

Xin Yuan

List of Publications by Year in descending order

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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	Coded aperture compressive temporal imaging. Optics Express, 2013, 21, 10526.	3.4	320
2	Rank Minimization for Snapshot Compressive Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2990-3006.	13.9	207
3	Hyperspectral Image Spatial Super-Resolution via 3D Full Convolutional Neural Network. Remote Sensing, 2017, 9, 1139.	4.0	192
4	Computational Snapshot Multispectral Cameras: Toward dynamic capture of the spectral world. IEEE Signal Processing Magazine, 2016, 33, 95-108.	5.6	178
5	Snapshot Compressive Imaging: Theory, Algorithms, and Applications. IEEE Signal Processing Magazine, 2021, 38, 65-88.	5.6	159
6	Video Compressive Sensing Using Gaussian Mixture Models. IEEE Transactions on Image Processing, 2014, 23, 4863-4878.	9.8	158
7	Compressive Hyperspectral Imaging With Side Information. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 964-976.	10.8	152
8	Generalized alternating projection based total variation minimization for compressive sensing. , 2016, , .		142
9	Compressive Sensing by Learning a Gaussian Mixture Model From Measurements. IEEE Transactions on Image Processing, 2015, 24, 106-119.	9.8	136
10	“Vector Cross-Product Direction-Finding” 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
11	Deep learning for video compressive sensing. APL Photonics, 2020, 5, .	5.7	113
12	lambda-Net: Reconstruct Hyperspectral Images From a Snapshot Measurement. , 2019, , .		106
13	Improved nested array with hole-free DCA and more degrees of freedom. Electronics Letters, 2016, 52, 2068-2070.	1.0	88
14	Plug-and-Play Algorithms for Large-Scale Snapshot Compressive Imaging. , 2020, , .		87
15	Image Restoration via Simultaneous Nonlocal Self-Similarity Priors. IEEE Transactions on Image Processing, 2020, 29, 8561-8576.	9.8	84
16	Spectral-temporal compressive imaging. Optics Letters, 2015, 40, 4054.	3.3	82
17	From Rank Estimation to Rank Approximation: Rank Residual Constraint for Image Restoration. IEEE Transactions on Image Processing, 2020, 29, 3254-3269.	9.8	81
18	Deep Tensor ADMM-Net for Snapshot Compressive Imaging. , 2019, , .		78

#	ARTICLE	IF	CITATIONS
19	Group Sparsity Residual Constraint With Non-Local Priors for Image Restoration. IEEE Transactions on Image Processing, 2020, 29, 8960-8975.	9.8	78
20	A Benchmark for Sparse Coding: When Group Sparsity Meets Rank Minimization. IEEE Transactions on Image Processing, 2020, 29, 5094-5109.	9.8	74
21	Image Restoration Using Joint Patch-Group-Based Sparse Representation. IEEE Transactions on Image Processing, 2020, 29, 7735-7750.	9.8	73
22	An integrated transcriptome and expressed variant analysis of sepsis survival and death. Genome Medicine, 2014, 6, 111.	8.2	70
23	Noise adaptive wavelet thresholding for speckle noise removal in optical coherence tomography. Biomedical Optics Express, 2017, 8, 2720.	2.9	68
24	Deep plug-and-play priors for spectral snapshot compressive imaging. Photonics Research, 2021, 9, B18.	7.0	68
25	Snapshot Compressed Sensing: Performance Bounds and Algorithms. IEEE Transactions on Information Theory, 2019, 65, 8005-8024.	2.4	67
26	End-to-End Low Cost Compressive Spectral Imaging with Spatial-Spectral Self-Attention. Lecture Notes in Computer Science, 2020, , 187-204.	1.3	65
27	Low-Cost Compressive Sensing for Color Video and Depth. , 2014, , .		62
28	Parallel lensless compressive imaging via deep convolutional neural networks. Optics Express, 2018, 26, 1962.	3.4	60
29	Deep Gaussian Scale Mixture Prior for Spectral Compressive Imaging. , 2021, , .		60
30	Image Restoration via Reconciliation of Group Sparsity and Low-Rank Models. IEEE Transactions on Image Processing, 2021, 30, 5223-5238.	9.8	58
31	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
32	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
33	Applying compressive sensing to TEM video: a substantial frame rate increase on any camera. Advanced Structural and Chemical Imaging, 2015, 1, .	4.0	55
34	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
35	Non-convex weighted \hat{a} , " nuclear norm based ADMM framework for image restoration. Neurocomputing, 2018, 311, 209-224.	5.9	51
36	Snapshot multispectral endomicroscopy. Optics Letters, 2020, 45, 3897.	3.3	51

