Antonio J Plaza

List of Publications by Year
in descending order

603 papers	34,352 citations	5574 82 h-index	4432 172 g-index
614 all docs	614 docs citations	614 times ranked	13647 citing authors

#	Article	IF	Citations
1	Hyperspectral Unmixing Overview: Geometrical, Statistical, and Sparse Regression-Based Approaches. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 354-379.	4.9	2,181
2	Hyperspectral Remote Sensing Data Analysis and Future Challenges. IEEE Geoscience and Remote Sensing Magazine, 2013, 1, 6-36.	9.6	1,508
3	Recent advances in techniques for hyperspectral image processing. Remote Sensing of Environment, 2009, 113, S110-S122.	11.0	1,452
4	Image Segmentation Using Deep Learning: A Survey. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, PP, 1-1.	13.9	1,071
5	Graph Convolutional Networks for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5966-5978.	6.3	974
6	Advanced Spectral Classifiers for Hyperspectral Images: A review. IEEE Geoscience and Remote Sensing Magazine, 2017, 5, 8-32.	9.6	893
7	Sparse Unmixing of Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 2014-2039.	6.3	850
8	Spectralâ€“Spatial Hyperspectral Image Segmentation Using Subspace Multinomial Logistic Regression and Markov Random Fields. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 809-823.	6.3	610
9	Total Variation Spatial Regularization for Sparse Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4484-4502.	6.3	604
10	Deep learning classifiers for hyperspectral imaging: A review. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 158, 279-317.	11.1	580
11	Advances in Hyperspectral Image and Signal Processing: A Comprehensive Overview of the State of the Art. IEEE Geoscience and Remote Sensing Magazine, 2017, 5, 37-78.	9.6	533
12	A Quantitative and Comparative Analysis of Endmember Extraction Algorithms From Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 650-663.	6.3	528
13	Land Surface Emissivity Retrieval From Different VNIR and TIR Sensors. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 316-327.	6.3	518
14	Generalized Composite Kernel Framework for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4816-4829.	6.3	439
15	Spatial/spectral endmember extraction by multidimensional morphological operations. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2025-2041.	6.3	426
16	A new deep convolutional neural network for fast hyperspectral image classification. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 145, 120-147.	11.1	418
17	SpectralFormer: Rethinking Hyperspectral Image Classification With Transformers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	414
18	Earth system science related imaging spectroscopyâ€”An assessment. Remote Sensing of Environment, 2009, 113, S123-S137.	11.0	382

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19	Collaborative Sparse Regression for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 341-354.	6.3	381
20	Hyperspectral Image Segmentation Using a New Bayesian Approach With Active Learning. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3947-3960.	6.3	368
21	A Signal Processing Perspective on Hyperspectral Unmixing: Insights from Remote Sensing. IEEE Signal Processing Magazine, 2014, 31, 67-81.	5.6	362
22	Anomaly Detection in Hyperspectral Images Based on Low-Rank and Sparse Representation. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1990-2000.	6.3	358
23	Dimensionality reduction and classification of hyperspectral image data using sequences of extended morphological transformations. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 466-479.	6.3	354
24	Big Data for Remote Sensing: Challenges and Opportunities. Proceedings of the IEEE, 2016, 104, 2207-2219.	21.3	351
25	Semisupervised Hyperspectral Image Segmentation Using Multinomial Logistic Regression With Active Learning. IEEE Transactions on Geoscience and Remote Sensing, 2010, , .	6.3	347
26	Deep Pyramidal Residual Networks for Spectralâ€“Spatial Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 740-754.	6.3	347
27	Spectralâ€“Spatial Classification of Hyperspectral Data Using Loopy Belief Propagation and Active Learning. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 844-856.	6.3	298
28	Multiple Feature Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1592-1606.	6.3	282
29	Recent Developments in High Performance Computing for Remote Sensing: A Review. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2011, 4, 508-527.	4.9	267
30	Capsule Networks for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 2145-2160.	6.3	261
31	A Fast Iterative Algorithm for Implementation of Pixel Purity Index. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 63-67.	3.1	245
32	Remote Sensing Scene Classification Using Multilayer Stacked Covariance Pooling. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6899-6910.	6.3	232
33	Active Learning With Convolutional Neural Networks for Hyperspectral Image Classification Using a New Bayesian Approach. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6440-6461.	6.3	210
34	Analysis and Optimizations of Global and Local Versions of the RX Algorithm for Anomaly Detection in Hyperspectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 801-814.	4.9	206
35	Spatial Preprocessing for Endmember Extraction. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2679-2693.	6.3	199
36	Weighted-RXD and Linear Filter-Based RXD: Improving Background Statistics Estimation for Anomaly Detection in Hyperspectral Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2351-2366.	4.9	193

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37	DAEN: Deep Autoencoder Networks for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4309-4321.	6.3	186
38	High Performance Computing for Hyperspectral Remote Sensing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2011, 4, 528-544.	4.9	185
39	Visual Attention-Driven Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8065-8080.	6.3	185
40	Commodity cluster-based parallel processing of hyperspectral imagery. Journal of Parallel and Distributed Computing, 2006, 66, 345-358.	4.1	182
41	Feature Extraction With Multiscale Covariance Maps for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 755-769.	6.3	182
42	Minimum Volume Simplex Analysis: A Fast Algorithm for Linear Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5067-5082.	6.3	165
43	Semisupervised Self-Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4032-4044.	6.3	164
44	Robust Collaborative Nonnegative Matrix Factorization for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6076-6090.	6.3	162
45	Automated Extraction of Image-Based Endmember Bundles for Improved Spectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 396-408.	4.9	159
46	Remotely Sensed Image Classification Using Sparse Representations of Morphological Attribute Profiles. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5122-5136.	6.3	157
47	Scale-Free Convolutional Neural Network for Remote Sensing Scene Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6916-6928.	6.3	157
48	A New Spatialâ€“Spectral Feature Extraction Method for Hyperspectral Images Using Local Covariance Matrix Representation. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3534-3546.	6.3	153
49	Spectralâ€“Spatial Weighted Sparse Regression for Hyperspectral Image Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3265-3276.	6.3	147
50	Skip-Connected Covariance Network for Remote Sensing Scene Classification. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1461-1474.	11.3	146
51	Spatial-Spectral Preprocessing Prior to Endmember Identification and Unmixing of Remotely Sensed Hyperspectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 380-395.	4.9	145
52	Semisupervised Hyperspectral Image Classification Using Soft Sparse Multinomial Logistic Regression. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 318-322.	3.1	142
53	Fusion of Hyperspectral and LiDAR Remote Sensing Data Using Multiple Feature Learning. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2971-2983.	4.9	139
54	Comparison Between Fractional Vegetation Cover Retrievals from Vegetation Indices and Spectral Mixture Analysis: Case Study of PROBA/CHRIS Data Over an Agricultural Area. Sensors, 2009, 9, 768-793.	3.8	134

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55	Foreword to the Special Issue on Spectral Unmixing of Remotely Sensed Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4103-4110.	6.3	133
56	Support Tensor Machines for Classification of Hyperspectral Remote Sensing Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3248-3264.	6.3	131
57	Pansharpening via Detail Injection Based Convolutional Neural Networks. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 1188-1204.	4.9	131
58	A New Deep Generative Network for Unsupervised Remote Sensing Single-Image Super-Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6792-6810.	6.3	129
59	Impact of Initialization on Design of Endmember Extraction Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3397-3407.	6.3	126
60	MUSIC-CSR: Hyperspectral Unmixing via Multiple Signal Classification and Collaborative Sparse Regression. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4364-4382.	6.3	123
61	A Quantitative and Comparative Assessment of Unmixing-Based Feature Extraction Techniques for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 421-435.	4.9	115
62	A new approach to mixed pixel classification of hyperspectral imagery based on extended morphological profiles. Pattern Recognition, 2004, 37, 1097-1116.	8.1	114
63	Parallel Hyperspectral Image and Signal Processing [Applications Corner]. IEEE Signal Processing Magazine, 2011, 28, 119-126.	5.6	114
64	Discriminative Low-Rank Gabor Filtering for Spectralâ€“Spatial Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1381-1395.	6.3	111
65	Spectralâ€“Spatial Classification of Hyperspectral Data Using Local and Global Probabilities for Mixed Pixel Characterization. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6298-6314.	6.3	108
66	Region-Based Spatial Preprocessing for Endmember Extraction and Spectral Unmixing. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 745-749.	3.1	106
67	Automatic Framework for Spectralâ€“Spatial Classification Based on Supervised Feature Extraction and Morphological Attribute Profiles. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2147-2160.	4.9	101
68	Parallel and Distributed Dimensionality Reduction of Hyperspectral Data on Cloud Computing Architectures. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2270-2278.	4.9	99
69	Hyperspectral Unmixing Using Sparsity-Constrained Deep Nonnegative Matrix Factorization With Total Variation. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6245-6257.	6.3	99
70	Subspace-Based Support Vector Machines for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 349-353.	3.1	93
71	On the use of small training sets for neural network-based characterization of mixed pixels in remotely sensed hyperspectral images. Pattern Recognition, 2009, 42, 3032-3045.	8.1	92
72	Cloud Removal Based on Sparse Representation via Multitemporal Dictionary Learning. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2998-3006.	6.3	88

