Jichuan Li

List of Publications by Year
in descending order

171 papers	5,551 citations	101384 36 h-index	85405 71 g-index
172 all docs	172 docs citations	172 times ranked	4647 citing authors

#	ARTICLE	IF	CITATIONS
1	Sparsity-Assisted Signal Denoising and Pattern Recognition in Time-Series Data. Circuits, Systems, and Signal Processing, 2022, 41, 249-298.	1.2	4
2	Target Detection via Cognitive Radars Using Change-Point Detection, Learning, and Adaptation. Circuits, Systems, and Signal Processing, 2021, 40, 233-261.	1.2	6
3	Development of an Institution-Specific Readmission Risk Prediction Model for Real-time Prediction and Patient-Centered Interventions. Journal of General Internal Medicine, 2021, 36, 3910-3912.	1.3	1
4	Local clustering via approximate heat kernel PageRank with subgraph sampling. Scientific Reports, 2021, 11, 15786.	1.6	0
5	Containing epidemics in a local cluster via antidote distribution and partial quarantine. Physical Review E, 2021, 104, 034307.	0.8	0
6	A myofibre model for the study of uterine excitation-contraction dynamics. Scientific Reports, 2020, 10, 16221.	1.6	4
7	Riemannian Geometric Optimization Methods for Joint Design of Transmit Sequence and Receive Filter on MIMO Radar. IEEE Transactions on Signal Processing, 2020, 68, 5602-5616.	3.2	30
8	Quantifying accuracy and heterogeneity in single-molecule super-resolution microscopy. Nature Communications, 2020, 11, 6353.	5.8	12
9	Manifold Optimization for Joint Design of MIMO-STAP Radars. IEEE Signal Processing Letters, 2020, 27, 1969-1973.	2.1	15
10	Public policy and economic dynamics of COVID-19 spread: A mathematical modeling study. PLoS ONE, 2020, 15, e0244174.	1.1	21
11	Further Results on the Cramér–Rao Bound for Sparse Linear Arrays. IEEE Transactions on Signal Processing, 2019, 67, 1493-1507.	3.2	14
12	Grid-Less DOA Estimation Using Sparse Linear Arrays Based on Wasserstein Distance. IEEE Signal Processing Letters, 2019, 26, 838-842.	2.1	12
13	Reweighted Nuclear Norm and Reweighted Frobenius Norm Minimizations for Narrowband RFI Suppression on SAR System. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5949-5962.	2.7	29
14	Dense Super-Resolution Imaging of Molecular Orientation Via Joint Sparse Basis Deconvolution and Spatial Pooling. , 2019, , .		14
15	Electro-Mechanical Ionic Channel Modeling for Uterine Contractions and Oxytocin Effect during Pregnancy. Sensors, 2019, 19, 4898.	2.1	2
16	Designing machine learning workflows with an application to topological data analysis. PLoS ONE, 2019, 14, e0225577.	1.1	4
17	Fast Narrowband RFI Suppression Algorithms for SAR Systems via Matrix-Factorization Techniques. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 250-262.	2.7	44
18	DeepNIS: Deep Neural Network for Nonlinear Electromagnetic Inverse Scattering. IEEE Transactions on Antennas and Propagation, 2019, 67, 1819-1825.	3.1	258