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37	Spatial light modulator based color polarization imaging. Optics Express, 2015, 23, 11912.	3.4	50
38	Compressive high-speed stereo imaging. Optics Express, 2017, 25, 18182.	3.4	48
39	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
40	Image Compression Based on Compressive Sensing: End-to-End Comparison With JPEG. IEEE Transactions on Multimedia, 2020, 22, 2889-2904.	7.2	45
41	Snapshot spatial-temporal compressive imaging. Optics Letters, 2020, 45, 1659.	3.3	44
42	Triply Complementary Priors for Image Restoration. IEEE Transactions on Image Processing, 2021, 30, 5819-5834.	9.8	42
43	Image translation for single-shot focal tomography. Optica, 2015, 2, 822.	9.3	39
44	Structured illumination temporal compressive microscopy. Biomedical Optics Express, 2016, 7, 746.	2.9	38
45	Self-supervised Neural Networks for Spectral Snapshot Compressive Imaging. , 2021, , .		38
46	Adaptive temporal compressive sensing for video. , 2013, , .		36
47	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
48	Plug-and-Play Algorithms for Video Snapshot Compressive Imaging. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7093-7111.	13.9	33
49	High-speed compressive range imaging based on active illumination. Optics Express, 2016, 24, 22836.	3.4	32
50	BIRNAT: Bidirectional Recurrent Neural Networks with Adversarial Training for Video Snapshot Compressive Imaging. Lecture Notes in Computer Science, 2020, , 258-275.	1.3	32
51	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
52	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
53	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
54	MetaSCI: Scalable and Adaptive Reconstruction for Video Compressive Sensing. , 2021, , .		30

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55	Snapshot temporal compressive microscopy using an iterative algorithm with untrained neural networks. <i>Optics Letters</i> , 2021, 46, 1888.	3.3	28
56	Memory-Efficient Network for Large-scale Video Compressive Sensing. , 2021, , .		28
57	Exploiting Channel Correlations for NLOS ToA Localization With Multivariate Gaussian Mixture Models. <i>IEEE Wireless Communications Letters</i> , 2020, 9, 70-73.	5.0	27
58	Snapshot spectral compressive imaging reconstruction using convolution and contextual Transformer. <i>Photonics Research</i> , 2022, 10, 1848.	7.0	27
59	A new array geometry for DOA estimation with enhanced degrees of freedom. , 2016, , .		25
60	A Multiscale Sparse Array of Spatially Spread Electromagnetic-Vector-Sensors for Direction Finding and Polarization Estimation. <i>IEEE Access</i> , 2018, 6, 9807-9818.	4.2	25
61	A directionally tunable but frequency-invariant beamformer on an acoustic velocity-sensor triad to enhance speech perception. <i>Journal of the Acoustical Society of America</i> , 2012, 131, 3891-3902.	1.1	23
62	Spatially Spread Dipole/Loop Quads/Quints: For Direction Finding and Polarization Estimation. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2013, 12, 1081-1084.	4.0	23
63	Class-Aware Domain Adaptation for Semantic Segmentation of Remote Sensing Images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-17.	6.3	23
64	Direction-Finding Wideband Linear FM Sources with Triangular Arrays. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2012, 48, 2416-2425.	4.7	22
65	SLOPE: Shrinkage of Local Overlapping Patches Estimator for Lensless Compressive Imaging. <i>IEEE Sensors Journal</i> , 2016, 16, 8091-8102.	4.7	21
66	A Hybrid Structural Sparsification Error Model for Image Restoration. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2022, 33, 4451-4465.	11.3	21
67	Coherent Source Direction-Finding using a Sparsely-Distributed Acoustic Vector-Sensor Array. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2012, 48, 2710-2715.	4.7	20
68	Hyperspectral image super-resolution via convolutional neural network. , 2017, , .		20
69	Compressive video sensing with side information. <i>Applied Optics</i> , 2017, 56, 2697.	2.1	20
70	Shearlet Enhanced Snapshot Compressive Imaging. <i>IEEE Transactions on Image Processing</i> , 2020, 29, 6466-6481.	9.8	20
71	Efficient patch-based approach for compressive depth imaging. <i>Applied Optics</i> , 2016, 55, 7556.	2.1	20
72	Edge Compression: An Integrated Framework for Compressive Imaging Processing on CAVs. , 2020, , .		20