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73	Fusion of Hyperspectral and LiDAR Data Using Sparse and Low-Rank Component Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6354-6365.	6.3	87
74	A Single Model CNN for Hyperspectral Image Denoising. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2516-2529.	6.3	87
75	Cloud implementation of the K-means algorithm for hyperspectral image analysis. Journal of Supercomputing, 2017, 73, 514-529.	3.6	86
76	Hyperspectral Image Classification Using Random Occlusion Data Augmentation. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1751-1755.	3.1	86
77	New Postprocessing Methods for Remote Sensing Image Classification: A Systematic Study. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 7140-7159.	6.3	85
78	HYCA: A New Technique for Hyperspectral Compressive Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2819-2831.	6.3	85
79	Hyperspectral Unmixing Using Double Reweighted Sparse Regression and Total Variation. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 1146-1150.	3.1	85
80	Deep&Dense Convolutional Neural Network for Hyperspectral Image Classification. Remote Sensing, 2018, 10, 1454.	4.0	85
81	The Promise of Reconfigurable Computing for Hyperspectral Imaging Onboard Systems: A Review and Trends. Proceedings of the IEEE, 2013, 101, 698-722.	21.3	84
82	GPU Implementation of an Automatic Target Detection and Classification Algorithm for Hyperspectral Image Analysis. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 221-225.	3.1	84
83	Probabilistic-Kernel Collaborative Representation for Spatialâ€“Spectral Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2371-2384.	6.3	83
84	On the Impact of Lossy Compression on Hyperspectral Image Classification and Unmixing. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 253-257.	3.1	82
85	Regional clustering-based spatial preprocessing for hyperspectral unmixing. Remote Sensing of Environment, 2018, 204, 333-346.	11.0	81
86	Hyperspectral Image Segmentation Using a New Spectral Unmixing-Based Binary Partition Tree Representation. IEEE Transactions on Image Processing, 2014, 23, 3574-3589.	9.8	79
87	On Endmember Identification in Hyperspectral Images Without Pure Pixels: A Comparison of Algorithms. Journal of Mathematical Imaging and Vision, 2012, 42, 163-175.	1.3	78
88	A New Sparse Subspace Clustering Algorithm for Hyperspectral Remote Sensing Imagery. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 43-47.	3.1	76
89	Sparse Unmixing-Based Change Detection for Multitemporal Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 708-719.	4.9	74
90	Spatio-temporal fusion for remote sensing data: an overview and new benchmark. Science China Information Sciences, 2020, 63, 1.	4.3	74

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91	Hyperspectral Unmixing on GPUs and Multi-Core Processors: A Comparison. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1386-1398.	4.9	73
92	A Discontinuity Preserving Relaxation Scheme for Spectralâ€“Spatial Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 625-639.	4.9	73
93	Hybrid first and second order attention Unet for building segmentation in remote sensing images. Science China Information Sciences, 2020, 63, 1.	4.3	73
94	Ghostnet for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 10378-10393.	6.3	73
95	On Understanding Big Data Impacts in Remotely Sensed Image Classification Using Support Vector Machine Methods. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4634-4646.	4.9	71
96	Use of FPGA or GPU-based architectures for remotely sensed hyperspectral image processing. The Integration VLSI Journal, 2013, 46, 89-103.	2.1	69
97	A Quantitative and Comparative Analysis of Different Implementations of N-FINDR: A Fast Endmember Extraction Algorithm. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 787-791.	3.1	67
98	Remote Sensing Image Superresolution Using Deep Residual Channel Attention. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 9277-9289.	6.3	67
99	HyperPNN: Hyperspectral Pansharpening via Spectrally Predictive Convolutional Neural Networks. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 3092-3100.	4.9	67
100	The impact of electrokinetic treatment on a loamy-sand soil properties. Chemical Engineering Journal, 2012, 183, 231-237.	12.7	66
101	A Subspace-Based Multinomial Logistic Regression for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 2105-2109.	3.1	65
102	Spectralâ€“Spatial Classification of Multispectral Images Using Kernel Feature Space Representation. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 288-292.	3.1	65
103	Hyperspectral Classification With Noisy Label Detection via Superpixel-to-Pixel Weighting Distance. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 4116-4131.	6.3	65
104	Automatic Change Detection in High-Resolution Remote Sensing Images by Using a Multiple Classifier System and Spectralâ€“Spatial Features. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3439-3451.	4.9	64
105	Hyperspectral Unmixing Based on Local Collaborative Sparse Regression. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 631-635.	3.1	63
106	Sparse Unmixing With Dictionary Pruning for Hyperspectral Change Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 321-330.	4.9	61
107	An Efficient and Scalable Framework for Processing Remotely Sensed Big Data in Cloud Computing Environments. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4294-4308.	6.3	61
108	Survey of geometric and statistical unmixing algorithms for hyperspectral images. , 2010, , .		60

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109	Remotely sensed big data: evolution in model development for information extraction [point of view]. Proceedings of the IEEE, 2019, 107, 2294-2301.	21.3	60
110	Deep Metric Learning Based on Scalable Neighborhood Components for Remote Sensing Scene Characterization. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8905-8918.	6.3	59
111	Parallel Morphological Endmember Extraction Using Commodity Graphics Hardware. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 441-445.	3.1	58
112	Recent Developments in Endmember Extraction and Spectral Unmixing. , 2011, , 235-267.		58
113	A³ CLNN: Spatial, Spectral and Multiscale Attention ConvLSTM Neural Network for Multisource Remote Sensing Data Classification. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 747-761.	11.3	58
114	GPU Parallel Implementation of Spatially Adaptive Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1131-1143.	4.9	57
115	Deep Unsupervised Embedding for Remotely Sensed Images Based on Spatially Augmented Momentum Contrast. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 2598-2610.	6.3	57
116	FPGA Implementation of the N-FINDR Algorithm for Remotely Sensed Hyperspectral Image Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 374-388.	6.3	56
117	Informative Change Detection by Unmixing for Hyperspectral Images. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1252-1256.	3.1	56
118	Multiple Morphological Component Analysis Based Decomposition for Remote Sensing Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3083-3102.	6.3	56
119	Remote Sensing Image Fusion Using Hierarchical Multimodal Probabilistic Latent Semantic Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 4982-4993.	4.9	54
120	Scheduling-Guided Automatic Processing of Massive Hyperspectral Image Classification on Cloud Computing Architectures. IEEE Transactions on Cybernetics, 2021, 51, 3588-3601.	9.5	54
121	Separation of butanol from ABE mixtures by sweep gas pervaporation using a supported gelled ionic liquid membrane: Analysis of transport phenomena and selectivity. Journal of Membrane Science, 2013, 444, 201-212.	8.2	53
122	Multiple Morphological Profiles From Multicomponent-Base Images for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4653-4669.	4.9	53
123	Thin Cloud Removal Based on Signal Transmission Principles and Spectral Mixture Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1659-1669.	6.3	53
124	An overview on hyperspectral unmixing: Geometrical, statistical, and sparse regression based approaches. , 2011, , .		52
125	Hashing Nets for Hashing: A Quantized Deep Learning to Hash Framework for Remote Sensing Image Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 7331-7345.	6.3	52
126	Graph Relation Network: Modeling Relations Between Scenes for Multilabel Remote-Sensing Image Classification and Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 4355-4369.	6.3	52

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127	A Comparison of 0.0625% Bupivacaine with Fentanyl and 0.1% Ropivacaine with Fentanyl for Continuous Epidural Labor Analgesia. Anesthesia and Analgesia, 2001, 92, 1261-1265.	2.2	50
128	Parallel Implementation of Endmember Extraction Algorithms From Hyperspectral Data. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 334-338.	3.1	50
129	Unmixing Prior to Supervised Classification of Remotely Sensed Hyperspectral Images. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 760-764.	3.1	50
130	Special issue on architectures and techniques for real-time processing of remotely sensed images. Journal of Real-Time Image Processing, 2009, 4, 191-193.	3.5	48
131	Real-Time Implementation of the Pixel Purity Index Algorithm for Endmember Identification on GPUs. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 955-959.	3.1	48
132	Electrokinetic remediation of gasoil contaminated soil enhanced by rhamnolipid. Journal of Applied Electrochemistry, 2010, 40, 1239-1248.	2.9	47
133	A New Minimum-Volume Enclosing Algorithm for Endmember Identification and Abundance Estimation in Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 2744-2757.	6.3	47
134	FPGA Implementation of Abundance Estimation for Spectral Unmixing of Hyperspectral Data Using the Image Space Reconstruction Algorithm. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 248-261.	4.9	47
135	Learning Discriminative Sparse Representations for Hyperspectral Image Classification. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 1089-1104.	10.8	47
136	A new sensor bias-driven spatio-temporal fusion model based on convolutional neural networks. Science China Information Sciences, 2020, 63, 1.	4.3	47
137	FPGA Implementation of the Pixel Purity Index Algorithm for Remotely Sensed Hyperspectral Image Analysis. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	46
138	Deep Autoencoders With Multitask Learning for Bilinear Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8615-8629.	6.3	46
139	Improving the Performance of Hyperspectral Image and Signal Processing Algorithms Using Parallel, Distributed and Specialized Hardware-Based Systems. Journal of Signal Processing Systems, 2010, 61, 293-315.	2.1	45
140	Oil Spill Detection via Multitemporal Optical Remote Sensing Images: A Change Detection Perspective. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 324-328.	3.1	45
141	Remote Sensing Single-Image Superresolution Based on a Deep Compendium Model. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1432-1436.	3.1	45
142	Clusters Versus FPGA for Parallel Processing of Hyperspectral Imagery. International Journal of High Performance Computing Applications, 2008, 22, 366-385.	3.7	44
143	Multi-Channel Morphological Profiles for Classification of Hyperspectral Images Using Support Vector Machines. Sensors, 2009, 9, 196-218.	3.8	44
144	Parallel unmixing of remotely sensed hyperspectral images on commodity graphics processing units. Concurrency Computation Practice and Experience, 2011, 23, 1538-1557.	2.2	44

