

# Xi-Le Zhao

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Dictionary Learning With Low-Rank Coding Coefficients for Tensor Completion. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 932-946.	7.2	16
2	Hyperspectral Image Denoising Using Factor Group Sparsity-Regularized Nonconvex Low-Rank Approximation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	38
3	Adaptive Hyperspectral Mixed Noise Removal. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	2.7	20
4	Multiscale Feature Tensor Train Rank Minimization for Multidimensional Image Recovery. IEEE Transactions on Cybernetics, 2022, 52, 13395-13410.	6.2	22
5	Hyperspectral Image Restoration by Tensor Fibered Rank Constrained Optimization and Plug-and-Play Regularization. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	2.7	23
6	Hyperspectral and Multispectral Image Fusion Using Factor Smoothed Tensor Ring Decomposition. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	2.7	19
7	Hyperspectral Denoising Using Unsupervised Disentangled Spatiospectral Deep Priors. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	19
8	Nonlocal Patch-Based Fully Connected Tensor Network Decomposition for Multispectral Image Inpainting. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	6
9	Low-Rank Tensor Optimization With Nonlocal Plug-and-Play Regularizers for Snapshot Compressive Imaging. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 581-593.	2.3	2
10	Robust Thick Cloud Removal for Multitemporal Remote Sensing Images Using Coupled Tensor Factorization. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	9
11	Tensor completion via nonconvex tensor ring rank minimization with guaranteed convergence. Signal Processing, 2022, 194, 108425.	2.1	12
12	Transform-based tensor singular value decomposition in multidimensional image recovery. , 2022, , 31-60.		2
13	Tensor Completion via Complementary Global, Local, and Nonlocal Priors. IEEE Transactions on Image Processing, 2022, 31, 984-999.	6.0	42
14	Exemplar-based image inpainting using adaptive two-stage structure-tensor based priority function and nonlocal filtering. Journal of Visual Communication and Image Representation, 2022, 83, 103430.	1.7	2
15	A Unified Framework of Cloud Detection and Removal Based on Low-Rank and Group Sparse Regularizations for Multitemporal Multispectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	9
16	Nonlocal-based tensor-average-rank minimization and tensor transform-sparsity for 3D image denoising. Knowledge-Based Systems, 2022, 244, 108590.	4.0	3
17	Low-Rank Tensor Completion Method for Implicitly Low-Rank Visual Data. IEEE Signal Processing Letters, 2022, 29, 1162-1166.	2.1	2
18	Non-Local Robust Quaternion Matrix Completion for Large-Scale Color Image and Video Inpainting. IEEE Transactions on Image Processing, 2022, 31, 3868-3883.	6.0	39

#	ARTICLE	IF	CITATIONS
19	Self-Supervised Nonlinear Transform-Based Tensor Nuclear Norm for Multi-Dimensional Image Recovery. IEEE Transactions on Image Processing, 2022, 31, 3793-3808.	6.0	28
20	Tensor Completion via Fully-Connected Tensor Network Decomposition with Regularized Factors. Journal of Scientific Computing, 2022, 92, .	1.1	9
21	A fast sketching-based algorithm for rank- $\leq 7$ block term decomposition. Applied Mathematics Letters, 2022, 133, 108252.	1.5	1
22	Rain Streaks Removal for Single Image via Kernel-Guided Convolutional Neural Network. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3664-3676.	7.2	38
23	Adaptive total variation and second-order total variation-based model for low-rank tensor completion. Numerical Algorithms, 2021, 86, 1-24.	1.1	6
24	Multi-Dimensional Visual Data Completion via Low-Rank Tensor Representation Under Coupled Transform. IEEE Transactions on Image Processing, 2021, 30, 3581-3596.	6.0	32
25	Nonlocal Block-Term Decomposition for Hyperspectral Image Mixed Noise Removal. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 5406-5420.	2.3	3
26	Hyperspectral Image Restoration Combining Intrinsic Image Characterization With Robust Noise Modeling. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 1628-1644.	2.3	4
27	Hyperspectral Mixed Noise Removal via Spatial-Spectral Constrained Unsupervised Deep Image Prior. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 9435-9449.	2.3	16
28	Endmember independence constrained hyperspectral unmixing via nonnegative tensor factorization. Knowledge-Based Systems, 2021, 216, 106657.	4.0	11
29	Hyperspectral Super-Resolution via Interpretable Block-Term Tensor Modeling. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 641-656.	7.3	39
30	Nonlocal Tensor-Based Sparse Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6854-6868.	2.7	23
31	A Tensor Subspace Representation-Based Method for Hyperspectral Image Denoising. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 7739-7757.	2.7	29
32	Three-dimensional fractional total variation regularized tensor optimized model for image deblurring. Applied Mathematics and Computation, 2021, 404, 126224.	1.4	15
33	A novel non-convex low-rank tensor approximation model for hyperspectral image restoration. Applied Mathematics and Computation, 2021, 408, 126342.	1.4	4
34	Sparsity reconstruction using nonconvex TGpV-shearlet regularization and constrained projection. Applied Mathematics and Computation, 2021, 410, 126170.	1.4	3
35	Tensor train rank minimization with nonlocal self-similarity for tensor completion. Inverse Problems and Imaging, 2021, 15, 475.	0.6	18
36	Reconciling Hand-Crafted and Self-Supervised Deep Priors for Video Directional Rain Streaks Removal. IEEE Signal Processing Letters, 2021, 28, 2147-2151.	2.1	4

