Farid Melgani

List of Publications by Year
in descending order

127 papers	5,420 citations	109137 35 h-index	88477 70 g-index
127 all docs	127 docs citations	127 times ranked	5602 citing authors

#	Article	IF	Citations
1	A Novel SVM-Based Decoder for Remote Sensing Image Captioning. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	2.7	22
2	New fusion frameworks including explicit weighting functions for the remaining useful life prognostics. Expert Systems With Applications, 2022, 189, 116091.	4.4	2
3	COVID-19 Detection in CT/X-ray Imagery Using Vision Transformers. Journal of Personalized Medicine, 2022, 12, 310.	1.1	25
4	Improving Text Encoding for Retro-Remote Sensing. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 622-626.	1.4	7
5	Point-Based Weakly Supervised Learning for Object Detection in High Spatial Resolution Remote Sensing Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 5361-5371.	2.3	12
6	Genetic robust kernel sample selection for chemometric data analysis. Journal of Chemometrics, 2021, 35, e3344.	0.7	0
7	Sar compressed sensing based on Gaussian process regression. International Journal of Remote Sensing, 2021, 42, 5648-5679.	1.3	0
8	A deep neural network approach to QRS detection using autoencoders. Expert Systems With Applications, 2021, 184, 115528.	4.4	17
9	An Active Learning Strategy for SVM-Based Captioning. , 2021, , .		3
10	Captioning Changes in Bi-Temporal Remote Sensing Images. , 2021, , .		8
11	Unsupervised Spectralâ€“Spatial Feature Extraction With Generalized Autoencoder for Hyperspectral Imagery. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 469-473.	1.4	9
12	Feature selection algorithm based on PDF/PMF area difference. Biomedical Signal Processing and Control, 2020, 57, 101681.	3.5	3
13	Vision System for Automatic On-Tree Kiwifruit Counting and Yield Estimation. Sensors, 2020, 20, 4214.	2.1	23
14	Change Detection in Unlabeled Optical Remote Sensing Data Using Siamese CNN. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4178-4187.	2.3	7
15	Toward Remote Sensing Image Retrieval Under a Deep Image Captioning Perspective. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4462-4475.	2.3	45
16	Retro-Remote Sensing With Doc2Vec Encoding. , 2020, , .		3
17	A New CNN-RNN Framework For Remote Sensing Image Captioning. , 2020, , .		28
18	Sar Compressed Sensing Based On Gaussian Process Regression. , 2020, , .		0

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19	Deep Learning Approach For Post-Flood Soil Deformation Mapping Using Insar Data. , 2020, , .		3
20	New fusion and selection approaches for estimating the remaining useful life using Gaussian process regression and induced ordered weighted averaging operators. Quality and Reliability Engineering International, 2020, 36, 2146-2169.	1.4	5
21	CSVM Architectures for Pixel-Wise Object Detection in High-Resolution Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6059-6070.	2.7	6
22	GPR B scan image analysis with deep learning methods. Measurement: Journal of the International Measurement Confederation, 2020, 165, 107770.	2.5	42
23	Capsule Networks for Object Detection in UAV Imagery. Remote Sensing, 2019, 11, 1694.	1.8	17
24	Domain Adversarial Neural Networks for Large-Scale Land Cover Classification. Remote Sensing, 2019, 11, 1153.	1.8	19
25	Towards Automatic Extraction and Updating of VGI-Based Road Networks Using Deep Learning. Remote Sensing, 2019, 11, 1012.	1.8	18
26	Retro-Remote Sensing: Generating Images From Ancient Texts. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 950-960.	2.3	15
27	High-Coverage Satellite-Based Coastal Bathymetrythrough a Fusion of Physical and Learning Methods. Remote Sensing, 2019, 11, 376.	1.8	18
28	Semisupervised Two-Level Fusion-Based Autoencoded Approach for Low-Cost Domain Adaptation of Remotely Sensed Images. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1041-1045.	1.4	5
29	Scene Description for Visually Impaired People with Multi-Label Convolutional SVM Networks. Applied Sciences (Switzerland), 2019, 9, 5062.	1.3	10
30	Multi-Scale Convolutional SVM Networks for Multi-Class Classification Problems of Remote Sensing Images. , 2019, , .		4
31	Towards Generating Remote Sensing Images of the Far Past. , 2019, , .		0
32	Retrieving Images with Generated Textual Descriptions. , 2019, , .		8
33	Fully Convolutional SVM for Car Detection In Uav Imagery. , 2019, , .		6
34	Computer vision-based phenotyping for improvement of plant productivity: a machine learning perspective. GigaScience, 2019, 8, .	3.3	99
35	Rainfall retrieval and drought monitoring skill of satellite rainfall estimates in the Ethiopian Rift Valley Lakes Basin. Journal of Applied Remote Sensing, 2019, 13, 1.	0.6	12
36	Reconstructing Cloud-Contaminated Multispectral Images With Contextualized Autoencoder Neural Networks. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 2270-2282.	2.7	29