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145	A new extended linear mixing model to address spectral variability. , 2014, , .		44
146	Hyperspectral Unmixing Based on Dual-Depth Sparse Probabilistic Latent Semantic Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6344-6360.	6.3	44
147	Deep Learning for Land Cover Classification Using Only a Few Bands. Remote Sensing, 2020, 12, 2000.	4.0	44
148	Scalable recurrent neural network for hyperspectral image classification. Journal of Supercomputing, 2020, 76, 8866-8882.	3.6	44
149	Generative Adversarial Minority Oversampling for Spectralâ€“Spatial Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	44
150	An improved N-FINDR algorithm in implementation. , 2005, 5806, 298.		43
151	One-Class Classification of Remote Sensing Images Using Kernel Sparse Representation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1613-1623.	4.9	43
152	Landslide Detection Using Densely Connected Convolutional Networks and Environmental Conditions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 5235-5247.	4.9	43
153	Real-time implementation of remotely sensed hyperspectral image unmixing on GPUs. Journal of Real-Time Image Processing, 2015, 10, 469-483.	3.5	42
154	Spatial Discontinuity-Weighted Sparse Unmixing of Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5767-5779.	6.3	42
155	Recognition and Mapping of Landslide Using a Fully Convolutional DenseNet and Influencing Factors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 7881-7894.	4.9	42
156	Morphological Convolutional Neural Networks for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 8689-8702.	4.9	41
157	A Siamese Network Based U-Net for Change Detection in High Resolution Remote Sensing Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 2357-2369.	4.9	41
158	Naive Gabor Networks for Hyperspectral Image Classification. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 376-390.	11.3	40
159	Incorporation of spatial constraints into spectral mixture analysis of remotely sensed hyperspectral data. , 2009, , .		39
160	Dual-Mode FPGA Implementation of Target and Anomaly Detection Algorithms for Real-Time Hyperspectral Imaging. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2950-2961.	4.9	39
161	Characterization of Soil Erosion Indicators Using Hyperspectral Data From a Mediterranean Rainfed Cultivated Region. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 845-860.	4.9	39
162	A New Cloud Computing Architecture for the Classification of Remote Sensing Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 409-416.	4.9	39

#	Article	IF	Citations
163	Impact of platform heterogeneity on the design of parallel algorithms for morphological processing of high-dimensional image data. Journal of Supercomputing, 2007, 40, 81-107.	3.6	38
164	Foreword to the Special Issue on Hyperspectral Image and Signal Processing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 347-353.	4.9	38
165	Robust Minimum Volume Simplex Analysis for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6431-6439.	6.3	38
166	Parallel Hyperspectral Unmixing on GPUs. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 666-670.	3.1	37
167	Landslide Detection Mapping Employing CNN, ResNet, and DenseNet in the Three Gorges Reservoir, China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 11417-11428.	4.9	37
168	A hybrid ensemble-based deep-learning framework for landslide susceptibility mapping. International Journal of Applied Earth Observation and Geoinformation, 2022, 108, 102713.	2.8	37
169	An experimental comparison of parallel algorithms for hyperspectral analysis using heterogeneous and homogeneous networks of workstations. Parallel Computing, 2008, 34, 92-114.	2.1	36
170	Structured Sparse Coding-Based Hyperspectral Imagery Denoising With Intracluster Filtering. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6860-6876.	6.3	36
171	Clusters versus GPUs for Parallel Target and Anomaly Detection in Hyperspectral Images. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	35
172	Real-Time Implementation of the Vertex Component Analysis Algorithm on GPUs. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 251-255.	3.1	35
173	Nonlinear Hyperspectral Unmixing Using Nonlinearity Order Estimation and Polytope Decomposition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2644-2654.	4.9	35
174	A Hybrid CPUâ€“GPU Real-Time Hyperspectral Unmixing Chain. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 945-951.	4.9	35
175	A New Genetic Method for Subpixel Mapping Using Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4480-4491.	4.9	35
176	Superpixel-Based Active Learning and Online Feature Importance Learning for Hyperspectral Image Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 347-359.	4.9	35
177	Fast dimensionality reduction and classification of hyperspectral images with extreme learning machines. Journal of Real-Time Image Processing, 2018, 15, 439-462.	3.5	35
178	Harmonic Mixture Modeling for Efficient Nonlinear Hyperspectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4247-4256.	4.9	33
179	Inference in Supervised Spectral Classifiers for On-Board Hyperspectral Imaging: An Overview. Remote Sensing, 2020, 12, 534.	4.0	33
180	PiCoCo: Pixelwise Contrast and Consistency Learning for Semisupervised Building Footprint Segmentation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 10548-10559.	4.9	33

#	Article	IF	Citations
181	Hyperspectral unmixing: geometrical, statistical, and sparse regression-based approaches. Proceedings of SPIE, 2010, , .	0.8	32
182	Hyperspectral band selection using a collaborative sparse model. , 2012, , .		32
183	Approximate Computing of Remotely Sensed Data: SVM Hyperspectral Image Classification as a Case Study. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5806-5818.	4.9	32
184	Robust Matrix Discriminative Analysis for Feature Extraction From Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2002-2011.	4.9	32
185	An Accurate Vegetation and Non-Vegetation Differentiation Approach Based on Land Cover Classification. Remote Sensing, 2020, 12, 3880.	4.0	32
186	Spectral-Fidelity Convolutional Neural Networks for Hyperspectral Pansharpening. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 5898-5914.	4.9	32
187	A New GPU Implementation of Support Vector Machines for Fast Hyperspectral Image Classification. Remote Sensing, 2020, 12, 1257.	4.0	32
188	Hyperspectral Anomaly Detection Using Dual Window Density. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8503-8517.	6.3	32
189	Spectral Mixture Analysis of Hyperspectral Scenes Using Intelligently Selected Training Samples. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 371-375.	3.1	31
190	Lowâ€“High-Power Consumption Architectures for Deep-Learning Models Applied to Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 776-780.	3.1	31
191	Hyperspectral Unmixing Based on Nonnegative Matrix Factorization: A Comprehensive Review. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 4414-4436.	4.9	31
192	On the use of spectral libraries to perform sparse unmixing of hyperspectral data. , 2010, , .		30
193	Real-Time Implementation of the Sparse Multinomial Logistic Regression for Hyperspectral Image Classification on GPUs. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1456-1460.	3.1	30
194	FPGA Implementation of an Algorithm for Automatically Detecting Targets in Remotely Sensed Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4334-4343.	4.9	30
195	Multimodal Probabilistic Latent Semantic Analysis for Sentinel-1 and Sentinel-2 Image Fusion. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1347-1351.	3.1	30
196	Recent developments in sparse hyperspectral unmixing. , 2010, , .		29
197	A New Hybrid Strategy Combining Semisupervised Classification and Unmixing of Hyperspectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3619-3629.	4.9	29
198	Probabilistic anomaly detector for remotely sensed hyperspectral data. Journal of Applied Remote Sensing, 2014, 8, 083538.	1.3	29

#	Article	IF	Citations
199	Multi-GPU Implementation of the Minimum Volume Simplex Analysis Algorithm for Hyperspectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2281-2296.	4.9	29
200	Parallel Implementation of Sparse Representation Classifiers for Hyperspectral Imagery on GPUs. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2912-2925.	4.9	29
201	Parallel Spatialâ€“Spectral Hyperspectral Image Classification With Sparse Representation and Markov Random Fields on GPUs. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2926-2938.	4.9	29
202	FLOP-Reduction Through Memory Allocations Within CNN for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5938-5952.	6.3	29
203	CLASSIFICATION ALGORITHMS FOR BIG DATA ANALYSIS, A MAP REDUCE APPROACH. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-3/W2, 17-21.	0.2	29
204	Attention mechanism-based generative adversarial networks for cloud removal in Landsat images. Remote Sensing of Environment, 2022, 271, 112902.	11.0	29
205	DisOptNet: Distilling Semantic Knowledge From Optical Images for Weather-Independent Building Segmentation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	29
206	Automatic tuning of iterative computation onÂheterogeneous multiprocessors with ADITHE. Journal of Supercomputing, 2011, 58, 151-159.	3.6	28
207	Multibranch Selective Kernel Networks for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1089-1093.	3.1	28
208	Fast determination of the number of endmembers for real-time hyperspectral unmixing on GPUs. Journal of Real-Time Image Processing, 2014, 9, 397-405.	3.5	27
209	Multiple Algorithm Integration Based on Ant Colony Optimization for Endmember Extraction From Hyperspectral Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2569-2582.	4.9	27
210	Spatial Technology and Social Media in Remote Sensing: A Survey. Proceedings of the IEEE, 2017, 105, 1855-1864.	21.3	27
211	Performance of Change Detection Algorithms Using Heterogeneous Images and Extended Multi-attribute Profiles (EMAPs). Remote Sensing, 2019, 11, 2377.	4.0	27
212	Accelerating Convolutional Neural Network-Based Hyperspectral Image Classification by Step Activation Quantization. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	27
213	Collaborative nonnegative matrix factorization for remotely sensed hyperspectral unmixing. , 2012, , .		26
214	A new parallel tool for classification of remotely sensed imagery. Computers and Geosciences, 2012, 46, 208-218.	4.2	26
215	Efficient Implementation of Hyperspectral Anomaly Detection Techniques on GPUs and Multicore Processors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2256-2266.	4.9	26
216	Unsupervised Remote Sensing Image Retrieval Using Probabilistic Latent Semantic Hashing. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 256-260.	3.1	26