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73	Hierarchical Infinite Divisibility for Multiscale Shrinkage. IEEE Transactions on Signal Processing, 2014, 62, 4363-4374.	5.3	19
74	Low-Rankness Guided Group Sparse Representation for Image Restoration. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 7593-7607.	11.3	19
75	Super-compression of large electron microscopy time series by deep compressive sensing learning. Patterns, 2021, 2, 100292.	5.9	18
76	Corrections to "Vector Cross-Product Direction-Finding"™ With an Electromagnetic Vector-Sensor of Six Orthogonally Oriented But Spatially Noncollocating Dipoles/Loops" [Jan 11 160-171]. IEEE Transactions on Signal Processing, 2014, 62, 1028-1030.	5.3	17
77	Enhanced "vector-cross-product" direction-finding using a constrained sparse triangular-array. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	16
78	Physics-driven deep learning enables temporal compressive coherent diffraction imaging. Optica, 2022, 9, 677.	9.3	16
79	Direction-Finding with a Misoriented Acoustic Vector Sensor. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 1809-1815.	4.7	15
80	Nonlocal Low-Rank Tensor Factor Analysis for Image Restoration. , 2018, , .		15
81	On the Fundamental Limit of Multipath Matching Pursuit. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 916-927.	10.8	15
82	Solving Inverse Problems via Auto-Encoders. IEEE Journal on Selected Areas in Information Theory, 2020, 1, 312-323.	2.5	15
83	End-to-end snapshot compressed super-resolution imaging with deep optics. Optica, 2022, 9, 451.	9.3	15
84	Compressive Imaging Via One-Shot Measurements. , 2018, , .		13
85	Attention-Based Pyramid Network for Segmentation and Classification of High-Resolution and Hyperspectral Remote Sensing Images. Remote Sensing, 2020, 12, 3501.	4.0	13
86	LED-based compressive spectral-temporal imaging. Optics Express, 2021, 29, 10698.	3.4	13
87	Ten-mega-pixel snapshot compressive imaging with a hybrid coded aperture. Photonics Research, 2021, 9, 2277.	7.0	13
88	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
89	Gaussian mixture model for video compressive sensing. , 2013, , .		12
90	Signal Recovery and System Calibration from Multiple Compressive Poisson Measurements. SIAM Journal on Imaging Sciences, 2015, 8, 1923-1954.	2.2	12

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91	Group Sparsity Residual with Non-Local Samples for Image Denoising. , 2018, , .		12
92	The Power Of Triply Complementary Priors For Image Compressive Sensing. , 2020, , .		12
93	Nonconvex Structural Sparsity Residual Constraint for Image Restoration. IEEE Transactions on Cybernetics, 2022, 52, 12440-12453.	9.5	12
94	Compressive dynamic range imaging via Bayesian shrinkage dictionary learning. Optical Engineering, 2016, 55, 123110.	1.0	12
95	Experimental investigation of chirped amplitude modulation heterodyne ghost imaging. Optics Express, 2020, 28, 20808.	3.4	10
96	Polynomial-phase signal source tracking using an electromagnetic vector-sensor. , 2012, , .		9
97	Compressive Sensing for Video Using a Passive Coding Element. , 2013, , .		9
98	Snapshot Coherence Tomographic Imaging. IEEE Transactions on Computational Imaging, 2021, 7, 624-637.	4.4	9
99	Deep Learning for Compressive Spectral Imaging. , 2019, , .		9
100	Compressive video microscope via structured illumination. , 2016, , .		8
101	Compressive extended depth of field using image space coding. , 2014, , .		8
102	Cramér-rao bound of the direction-of-arrival estimation using a spatially spread electromagnetic vector-sensor. , 2011, , .		7
103	CramÃ©r-Rao bounds of angle-of-arrival and polarisation estimation for various triads. IET Microwaves, Antennas and Propagation, 2012, 6, 1651-1664.	1.4	7
104	Temporal Compressive Sensing for Video. Applied and Numerical Harmonic Analysis, 2015, , 41-74.	0.3	7
105	Coded Aperture Compressive Spectral-Temporal Imaging. , 2015, , .		7
106	Reconciliation Of Group Sparsity And Low-Rank Models For Image Restoration. , 2020, , .		7
107	A Hybrid Structural Sparse Error Model for Image Deblocking. , 2020, , .		7
108	Mid-Infrared Compressive Hyperspectral Imaging. Remote Sensing, 2021, 13, 741.	4.0	6

