

Zhenwei Shi

List of Publications by Year in descending order

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133
papers

5,219
citations

109264

35
h-index

91828

69
g-index

133
all docs

133
docs citations

133
times ranked

3061
citing authors

#	ARTICLE	IF	CITATIONS
1	Neural Rendering for Game Character Auto-Creation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 1489-1502.	9.7	5
2	Adversarial Instance Augmentation for Building Change Detection in Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	50
3	Remote Sensing Image Change Detection With Transformers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	2.7	258
4	High-Resolution Remote Sensing Image Captioning Based on Structured Attention. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	2.7	22
5	An Open Set Domain Adaptation Algorithm via Exploring Transferability and Discriminability for Remote Sensing Image Scene Classification. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	2.7	10
6	Text-to-Remote-Sensing-Image Generation With Structured Generative Adversarial Networks. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	3
7	Semantic Segmentation of Remote Sensing Image Based on Regional Self-Attention Mechanism. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	10
8	Hybrid-Scale Self-Similarity Exploitation for Remote Sensing Image Super-Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	2.7	26
9	CANet: Centerness-Aware Network for Object Detection in Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	2.7	15
10	Richer U-Net: Learning More Details for Road Detection in Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	10
11	An All-Scale Feature Fusion Network With Boundary Point Prediction for Cloud Detection. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	7
12	Geographical Knowledge-Driven Representation Learning for Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	14
13	Scene Aggregation Network for Cloud Detection on Remote Sensing Imagery. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	5
14	Tropical Cyclone Forecast Using Multitask Deep Learning Framework. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	6
15	Transformer-Based Multistage Enhancement for Remote Sensing Image Super-Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-11.	2.7	33
16	Structure-aware Color Preserving Network for Hyperspectral Image Super-Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	2.7	10
17	UGCNet: An Unsupervised Semantic Segmentation Network Embedded With Geometry Consistency for Remote-Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	1
18	Remote-Sensing Image Captioning Based on Multilayer Aggregated Transformer. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	14

#	ARTICLE	IF	CITATIONS
19	Deep Autoencoder for Hyperspectral Unmixing via Global-Local Smoothing. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	16
20	Global estimation of clear-sky shortwave aerosol direct radiative effects based on CALIPSO observations. International Journal of Remote Sensing, 2022, 43, 1514-1548.	1.3	1
21	Mining Cross-Domain Structure Affinity for Refined Building Segmentation in Weakly Supervised Constraints. Remote Sensing, 2022, 14, 1227.	1.8	5
22	Feedback Refined Local-Global Network for Super-Resolution of Hyperspectral Imagery. Remote Sensing, 2022, 14, 1944.	1.8	4
23	Dual-Branched Spatio-Temporal Fusion Network for Multihorizon Tropical Cyclone Track Forecast. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 3842-3852.	2.3	7
24	Physics-Informed Hyperspectral Remote Sensing Image Synthesis With Deep Conditional Generative Adversarial Networks. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	5
25	LMO-YOLO: A Ship Detection Model for Low-Resolution Optical Satellite Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 4117-4131.	2.3	10
26	A Degraded Reconstruction Enhancement-Based Method for Tiny Ship Detection in Remote Sensing Images With a New Large-Scale Dataset. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	2.7	8
27	Multiscale Methods for Optical Remote-Sensing Image Captioning. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 2001-2005.	1.4	13
28	An End-to-End Network for Remote Sensing Imagery Semantic Segmentation via Joint Pixel- and Representation-Level Domain Adaptation. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1896-1900.	1.4	20
29	Simultaneously Multiobjective Sparse Unmixing and Library Pruning for Hyperspectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 3383-3395.	2.7	29
30	Hyperspectral Remote Sensing Imagery Generation From RGB Images Based on Joint Discrimination. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 7624-7636.	2.3	10
31	Semantic Segmentation of Remote Sensing Images With Self-Supervised Multitask Representation Learning. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 6438-6450.	2.3	31
32	A geographic information-driven method and a new large scale dataset for remote sensing cloud/snow detection. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 174, 87-104.	4.9	33
33	DCL-Net: Augmenting the Capability of Classification and Localization for Remote Sensing Object Detection. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 7933-7944.	2.7	23
34	Adversarial Training for Solving Inverse Problems in Image Processing. IEEE Transactions on Image Processing, 2021, 30, 2513-2525.	6.0	11
35	Establishment of a Comprehensive Drought Monitoring Index Based on Multisource Remote Sensing Data and Agricultural Drought Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 2113-2126.	2.3	20
36	Bayesian Constrained Energy Minimization for Hyperspectral Target Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 8359-8372.	2.3	6