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19	Community Detection in Complex Networks via Clique Conductance. Scientific Reports, 2018, 8, 5982.	1.6	44
20	A Model for Decision Making Under the Influence of an Artificial Social Network. IEEE Transactions on Computational Social Systems, 2018, 5, 220-228.	3.2	5
21	Performance Analysis of Coarray-Based MUSIC in the Presence of Sensor Location Errors. IEEE Transactions on Signal Processing, 2018, 66, 3074-3085.	3.2	27
22	Distributed Particle Filtering via Optimal Fusion of Gaussian Mixtures. IEEE Transactions on Signal and Information Processing Over Networks, 2018, 4, 280-292.	1.6	17
23	Estimating uterine source current during contractions using magnetomyography measurements. PLoS ONE, 2018, 13, e0202184.	1.1	18
24	Minimizing Structural Bias in Single-Molecule Super-Resolution Microscopy. Scientific Reports, 2018, 8, 13133.	1.6	12
25	Underdetermined DOA estimation with unknown source number in nonuniform noise. , 2018, , .		1
26	SAR Automatic Target Recognition Using Joint Low-Rank and Sparse Multiview Denoising. IEEE Geoscience and Remote Sensing Letters, 2018, , 1-5.	1.4	11
27	The eta-Model—Maximum Likelihood, Cramér–Rao Bounds, and Hypothesis Testing. IEEE Transactions on Signal Processing, 2017, 65, 3234-3246.	3.2	4
28	Direction finding using sparse linear arrays with missing data. , 2017, , .		11
29	Adaptive smoothing based on Gaussian processes regression increases the sensitivity and specificity of fMRI data. Human Brain Mapping, 2017, 38, 1438-1459.	1.9	17
30	Performance analysis of coarray-based MUSIC and the Cramér-Rao bound. , 2017, , .		4
31	Coarrays, MUSIC, and the Cramér–Rao Bound. IEEE Transactions on Signal Processing, 2017, 65, 933-946.	3.2	268
32	Microwave imaging of dielectric targets using higher-order sparse processing. , 2017, , .		0
33	Target tracking via recursive Bayesian state estimation in radar networks. , 2017, , .		0
34	Robustness of meta-analyses in finding gene Ã— environment interactions. PLoS ONE, 2017, 12, e0171446.	1.1	8
35	Rod Driven Frequency Entrainment and Resonance Phenomena. Frontiers in Human Neuroscience, 2016, 10, 413.	1.0	28
36	Risk measures for power failures in transmission systems. Chaos, 2016, 26, 113110.	1.0	6

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37	A novel physics-driven fast parallel three-dimension radar imaging method. , 2016, , .		1
38	Inertial Sensor Arrays, Maximum Likelihood, and Cramér–Rao Bound. IEEE Transactions on Signal Processing, 2016, 64, 4218-4227.	3.2	75
39	Semidefinite Programming for Computable Performance Bounds on Block-Sparsity Recovery. IEEE Transactions on Signal Processing, 2016, 64, 4455-4468.	3.2	3
40	Knowledge-aided object-oriented three-dimensional microwave imaging. , 2016, , .		0
41	IMU-Based Smartphone-to-Vehicle Positioning. IEEE Transactions on Intelligent Vehicles, 2016, 1, 139-147.	9.4	23
42	Higher Order Sparse Microwave Imaging of PEC Scatterers. IEEE Transactions on Antennas and Propagation, 2016, 64, 988-997.	3.1	25
43	Modeling Magnetomyograms of Uterine Contractions during Pregnancy Using a Multiscale Forward Electromagnetic Approach. PLoS ONE, 2016, 11, e0152421.	1.1	17
44	Calibrating Nested Sensor Arrays With Model Errors. IEEE Transactions on Antennas and Propagation, 2015, 63, 4739-4748.	3.1	43
45	Computable Performance Bounds on Sparse Recovery. IEEE Transactions on Signal Processing, 2015, 63, 132-141.	3.2	6
46	Distributed Power System State Estimation Using Factor Graphs. IEEE Transactions on Signal Processing, 2015, 63, 2864-2876.	3.2	39
47	Hybrid opportunistic radar over long term evolution networks. , 2015, , .		1
48	Joint Sequential Target Estimation and Clock Synchronization in Wireless Sensor Networks. IEEE Transactions on Signal and Information Processing Over Networks, 2015, 1, 74-88.	1.6	5
49	Placement of PMUs Considering Measurement Phase-Angle Mismatch. IEEE Transactions on Power Delivery, 2015, 30, 914-922.	2.9	20
50	Distributed source processing with linear nested arrays. , 2014, , .		3
51	Multipole-based sparse electromagnetic imaging. , 2014, , .		1
52	Joint sequential target state estimation and clock synchronization in wireless sensor networks. , 2014, , .		0
53	Cramer-Rao bound analysis for passive multistatic radar using UMTS signals. , 2014, , .		3
54	Joint Sparse Recovery Method for Compressed Sensing With Structured Dictionary Mismatches. IEEE Transactions on Signal Processing, 2014, 62, 4997-5008.	3.2	185