#	ARTICLE	IF	CITATIONS
37	Hyperspectral Denoising Via Global Tensor Ring Decomposition and Local Unsupervised Deep Image Prior. , 2021, , .		0
38	Tensor Completion Via Collaborative Sparse and Low-Rank Transforms. IEEE Transactions on Computational Imaging, 2021, 7, 1289-1303.	2.6	12
39	Low-rank tensor train for tensor robust principal component analysis. Applied Mathematics and Computation, 2020, 367, 124783.	1.4	62
40	Remote sensing images destriping using unidirectional hybrid total variation and nonconvex low-rank regularization. Journal of Computational and Applied Mathematics, 2020, 363, 124-144.	1.1	93
41	Video deraining via nonlocal low-rank regularization. Applied Mathematical Modelling, 2020, 79, 896-913.	2.2	10
42	Nonlocal Tensor-Ring Decomposition for Hyperspectral Image Denoising. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1348-1362.	2.7	71
43	Mixed Noise Removal in Hyperspectral Image via Low-Fibered-Rank Regularization. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 734-749.	2.7	139
44	Multi-dimensional imaging data recovery via minimizing the partial sum of tubal nuclear norm. Journal of Computational and Applied Mathematics, 2020, 372, 112680.	1.1	55
45	Patched-tube unitary transform for robust tensor completion. Pattern Recognition, 2020, 100, 107181.	5.1	22
46	Tensor Factorization with Total Variation and Tikhonov Regularization for Low-Rank Tensor Completion in Imaging Data. Journal of Mathematical Imaging and Vision, 2020, 62, 900-918.	0.8	13
47	Framelet Representation of Tensor Nuclear Norm for Third-Order Tensor Completion. IEEE Transactions on Image Processing, 2020, 29, 7233-7244.	6.0	84
48	Fast algorithm with theoretical guarantees for constrained low-tubal-rank tensor recovery in hyperspectral images denoising. Neurocomputing, 2020, 413, 397-409.	3.5	11
49	A New Variational Approach Based on Proximal Deep Injection and Gradient Intensity Similarity for Spatio-Spectral Image Fusion. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 6277-6290.	2.3	25
50	Hyperspectral Image Superresolution Using Unidirectional Total Variation With Tucker Decomposition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4381-4398.	2.3	54
51	Weighted Low-Rank Tensor Recovery for Hyperspectral Image Restoration. IEEE Transactions on Cybernetics, 2020, 50, 4558-4572.	6.2	109
52	Hyperspectral and Multispectral Image Fusion via Nonlocal Low-Rank Tensor Decomposition and Spectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 7654-7671.	2.7	27
53	Tensor N-tubal rank and its convex relaxation for low-rank tensor recovery. Information Sciences, 2020, 532, 170-189.	4.0	52
54	A convex single image dehazing model via sparse dark channel prior. Applied Mathematics and Computation, 2020, 375, 125085.	1.4	5