#	Article	IF	Citations
217	Foreword to the Special Issue on High Performance Computing in Earth Observation and Remote Sensing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2011, 4, 503-507.	4.9	25
218	Remote Sensing Image Classification Using Attribute Filters Defined Over the Tree of Shapes. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3899-3911.	6.3	25
219	Unmixing-based content retrieval system for remotely sensed hyperspectral imagery on GPUs. Journal of Supercomputing, 2014, 70, 588-599.	3.6	24
220	A Dynamic Unmixing Framework for Plant Production System Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2016-2034.	4.9	24
221	A Novel Negative Abundanceâ€Oriented Hyperspectral Unmixing Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3772-3790.	6.3	24
222	Complementarity of Discriminative Classifiers and Spectral Unmixing Techniques for the Interpretation of Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2899-2912.	6.3	24
223	Normal Endmember Spectral Unmixing Method for Hyperspectral Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2598-2606.	4.9	24
224	Nonnegative sparse autoencoder for robust endmember extraction from remotely sensed hyperspectral images. , 2017, , .		24
225	Optical Remote Sensing Image Understanding With Weak Supervision: Concepts, methods, and perspectives. IEEE Geoscience and Remote Sensing Magazine, 2022, 10, 250-269.	9.6	24
226	Joint linear/nonlinear spectral unmixing of hyperspectral image data. , 2007, , .		23
227	FPGA Design of an Automatic Target Generation Process for Hyperspectral Image Analysis. , 2011, , .		23
228	Cloud Deep Networks for Hyperspectral Image Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 9832-9848.	6.3	23
229	Improving Land Cover Classification Using Extended Multi-Attribute Profiles (EMAP) Enhanced Color, Near Infrared, and LiDAR Data. Remote Sensing, 2020, 12, 1392.	4.0	23
230	Multisensor Coupled Spectral Unmixing for Time-Series Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2842-2857.	6.3	22
231	A New Spectral-Spatial Sub-Pixel Mapping Model for Remotely Sensed Hyperspectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6763-6778.	6.3	22
232	Object-Oriented Open-Pit Mine Mapping Using Gaofen-2 Satellite Image and Convolutional Neural Network, for the Yuzhou City, China. Remote Sensing, 2020, 12, 3895.	4.0	22
233	Anomaly detection based on a parallel kernel RX algorithm for multicore platforms. Journal of Applied Remote Sensing, 2012, 6, 061503.	1.3	21
234	A New Preprocessing Technique for Fast Hyperspectral Endmember Extraction. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1070-1074.	3.1	21

#	Article	IF	Citations
235	A New Algorithm for Bilinear Spectral Unmixing of Hyperspectral Images Using Particle Swarm Optimization. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5776-5790.	4.9	21
236	Advanced processing of hyperspectral images. , 2006, , .		20
237	Real-Time Identification of Hyperspectral Subspaces. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2680-2687.	4.9	20
238	Simultaneously Counting and Extracting Endmembers in a Hyperspectral Image Based on Divergent Subsets. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8952-8966.	6.3	20
239	Spectral-Spatial Hyperspectral Unmixing Using Nonnegative Matrix Factorization. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	20
240	Robust Normalized Softmax Loss for Deep Metric Learning-Based Characterization of Remote Sensing Images With Label Noise. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8798-8811.	6.3	20
241	Automated selection of results in hierarchical segmentations of remotely sensed hyperspectral images. , 0, , .		19
242	Semi-supervised hyperspectral image classification based on a Markov random field and sparse multinomial logistic regression. , 2009, , .		19
243	GPU implementation of the pixel purity index algorithm for hyperspectral image analysis. , 2010, , .		19
244	Fast anomaly detection in hyperspectral images with RX method on heterogeneous clusters. Journal of Supercomputing, 2011, 58, 411-419.	3.6	19
245	Hyperspectral unmixingwith sparse group lasso. , 2011, , .		19
246	Joint Sparse Sub-Pixel Mapping Model with Endmember Variability for Remotely Sensed Imagery. Remote Sensing, 2017, 9, 15.	4.0	19
247	Hyperspectral Classification via Global-Local Hierarchical Weighting Fusion Network. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 184-200.	4.9	19
248	Hyperspectral and LiDAR Data Classification Using Joint CNNs and Morphological Feature Learning. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	19
249	Hyperspectral Anomaly Detection With Relaxed Collaborative Representation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	19
250	Cloud Implementation of a Full Hyperspectral Unmixing Chain Within the NASA Web Coverage Processing Service for EO-1. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 408-418.	4.9	18
251	A Novel Semi-Supervised Method for Obtaining Finer Resolution Urban Extents Exploiting Coarser Resolution Maps. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4276-4287.	4.9	18
252	A real-time unsupervised background extraction-based target detection method for hyperspectral imagery. Journal of Real-Time Image Processing, 2018, 15, 597-615.	3.5	18

#	Article	IF	Citations
253	Entropy-Based Convex Set Optimization for Spatialâ€“Spectral Endmember Extraction From Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4200-4213.	4.9	18
254	Lightweight Tensor Attention-Driven ConvLSTM Neural Network for Hyperspectral Image Classification. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 734-745.	10.8	18
255	Revisiting Deep Hyperspectral Feature Extraction Networks via Gradient Centralized Convolution. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-19.	6.3	18
256	Spatial/spectral analysis of hyperspectral image data. , 0, , .		17
257	Parallel Processing of Remotely Sensed Hyperspectral Images On Heterogeneous Networks of Workstations Using HeteroMPI. International Journal of High Performance Computing Applications, 2008, 22, 386-407.	3.7	17
258	Real-Time Endmember Extraction on Multicore Processors. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 924-928.	3.1	17
259	GPU Implementation of Composite Kernels for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1973-1977.	3.1	17
260	Endmember Extraction From Hyperspectral Imagery Based on Probabilistic Tensor Moments. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 2120-2124.	3.1	17
261	GPU implementation of target and anomaly detection algorithms for remotely sensed hyperspectral image analysis. Proceedings of SPIE, 2010, , .	0.8	16
262	Parallel Hyperspectral Coded Aperture for Compressive Sensing on GPUs. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 932-944.	4.9	16
263	Urban Impervious Surface Estimation from Remote Sensing and Social Data. Photogrammetric Engineering and Remote Sensing, 2018, 84, 771-780.	0.6	16
264	Curvelet Transform Domain-Based Sparse Nonnegative Matrix Factorization for Hyperspectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4908-4924.	4.9	16
265	A Parallel Unmixing-Based Content Retrieval System for Distributed Hyperspectral Imagery Repository on Cloud Computing Platforms. Remote Sensing, 2021, 13, 176.	4.0	16
266	Ship Detection in SAR Images via Enhanced Nonnegative Sparse Locality-Representation of Fisher Vectors. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 9424-9438.	6.3	16
267	Distributed Deep Learning for Remote Sensing Data Interpretation. Proceedings of the IEEE, 2021, 109, 1320-1349.	21.3	16
268	Mapping oil spills on sea water using spectral mixture analysis of hyperspectral image data. , 2005, , .		15
269	<title>Comparative analysis of different implementations of a parallel algorithm for automatic target detection and classification of hyperspectral images</title>. , 2009, , .		15
270	Cluster versus GPU implementation of an Orthogonal Target Detection Algorithm for Remotely Sensed Hyperspectral Images. , 2010, , .		15

#	Article	IF	Citations
271	A Web-Based System for Classification of Remote Sensing Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1934-1948.	4.9	15
272	Fast principal component analysis for hyperspectral imaging based on cloud computing. , 2015, , .		15
273	Fast Spatial Preprocessing for Spectral Unmixing of Hyperspectral Data on Graphics Processing Units. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 952-961.	4.9	15
274	Portability Study of an OpenCL Algorithm for Automatic Target Detection in Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 9499-9511.	6.3	15
275	Sentinel-2 and Sentinel-3 Intersensor Vegetation Estimation via Constrained Topic Modeling. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1531-1535.	3.1	15
276	Generalized Morphological Component Analysis for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2817-2832.	6.3	15
277	U-IMG2DSM: Unpaired Simulation of Digital Surface Models With Generative Adversarial Networks. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1288-1292.	3.1	15
278	Fast implementation of pixel purity index algorithm. , 2005, , .		15
279	Open-Pit Mine Area Mapping With Gaofen-2 Satellite Images Using U-Net+. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 3589-3599.	4.9	15
280	H-COMP: a tool for quantitative and comparative analysis of endmember identification algorithms. , 0, , .		14
281	Utilizing Hierarchical Segmentation to Generate Water and Snow Masks to Facilitate Monitoring Change with Remotely Sensed Image Data. GIScience and Remote Sensing, 2006, 43, 39-66.	5.9	14
282	Parallel morphological/neural processing of hyperspectral images using heterogeneous and homogeneous platforms. Cluster Computing, 2008, 11, 17-32.	5.0	14
283	GPU implementation of fully constrained linear spectral unmixing for remotely sensed hyperspectral data exploitation. , 2010, , .		14
284	Exploiting spatial information in semi-supervised hyperspectral image segmentation. , 2010, , .		14
285	Graphics processing unit implementation of JPEG2000 for hyperspectral image compression. Journal of Applied Remote Sensing, 2012, 6, 061507.	1.3	14
286	A new technique for hyperspectral compressive sensing using spectral unmixing. Proceedings of SPIE, 2012, , .	0.8	14
287	Dictionary pruning in sparse unmixing of hyperspectral data. , 2012, , .		14
288	Active learning based autoencoder for hyperspectral imagery classification. , 2016, , .		14