#	ARTICLE	IF	CITATIONS
37	Selective focus saliency model driven by object class-awareness. IET Image Processing, 2021, 15, 1332-1344.	1.4	1
38	Cross-Domain Transfer for Ship Instance Segmentation in SAR Images. , 2021, , .		4
39	V2RNet: An Unsupervised Semantic Segmentation Algorithm for Remote Sensing Images via Cross-Domain Transfer Learning. , 2021, , .		4
40	Synergistic Attention for Ship Instance Segmentation in SAR Images. Remote Sensing, 2021, 13, 4384.	1.8	17
41	Stylized Neural Painting. , 2021, , .		40
42	Building Extraction from Remote Sensing Images with Sparse Token Transformers. Remote Sensing, 2021, 13, 4441.	1.8	56
43	Local Attention Networks for Occluded Airplane Detection in Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 381-385.	1.4	33
44	Coupled Adversarial Training for Remote Sensing Image Super-Resolution. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3633-3643.	2.7	87
45	A Contextual Bidirectional Enhancement Method for Remote Sensing Image Object Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4518-4531.	2.3	26
46	Deep Matting for Cloud Detection in Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8490-8502.	2.7	29
47	Domain Adaptation Based on Correlation Subspace Dynamic Distribution Alignment for Remote Sensing Image Scene Classification. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 7920-7930.	2.7	53
48	Multiscale Deep Spatial Feature Extraction Using Virtual RGB Image for Hyperspectral Imagery Classification. Remote Sensing, 2020, 12, 280.	1.8	20
49	Extraction of urban power lines and potential hazard analysis from mobile laser scanning point clouds. International Journal of Remote Sensing, 2020, 41, 3411-3428.	1.3	18
50	DSSNet: A Simple Dilated Semantic Segmentation Network for Hyperspectral Imagery Classification. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1968-1972.	1.4	65
51	Semisupervised Center Loss for Remote Sensing Image Scene Classification. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 1362-1373.	2.3	10
52	Do Game Data Generalize Well for Remote Sensing Image Segmentation?. Remote Sensing, 2020, 12, 275.	1.8	16
53	A Spatial-Temporal Attention-Based Method and a New Dataset for Remote Sensing Image Change Detection. Remote Sensing, 2020, 12, 1662.	1.8	605
54	Multiobjective-Based Sparse Representation Classifier for Hyperspectral Imagery Using Limited Samples. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 239-249.	2.7	19

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55	Tropical cyclone intensity prediction based on recurrent neural networks. Electronics Letters, 2019, 55, 413-415.	0.5	28
56	A Classification-Based Model for Multi-Objective Hyperspectral Sparse Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 9612-9625.	2.7	26
57	Ensemble-Based Cascaded Constrained Energy Minimization for Hyperspectral Target Detection. Remote Sensing, 2019, 11, 1310.	1.8	72
58	Unsupervised Saliency Model with Color Markov Chain for Oil Tank Detection. Remote Sensing, 2019, 11, 1089.	1.8	51
59	Generative Adversarial Training for Weakly Supervised Cloud Matting. , 2019, , .		12
60	Simultaneous Super-Resolution and Segmentation for Remote Sensing Images. , 2019, , .		19
61	Ship detection in spaceborne infrared images based on Convolutional Neural Networks and synthetic targets. Infrared Physics and Technology, 2019, 97, 229-234.	1.3	30
62	Analysis for the Weakly Pareto Optimum in Multiobjective-Based Hyperspectral Band Selection. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 3729-3740.	2.7	21
63	Unsupervised Oil Tank Detection by Shape-Guide Saliency Model. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 477-481.	1.4	14
64	CoinNet: Copy Initialization Network for Multispectral Imagery Semantic Segmentation. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 816-820.	1.4	47
65	A supervised abundance estimation method for hyperspectral unmixing. Remote Sensing Letters, 2018, 9, 383-392.	0.6	19
66	Random Access Memories: A New Paradigm for Target Detection in High Resolution Aerial Remote Sensing Images. IEEE Transactions on Image Processing, 2018, 27, 1100-1111.	6.0	151
67	$\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si35.gif" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \hat{a}, \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0 \langle \text{mml:mn} \rangle$ sparse hyperspectral unmixing using spectral information and a multi-objectives formulation. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 141, 46-58.	4.9	57
68	Dehazing for Multispectral Remote Sensing Images Based on a Convolutional Neural Network With the Residual Architecture. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1645-1655.	2.3	77
69	Sea-land segmentation for infrared remote sensing images based on superpixels and multi-scale features. Infrared Physics and Technology, 2018, 91, 12-17.	1.3	15
70	MugNet: Deep learning for hyperspectral image classification using limited samples. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 145, 108-119.	4.9	201
71	Robust Sparse Unmixing for Hyperspectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1348-1359.	2.7	17
72	Automatic Recognition of Pole-Like Objects from Mobile Laser Scanning Point Clouds. Remote Sensing, 2018, 10, 1891.	1.8	18