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55	Spectrum Cartography via Coupled Block-Term Tensor Decomposition. IEEE Transactions on Signal Processing, 2020, 68, 3660-3675.	3.2	33
56	Tensor train rank minimization with hybrid smoothness regularization for visual data recovery. Applied Mathematical Modelling, 2020, 81, 711-726.	2.2	15
57	Toward Universal Stripe Removal via Wavelet-Based Deep Convolutional Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2880-2897.	2.7	53
58	Cauchy noise removal using group-based low-rank prior. Applied Mathematics and Computation, 2020, 372, 124971.	1.4	9
59	A Preconditioning Technique for All-at-Once System from the Nonlinear Tempered Fractional Diffusion Equation. Journal of Scientific Computing, 2020, 83, 1.	1.1	23
60	Fast implicit integration factor method for nonlinear space Riesz fractional reaction-diffusion equations. Journal of Computational and Applied Mathematics, 2020, 378, 112935.	1.1	11
61	Deep plug-and-play prior for low-rank tensor completion. Neurocomputing, 2020, 400, 137-149.	3.5	67
62	Double-Factor-Regularized Low-Rank Tensor Factorization for Mixed Noise Removal in Hyperspectral Image. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 8450-8464.	2.7	81
63	Hyperspectral Image Compressive Sensing Reconstruction Using Subspace-Based Nonlocal Tensor Ring Decomposition. IEEE Transactions on Image Processing, 2020, 29, 6813-6828.	6.0	47
64	Semi-blind image deblurring by a proximal alternating minimization method with convergence guarantees. Applied Mathematics and Computation, 2020, 377, 125168.	1.4	2
65	Low-rank tensor completion via combined non-local self-similarity and low-rank regularization. Neurocomputing, 2019, 367, 1-12.	3.5	33
66	Reweighted Block Sparsity Regularization for Remote Sensing Images Destriping. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 4951-4963.	2.3	14
67	Low-Rank Tensor Completion Using Matrix Factorization Based on Tensor Train Rank and Total Variation. Journal of Scientific Computing, 2019, 81, 941-964.	1.1	46
68	Low-Rank Tensor Completion via Tensor Nuclear Norm With Hybrid Smooth Regularization. IEEE Access, 2019, 7, 131888-131901.	2.6	1
69	Rain Streaks Removal for Single Image Via Directional Total Variation Regularization. , 2019, , .		7
70	A limited-memory block bi-diagonal Toeplitz preconditioner for block lower triangular Toeplitz system from time-space fractional diffusion equation. Journal of Computational and Applied Mathematics, 2019, 362, 99-115.	1.1	11
71	A sheared low-rank model for oblique stripe removal. Applied Mathematics and Computation, 2019, 360, 167-180.	1.4	14
72	Low-rank tensor completion via smooth matrix factorization. Applied Mathematical Modelling, 2019, 70, 677-695.	2.2	49

