Xin Yuan

List of Publications by Year
in descending order

144 papers	5,218 citations	94433 37 h-index	114465 63 g-index
147 all docs	147 docs citations	147 times ranked	2395 citing authors

#	Article	IF	Citations
1	Low-Rankness Guided Group Sparse Representation for Image Restoration. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 7593-7607.	11.3	19
2	A Hybrid Structural Sparsification Error Model for Image Restoration. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 4451-4465.	11.3	21
3	Nonconvex Structural Sparsity Residual Constraint for Image Restoration. IEEE Transactions on Cybernetics, 2022, 52, 12440-12453.	9.5	12
4	Plug-and-Play Algorithms for Video Snapshot Compressive Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7093-7111.	13.9	33
5	Class-Aware Domain Adaptation for Semantic Segmentation of Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	23
6	End-to-end snapshot compressed super-resolution imaging with deep optics. Optica, 2022, 9, 451.	9.3	15
7	Simultaneous Nonlocal Low-Rank And Deep Priors For Poisson Denoising. , 2022, , .		4
8	Snapshot spectral compressive imaging reconstruction using convolution and contextual Transformer. Photonics Research, 2022, 10, 1848.	7.0	27
9	Physics-driven deep learning enables temporal compressive coherent diffraction imaging. Optica, 2022, 9, 677.	9.3	16
10	Editorial: Introduction to the Special Issue on Deep Learning for High-Dimensional Sensing. IEEE Journal on Selected Topics in Signal Processing, 2022, 16, 603-607.	10.8	2
11	Deep plug-and-play priors for spectral snapshot compressive imaging. Photonics Research, 2021, 9, B18.	7.0	68
12	Triply Complementary Priors for Image Restoration. IEEE Transactions on Image Processing, 2021, 30, 5819-5834.	9.8	42
13	Snapshot Coherence Tomographic Imaging. IEEE Transactions on Computational Imaging, 2021, 7, 624-637.	4.4	9
14	Fast Hyperspectral Image Recovery of Dual-Camera Compressive Hyperspectral Imaging via Non-Iterative Subspace-Based Fusion. IEEE Transactions on Image Processing, 2021, 30, 7170-7183.	9.8	31
15	Mid-Infrared Compressive Hyperspectral Imaging. Remote Sensing, 2021, 13, 741.	4.0	6
16	LED-based compressive spectral-temporal imaging. Optics Express, 2021, 29, 10698.	3.4	13
17	Snapshot Compressive Imaging: Theory, Algorithms, and Applications. IEEE Signal Processing Magazine, 2021, 38, 65-88.	5.6	159
18	Snapshot temporal compressive microscopy using an iterative algorithm with untrained neural networks. Optics Letters, 2021, 46, 1888.	3.3	28