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73	Automatic Raft Labeling for Remote Sensing Images via Dual-Scale Homogeneous Convolutional Neural Network. Remote Sensing, 2018, 10, 1130.	1.8	42
74	Robust Sparse Hyperspectral Unmixing Based on Multi-Objective Optimization. , 2018, , .		2
75	Utilizing Multilevel Features for Cloud Detection on Satellite Imagery. Remote Sensing, 2018, 10, 1853.	1.8	26
76	Single-Sample Aeroplane Detection in High-Resolution Optimal Remote Sensing Imagery. , 2018, , .		0
77	Attention-Based Convolutional Networks for Ship Detection in High-Resolution Remote Sensing Images. Lecture Notes in Computer Science, 2018, , 373-383.	1.0	1
78	Towards Weakly Pareto Optimal: An Improved Multi-Objective Based Band Selection Method for Hyperspectral Imagery. , 2018, , .		3
79	Mudflat aquaculture labeling for infrared remote sensing images via a scanning convolutional network. Infrared Physics and Technology, 2018, 94, 16-22.	1.3	7
80	Collaborative Sparse Hyperspectral Unmixing Using l_{∞} Norm. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5495-5508.	2.7	52
81	Multi-resolution networks for ship detection in infrared remote sensing images. Infrared Physics and Technology, 2018, 92, 183-189.	1.3	24
82	A nowcasting model for the prediction of typhoon tracks based on a long short term memory neural network. Acta Oceanologica Sinica, 2018, 37, 8-12.	0.4	91
83	Learning to Segment Objects of Various Sizes in VHR Aerial Images. Communications in Computer and Information Science, 2018, , 330-340.	0.4	2
84	Multi-objective based spectral unmixing for hyperspectral images. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 124, 54-69.	4.9	61
85	Multilevel Cloud Detection in Remote Sensing Images Based on Deep Learning. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 3631-3640.	2.3	205
86	Hierarchical Guidance Filtering-Based Ensemble Classification for Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4177-4189.	2.7	90
87	Super-Resolution for Remote Sensing Images via Local-Global Combined Network. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 1243-1247.	1.4	205
88	Can a Machine Generate Humanlike Language Descriptions for a Remote Sensing Image?. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3623-3634.	2.7	139
89	A Novel Spectral-Unmixing-Based Green Algae Area Estimation Method for GOCI Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 437-449.	2.3	31
90	Object Detection with Proposals in High-Resolution Optical Remote Sensing Images. Lecture Notes in Computer Science, 2017, , 242-250.	1.0	1