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55	Continuous sparse recovery for direction of arrival estimation with co-prime arrays. , 2014, , .		3
56	Smoothing and Decomposition for Analysis Sparse Recovery. IEEE Transactions on Signal Processing, 2014, 62, 1762-1774.	3.2	73
57	Calibrating nested sensor arrays with model errors. , 2014, , .		2
58	Direction of arrival estimation using nested vector-sensor arrays via tensor modeling. , 2014, , .		1
59	An Optimal and Distributed Demand Response Strategy With Electric Vehicles in the Smart Grid. IEEE Transactions on Smart Grid, 2014, 5, 861-869.	6.2	218
60	Nested Vector-Sensor Array Processing via Tensor Modeling. IEEE Transactions on Signal Processing, 2014, 62, 2542-2553.	3.2	100
61	CramÃ©r-Rao Bounds for UMTS-Based Passive Multistatic Radar. IEEE Transactions on Signal Processing, 2014, 62, 95-106.	3.2	69
62	Modeling Smart Grid adoption via a social network model. , 2014, , .		7
63	Direction of Arrival Estimation Using Co-Prime Arrays: A Super Resolution Viewpoint. IEEE Transactions on Signal Processing, 2014, 62, 5565-5576.	3.2	255
64	Sparse Direction of Arrival Estimation Using Co-Prime Arrays with Off-Grid Targets. IEEE Signal Processing Letters, 2014, 21, 26-29.	2.1	215
65	Ambiguity function analysis for passive multistatic radar using UMTS signals. , 2014, , .		4
66	Nested Array Processing for Distributed Sources. IEEE Signal Processing Letters, 2014, 21, 1111-1114.	2.1	107
67	Joint Optimization of Hybrid Energy Storage and Generation Capacity With Renewable Energy. IEEE Transactions on Smart Grid, 2014, 5, 1566-1574.	6.2	194
68	A Distributed Algorithm of Appliance Scheduling for Home Energy Management System. IEEE Transactions on Smart Grid, 2014, 5, 282-290.	6.2	201
69	Electromagnetic Imaging of Hidden 2-D PEC Targets Using Sparse-Signal Modeling. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2707-2721.	2.7	19
70	Parallel Load Schedule Optimization With Renewable Distributed Generators in Smart Grids. IEEE Transactions on Smart Grid, 2013, 4, 1431-1441.	6.2	65
71	Joint-sparse recovery in compressed sensing with dictionary mismatch. , 2013, , .		7
72	Finite element simulations of hydrodynamic trapping in microfluidic particle-trap array systems. Biomicrofluidics, 2013, 7, 54108.	1.2	32