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37	Convolutional SVM Networks for Object Detection in UAV Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3107-3118.	2.7	102
38	Multilabel Conditional Random Field Classification for UAV Images. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 399-403.	1.4	20
39	Oneâ€dimensional convolutional neural networks for spectroscopic signal regression. Journal of Chemometrics, 2018, 32, e2977.	0.7	137
40	An Adversarial Approach to Cross-Sensor Hyperspectral Data Classification. , 2018, , .		4
41	Gan-Based Domain Adaptation for Object Classification. , 2018, , .		9
42	Spatial and Structured SVM for Multilabel Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2018, , 1-13.	2.7	31
43	Fast indoor scene description for blind people with multiresolution random projections. Journal of Visual Communication and Image Representation, 2017, 44, 95-105.	1.7	13
44	Multilabeling UAV images with Autoencoder networks. , 2017, , .		2
45	Domain Adaptation Network for Cross-Scene Classification. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4441-4456.	2.7	127
46	A Deep Learning Approach to UAV Image Multilabeling. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 694-698.	1.4	75
47	A Convolutional Neural Network Approach for Assisting Avalanche Search and Rescue Operations with UAV Imagery. Remote Sensing, 2017, 9, 100.	1.8	164
48	Real-Time Indoor Scene Description for the Visually Impaired Using Autoencoder Fusion Strategies with Visible Cameras. Sensors, 2017, 17, 2641.	2.1	12
49	Leaf Wetness Evaluation Using Artificial Neural Network for Improving Apple Scab Fight. Environments - MDPI, 2017, 4, 42.	1.5	12
50	Autoencoding approach to the cloud removal problem. , 2017, , .		0
51	Using convolutional features and a sparse autoencoder for land-use scene classification. International Journal of Remote Sensing, 2016, 37, 2149-2167.	1.3	141
52	Wave Period and Coastal Bathymetry Using Wave Propagation on Optical Images. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6307-6319.	2.7	19
53	Adaptive wave tracing for coastal bathymetry estimation. , 2016, , .		0
54	Convolutional neural networks for near real-time object detection from UAV imagery in avalanche search and rescue operations. , 2016, , .		34