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109	Block-wise lensless compressive camera. , 2017, , .		5
110	Adaptive step-size iterative algorithm for sparse signal recovery. Signal Processing, 2018, 152, 273-285.	3.7	5
111	Coprime L-shaped array connected by a triangular spatially-spread electromagnetic vector-sensor for two-dimensional direction of arrival estimation. IET Radar, Sonar and Navigation, 2019, 13, 1609-1615.	1.8	5
112	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
113	Snapshot Optical Coherence Tomography. , 2019, , .		5
114	TEM Video Compressive Sensing. Microscopy and Microanalysis, 2015, 21, 1583-1584.	0.4	4
115	Perception Inspired Deep Neural Networks For Spectral Snapshot Compressive Imaging. , 2021, , .		4
116	Realistic phase screen model for forward multiple-scattering media. Optics Letters, 2020, 45, 1031.	3.3	4
117	Compressive temporal stereo-vision imaging. , 2016, , .		4
118	Universal and Flexible Optical Aberration Correction Using Deep-Prior Based Deconvolution. , 2021, , .		4
119	Simultaneous Nonlocal Low-Rank And Deep Priors For Poisson Denoising. , 2022, , .		4
120	Classification and reconstruction of compressed GMM signals with side information. , 2015, , .		3
121	Compressive Sensing in Microscopy: a Tutorial. Microscopy and Microanalysis, 2016, 22, 2084-2085.	0.4	3
122	Solving linear inverse problems using generative models. , 2019, , .		3
123	Drcas: Deep Restoration Network For Hardware Based Compressive Acquisition Scheme. , 2020, , .		3
124	Dual-view Snapshot Compressive Imaging via Optical Flow Aided Recurrent Neural Network. International Journal of Computer Vision, 2021, 129, 3279-3298.	15.6	3
125	Multi-scale Bayesian reconstruction of compressive X-ray image. , 2015, , .		2
126	Collaborative compressive X-ray image reconstruction. , 2015, , .		2

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127	Convolutional factor analysis inspired compressive sensing. , 2017, , .		2
128	Simultaneous Nonlocal Self-Similarity Prior for Image Denoising. , 2019, , .		2
129	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
130	Adaptive Wavelet Thresholding for Optical Coherence Tomography Image Denoising. , 2017, , .		2
131	Compressive Temporal RGB-D Imaging. , 2017, , .		2
132	A coded aperture microscope for X-ray fluorescence full-field imaging. Journal of Synchrotron Radiation, 2020, 27, 1703-1706.	2.4	2
133	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
134	A general framework for reconstruction and classification from compressive measurements with side information. , 2016, , .		1
135	Video compressed imaging using side information (Rising Researcher Presentation) (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock		1
136	Deep Learning for Lensless Compressive Imaging. Microscopy and Microanalysis, 2018, 24, 506-507.	0.4	1
137	Low-Rank Regularized Joint Sparsity for Image Denoising. , 2021, , .		1
138	Active illumination compressive 4D spectral video imaging system. , 2021, , .		1
139	Polynomial-phase signal direction-finding and source-tracking with a single acoustic vector sensor. , 2015, , .		0
140	Structured Illumination Temporal Compressive Microscopy. , 2015, , .		0
141	A concentration-of-measure inequality for multiple-measurement models. , 2015, , .		0
142	Wavelet tree structure based speckle noise removal for optical coherence tomography. , 2018, , .		0
143	Deep learning for snapshot compressive imaging. , 2021, , .		0
144	10.1063/1.5140721.2. , 2020, , .		0