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73	Power System State Estimation Using PMUs With Imperfect Synchronization. IEEE Transactions on Power Systems, 2013, 28, 4162-4172.	4.6	90
74	Joint frequency-hopping waveform design for MIMO radar estimation using game theory. , 2013, , .		6
75	Concurrent Particle Filtering and Data Association Using Game Theory for Tracking Multiple Maneuvering Targets. IEEE Transactions on Signal Processing, 2013, 61, 4934-4948.	3.2	18
76	A game-theoretic approach for optimal time-of-use electricity pricing. IEEE Transactions on Power Systems, 2013, 28, 884-892.	4.6	351
77	Distributed optimization via adaptive regularization for large problems with separable constraints. , 2013, , .		0
78	Distributed demand response for plug-in electrical vehicles in the smart grid. , 2013, , .		2
79	Hybrid energy storage and generation planning with large renewable penetration. , 2013, , .		2
80	Distributed data association for multiple-target tracking using game theory. , 2013, , .		2
81	Wideband Gaussian Source Processing Using a Linear Nested Array. IEEE Signal Processing Letters, 2013, 20, 1110-1113.	2.1	71
82	Optimization of microfluidic microsphere-trap arrays. Biomicrofluidics, 2013, 7, 14112.	1.2	28
83	Multi-modal OFDM waveform design. , 2013, , .		24
84	Sparse MIMO radar with phase mismatch. , 2013, , .		0
85	Improved Source Number Detection and Direction Estimation With Nested Arrays and ULAs Using Jackknifing. IEEE Transactions on Signal Processing, 2013, 61, 6118-6128.	3.2	169
86	Cell type-specific analysis of human brain transcriptome data to predict alterations in cellular composition. Systems Biomedicine (Austin, Tex), 2013, 1, 151-160.	0.7	19
87	Managing Multi-Modal Sensor Networks Using Price Theory. IEEE Transactions on Signal Processing, 2012, 60, 4874-4887.	3.2	25
88	Cell type specific analysis of human transcriptome data. , 2012, , .		0
89	Frequency-Hopping Code Design for MIMO Radar Estimation Using Sparse Modeling. IEEE Transactions on Signal Processing, 2012, 60, 3022-3035.	3.2	54
90	Price theory framework for target tracking using multi-modal sensors. , 2012, , .		0

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91	Experimental verification of 2D sparse electromagnetic imaging. , 2012, , .		3
92	Frequency-hopping code design for colocated MIMO radar using sparse modeling. , 2012, , .		0
93	Game theoretic approach for polarimetric MIMO radar waveform design. , 2012, , .		1
94	Sparsity-based MIMO noise radar for multiple target estimation. , 2012, , .		2
95	Hierarchical particle filtering for target tracking in multi-modal sensor networks. , 2012, , .		1
96	Iterative sparse through-the-wall imaging. , 2012, , .		0
97	The Stability of Low-Rank Matrix Reconstruction: A Constrained Singular Value View. IEEE Transactions on Information Theory, 2012, 58, 6079-6092.	1.5	11
98	Direction-of-Arrival Estimation of Hydroacoustic Signals From Marine Vessels Containing Random and Sinusoidal Components. IEEE Signal Processing Letters, 2012, 19, 503-506.	2.1	8
99	Genome-wide meta-regression of gene-environment interaction. , 2012, , .		1
100	Scheduling and Power Allocation in a Cognitive Radar Network for Multiple-Target Tracking. IEEE Transactions on Signal Processing, 2012, 60, 715-729.	3.2	177
101	Optimal time-of-use electricity pricing using game theory. , 2012, , .		10
102	Sparse through-the-wall imaging. , 2011, , .		1
103	Compressed LED Illumination Sensing. IEEE Signal Processing Letters, 2011, 18, 587-590.	2.1	1
104	A low-complexity sparsity-based multi-target tracking algorithm for urban environments. , 2011, , .		5
105	Sparsity-based estimation for target detection in multipath scenarios. , 2011, , .		2
106	Adaptive waveform design for colocated MIMO radar using sparse modeling. , 2011, , .		3
107	Lower Bounds on the Mean-Squared Error of Low-Rank Matrix Reconstruction. IEEE Transactions on Signal Processing, 2011, 59, 4559-4571.	3.2	25
108	Target Estimation Using Sparse Modeling for Distributed MIMO Radar. IEEE Transactions on Signal Processing, 2011, 59, 5315-5325.	3.2	167