#	Article	IF	Citations
289	Neural Ordinary Differential Equations for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1718-1734.	6.3	14
290	Deep Hashing Based on Class-Discriminated Neighborhood Embedding. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 5998-6007.	4.9	14
291	Estudio Comparativo de TÃ©cnicas de ClasificaciÃ³n de ImÃ¡genes Hiperespectrales. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2019, 16, 129.	1.0	14
292	The Future of Imaging Spectroscopy Prospective Technologies and Applications. , 2006, , .		13
293	Parallel techniques for information extraction from hyperspectral imagery using heterogeneous networks of workstations. Journal of Parallel and Distributed Computing, 2008, 68, 93-111.	4.1	13
294	Unmixing sparse hyperspectral mixtures. , 2009, , .		13
295	Comparison of support vector machine-based processing chains for hyperspectral image classification. , 2010, , .		13
296	Performance versus energy consumption of hyperspectral unmixing algorithms on multi-core platforms. Eurasip Journal on Advances in Signal Processing, 2013, 2013, .	1.7	13
297	Fusion of hyperspectral and LiDAR data using morphological component analysis. , 2016, , .		13
298	Parallel Implementation of a Full Hyperspectral Unmixing Chain Using OpenCL. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2452-2461.	4.9	13
299	Endmember Estimation with Maximum Distance Analysis. Remote Sensing, 2021, 13, 713.	4.0	13
300	Adaptive Superpixel Segmentation of Marine SAR Images by Aggregating Fisher Vectors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 2058-2069.	4.9	13
301	CNN-Based Hyperspectral Pansharpening With Arbitrary Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-21.	6.3	13
302	Parallel implementation of the N-FINDR endmember extraction algorithm on commodity graphics processing units. , 2010, , .		12
303	GPU Implementation of Iterative-Constrained Endmember Extraction from Remotely Sensed Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2939-2949.	4.9	12
304	Using Linear Spectral Unmixing for Subpixel Mapping of Hyperspectral Imagery: A Quantitative Assessment. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1589-1600.	4.9	12
305	Convex Formulation for Multiband Image Classification With Superpixel-Based Spatial Regularization. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 2704-2721.	6.3	12
306	Subpixel Component Analysis for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5564-5579.	6.3	12

#	Article	IF	Citations
307	Superpixel-Guided Sparse Unmixing for Remotely Sensed Hyperspectral Imagery. , 2019, , .		12
308	Self-Supervised Robust Deep Matrix Factorization for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	12
309	AMEEPAR: Parallel Morphological Algorithm for Hyperspectral Image Classification on Heterogeneous Networks of Workstations. Lecture Notes in Computer Science, 2006, , 24-31.	1.3	12
310	Superpixel-Based Collaborative and Low-Rank Regularization for Sparse Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	12
311	A new method for target detection in hyperspectral imagery based on extended morphological profiles. , 0, , .		11
312	Nonlinear neural-network-based mixture model for estimating the concentration of nitrogen salts in turbid inland waters using hyperspectral imagery. , 2004, 5584, 165.		11
313	Nonlinear mixture models for analyzing laboratory simulated-forest hyperspectral data. , 2004, , .		11
314	Spectral/spatial hyperspectral image compression in conjunction with virtual dimensionality. , 2005, , .		11
315	Parallel hyperspectral image processing on distributed multicluster systems. Journal of Applied Remote Sensing, 2011, 5, 051501.	1.3	11
316	Hyperspectral coded aperture (HYCA): A new technique for hyperspectral compressive sensing. , 2012, , .		11
317	Collaborative sparse unmixing of hyperspectral data. , 2012, , .		11
318	A Technique for Subpixel Analysis of Dynamic Mangrove Ecosystems With Time-Series Hyperspectral Image Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1244-1252.	4.9	11
319	GPU Parallel Implementation of Dual-Depth Sparse Probabilistic Latent Semantic Analysis for Hyperspectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 3156-3167.	4.9	11
320	Neighboring Region Dropout for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1032-1036.	3.1	11
321	Endmember extraction algorithms from hyperspectral images. Annals of Geophysics, 2009, 49, .	1.0	11
322	Hyperspectral Unmixing Based on Spectral and Sparse Deep Convolutional Neural Networks. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 11669-11682.	4.9	11
323	FPGA design and implementation of a fast pixel purity index algorithm for endmember extraction in hyperspectral imagery. , 2005, 5995, 69.		10
324	Efficient Multi-Band Texture Analysis for Remotely Sensed Data Interpretation in Urban Areas. , 2007, , .		10

#	Article	IF	Citations
325	A New Digital Repository for Hyperspectral Imagery With Unmixing-Based Retrieval Functionality Implemented on GPUs. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2267-2280.	4.9	10
326	Parallel Implementation of Spatialâ€“Spectral Endmember Extraction on Graphic Processing Units. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1247-1255.	4.9	10
327	A Novel Preunmixing Framework for Efficient Detection of Linear Mixtures in Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4325-4333.	6.3	10
328	Hyperspectral cloud shadow removal based on linear unmixing. , 2017, , .		10
329	Intersensor Remote Sensing Image Registration Using Multispectral Semantic Embeddings. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1545-1549.	3.1	10
330	A Joint Sparsity Approach to Soil Detection Using Expanded Bands of WV-2 Images. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1869-1873.	3.1	10
331	Noise-Tolerant Deep Neighborhood Embedding for Remotely Sensed Images With Label Noise. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 2551-2562.	4.9	10
332	Multiattribute Sample Learning for Hyperspectral Image Classification Using Hierarchical Peak Attribute Propagation. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-17.	4.7	10
333	Automated generation of semi-labeled training samples for nonlinear neural network-based abundance estimation in hyperspectral data. , 0, , .		9
334	Parallel Hyperspectral Image Processing on Commodity Graphics Hardware. , 0, , .		9
335	FLuorescence EXplorer (FLEX): an optimised payload to map vegetation photosynthesis from space. , 2006, , .		9
336	European perspectives in hyperspectral data analysis. , 2007, , .		9
337	Parallel processing of remotely sensed hyperspectral imagery: fullâ€pixel versus mixedâ€pixel classification. Concurrency Computation Practice and Experience, 2008, 20, 1539-1572.	2.2	9
338	Parallel heterogeneous CBIR system for efficient hyperspectral image retrieval using spectral mixture analysis. Concurrency Computation Practice and Experience, 2010, 22, 1138-1159.	2.2	9
339	Parallel implementation of endmember extraction algorithms using NVidia graphical processing units. , 2009, , .		9
340	Total variation regulatization in sparse hyperspectral unmixing. , 2011, , .		9
341	Hyperspectral Unmixing on Multicore DSPs: Trading Off Performance for Energy. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2297-2304.	4.9	9
342	Efficient implementation of morphological index for building/shadow extraction from remotely sensed images. Journal of Supercomputing, 2017, 73, 482-494.	3.6	9

#	Article	IF	Citations
343	Efficient Semantic Segmentation of Hyperspectral Images Using Adaptable Rectangular Convolution. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	9
344	On the Use of Cluster Computing Architectures for Implementation of Hyperspectral Image Analysis Algorithms. , 0, , .		8
345	Parallel Morphological/Neural Classification of Remote Sensing Images Using Fully Heterogeneous and Homogeneous Commodity Clusters. , 2006, , .		8
346	FPGA-Based Hyperspectral Data Compression Using Spectral Unmixing and the Pixel Purity Index Algorithm. Lecture Notes in Computer Science, 2006, , 888-891.	1.3	8
347	Efficient implementation of morphological opening and closing by reconstruction on multi-core parallel systems. , 2009, , .		8
348	GPU implementation of JPEG2000 for hyperspectral image compression. , 2011, , .		8
349	Content-based hyperspectral image retrieval using spectral unmixing. Proceedings of SPIE, 2011, , .	0.8	8
350	Hyperspectral image segmentation using a new spectral mixture-based binary partition tree representation. , 2013, , .		8
351	Fusion of hyperspectral and lidar data using generalized composite kernels: A case study in Extremadura, Spain. , 2015, , .		8
352	HyperMix: An Open-Source Tool for Fast Spectral Unmixing on Graphics Processing Units. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1883-1887.	3.1	8
353	Spatialâ€“Spectral Hyperspectral Image Classification Using Random Multiscale Representation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4129-4141.	4.9	8
354	GPU Implementation of Spatialâ€“Spectral Preprocessing for Hyperspectral Unmixing. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1671-1675.	3.1	8
355	Spectrometer-Driven Spectral Partitioning for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 668-680.	4.9	8
356	Class-Oriented Spectral Partitioning for Remotely Sensed Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 691-711.	4.9	8
357	A suite of parallel algorithms for efficient band selection from hyperspectral images. Journal of Real-Time Image Processing, 2018, 15, 537-553.	3.5	8
358	Parallel real-time virtual dimensionality estimation for hyperspectral images. Journal of Real-Time Image Processing, 2018, 14, 753-761.	3.5	8
359	Multi-Task Learning with Low-Rank Matrix Factorization for Hyperspectral Nonlinear Unmixing. , 2019, , .		8
360	FPGA implementation of a maximum simplex volume algorithm for endmember extraction from remotely sensed hyperspectral images. Journal of Real-Time Image Processing, 2019, 16, 1681-1694.	3.5	8