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19	Single-pixel neutron imaging with artificial intelligence: Breaking the barrier in multi-parameter imaging, sensitivity, and spatial resolution. Innovation(China), 2021, 2, 100100.	9.1	5
20	Super-compression of large electron microscopy time series by deep compressive sensing learning. Patterns, 2021, 2, 100292.	5.9	18
21	Ten-mega-pixel snapshot compressive imaging with a hybrid coded aperture. Photonics Research, 2021, 9, 2277.	7.0	13
22	Low-Rank Regularized Joint Sparsity for Image Denoising. , 2021, , .		1
23	Perception Inspired Deep Neural Networks For Spectral Snapshot Compressive Imaging. , 2021, , .		4
24	Image Restoration via Reconciliation of Group Sparsity and Low-Rank Models. IEEE Transactions on Image Processing, 2021, 30, 5223-5238.	9.8	58
25	Dual-view Snapshot Compressive Imaging via Optical Flow Aided Recurrent Neural Network. International Journal of Computer Vision, 2021, 129, 3279-3298.	15.6	3
26	Deep learning for snapshot compressive imaging. , 2021, , .		0
27	Active illumination compressive 4D spectral video imaging system. , 2021, , .		1
28	MetaSCI: Scalable and Adaptive Reconstruction for Video Compressive Sensing. , 2021, , .		30
29	Deep Gaussian Scale Mixture Prior for Spectral Compressive Imaging. , 2021, , .		60
30	Memory-Efficient Network for Large-scale Video Compressive Sensing. , 2021, , .		28
31	Universal and Flexible Optical Aberration Correction Using Deep-Prior Based Deconvolution. , 2021, , .		4
32	Self-supervised Neural Networks for Spectral Snapshot Compressive Imaging. , 2021, , .		38
33	Exploiting Channel Correlations for NLOS ToA Localization With Multivariate Gaussian Mixture Models. IEEE Wireless Communications Letters, 2020, 9, 70-73.	5.0	27
34	From Rank Estimation to Rank Approximation: Rank Residual Constraint for Image Restoration. IEEE Transactions on Image Processing, 2020, 29, 3254-3269.	9.8	81
35	Image Restoration Using Joint Patch-Group-Based Sparse Representation. IEEE Transactions on Image Processing, 2020, 29, 7735-7750.	9.8	73
36	Reconciliation Of Group Sparsity And Low-Rank Models For Image Restoration. , 2020, , .		7

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37	Plug-and-Play Algorithms for Large-Scale Snapshot Compressive Imaging. , 2020, , .		87
38	Drcas: Deep Restoration Network For Hardware Based Compressive Acquisition Scheme. , 2020, , .		3
39	Group Sparsity Residual Constraint With Non-Local Priors for Image Restoration. IEEE Transactions on Image Processing, 2020, 29, 8960-8975.	9.8	78
40	Image Restoration via Simultaneous Nonlocal Self-Similarity Priors. IEEE Transactions on Image Processing, 2020, 29, 8561-8576.	9.8	84
41	Attention-Based Pyramid Network for Segmentation and Classification of High-Resolution and Hyperspectral Remote Sensing Images. Remote Sensing, 2020, 12, 3501.	4.0	13
42	The Power Of Triply Complementary Priors For Image Compressive Sensing. , 2020, , .		12
43	Solving Inverse Problems via Auto-Encoders. IEEE Journal on Selected Areas in Information Theory, 2020, 1, 312-323.	2.5	15
44	Shearlet Enhanced Snapshot Compressive Imaging. IEEE Transactions on Image Processing, 2020, 29, 6466-6481.	9.8	20
45	A Hybrid Structural Sparse Error Model for Image Deblocking. , 2020, , .		7
46	Deep learning for video compressive sensing. APL Photonics, 2020, 5, .	5.7	113
47	A Benchmark for Sparse Coding: When Group Sparsity Meets Rank Minimization. IEEE Transactions on Image Processing, 2020, 29, 5094-5109.	9.8	74
48	Image Compression Based on Compressive Sensing: End-to-End Comparison With JPEG. IEEE Transactions on Multimedia, 2020, 22, 2889-2904.	7.2	45
49	Experimental investigation of chirped amplitude modulation heterodyne ghost imaging. Optics Express, 2020, 28, 20808.	3.4	10
50	Realistic phase screen model for forward multiple-scattering media. Optics Letters, 2020, 45, 1031.	3.3	4
51	Snapshot spatialâ€“temporal compressive imaging. Optics Letters, 2020, 45, 1659.	3.3	44
52	Snapshot multispectral endomicroscopy. Optics Letters, 2020, 45, 3897.	3.3	51
53	End-to-End Low Cost Compressive Spectral Imaging with Spatial-Spectral Self-Attention. Lecture Notes in Computer Science, 2020, , 187-204.	1.3	65
54	BIRNAT: Bidirectional Recurrent Neural Networks with Adversarial Training for Video Snapshot Compressive Imaging. Lecture Notes in Computer Science, 2020, , 258-275.	1.3	32