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55	Multilabel classification of UAV images with Convolutional Neural Networks. , 2016, , .		5
56	Deep learning approach for active classification of electrocardiogram signals. Information Sciences, 2016, 345, 340-354.	4.0	467
57	Recovering the sight to blind people in indoor environments with smart technologies. Expert Systems With Applications, 2016, 46, 129-138.	4.4	65
58	Sparse modeling of the land use classification problem. , 2015, , .		0
59	A fast screening method for detecting cars in UAV images over urban areas. , 2015, , .		0
60	LBP-based multiclass classification method for UAV imagery. , 2015, , .		4
61	A Compressive Sensing Approach to Describe Indoor Scenes for Blind People. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 1246-1257.	5.6	34
62	Land-Cover Classification of Remotely Sensed Images Using Compressive Sensing Having Severe Scarcity of Labeled Patterns. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1257-1261.	1.4	17
63	A fast object detector based on high-order gradients and Gaussian process regression for UAV images. International Journal of Remote Sensing, 2015, 36, 2713-2733.	1.3	28
64	Classification of AAMI heartbeat classes with an interactive ELM ensemble learning approach. Biomedical Signal Processing and Control, 2015, 19, 56-67.	3.5	18
65	Land-Use Classification With Compressive Sensing Multifeature Fusion. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 2155-2159.	1.4	71
66	Spatial contextual Gaussian process learning for remote-sensing image classification. Remote Sensing Letters, 2015, 6, 519-528.	0.6	4
67	Multiclass Coarse Analysis for UAV Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6394-6406.	2.7	26
68	Genetic algorithm-based method for mitigating label noise issue in ECG signal classification. Biomedical Signal Processing and Control, 2015, 19, 130-136.	3.5	33
69	Toward an assisted indoor scene perception for blind people with image multilabeling strategies. Expert Systems With Applications, 2015, 42, 2907-2918.	4.4	18
70	Fusion of Extreme Learning Machine and Graph-Based Optimization Methods for Active Classification of Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 527-531.	1.4	54
71	Efficient Framework for Palm Tree Detection in UAV Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4692-4703.	2.3	87
72	Geometric model for vision-based door detection. , 2014, , .		7

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73	Car speed estimation method for UAV images. , 2014, , .		8
74	Detection of premature ventricular contraction arrhythmias in electrocardiogram signals with kernel methods. Signal, Image and Video Processing, 2014, 8, 931-942.	1.7	43
75	Large-Scale Image Classification Using Active Learning. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 259-263.	1.4	32
76	Automatic Car Counting Method for Unmanned Aerial Vehicle Images. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1635-1647.	2.7	160
77	Detecting Cars in UAV Images With a Catalog-Based Approach. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6356-6367.	2.7	153
78	SVM Active Learning Approach for Image Classification Using Spatial Information. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2217-2233.	2.7	128
79	Robust Estimation of Water Chlorophyll Concentrations With Gaussian Process Regression and IOWA Aggregation Operators. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3019-3028.	2.3	21
80	Differential Evolution Extreme Learning Machine for the Classification of Hyperspectral Images. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1066-1070.	1.4	126
81	Missing-Area Reconstruction in Multispectral Images Under a Compressive Sensing Perspective. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3998-4008.	2.7	74
82	Optical Image Classification: A Ground-Truth Design Framework. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3580-3597.	2.7	13
83	Design of a multiblock general regression neural network for wind speed prediction in Algeria. , 2013, , .		0
84	Swarm Optimization of Structuring Elements for VHR Image Classification. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1334-1338.	1.4	21
85	Using OWA Fusion Operators for the Classification of Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 602-614.	2.3	12
86	Support vector regression with kernel combination for missing data reconstruction. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 367-371.	1.4	15
87	An object detection technique for very high resolution remote sensing images. , 2013, , .		2
88	Comparison of different feature detectors and descriptors for car classification in UAV images. , 2013, , .		4
89	Contextual genetic algorithm for compressive sensing reconstruction of VHR images. , 2013, , .		3
90	A novel fusion approach based on induced ordered weighted averaging operators for chemometric data analysis. Journal of Chemometrics, 2013, 27, 447-456.	0.7	16

