Cognitive Graph-Based Segmentation for Detection of Blood Vessels in Retinal Images. Mathematical Problems in Engineering, 2016, 2016, 1-15.	1.1	12
42	Spectral-spatial classification of polarimetric SAR data using morphological attribute profiles. Proceedings of SPIE, 2011, , .	0.8	11
43	Segmentation based traversing-agent approach for road width extraction from satellite images using volunteered geographic information. Applied Computing and Informatics, 2021, 17, 131-152.	5.9	11
44	Diversity-driven ANN-based ensemble framework for seasonal low-flow analysis at ungauged sites. Advances in Water Resources, 2021, 147, 103814.	3.8	11
45	Hyperspectral imaging based kinetic approach to assess quality deterioration in fresh mushrooms (Agaricus bisporus) during postharvest storage. Food Control, 2022, 131, 108298.	5.5	11
46	Hyperspectral change detection using IR-MAD and feature reduction. , 2011, , .		10
47	A Review of Requirements for Gamma Radiation Detection in Space Using CubeSats. Applied Sciences (Switzerland), 2021, 11, 2659.	2.5	10
48	Change detection using remote sensing in a reef environment of the UAE during the extreme event of El NiÃ±o 2015â€"2016. International Journal of Remote Sensing, 2018, 39, 6358-6382.	2.9	9
49	Classification using Extended Morphological Attribute Profiles based on different feature extraction techniques. , 2011, , .		8
50	Design of sensor network for urban micro-climate monitoring. , 2015, , .		8
51	A Complete Mission Concept Design and Analysis of the Student-Led CubeSat Project: Light-1. Aerospace, 2021, 8, 247.	2.2	8
52	Unsupervised change detection analysis to multi-channel scenario based on morphological contextual analysis. , 2016, , .		7
53	Estimation of Urban Air Temperature From a Rural Station Using Remotely Sensed Thermal Infrared Data. Energy Procedia, 2017, 143, 519-525.	1.8	7
54	Inferring Species Diversity and Variability over Climatic Gradient with Spectral Diversity Metrics. Remote Sensing, 2020, 12, 2130.	4.0	7

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55	Change detection using the object features. , 2007, , .		6
56	Spectral unmixing of multispectral satellite images with dimensionality expansion using morphological profiles. , 2012, , .		6
57	A novel supervised feature selection technique based on genetic algorithms. , 2012, , .		6
58	Coral Reefs of Abu Dhabi, United Arab Emirates: Analysis of Management Approaches in Light of International Best Practices and a Changing Climate. Frontiers in Marine Science, 2020, 7, .	2.5	6
59	On the Value of River Network Information in Regional Frequency Analysis. Journal of Hydrometeorology, 2021, 22, 201-216.	1.9	6
60	Characterization of Local Climate Zones Using ENVI-met and Site Data in the City of Al-Ain, UAE. International Journal of Sustainable Development and Planning, 2020, 15, 751-760.	0.7	6
61	Hyperspectral change detection with IR-MAD and initial change mask. , 2011, , .		5
62	A Highly Modular Software Framework for Reducing Software Development Time of Nanosatellites. IEEE Access, 2021, 9, 107791-107803.	4.2	5
63	Automatic Generation of Seamless Mosaics Using Invariant Features. Remote Sensing, 2021, 13, 3094.	4.0	5
64	Extended morphological profiles using auto-associative neural networks for hyperspectral data classification. , 2011, , .		4
65	Object-based fusion of hyperspectral and LiDAR data for classification of urban areas. , 2015, , .		4
66	Parallel Implementation of Polarimetric Synthetic Aperture Radar Data Processing for Unsupervised Classification Using the Complex Wishart Classifier. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 5376-5387.	4.9	4
67	Corals & benthic habitat mapping using DubaiSat-2: a spectral-spatial approach applied to Dalma Island, UAE (Arabian Gulf). Remote Sensing Letters, 2016, 7, 781-789.	1.4	4
68	Continuous Mapping and Monitoring Framework for Habitat Analysis in the United Arab Emirates. Proceedings (mdpi), 2018, 2, .	0.2	4
69	Unsupervised image segmentation by identifying natural clusters. , 2007, , .		3
70	Soft Classification and Assessment of Kalman Filter Neural Network for Complex Landcover of Tropical Rainforests. , 2008, , .		3
71	Object-based classification with features extracted by a semi-automatic feature extraction algorithm â€" SEaTH. Geocarto International, 2011, 26, 413-413.	3.5	3
72	Fusion of hyperspectral and lidar data using morphological attribute profiles. , 2011, , .		3

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73	Comparison of ITPCA and IRMAD for automatic change detection using initial change mask. , 2012, , .		3
74	Change Detection and Transfer Learning Approach for Updating the Habitat Maps in UAE. , 2019, , .		3
75	Object-based change detection and classification. , 2009, , .		2
76	Change detection using iteratively reweighted regression with neural networks. , 2010, , .		2
77	Comparison of advanced neural network architectures for hyperspectral data classification. , 2010, , .		2
78	Multi-sensor based approach for detection of oil pollution in the Arabian Gulf and the Sea of Oman. , 2015, , .		2
79	Studying coral reef patterns in UAE waters using panel data analysis and multinomial logit and probit models. Ecological Indicators, 2020, 112, 106050.	6.3	2
80	Effect of finite element model details in structural analysis of CubeSats. CEAS Space Journal, 2021, 13, 231-246.	2.3	2
81	Extraction of urban multi-class from high-resolution images using pyramid generative adversarial networks. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102379.	2.8	2
82	Real-time retrieval of dust emissions over the UAE desert from seviri thermal bands. , 2013, , .		1
83	Object based image analysis for the classification of the growth stages of Avocado crop, in Michoacán State, Mexico. , 2014, , .		1
84	In-situ sensor network for microclimate and urban energy modeling and validation. , 2016, , .		1
85	Development of a Metal-to-Metal Mid-Field Shock Test Procedure for Nanosatellites. IEEE Journal on Miniaturization for Air and Space Systems, 2020, 1, 103-109.	2.7	1
86	Mission Operations and Science Plan for the MeznSat CubeSat Mission for Greenhouse Gases Monitoring. , 2020, , .		1
87	Treaty monitoring from space: satellite imagery analysis for verifying treaty compliance. , 2009, , .		0
88	Efficient parallel implementation of polarimetric synthetic aperture radar data processing. Proceedings of SPIE, 2014, , .	0.8	0
89	The IEEE United Arab Emirates Section Chapter Is Gearing Up to Support the National Space Program [Chapters]. IEEE Geoscience and Remote Sensing Magazine, 2017, 5, 74-75.	9.6	0
90	Towards Generating the Habitat Maps for UAE using a Transfer Learning Approach. , 2020, , .		0

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91	Generation of Detailed Classification Maps using High-Resolution Satellite Images At Country-wide Scale. , 2021, , .		0