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55	10.1063/1.5140721.2. , 2020, , .		0
56	A coded aperture microscope for X-ray fluorescence full-field imaging. Journal of Synchrotron Radiation, 2020, 27, 1703-1706.	2.4	2
57	Edge Compression: An Integrated Framework for Compressive Imaging Processing on CAVs. , 2020, , .		20
58	Coprime Lâ€shaped array connected by a triangular spatiallyâ€spread electromagneticâ€vectorâ€sensor for twoâ€dimensional direction of arrival estimation. IET Radar, Sonar and Navigation, 2019, 13, 1609-1615.	1.8	5
59	Simultaneous Nonlocal Self-Similarity Prior for Image Denoising. , 2019, , .		2
60	lambda-Net: Reconstruct Hyperspectral Images From a Snapshot Measurement. , 2019, , .		106
61	Deep Tensor ADMM-Net for Snapshot Compressive Imaging. , 2019, , .		78
62	Solving linear inverse problems using generative models. , 2019, , .		3
63	Snapshot Compressed Sensing: Performance Bounds and Algorithms. IEEE Transactions on Information Theory, 2019, 65, 8005-8024.	2.4	67
64	Rank Minimization for Snapshot Compressive Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2990-3006.	13.9	207
65	A single triangular SS-EMVS aided high-accuracy DOA estimation using a multi-scale L-shaped sparse array. Eurasip Journal on Advances in Signal Processing, 2019, 2019, .	1.7	2
66	Deep Learning for Compressive Spectral Imaging. , 2019, , .		9
67	Snapshot Optical Coherence Tomography. , 2019, , .		5
68	A Multiscale Sparse Array of Spatially Spread Electromagnetic-Vector-Sensors for Direction Finding and Polarization Estimation. IEEE Access, 2018, 6, 9807-9818.	4.2	25
69	A New Nested MIMO Array With Increased Degrees of Freedom and Hole-Free Difference Coarray. IEEE Signal Processing Letters, 2018, 25, 40-44.	3.6	53
70	A Unified Array Geometry Composed of Multiple Identical Subarrays With Hole-Free Difference Coarrays for Underdetermined DOA Estimation. IEEE Access, 2018, 6, 14238-14254.	4.2	33
71	Deep Learning for Lensless Compressive Imaging. Microscopy and Microanalysis, 2018, 24, 506-507.	0.4	1
72	Nonlocal Low-Rank Tensor Factor Analysis for Image Restoration. , 2018, , .		15

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73	Group Sparsity Residual with Non-Local Samples for Image Denoising. , 2018, , .		12
74	Compressive Imaging Via One-Shot Measurements. , 2018, , .		13
75	Parallel lensless compressive imaging via deep convolutional neural networks. Optics Express, 2018, 26, 1962.	3.4	60
76	Non-convex weighted â„“ nuclear norm based ADMM framework for image restoration. Neurocomputing, 2018, 311, 209-224.	5.9	51
77	On the Fundamental Limit of Multipath Matching Pursuit. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 916-927.	10.8	15
78	Adaptive step-size iterative algorithm for sparse signal recovery. Signal Processing, 2018, 152, 273-285.	3.7	5
79	Wavelet tree structure based speckle noise removal for optical coherence tomography. , 2018, , .		0
80	Video compressed imaging using side information (Rising Researcher Presentation) (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4		1
81	Hyperspectral image super-resolution via convolutional neural network. , 2017, , .		20
82	Convolutional factor analysis inspired compressive sensing. , 2017, , .		2
83	Block-wise lensless compressive camera. , 2017, , .		5
84	Noise adaptive wavelet thresholding for speckle noise removal in optical coherence tomography. Biomedical Optics Express, 2017, 8, 2720.	2.9	68
85	Compressive high-speed stereo imaging. Optics Express, 2017, 25, 18182.	3.4	48
86	Compressive video sensing with side information. Applied Optics, 2017, 56, 2697.	2.1	20
87	Hyperspectral Image Spatial Super-Resolution via 3D Full Convolutional Neural Network. Remote Sensing, 2017, 9, 1139.	4.0	192
88	Adaptive Wavelet Thresholding for Optical Coherence Tomography Image Denoising. , 2017, , .		2
89	Compressive Temporal RGB-D Imaging. , 2017, , .		2
90	Structured illumination temporal compressive microscopy. Biomedical Optics Express, 2016, 7, 746.	2.9	38