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73	Tensor Completion via Global Low-Tubal-Rankness and Nonlocal Self-Similarity. , 2019, , .		0
74	Joint-Sparse-Blocks Regression for Total Variation Regularized Hyperspectral Unmixing. IEEE Access, 2019, 7, 138779-138791.	2.6	9
75	Row-Sparsity Spectral Unmixing via Total Variation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 5009-5022.	2.3	11
76	FastDeRain: A Novel Video Rain Streak Removal Method Using Directional Gradient Priors. IEEE Transactions on Image Processing, 2019, 28, 2089-2102.	6.0	121
77	A total variation and group sparsity based tensor optimization model for video rain streak removal. Signal Processing: Image Communication, 2019, 73, 96-108.	1.8	17
78	Joint-Sparse-Blocks and Low-Rank Representation for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 2419-2438.	2.7	75
79	Total variation and high-order total variation adaptive model for restoring blurred images with Cauchy noise. Computers and Mathematics With Applications, 2019, 77, 1255-1272.	1.4	46
80	Laplace function based nonconvex surrogate for low-rank tensor completion. Signal Processing: Image Communication, 2019, 73, 62-69.	1.8	38
81	A variational model with hybrid Hyper-Laplacian priors for Retinex. Applied Mathematical Modelling, 2019, 66, 305-321.	2.2	18
82	Total variation with overlapping group sparsity for deblurring images under Cauchy noise. Applied Mathematics and Computation, 2019, 341, 128-147.	1.4	30
83	Hyperspectral Image Restoration Via Total Variation Regularized Low-Rank Tensor Decomposition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1227-1243.	2.3	276
84	Matrix factorization for low-rank tensor completion using framelet prior. Information Sciences, 2018, 436-437, 403-417.	4.0	62
85	A directional global sparse model for single image rain removal. Applied Mathematical Modelling, 2018, 59, 662-679.	2.2	113
86	Spatially dependent regularization parameter selection for total generalized variation-based image denoising. Computational and Applied Mathematics, 2018, 37, 277-296.	1.3	10
87	Second order total generalized variation for speckle reduction in ultrasound images. Journal of the Franklin Institute, 2018, 355, 574-595.	1.9	18
88	Speckle noise removal in ultrasound images by first- and second-order total variation. Numerical Algorithms, 2018, 78, 513-533.	1.1	64
89	Destriping of Multispectral Remote Sensing Image Using Low-Rank Tensor Decomposition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 4950-4967.	2.3	57
90	Double Reweighted Sparse Regression and Graph Regularization for Hyperspectral Unmixing. Remote Sensing, 2018, 10, 1046.	1.8	26

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91	Hyperspectral image restoration using framelet-regularized low-rank nonnegative matrix factorization. Applied Mathematical Modelling, 2018, 63, 128-147.	2.2	28
92	Multispectral Image Denoising via Nonlocal Multitask Sparse Learning. Remote Sensing, 2018, 10, 116.	1.8	8
93	Directional $\ell_{0,1}$ Sparse Modeling for Image Stripe Noise Removal. Remote Sensing, 2018, 10, 361.	1.8	30
94	A Framelet-Based Iterative Pan-Sharpening Approach. Remote Sensing, 2018, 10, 622.	1.8	9
95	A fast implicit difference scheme for a new class of time distributed-order and space fractional diffusion equations with variable coefficients. Advances in Difference Equations, 2018, 2018, .	3.5	11
96	Cartoon texture image decomposition via non-convex low-rank texture regularization. Journal of the Franklin Institute, 2017, 354, 3170-3187.	1.9	19
97	Group sparsity based regularization model for remote sensing image stripe noise removal. Neurocomputing, 2017, 267, 95-106.	3.5	65
98	A non-convex tensor rank approximation for tensor completion. Applied Mathematical Modelling, 2017, 48, 410-422.	2.2	72
99	Image deblurring with an inaccurate blur kernel using a group-based low-rank image prior. Information Sciences, 2017, 408, 213-233.	4.0	21
100	Image fusion via dynamic gradient sparsity and anisotropic spectral-spatial total variation. , 2017, , .		2
101	A Novel Tensor-Based Video Rain Streaks Removal Approach via Utilizing Discriminatively Intrinsic Priors. , 2017, , .		110
102	A Convex Optimization Model and Algorithm for Retinex. Mathematical Problems in Engineering, 2017, 2017, 1-14.	0.6	3
103	Patch-Based Principal Component Analysis for Face Recognition. Computational Intelligence and Neuroscience, 2017, 2017, 1-9.	1.1	19
104	A Unidirectional Total Variation and Second-Order Total Variation Model for Destriping of Remote Sensing Images. Mathematical Problems in Engineering, 2017, 2017, 1-10.	0.6	3
105	Vector Extrapolation Based Landweber Method for Discrete Ill-Posed Problems. Mathematical Problems in Engineering, 2017, 2017, 1-8.	0.6	7
106	Stripe noise removal of remote sensing images by total variation regularization and group sparsity constraint. Remote Sensing, 2017, 9, 559.	1.8	53
107	Multiplicative Noise and Blur Removal by Framelet Decomposition and $\ell_{1/2}$ -Based L-Curve Method. IEEE Transactions on Image Processing, 2016, 25, 4222-4232.	6.0	24
108	Super-resolution via a fast deconvolution with kernel estimation. Eurasip Journal on Image and Video Processing, 2016, 2017, .	1.7	3