#	Article	IF	Citations
361	High-Rankness Regularized Semi-Supervised Deep Metric Learning for Remote Sensing Imagery. Remote Sensing, 2020, 12, 2603.	4.0	8
362	Geographic Optimal Transport for Heterogeneous Data: Fusing Remote Sensing and Social Media. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6935-6945.	6.3	8
363	Rotation-Invariant Deep Embedding for Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	8
364	Parallel Implementation of Target and Anomaly Detection Algorithms for Hyperspectral Imagery. , 2008, , .		7
365	Improved Spectral Unmixing of Hyperspectral Images Using Spatially Homogeneous Endmembers. , 2008, , .		7
366	Parallel Morphological Classification of Hyperspectral Imagery Using Extended Opening and Closing by Reconstruction Operations. , 2008, , .		7
367	Supervised hyperspectral image segmentation using active learning. , 2010, , .		7
368	Semi-supervised hyperspectral image classification using a new (soft) sparse multinomial logistic regression model. , 2011, , .		7
369	A comparative assessment of several processing chains for hyperspectral image classification: What features to use?. , 2011, , .		7
370	On the minimum volume simplex enclosure problem for estimating a linear mixing model. Journal of Global Optimization, 2013, 56, 957-970.	1.8	7
371	A new framework for hyperspectral image classification using multiple spectral and spatial features. , 2014, , .		7
372	Unmixing with SLIC superpixels for hyperspectral change detection. , 2016, , .		7
373	Apparent kinetics of the catalyzed waterâ€“gas shift reaction in synthetic wood gas. Chemical Engineering Journal, 2016, 301, 222-228.	12.7	7
374	Multicore Real-Time Implementation of a Full Hyperspectral Unmixing Chain. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 744-748.	3.1	7
375	Hyperspectral Image Classification Using Parallel Autoencoding Diabolo Networks on Multi-Core and Many-Core Architectures. Electronics (Switzerland), 2018, 7, 411.	3.1	7
376	Impervious Surface Extraction From Multispectral Images via Morphological Attribute Profiles Based on Spectral Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 4775-4790.	4.9	7
377	Covariance Matrix Based Feature Fusion for Scene Classification. , 2018, , .		7
378	Ship Detection in SAR Images by Aggregating Densities of Fisher Vectors: Extension to a Global Perspective. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	7

#	Article	IF	Citations
379	Separable Attention Network in Single- and Mixed-Precision Floating Point for Land-Cover Classification of Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	7
380	Deep Learning-Based Building Footprint Extraction With Missing Annotations. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	7
381	Hashing for Localization (HfL): A Baseline for Fast Localizing Objects in a Large-Scale Scene. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	7
382	Ensemble Entropy Metric for Hyperspectral Anomaly Detection. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	7
383	An experimental evaluation of endmember generation algorithms. , 2005, 5995, 599501.		6
384	Heterogeneous Parallel Computing in Remote Sensing Applications: Current Trends and Future Perspectives. , 2006, , .		6
385	Parallel CBIR System for Efficient Hyperspectral Image Retrieval from Heterogeneous Networks of Workstations. , 2007, , .		6
386	On the incorporation of spatial information to endmember extraction: Survey and algorithm comparison. , 2009, , .		6
387	A new semi-supervised algorithm for hyperspectral image classification based on spectral unmixing concepts. , 2011, , .		6
388	Real-time implementation of a full hyperspectral unmixing chain on graphics processing units. , 2011, , .		6
389	Semi-supervised active learning for urban hyperspectral image classification. , 2012, , .		6
390	Spectral unmixing of multispectral satellite images with dimensionality expansion using morphological profiles. , 2012, , .		6
391	Parallel sparse unmixing of hyperspectral data. , 2013, , .		6
392	Hyperspectral change detection by sparse unmixing with dictionary pruning. , 2015, , .		6
393	Exploring the performanceâ€“powerâ€“energy balance of low-power multicore and manycore architectures for anomaly detection in remote sensing. Journal of Supercomputing, 2015, 71, 1893-1906.	3.6	6
394	On the architecture of a big data classification tool based on a map reduce approach for hyperspectral image analysis. , 2015, , .		6
395	A Distributed Parallel Algorithm Based on Low-Rank and Sparse Representation for Anomaly Detection in Hyperspectral Images. Sensors, 2018, 18, 3627.	3.8	6
396	Estimating Nonlinearities in p-Linear Hyperspectral Mixtures. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6586-6595.	6.3	6

#	Article	IF	Citations
397	GPU-Friendly Neural Networks for Remote Sensing Scene Classification. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	6
398	DFLLR: Deep Feature Learning With Latent Relationship Embedding for Remote Sensing Image Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	6
399	Deep mixed precision for hyperspectral image classification. Journal of Supercomputing, 2021, 77, 9190-9201.	3.6	6
400	Enhanced Spatiotemporal Fusion via MODIS-Like Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	6
401	Parallel Classification of Hyperspectral Images Using Neural Networks. Studies in Computational Intelligence, 2008, , 193-216.	0.9	6
402	Revisiting SLIC: Fast Superpixel Segmentation of Marine SAR Images Using Density Features. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-18.	6.3	6
403	Fast Orthogonal Projection for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	6
404	Variable Subpixel Convolution Based Arbitrary-Resolution Hyperspectral Pansharpening. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-19.	6.3	6
405	<title>Automated identification of endmembers from hyperspectral data using mathematical morphology</title>. , 2002, , .		5
406	Analysis of the behavior of a neural network model in the identification and quantification of hyperspectral signatures applied to the determination of water quality. , 2004, 5584, 174.		5
407	On the generation of training samples for neural network-based mixed pixel classification. , 2005, , .		5
408	Morphological feature extraction for automatic registration of multispectral images. , 2007, , .		5
409	Semi-supervised hyperspectral image segmentation. , 2009, , .		5
410	Improving the scalability of hyperspectral imaging applications on heterogeneous platforms using adaptive run-time data compression. Computers and Geosciences, 2010, 36, 1283-1291.	4.2	5
411	Impact of JPEG2000 compression on endmember extraction and unmixing of remotely sensed hyperspectral data. Journal of Applied Remote Sensing, 2010, 4, 041796.	1.3	5
412	Spatial-spectral preprocessing for volume-based endmember extraction algorithms using unsupervised clustering. , 2010, , .		5
413	A comparative analysis of GPU implementations of spectral unmixing algorithms. , 2011, , .		5
414	HyperMix: A new tool for quantitative evaluation of end member identification and spectral unmixing techniques. , 2012, , .		5

#	Article	IF	Citations
415	Assessing the Performance-Energy Balance of Graphics Processors for Spectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2305-2316.	4.9	5
416	Binary partition tree-based local spectral unmixing. , 2014, , .		5
417	Hyperspectral and lidar data integration and classification. , 2015, , .		5
418	Sparse Unmixing-Based Content Retrieval of Hyperspectral Images on Graphics Processing Units. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 2443-2447.	3.1	5
419	Spatial technology and social media in remote sensing: challenges and opportunities [point of view]. Proceedings of the IEEE, 2017, 105, 1583-1585.	21.3	5
420	An Investigation on Self-Normalized Deep Neural Networks for Hyperspectral Image Classification. , 2018, , .		5
421	Deep Auto-Encoder Network for Hyperspectral Image Unmixing. , 2018, , .		5
422	A New Max-Min Convolutional Network for Hyperspectral Image Classification. , 2021, , .		5
423	Endmember Estimation From Hyperspectral Images Using Geometric Distances. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	5
424	Endmember generation by projection pursuit. , 2005, , .		4
425	Automated image registration using morphological region of interest feature extraction. , 0, , .		4
426	Design and Implementation of a Parallel Heterogeneous Algorithm for Hyperspectral Image Analysis Using HeteroMPI. , 2006, , .		4
427	High-performance computing in remotely sensed hyperspectral imaging: the Pixel Purity Index algorithm as a case study. , 2006, , .		4
428	HYPER-I-NET: European research network on hyperspectral imaging. , 2007, , .		4
429	Parallel Detection of Targets in Hyperspectral Images Using Heterogeneous Networks of Workstations. , 2007, , .		4
430	A novel thresholding method for automatically detecting stars in astronomical images. , 2008, , .		4
431	A new system to perform unsupervised and supervised classification of satellite images from Google Maps. , 2010, , .		4
432	Low-bit rate exploitation-based lossy hyperspectral image compression. Journal of Applied Remote Sensing, 2010, 4, 041760.	1.3	4

#	Article	IF	Citations
433	Unmixing prior to supervised classification of urban hyperspectral images. , 2011, , .		4
434	Parallel implementation of linear and nonlinear spectral unmixing of remotely sensed hyperspectral images. , 2011, , .		4
435	Unsupervised clustering and spectral unmixing for feature extraction prior to supervised classification of hyperspectral images. , 2011, , .		4
436	Parallel positive Boolean function approach to classification of remote sensing images. Journal of Applied Remote Sensing, 2011, 5, 051505.	1.3	4
437	Parallel implementation of vertex component analysis for hyperspectral endmember extraction. , 2012, , .		4
438	Spectral characterisation of land surface composition to determine soil erosion within semiarid rainfed cultivated areas. , 2012, , .		4
439	A new semi-supervised approach for hyperspectral image classification with different active learning strategies. , 2012, , .		4
440	Semi-supervised discriminative random field for hyperspectral image classification. , 2012, , .		4
441	Spectral-spatial classification for hyperspectral data using SVM and subspace MLR. , 2013, , .		4
442	Decision fusion based on extended multi-attribute profiles for hyperspectral image classification. , 2013, , .		4
443	Potential and limitations of band selection and library pruning in sparse hyperspectral unmixing. , 2015, , .		4
444	A fast parallel hyperspectral coded aperture algorithm for compressive sensing using OpenCL. , 2015, , .		4
445	Hyperspectral image classification based on union of subspaces. , 2015, , .		4
446	GPU implementation of spatial preprocessing for spectral unmixing of hyperspectral data. , 2015, , .		4
447	Fast and Reliable Noise Estimation for Hyperspectral Subspace Identification. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1199-1203.	3.1	4
448	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
449	Convex formulation for hyperspectral image classification with superpixels. , 2016, , .		4
450	Structure-Aware Multikernel Learning for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 9837-9854.	4.9	4