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109	Biologically Inspired Coupled Antenna Array for Direction-of-Arrival Estimation. IEEE Transactions on Signal Processing, 2011, 59, 4795-4808.	3.2	24
110	Sparsity-enforced regression based on over-complete dictionary. , 2011, , .		0
111	Robust principal component analysis based on low-rank and block-sparse matrix decomposition. , 2011, , .		12
112	Computable performance analysis of block-sparsity recovery. , 2011, , .		5
113	A Barankin-Type Bound on Direction Estimation Using Acoustic Sensor Arrays. IEEE Transactions on Signal Processing, 2011, 59, 431-435.	3.2	19
114	Adaptive OFDM Radar for Target Detection in Multipath Scenarios. IEEE Transactions on Signal Processing, 2011, 59, 78-90.	3.2	168
115	Maximum Likelihood Direction Finding in Spatially Colored Noise Fields Using Sparse Sensor Arrays. IEEE Transactions on Signal Processing, 2011, 59, 1048-1062.	3.2	38
116	Sparsity-Based Multi-Target Tracking Using OFDM Radar. IEEE Transactions on Signal Processing, 2011, 59, 1902-1906.	3.2	34
117	Maximum Likelihood Direction-of-Arrival Estimation of Underwater Acoustic Signals Containing Sinusoidal and Random Components. IEEE Transactions on Signal Processing, 2011, 59, 5302-5314.	3.2	26
118	Acoustic vector-sensor beamforming in the presence of flow noise. , 2011, , .		4
119	Polarimetric MIMO radar target detection using game theory. , 2011, , .		3
120	Verifiable and computable ℓ_∞ performance evaluation of ℓ_1 sparse signal recovery. , 2011, , .		3
121	Multiobjective Optimization of OFDM Radar Waveform for Target Detection. IEEE Transactions on Signal Processing, 2011, 59, 639-652.	3.2	78
122	Illumination sensing using sparse modeling. , 2011, , .		1
123	MIMO radar sensitivity analysis for target detection. , 2011, , .		1
124	Multiple Rao-Blackwellized particle filtering for target tracking in urban environments. , 2011, , .		1
125	Statistical design of position-encoded microsphere arrays at low target concentrations. , 2011, , .		4
126	Constrained Cramér–Rao Bound on Robust Principal Component Analysis. IEEE Transactions on Signal Processing, 2011, 59, 5070-5076.	3.2	13

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127	Performance analysis of biologically inspired coupled circular antenna array. , 2011, , .		1
128	Biologically inspired coupled antenna array for direction of arrival estimation. , 2010, , .		7
129	Slow-time multi-frequency radar for target detection in multipath scenarios. , 2010, , .		3
130	The stability of low-rank matrix reconstruction: A constrained singular value perspective. , 2010, , .		1
131	Electromagnetic imaging using compressive sensing. , 2010, , .		1
132	Support recovery for source localization based on overcomplete signal representation. , 2010, , .		2
133	Target estimation using compressive sensing for distributed MIMO radar. , 2010, , .		8
134	Adaptive Design of OFDM Radar Signal With Improved Wideband Ambiguity Function. IEEE Transactions on Signal Processing, 2010, 58, 928-933.	3.2	98
135	MIMO Radar Detection and Adaptive Design Under a Phase Synchronization Mismatch. IEEE Transactions on Signal Processing, 2010, 58, 4994-5005.	3.2	56
136	Multi-objective optimized OFDM radar waveform for target detection in multipath scenarios. , 2010, , .		9
137	Computable quantification of the stability of sparse signal reconstruction. , 2010, , .		2
138	OFDM MIMO Radar With Mutual-Information Waveform Design for Low-Grazing Angle Tracking. IEEE Transactions on Signal Processing, 2010, 58, 3152-3162.	3.2	134
139	Polarimetric MIMO Radar With Distributed Antennas for Target Detection. IEEE Transactions on Signal Processing, 2010, 58, 1689-1697.	3.2	89
140	MIMO radar detection and adaptive design in compound-Gaussian clutter. , 2010, , .		6
141	MIMO radar detection under phase synchronization errors. , 2010, , .		5
142	Target tracking using monopulse MIMO radar with distributed antennas. , 2010, , .		6
143	OFDM radar waveform design for sparsity-based multi-target tracking. , 2010, , .		7
144	Adaptive design for distributed MIMO radar using sparse modeling. , 2010, , .		7