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91	Fully Convolutional Network With Task Partitioning for Inshore Ship Detection in Optical Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 1665-1669.	1.4	108
92	Longwave infrared hyperspectral image classification via an ensemble method. International Journal of Remote Sensing, 2017, 38, 6164-6178.	1.3	9
93	A New Unsupervised Hyperspectral Band Selection Method Based on Multiobjective Optimization. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 2112-2116.	1.4	24
94	Detecting ship targets in spaceborne infrared image based on modeling radiation anomalies. Infrared Physics and Technology, 2017, 85, 141-146.	1.3	20
95	Hyperspectral Image Classification Based on Deep Forest and Spectral-Spatial Cooperative Feature. Lecture Notes in Computer Science, 2017, , 325-336.	1.0	5
96	Maritime Semantic Labeling of Optical Remote Sensing Images with Multi-Scale Fully Convolutional Network. Remote Sensing, 2017, 9, 480.	1.8	65
97	Hashing Based Hierarchical Feature Representation for Hyperspectral Imagery Classification. Remote Sensing, 2017, 9, 1094.	1.8	4
98	Ship Detection in Spaceborne Optical Image With SVD Networks. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5832-5845.	2.7	215
99	Hyperspectral Image Target Detection Improvement Based on Total Variation. IEEE Transactions on Image Processing, 2016, 25, 2249-2258.	6.0	73
100	No-Reference Assessment on Haze for Remote-Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1855-1859.	1.4	20
101	Hyperspectral Image Classification Based on Nonlinear Spectral-Spatial Network. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1782-1786.	1.4	50
102	Hierarchical Suppression Method for Hyperspectral Target Detection. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 330-342.	2.7	114
103	Quadratic Constrained Energy Minimization for hyperspectral target detection. , 2015, , .		10
104	Panchromatic image processing using hyperspectral unmixing method. , 2015, , .		1
105	Robust Hyperspectral Image Target Detection Using an Inequality Constraint. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3389-3404.	2.7	43
106	Scene Learning for Cloud Detection on Remote-Sensing Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4206-4222.	2.3	50
107	Sparse Unmixing of Hyperspectral Data Using Spectral <i>A Priori</i> Information. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 770-783.	2.7	111
108	Robust and real-time traffic light recognition based on hierarchical vision architecture. , 2014, , .		12

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109	A hierarchical oil depot detector in high-resolution images with false detection control. , 2014, , .		3
110	Single Remote Sensing Image Dehazing. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 59-63.	1.4	120
111	SparseCEM and SparseACE for Hyperspectral Image Target Detection. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 2135-2139.	1.4	33
112	Ship Detection in High-Resolution Optical Imagery Based on Anomaly Detector and Local Shape Feature. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4511-4523.	2.7	163
113	An automated airplane detection system for large panchromatic image with high spatial resolution. Optik, 2014, 125, 2768-2775.	1.4	27
114	Subspace Matching Pursuit for Sparse Unmixing of Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3256-3274.	2.7	90
115	Regularized Simultaneous Forward-Backward Greedy Algorithm for Sparse Unmixing of Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5271-5288.	2.7	64
116	Efficient sparse unmixing analysis for hyperspectral imagery based on random projection. Neural Computing and Applications, 2013, 23, 2281-2293.	3.2	1
117	Nonnegative matrix factorization-based hyperspectral and panchromatic image fusion. Neural Computing and Applications, 2013, 23, 895-905.	3.2	10
118	A quasi-Newton-based spatial multiple materials detector for hyperspectral imagery. Neural Computing and Applications, 2013, 23, 403-409.	3.2	2
119	Nonlocal Similarity Regularized Sparsity Model for Hyperspectral Target Detection. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1532-1536.	1.4	14
120	Hyperspectral unmixing using nonnegative matrix factorization with an approximate L_1 sparsity constraint. , 2012, , .		1
121	A dimension reduction model for sparse hyperspectral target detection with weighted $L_{1/2}$ minimization. , 2012, , .		1
122	Hyperspectral unmixing using non-negative matrix factorization with automatically estimating regularization parameters. , 2011, , .		0
123	Fast fixed-point algorithm for blind separation of nonlinear autocorrelation and non-Gaussian sources. , 2011, , .		0
124	A Hierarchical Connection Graph Algorithm for Gable-Roof Detection in Aerial Image. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 177-181.	1.4	15
125	Blind Source Separation Using Quadratic form Innovation. Neural Processing Letters, 2011, 33, 83-97.	2.0	1
126	Spatial multiple materials detection in hyperspectral imagery. , 2011, , .		0

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127	A method of automatically estimating the regularization parameter for Non-negative Matrix Factorization. , 2010, , .		0
128	Natural gradient for temporally dependent component analysis. , 2010, , .		0
129	Noisy blind source separation by nonlinear autocorrelation. , 2010, , .		5
130	Blind separation of superimposed images with unknown motions. , 2009, , .		17
131	Blind separation of superimposed images with unknown motions. , 2009, , .		0
132	Blind Source Extraction for Noisy Mixtures by Combining Gaussian Moments and Generalized Autocorrelations. Neural Processing Letters, 2008, 28, 209-225.	2.0	1
133	Localized content based image retrieval by multiple instance active learning. , 2008, , .		6