#	Article	IF	Citations
451	High-Performance Computer Architectures for Remote Sensing Data Analysis. Chapman & Hall/CRC Computer and Information Science Series, 2007, , 9-41.	0.4	4
452	Spectral-Spatial Weighted Sparse Nonnegative Tensor Factorization for Hyperspectral Unmixing. , 2020, , .		4
453	Adaptive Superpixel Segmentation with Fisher Vectors for Ship Detection in SAR Images. , 2020, , .		4
454	Pseudo Complex-Valued Deformable ConvLSTM Neural Network With Mutual Attention Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	4
455	Commodity cluster and hardware-based massively parallel implementations of hyperspectral imaging algorithms. , 2006, , .		3
456	Recent developments and future directions in parallel processing of remotely sensed hyperspectral images. , 2009, , .		3
457	High performance computing for hyperspectral image analysis: Perspective and state-of-the-art. , 2009, , .		3
458	Semi-supervised hyperspectral classification using active label selection. Proceedings of SPIE, 2009, , .	0.8	3
459	<title>Massively parallel processing of remotely sensed hyperspectral images</title>. , 2009, , .		3
460	Automatic selection of informative samples for SVM-based classification of hyperspectral data using limited training sets. , 2010, , .		3
461	Near real-time endmember extraction from remotely sensed hyperspectral data using NVidia GPUs. , 2010, , .		3
462	Minimum volume simplicial enclosure for spectral unmixing of remotely sensed hyperspectral data. , 2010, , .		3
463	Spectral-textural endmember extraction. , 2010, , .		3
464	FPGA implementation of endmember extraction algorithms from hyperspectral imagery: pixel purity index versus N-FINDR. Proceedings of SPIE, 2011, , .	0.8	3
465	A new morphological anomaly detection algorithm for hyperspectral images and its GPU implementation. , 2011, , .		3
466	Noise-robust spatial preprocessing prior to endmember extraction from hyperspectral data. , 2011, , .		3
467	Real-time spectral unmixing using iterative error analysis on commodity graphics processing units. , 2011, , .		3
468	Commodity Cluster-Based Parallel Implementation of an Automatic Target Generation Process for Hyperspectral Image Analysis. , 2011, , .		3

#	Article	IF	Citations
469	Semi-supervised classification of hyperspectral data using spectral unmixing concepts. , 2012, , .		3
470	Vertex component analysis GPU-based implementation for hyperspectral unmixing. , 2012, , .		3
471	Integrating multiple nonlinear estimators into hyperspectral unmixing. , 2014, , .		3
472	Spectral partitioning for hyperspectral remote sensing image classification. , 2014, , .		3
473	New geo-portal for MODIS/SEVIRI image products with geolocation-based retrieval functionality. Journal of Applied Remote Sensing, 2015, 9, 096079.	1.3	3
474	SPT 3.1: A free software for automatic tuning of segmentation parameters in optical, hyperspectral and SAR images. , 2015, , .		3
475	Performance-Power Evaluation of an OpenCL Implementation of the Simplex Growing Algorithm for Hyperspectral Unmixing. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 304-308.	3.1	3
476	Multicore implementation of the multi-scale adaptive deep pyramid matching model for remotely sensed image classification. , 2017, , .		3
477	Models for Hyperspectral Image Analysis: From Unmixing to Object-Based Classification. Signals and Communication Technology, 2018, , 37-80.	0.5	3
478	Sentinel-3/FLEX Biophysical Product Confidence Using Sentinel-2 Land-Cover Spatial Distributions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 3447-3461.	4.9	3
479	DS⁴L: Deep Semisupervised Shared Subspace Learning for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	3
480	Towards Real-Time Compression of Hyperspectral Images Using Virtex-II FPGAs. Lecture Notes in Computer Science, 2007, , 248-257.	1.3	3
481	Semisupervised Discriminative Random Field for Hyperspectral Image Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 12403-12414.	4.9	3
482	Toward Tightness of Scalable Neighborhood Component Analysis for Remote-Sensing Image Characterization. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	3
483	DRFL-VAT: Deep Representative Feature Learning With Virtual Adversarial Training for Semisupervised Classification of Hyperspectral Image. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	3
484	Hyperspectral image analysis by scale-orientation morphological profiles. , 2004, 5238, 432.		2
485	Morphological algorithms for processing tickets by handheld assay. , 2004, 5584, 221.		2
486	Parallel Implementation of Hyperspectral Image Processing Algorithms. , 2006, , .		2

#	Article	IF	Citations
487	Recent developments and future directions in hyperspectral data classification. , 2007, , .		2
488	Endmember extraction from hyperspectral imagery using a parallel ensemble approach with consensus analysis. , 2009, , .		2
489	<title>Lossy hyperspectral image compression tuned for spectral mixture analysis applications on NVidia graphics processing units</title>. Proceedings of SPIE, 2009, , .	0.8	2
490	A fast sequential endmember extraction algorithm based on unconstrained linear spectral unmixing. , 2009, , .		2
491	Spatial-spectral endmember extraction from remotely sensed hyperspectral images using the watershed transformation. , 2010, , .		2
492	Impact of Vector Ordering Strategies on Morphological Unmixing of Remotely Sensed Hyperspectral Images. , 2010, , .		2
493	A new subspace discriminant analysis approach for supervised hyperspectral image classification. , 2011, , .		2
494	A new digital repository for remotely sensed hyperspectral imagery with unmixing-based retrieval functionality. Proceedings of SPIE, 2012, , .	0.8	2
495	Nonnegative matrix factorization with collaborativity for hyperspectral unmixing. , 2012, , .		2
496	B-HYCA: Blind hyperspectral compressive sensing. , 2015, , .		2
497	FPGA implementation of a maximum volume algorithm for endmember extraction from hyperspectral imagery. , 2015, , .		2
498	Foreword to the Special Issue on Big Data in Remote Sensing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4607-4609.	4.9	2
499	GPU implementation of a hyperspectral coded aperture algorithm for compressive sensing. , 2015, , .		2
500	Performance portability study of an automatic target detection and classification algorithm for hyperspectral image analysis using OpenCL. , 2015, , .		2
501	Parallel implementation of the simplex growing algorithm for hyperspectral unmixing using OpenCL. , 2016, , .		2
502	A Gaussian approach to subspace based classification of hyperspectral images. , 2016, , .		2
503	GPU implementation of hyperspectral image classification based on weighted Markov random fields. , 2016, , .		2
504	Uncertainty propagation from atmospheric parameters to sparse hyperspectral unmixing. , 2016, , .		2

#	Article	IF	Citations
505	Onboard payload-data dimensionality reduction. , 2017, , .		2
506	Spatial weighted sparse regression for hyperspectral image unmixing. , 2017, , .		2
507	Multi-superpixelization-based convex formulation for joint classification of hyperspectral and lidar data. , 2017, , .		2
508	Efficient Convolutional Neural Network for Spectral-Spatial Hyperspectral Denoising. , 2019, , .		2
509	High-Order Self-Attention Network for Remote Sensing Scene Classification. , 2019, , .		2
510	Analysis of Remotely Sensed Images Through Social Media. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 3026-3039.	4.9	2
511	Parallel Spatial-Spectral Processing of Hyperspectral Images. Studies in Computational Intelligence, 2008, , 163-192.	0.9	2
512	Training Capsnets via Active Learning for Hyperspectral Image Classification. , 2020, , .		2
513	Recent Advances in Hyperspectral Unmixing Using Sparse Techniques and Deep Learning. Advances in Computer Vision and Pattern Recognition, 2020, , 377-405.	1.3	2
514	Optimized Spatial Gradient Transfer for Hyperspectral-LiDAR Data Classification. Remote Sensing, 2022, 14, 1814.	4.0	2
515	Multi-resolution Pyramid Enhanced Non-local Feature Extraction for Hyperspectral Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 5865-5879.	4.9	2
516	Efficient information extraction from hyperspectral imagery using networks of workstations. , 0, , .		1
517	Morphological feature extraction and spectral unmixing of hyperspectral images. , 2008, , .		1
518	Towards the Definition of a Flexible Hyperspectral Processing Chain: Preliminary Case Study Using High-Resolution Urban Data. , 2008, , .		1
519	A PYRAMID-BASED BLOCK OF SKEWERS FOR PIXEL PURITY INDEX FOR ENDMEMBER EXTRACTION IN HYPERSPECTRAL IMAGERY. International Journal of High Speed Electronics and Systems, 2008, 18, 469-482.	0.7	1
520	Analysis of different strategies for incorporating spatial information in the design of endmember extraction algorithms from hyperspectral data. , 2009, , .		1
521	Spatial-spectral endmember extraction from hyperspectral imagery using multi-band morphology and volume optimization. , 2009, , .		1
522	<title>Impact of JPEG2000 compression on spatial-spectral endmember extraction from hyperspectral data</title>. , 2009, , .		1

#	Article	IF	Citations
523	Spatial preprocessing for endmember extraction using unsupervised clustering and orthogonal subspace projection concepts. , 2010, , .		1
524	On the incorporation of spatial information to endmember identification algorithms without the pure pixel assumption. , 2011, , .		1
525	Parallel hyperspectral image compression using iterative error analysis on graphics processing units. , 2012, , .		1
526	Parallel implementation of a hyperspectral unmixing chain: Graphic processing units versus multi-core processors. , 2012, , .		1
527	Real-time lossy compression of hyperspectral images using iterative error analysis on graphics processing units. , 2012, , .		1
528	A New Digital Repository for Remotely Sensed Hyperspectral Imagery on GPUs. , 2013, , .		1
529	Parallel method for sparse semisupervised hyperspectral unmixing. Proceedings of SPIE, 2013, , .	0.8	1
530	Semi-supervised classification of urban hyperspectral data using spectral unmixing concepts. , 2013, , .		1
531	Acceleration of vertex component analysis for spectral unmixing with CUDA. Proceedings of SPIE, 2013, , .	0.8	1
532	Validation of spectral unmixing methods using photometry and topography information. , 2013, , .		1
533	On the use of collaborative sparse regression in hyperspectral unmixing chains. , 2014, , .		1
534	Class-oriented spectral partitioning for hyperspectral image classification. , 2015, , .		1
535	Segmentation as postprocessing for hyperspectral image classification. , 2015, , .		1
536	Parallel implementation of the multiple endmember spectral mixture analysis algorithm for hyperspectral unmixing. , 2015, , .		1
537	On the optimization of memory access to increase the performance of spatial preprocessing techniques on graphics processing units. , 2016, , .		1
538	On the detection of linear mixtures in hyperspectral images. , 2016, , .		1
539	Fast spatial-spectral preprocessing for endmember extraction and spectral unmixing using graphic processing units. , 2016, , .		1
540	A new tool for supervised classification of satellite images available on web servers: Google Maps as a case study. , 2016, , .		1