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109	Group-based image decomposition using 3-D cartoon and texture priors. Information Sciences, 2016, 328, 510-527.	4.0	22
110	Tensor completion using total variation and low-rank matrix factorization. Information Sciences, 2016, 326, 243-257.	4.0	125
111	Compressive Sensing via Nonlocal Smoothed Rank Function. PLoS ONE, 2016, 11, e0162041.	1.1	11
112	Exemplar-Based Image Inpainting Using a Modified Priority Definition. PLoS ONE, 2015, 10, e0141199.	1.1	30
113	Global Quasi-Minimal Residual Method for Image Restoration. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	1
114	Fast iterative solvers for numerical simulations of scattering and radiation on thin wires. Journal of Electromagnetic Waves and Applications, 2015, 29, 1281-1296.	1.0	8
115	Heaviside image edge sharpening. , 2015, , .		1
116	Alternating Direction Method of Multipliers for Nonlinear Image Restoration Problems. IEEE Transactions on Image Processing, 2015, 24, 33-43.	6.0	35
117	Strang-type preconditioners for solving fractional diffusion equations by boundary value methods. Journal of Computational and Applied Mathematics, 2015, 277, 73-86.	1.1	38
118	Some Refinements and Generalizations of I. Schur Type Inequalities. Scientific World Journal, The, 2014, 2014, 1-8.	0.8	0
119	Two soft-thresholding based iterative algorithms for image deblurring. Information Sciences, 2014, 271, 179-195.	4.0	28
120	Circulant preconditioned iterative methods for peridynamic model simulation. Applied Mathematics and Computation, 2014, 248, 470-479.	1.4	11
121	A New Convex Optimization Model for Multiplicative Noise and Blur Removal. SIAM Journal on Imaging Sciences, 2014, 7, 456-475.	1.3	119
122	Deblurring and Sparse Unmixing for Hyperspectral Images. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4045-4058.	2.7	142
123	A special Hermitian and skew-Hermitian splitting method for image restoration. Applied Mathematical Modelling, 2013, 37, 1069-1082.	2.2	15
124	Signal restoration combining Tikhonov regularization and multilevel method with thresholding strategy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 948.	0.8	7
125	An Alternating Direction Method for Mixed Gaussian Plus Impulse Noise Removal. Abstract and Applied Analysis, 2013, 2013, 1-11.	0.3	3
126	Two New Efficient Iterative Regularization Methods for Image Restoration Problems. Abstract and Applied Analysis, 2013, 2013, 1-9.	0.3	1



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127	New Regularization Models for Image Denoising with a Spatially Dependent Regularization Parameter. <i>Abstract and Applied Analysis</i> , 2013, 2013, 1-15.	0.3	3
128	Total Variation Structured Total Least Squares Method for Image Restoration. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, B1304-B1320.	1.3	70
129	DCT- and DST-based splitting methods for Toeplitz systems. <i>International Journal of Computer Mathematics</i> , 2012, 89, 691-700.	1.0	3
130	Wavelet-based two-level methods for image restoration. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2012, 17, 5079-5087.	1.7	7
131	Kronecker product approximations for image restoration with new mean boundary conditions. <i>Applied Mathematical Modelling</i> , 2012, 36, 225-237.	2.2	9
132	Kronecker product approximations for image restoration with whole-sample symmetric boundary conditions. <i>Information Sciences</i> , 2012, 186, 150-163.	4.0	28
133	A modified SSOR iterative method for augmented systems. <i>Journal of Computational and Applied Mathematics</i> , 2009, 228, 424-433.	1.1	54
134	On the inverse of a general pentadiagonal matrix. <i>Applied Mathematics and Computation</i> , 2008, 202, 639-646.	1.4	27