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91	An approach for classifying large scale images. , 2012, , .		1
92	Orthogonal matching pursuit for VHR image reconstruction. , 2012, , .		2
93	A wavelet optimization approach for ECG signal classification. Biomedical Signal Processing and Control, 2012, 7, 342-349.	3.5	154
94	Fusion of supervised and unsupervised learning for improved classification of hyperspectral images. Information Sciences, 2012, 217, 39-55.	4.0	69
95	Improved Estimation of Water Chlorophyll Concentration With Semisupervised Gaussian Process Regression. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 2733-2743.	2.7	28
96	A Complete Processing Chain for Shadow Detection and Reconstruction in VHR Images. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 3440-3452.	2.7	61
97	Local SVM approaches for fast and accurate classification of remote-sensing images. International Journal of Remote Sensing, 2012, 33, 6186-6201.	1.3	10
98	Some criteria to assess the reconstructability of shadow areas. , 2012, , .		0
99	A SIFT-SVM method for detecting cars in UAV images. , 2012, , .		43
100	Active Learning Methods for Biophysical Parameter Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4071-4084.	2.7	32
101	Active learning for spectroscopic data regression. Journal of Chemometrics, 2012, 26, 374-383.	0.7	28
102	A robust regression approach for spectrophotometric signal analysis. Journal of Chemometrics, 2012, 26, 400-405.	0.7	5
103	Support Vector Machine Active Learning Through Significance Space Construction. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 431-435.	1.4	58
104	Inpainting Strategies for Reconstruction of Missing Data in VHR Images. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 914-918.	1.4	77
105	Ground-truth assisted design for remote sensing image classification. , 2011, , .		0
106	Improving active learning methods using spatial information. , 2011, , .		7
107	Multiresolution inpainting for reconstruction of missing data in VHR images. , 2011, , .		4
108	Gaussian process regression within an active learning scheme. , 2011, , .		15

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109	Unsupervised Change Detection in Multispectral Remotely Sensed Imagery With Level Set Methods. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3178-3187.	2.7	146
110	Active Learning Methods for Electrocardiographic Signal Classification. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 1405-1416.	3.6	67
111	Gaussian Process Approach to Buried Object Size Estimation in GPR Images. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 141-145.	1.4	25
112	Gaussian Process Regression for Estimating Chlorophyll Concentration in Subsurface Waters From Remote Sensing Data. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 464-468.	1.4	110
113	Model-based active learning for SVM classification of remote sensing images. , 2010, , .		3
114	Gaussian Process Approach to Remote Sensing Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 186-197.	2.7	114
115	A pattern recognition system for extracting buried object characteristics in GPR images. , 2009, , .		6
116	Optimizing wavelets for hyperspectral image classification. , 2009, , .		2
117	A Multiobjective Genetic SVM Approach for Classification Problems With Limited Training Samples. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 1707-1718.	2.7	67
118	Swarm Intelligence Approach to Wavelet Design for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 825-829.	1.4	17
119	Automatic Ground-Truth Validation With Genetic Algorithms for Multispectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2172-2181.	2.7	15
120	Automatic Analysis of GPR Images: A Pattern-Recognition Approach. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2206-2217.	2.7	194
121	A genetic expectation-maximization method for unsupervised change detection in multitemporal SAR imagery. International Journal of Remote Sensing, 2009, 30, 6591-6610.	1.3	34
122	Nearest Neighbor Classification of Remote Sensing Images With the Maximal Margin Principle. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1804-1811.	2.7	216
123	Classification of Electrocardiogram Signals With Support Vector Machines and Particle Swarm Optimization. IEEE Transactions on Information Technology in Biomedicine, 2008, 12, 667-677.	3.6	421
124	Contextual Spatiospectral Postreconstruction of Cloud-Contaminated Images. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 204-208.	1.4	51
125	Automatic Detection and Classification of Buried Objects in GPR Images Using Genetic Algorithms and Support Vector Machines. , 2008, , .		20
126	Genetic SVM Approach to Semisupervised Multitemporal Classification. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 212-216.	1.4	39

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127	Semisupervised PSO-SVM Regression for Biophysical Parameter Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1887-1895.	2.7	78