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91	High-speed compressive range imaging based on active illumination. Optics Express, 2016, 24, 22836.	3.4	32
92	Improved nested array with holeâ€free DCA and more degrees of freedom. Electronics Letters, 2016, 52, 2068-2070.	1.0	88
93	Computational Snapshot Multispectral Cameras: Toward dynamic capture of the spectral world. IEEE Signal Processing Magazine, 2016, 33, 95-108.	5.6	178
94	SLOPE: Shrinkage of Local Overlapping Patches Estimator for Lensless Compressive Imaging. IEEE Sensors Journal, 2016, 16, 8091-8102.	4.7	21
95	Compressive video microscope via structured illumination. , 2016, , .		8
96	Classification and Reconstruction of High-Dimensional Signals From Low-Dimensional Features in the Presence of Side Information. IEEE Transactions on Information Theory, 2016, 62, 6459-6492.	2.4	31
97	Generalized alternating projection based total variation minimization for compressive sensing. , 2016, , .		142
98	A general framework for reconstruction and classification from compressive measurements with side information. , 2016, , .		1
99	Compressive Sensing in Microscopy: a Tutorial. Microscopy and Microanalysis, 2016, 22, 2084-2085.	0.4	3
100	A new array geometry for DOA estimation with enhanced degrees of freedom. , 2016, , .		25
101	Compressive dynamic range imaging via Bayesian shrinkage dictionary learning. Optical Engineering, 2016, 55, 123110.	1.0	12
102	Efficient patch-based approach for compressive depth imaging. Applied Optics, 2016, 55, 7556.	2.1	20
103	Compressive temporal stereo-vision imaging. , 2016, , .		4
104	Multi-scale Bayesian reconstruction of compressive X-ray image. , 2015, , .		2
105	TEM Video Compressive Sensing. Microscopy and Microanalysis, 2015, 21, 1583-1584.	0.4	4
106	Polynomial-phase signal direction-finding and source-tracking with a single acoustic vector sensor. , 2015, , .		0
107	Applying compressive sensing to TEM video: a substantial frame rate increase on any camera. Advanced Structural and Chemical Imaging, 2015, 1, .	4.0	55
108	Structured Illumination Temporal Compressive Microscopy. , 2015, , .		0