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145	Biologically inspired coupled beampattern design. , 2010, , .		3
146	Cognitive radar for target tracking in multipath scenarios. , 2010, , .		19
147	3D Electromagnetic imaging using compressive sensing. , 2010, , .		3
148	Performance analysis of support recovery with joint sparsity constraints. , 2009, , .		2
149	OFDM MIMO radar design for low-angle tracking using mutual information. , 2009, , .		6
150	OFDM MIMO radar for low-grazing angle tracking. , 2009, , .		4
151	Target Estimation, Detection, and Tracking. IEEE Signal Processing Magazine, 2009, 26, 42-52.	4.6	52
152	A Biologically Inspired Compound-Eye Detector Arrayâ€"Part I: Modeling and Fundamental Limits. IEEE Transactions on Signal Processing, 2009, 57, 1839-1857.	3.2	7
153	Circular Acoustic Vector-Sensor Array for Mode Beamforming. IEEE Transactions on Signal Processing, 2009, 57, 3041-3052.	3.2	54
154	Estimating Moving Targets Behind Reinforced Walls Using Radar. IEEE Transactions on Antennas and Propagation, 2009, 57, 3530-3538.	3.1	21
155	Statistical design of a 3D microarray with position-encoded microspheres. , 2009, , .		0
156	Polarimetric MIMO radar with distributed antennas for target detection. , 2009, , .		10
157	Adaptive OFDM radar for detecting a moving target in urban scenarios. , 2009, , .		29
158	Bat-inspired adaptive design of waveform and trajectory for radar. , 2008, , .		8
159	MIMO radar detection of targets in compound-Gaussian clutter. , 2008, , .		17
160	Estimating Gene Signals From Noisy Microarray Images. IEEE Transactions on Nanobioscience, 2008, 7, 142-153.	2.2	10
161	Seismic Velocity and Polarization Estimation for Wavefield Separation. IEEE Transactions on Signal Processing, 2008, 56, 4794-4809.	3.2	25
162	Adaptive Polarized Waveform Design for Target Tracking using Electromagnetic Vector Sensors. , 2007, , .		4

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163	/title> </titles> <publication_date> <month>06</month> <year>2007</year> </publication_date> <pages> <first_page>2373</first_page> <last_page>2374</last_page> </pages> <publisher_item> <item_number item_number_type='arNumber'>4203066</item_number> </publisher_item> <doi_data> <doi>10.1109/TSP.2007.896841</doi> <resource>http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=4203066</resource> </doi_data> </journal_article> <journal_article> <titles> <title><![CDATA[Cramér–Rao	3.2	19
164	Polarization diversity for detecting targets in inhomogeneous clutter. , 2007, , .		1
165	Barankin Bound for Multiple Change-Point Estimation. , 2007, , .		0
166	Polarization Diversity for Detecting Targets in Heavy Inhomogeneous Clutter. , 2007, , .		0
167	A Relationship Between Time-Reversal Imaging and Maximum-Likelihood Scattering Estimation. IEEE Transactions on Signal Processing, 2007, 55, 4707-4711.	3.2	22
168	A Competitive Mean-Squared Error Approach to Beamforming. IEEE Transactions on Signal Processing, 2007, 55, 5143-5154.	3.2	45
169	Statistical Angular Resolution Limit for Point Sources. IEEE Transactions on Signal Processing, 2007, 55, 5521-5527.	3.2	58
170	Array Response Kernel for EEG in Four-Shell Ellipsoidal Geometry. , 2006, , .		2
171	Sequential Detection for a Target in Compound-Gaussian Clutter. , 2006, , .		1