#	Article	IF	Citations
541	A new classification-oriented endmember extraction and sparse unmixing approach for hyperspectral data. , 2017, , .		1
542	Spatial Technology and Social Media [Scanning the Issue]. Proceedings of the IEEE, 2017, 105, 1851-1854.	21.3	1
543	Evaluation of Different Regularization Methods for the Extreme Learning Machine Applied to Hyperspectral Images. , 2018, , .		1
544	Solving Deep Neural Networks with Ordinary Differential Equations for Remotely Sensed Hyperspectral Image Classification. , 2019, , .		1
545	Accessibility-Free Active Learning for Hyperspectral Image Classification. , 2019, , .		1
546	A New Spatio-Temporal Fusion Method for Remotely Sensed Data Based on Convolutional Neural Networks. , 2019, , .		1
547	Parallel Segmentation of Multi-Channel Images Using Multi-Dimensional Mathematical Morphology. , 0, , 321-340.		1
548	Subspace Optimal Transport for Spatial Bias Correction of Social Media Data: A Case Study of 2013 Boulder Flood Event. , 2021, , .		1
549	Parallel Segmentation of Multi-Channel Images Using Multi-Dimentional Mathematical Morphology. , 2006, , 270-291.		1
550	A PYRAMID-BASED BLOCK OF SKEWERS FOR PIXEL PURITY INDEX FOR ENDMEMBER EXTRACTION IN HYPERSPECTRAL IMAGERY. Selected Topics in Electornics and Systems, 2009, , 241-254.	0.2	1
551	Soil Remediation, Use of Combined (Coupled) Technologies. , 2014, , 1982-1988.		1
552	Self-Organizing Map for Hyperspectral Image Analysis. Lecture Notes in Computer Science, 2001, , 208-218.	1.3	0
553	Distributed Computing for Efficient Hyperspectral Imaging Using Fully Heterogeneous Networks of Workstations. , 2006, , .		0
554	Parallel morphological processing of hyperspectral image data on heterogeneous networks of computers. , 2006, , .		0
555	Morphological Hyperspectral Image Classification: A Parallel Processing Perspective. , 0, , 353-378.		0
556	Message from the HeteroPar 2007 chair. , 2007, , .		0
557	Cluster-Based Implementation of a Morphological Watershed Algorithm for Parallel Classification of Multichannel Images. , 2007, , .		0
558	Clusters versus FPGAs for spectral mixture analysis-based lossy hyperspectral data compression. Proceedings of SPIE, 2008, , .	0.8	0

#	Article	IF	Citations
559	Improving the scalability of parallel algorithms for hyperspectral image analysis using adaptive message compression. , 2009, , .		0
560	Recent activities in the Hyperspectral Imaging Network (HYPER-I-NET): A European consortium fostering imaging spectroscopy research. , 2009, , .		0
561	Comparative analysis of training strategies for neural network-based spectral unmixing of laboratory-simulated forest hyperspectral scenes. , 2010, , .		0
562	Integration of Hyperspectral Image Classification and Unmixing for Active Learning. , 2011, , .		0
563	Special Section Guest Editorial: High-Performance Computing inÂApplied Remote Sensing. Journal of Applied Remote Sensing, 2011, 5, 051599.	1.3	0
564	Joint spectral and spatial preprocessing prior to endmember extraction from hyperspectral images. Proceedings of SPIE, 2011, , .	0.8	0
565	Parallel implementation of RX anomaly detection on multi-core processors: impact of data partitioning strategies. Proceedings of SPIE, 2011, , .	0.8	0
566	Urban area product simulation for the EnMap hyperspectral sensor. , 2011, , .		0
567	Further optimizations of the GPU-based pixel purity index algorithm for hyperspectral unmixing. Proceedings of SPIE, 2012, , .	0.8	0
568	Publisherâ€™s Note: Graphics processing unit implementation of JPEG2000 for hyperspectral image compression. Journal of Applied Remote Sensing, 2012, 6, 060101.	1.3	0
569	A new web-based system for unsupervised classification of satellite images from the Google Maps engine. Proceedings of SPIE, 2012, , .	0.8	0
570	Improved signal unmixing of vegetation using sparse group selection. , 2013, , .		0
571	A comparison study between windowing and binary partition trees for hyperspectral image information mining. , 2013, , .		0
572	Spectral unmixing-based post-processing for hyperspectral image classification. , 2013, , .		0
573	Plant production system monitoring via multiple signal classification and sparse regression. , 2013, , .		0
574	Special issue on algorithms and architectures for real-time multi-dimensional image processing. Journal of Real-Time Image Processing, 2014, 9, 393-396.	3.5	0
575	Spectrometer-driven spectral partitioning for hyperspectral image classification. , 2014, , .		0
576	Efficient parallel implementation of polarimetric synthetic aperture radar data processing. Proceedings of SPIE, 2014, , .	0.8	0

#	Article	IF	Citations
577	GPU implementation of a constrained hyperspectral coded aperture algorithm for compressive sensing. , 2015, , .		0
578	Robust collaborative nonnegative matrix factorization for hyperspectra unmixing (R-CONMF). , 2015, , .		0
579	Segmentation as postprocessing for hyperspectral image classification. , 2015, , .		0
580	HyperMix: An open source tool for hyperspectral imaging. , 2015, , .		0
581	Sparse hyperspectral unmixing with spatial discontinuity preservation. , 2016, , .		0
582	HyperMix: A New Tool for Higher Education of Computer and Remote Sensing Engineers. Procedia, Social and Behavioral Sciences, 2016, 228, 59-65.	0.5	0
583	Spatial-spectral preprocessing for endmember extraction on GPU's. Proceedings of SPIE, 2016, , .	0.8	0
584	A multiple criteria-based spectral partitioning method for remotely sensed hyperspectral image classification. Proceedings of SPIE, 2016, , .	0.8	0
585	OpenCL-library-based implementation of SCLSU algorithm for remotely sensed hyperspectral data exploitation: clMAGMA versus viennaCL. Proceedings of SPIE, 2016, , .	0.8	0
586	A new semi-supervised classification strategy combining active learning and spectral unmixing of hyperspectral data. Proceedings of SPIE, 2016, , .	0.8	0
587	An iterative enhancement of higher order nonlinear mixture model for accurate hyperspectral unmixing. , 2016, , .		0
588	Graph-regularized coupled spectral unmixing for multisensor time-series analysis. , 2016, , .		0
589	Parallel implementation of a hyperspectral data geometry-based estimation of number of endmembers algorithm. Proceedings of SPIE, 2016, , .	0.8	0
590	Impervious surface extraction from multispectral images using morphological attribute profiles and spectral mixture analysis. , 2017, , .		0
591	Inter-Sensor Regression Analysis for Operational Sentinel-2 and Sentinel-3 Data Products. , 2018, , .		0
592	IGARSS in Yokohama, Japan: Impressions From the First Days [Conference Reports]. IEEE Geoscience and Remote Sensing Magazine, 2019, 7, 8-19.	9.6	0
593	Activities of the IEEE GRSS Spain Chapter [Chapters]. IEEE Geoscience and Remote Sensing Magazine, 2019, 7, 177-180.	9.6	0
594	Open Multi-Processing Acceleration for Unsupervised Land Cover Categorization Using Probabilistic Latent Semantic Analysis. , 2019, , .		0

#	Article	IF	Citations
595	On the Evaluation of Machine Learning Algorithms for Hyperspectral Image Classification on a Heterogeneous Computing Device. , 2021, , .		0
596	Generalized Scalable Neighborhood Component Analysis for Single and Multi-Label Remote Sensing Image Characterization. , 2021, , .		0
597	An Overview of the Contributions of Jose Manuel Bioucas-Dias to Remote Sensing Image Processing. , 2021, , .		0
598	Robust Deep Metric Learning for Remote Sensing Images with Noisy Annotations. , 2021, , .		0
599	Parallel Implementation of Morphological Neural Networks for Hyperspectral Image Analysis. Chapman & Hall/CRC Computer and Information Science Series, 2007, , 131-150.	0.4	0
600	Parallel Wildland Fire Monitoring and Tracking Using Remotely Sensed Data. Chapman & Hall/CRC Computer and Information Science Series, 2007, , 151-182.	0.4	0
601	Efficient Collective Communication Paradigms for Hyperspectral Imaging Algorithms Using HeteroMPI. Lecture Notes in Computer Science, 2008, , 326-331.	1.3	0
602	A NEW MULTIPLE CLASSIFIER SYSTEM FOR SEMI-SUPERVISED ANALYSIS OF HYPERSPECTRAL IMAGES. , 2012, , .		0
603	Performance Optimizations for an Automatic Target Generation Process in Hyperspectral Analysis. Scalable Computing, 2016, 17, .	1.0	0