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109	Collaborative compressive X-ray image reconstruction. , 2015, , .		2
110	Classification and reconstruction of compressed GMM signals with side information. , 2015, , .		3
111	A concentration-of-measure inequality for multiple-measurement models. , 2015, , .		0
112	Compressive Sensing by Learning a Gaussian Mixture Model From Measurements. IEEE Transactions on Image Processing, 2015, 24, 106-119.	9.8	136
113	Temporal Compressive Sensing for Video. Applied and Numerical Harmonic Analysis, 2015, , 41-74.	0.3	7
114	Compressive Hyperspectral Imaging With Side Information. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 964-976.	10.8	152
115	Signal Recovery and System Calibration from Multiple Compressive Poisson Measurements. SIAM Journal on Imaging Sciences, 2015, 8, 1923-1954.	2.2	12
116	Spatial light modulator based color polarization imaging. Optics Express, 2015, 23, 11912.	3.4	50
117	Image translation for single-shot focal tomography. Optica, 2015, 2, 822.	9.3	39
118	Coded Aperture Compressive Spectral-Temporal Imaging. , 2015, , .		7
119	Spectral-temporal compressive imaging. Optics Letters, 2015, 40, 4054.	3.3	82
120	Low-Cost Compressive Sensing for Color Video and Depth. , 2014, , .		62
121	An integrated transcriptome and expressed variant analysis of sepsis survival and death. Genome Medicine, 2014, 6, 111.	8.2	70
122	Corrections to â€œVector Cross-Product Direction-Findingâ€™ With an Electromagnetic Vector-Sensor of Six Orthogonally Oriented But Spatially Noncollocating Dipoles/Loopsâ€•[Jan 11 160-171]. IEEE Transactions on Signal Processing, 2014, 62, 1028-1030.	5.3	17
123	Hierarchical Infinite Divisibility for Multiscale Shrinkage. IEEE Transactions on Signal Processing, 2014, 62, 4363-4374.	5.3	19
124	Coherent sources direction finding and polarization estimation with various compositions of spatially spread polarized antenna arrays. Signal Processing, 2014, 102, 265-281.	3.7	30
125	Video Compressive Sensing Using Gaussian Mixture Models. IEEE Transactions on Image Processing, 2014, 23, 4863-4878.	9.8	158
126	Compressive extended depth of field using image space coding. , 2014, , .		8

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127	Gaussian mixture model for video compressive sensing. , 2013, , .		12
128	Adaptive temporal compressive sensing for video. , 2013, , .		36
129	Spatially Spread Dipole/Loop Quads/Quints: For Direction Finding and Polarization Estimation. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1081-1084.	4.0	23
130	Compressive Sensing for Video Using a Passive Coding Element. , 2013, , .		9
131	Coded aperture compressive temporal imaging. Optics Express, 2013, 21, 10526.	3.4	320
132	A directionally tunable but frequency-invariant beamformer on an acoustic velocity-sensor triad to enhance speech perception. Journal of the Acoustical Society of America, 2012, 131, 3891-3902.	1.1	23
133	Polynomial-phase signal source tracking using an electromagnetic vector-sensor. , 2012, , .		9
134	CramÃ©râ€“Rao bounds of angle-of-arrival and polarisation estimation for various triads. IET Microwaves, Antennas and Propagation, 2012, 6, 1651-1664.	1.4	7
135	Direction-Finding Wideband Linear FM Sources with Triangular Arrays. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 2416-2425.	4.7	22
136	Coherent Source Direction-Finding using a Sparsely-Distributed Acoustic Vector-Sensor Array. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 2710-2715.	4.7	20
137	Various Compositions to Form a Triad of Collocated Dipoles/Loops, for Direction Finding and Polarization Estimation. IEEE Sensors Journal, 2012, 12, 1763-1771.	4.7	57
138	Estimating the DOA and the Polarization of a Polynomial-Phase Signal Using a Single Polarized Vector-Sensor. IEEE Transactions on Signal Processing, 2012, 60, 1270-1282.	5.3	57
139	Quad Compositions of Collocated Dipoles and Loops: For Direction Finding and Polarization Estimation. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1044-1047.	4.0	12
140	Enhanced "vector-cross-product" direction-finding using a constrained sparse triangular-array. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	16
141	Polarization Estimation With a Dipole-Dipole Pair, a Dipole-Loop Pair, or a Loop-Loop Pair of Various Orientations. IEEE Transactions on Antennas and Propagation, 2012, 60, 2442-2452.	5.1	45
142	Direction-Finding with a Misoriented Acoustic Vector Sensor. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 1809-1815.	4.7	15
143	Cramér-rao bound of the direction-of-arrival estimation using a spatially spread electromagnetic vector-sensor. , 2011, , .		7
144	â€œVector Cross-Product Direction-Findingâ€•With an Electromagnetic Vector-Sensor of Six Orthogonally Oriented But Spatially Noncollocating Dipoles/Loops. IEEE Transactions on Signal Processing, 2011, 59, 160-171.	5.3	125