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	A game-theoretic approach for optimal time-of-use electricity pricing. IEEE Transactions on Power Systems, 2013, 28, 884-892.	4.6	351
2	Coarrays, MUSIC, and the Cramér–Rao Bound. IEEE Transactions on Signal Processing, 2017, 65, 933-946.	3.2	268
3	DeepNIS: Deep Neural Network for Nonlinear Electromagnetic Inverse Scattering. IEEE Transactions on Antennas and Propagation, 2019, 67, 1819-1825.	3.1	258
4	Direction of Arrival Estimation Using Co-Prime Arrays: A Super Resolution Viewpoint. IEEE Transactions on Signal Processing, 2014, 62, 5565-5576.	3.2	255
5	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
6	Sparse Direction of Arrival Estimation Using Co-Prime Arrays with Off-Grid Targets. IEEE Signal Processing Letters, 2014, 21, 26-29.	2.1	215
7	A Distributed Algorithm of Appliance Scheduling for Home Energy Management System. IEEE Transactions on Smart Grid, 2014, 5, 282-290.	6.2	201
8	Joint Optimization of Hybrid Energy Storage and Generation Capacity With Renewable Energy. IEEE Transactions on Smart Grid, 2014, 5, 1566-1574.	6.2	194
9	Joint Sparse Recovery Method for Compressed Sensing With Structured Dictionary Mismatches. IEEE Transactions on Signal Processing, 2014, 62, 4997-5008.	3.2	185
10	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
11	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
12	Adaptive OFDM Radar for Target Detection in Multipath Scenarios. IEEE Transactions on Signal Processing, 2011, 59, 78-90.	3.2	168
13	Target Estimation Using Sparse Modeling for Distributed MIMO Radar. IEEE Transactions on Signal Processing, 2011, 59, 5315-5325.	3.2	167
14	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
15	Nested Array Processing for Distributed Sources. IEEE Signal Processing Letters, 2014, 21, 1111-1114.	2.1	107
16	Nested Vector-Sensor Array Processing via Tensor Modeling. IEEE Transactions on Signal Processing, 2014, 62, 2542-2553.	3.2	100
17	Adaptive Design of OFDM Radar Signal With Improved Wideband Ambiguity Function. IEEE Transactions on Signal Processing, 2010, 58, 928-933.	3.2	98
18	Power System State Estimation Using PMUs With Imperfect Synchronization. IEEE Transactions on Power Systems, 2013, 28, 4162-4172.	4.6	90

#	Article	IF	Citations
19	Polarimetric MIMO Radar With Distributed Antennas for Target Detection. IEEE Transactions on Signal Processing, 2010, 58, 1689-1697.	3.2	89
20	Multiobjective Optimization of OFDM Radar Waveform for Target Detection. IEEE Transactions on Signal Processing, 2011, 59, 639-652.	3.2	78
21	Inertial Sensor Arrays, Maximum Likelihood, and Cramér–Rao Bound. IEEE Transactions on Signal Processing, 2016, 64, 4218-4227.	3.2	75
22	Smoothing and Decomposition for Analysis Sparse Recovery. IEEE Transactions on Signal Processing, 2014, 62, 1762-1774.	3.2	73
23	Wideband Gaussian Source Processing Using a Linear Nested Array. IEEE Signal Processing Letters, 2013, 20, 1110-1113.	2.1	71
24	Cramér-Rao Bounds for UMTS-Based Passive Multistatic Radar. IEEE Transactions on Signal Processing, 2014, 62, 95-106.	3.2	69
25	Parallel Load Schedule Optimization With Renewable Distributed Generators in Smart Grids. IEEE Transactions on Smart Grid, 2013, 4, 1431-1441.	6.2	65
26	Statistical Angular Resolution Limit for Point Sources. IEEE Transactions on Signal Processing, 2007, 55, 5521-5527.	3.2	58
27	MIMO Radar Detection and Adaptive Design Under a Phase Synchronization Mismatch. IEEE Transactions on Signal Processing, 2010, 58, 4994-5005.	3.2	56
28	Circular Acoustic Vector-Sensor Array for Mode Beamforming. IEEE Transactions on Signal Processing, 2009, 57, 3041-3052.	3.2	54
29	Frequency-Hopping Code Design for MIMO Radar Estimation Using Sparse Modeling. IEEE Transactions on Signal Processing, 2012, 60, 3022-3035.	3.2	54
30	Target Estimation, Detection, and Tracking. IEEE Signal Processing Magazine, 2009, 26, 42-52.	4.6	52
31	A Competitive Mean-Squared Error Approach to Beamforming. IEEE Transactions on Signal Processing, 2007, 55, 5143-5154.	3.2	45
32	Community Detection in Complex Networks via Clique Conductance. Scientific Reports, 2018, 8, 5982.	1.6	44
33	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
34	Calibrating Nested Sensor Arrays With Model Errors. IEEE Transactions on Antennas and Propagation, 2015, 63, 4739-4748.	3.1	43
35	Distributed Power System State Estimation Using Factor Graphs. IEEE Transactions on Signal Processing, 2015, 63, 2864-2876.	3.2	39
36	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

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37	Sparsity-Based Multi-Target Tracking Using OFDM Radar. IEEE Transactions on Signal Processing, 2011, 59, 1902-1906.	3.2	34
38	Finite element simulations of hydrodynamic trapping in microfluidic particle-trap array systems. Biomicrofluidics, 2013, 7, 54108.	1.2	32
39	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
40	Adaptive OFDM radar for detecting a moving target in urban scenarios. , 2009, , .		29
41	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
42	Optimization of microfluidic microsphere-trap arrays. Biomicrofluidics, 2013, 7, 14112.	1.2	28
43	Rod Driven Frequency Entrainment and Resonance Phenomena. Frontiers in Human Neuroscience, 2016, 10, 413.	1.0	28
44	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
45	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
46	Seismic Velocity and Polarization Estimation for Wavefield Separation. IEEE Transactions on Signal Processing, 2008, 56, 4794-4809.	3.2	25
47	Lower Bounds on the Mean-Squared Error of Low-Rank Matrix Reconstruction. IEEE Transactions on Signal Processing, 2011, 59, 4559-4571.	3.2	25
48	Managing Multi-Modal Sensor Networks Using Price Theory. IEEE Transactions on Signal Processing, 2012, 60, 4874-4887.	3.2	25
49	Higher Order Sparse Microwave Imaging of PEC Scatterers. IEEE Transactions on Antennas and Propagation, 2016, 64, 988-997.	3.1	25
50	Biologically Inspired Coupled Antenna Array for Direction-of-Arrival Estimation. IEEE Transactions on Signal Processing, 2011, 59, 4795-4808.	3.2	24
51	Multi-modal OFDM waveform design. , 2013, , .		24
52	IMU-Based Smartphone-to-Vehicle Positioning. IEEE Transactions on Intelligent Vehicles, 2016, 1, 139-147.	9.4	23
53	A Relationship Between Time-Reversal Imaging and Maximum-Likelihood Scattering Estimation. IEEE Transactions on Signal Processing, 2007, 55, 4707-4711.	3.2	22
54	Estimating Moving Targets Behind Reinforced Walls Using Radar. IEEE Transactions on Antennas and Propagation, 2009, 57, 3530-3538.	3.1	21

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55	Public policy and economic dynamics of COVID-19 spread: A mathematical modeling study. PLoS ONE, 2020, 15, e0244174.	1.1	21
56	Placement of PMUs Considering Measurement Phase-Angle Mismatch. IEEE Transactions on Power Delivery, 2015, 30, 914-922.	2.9	20
57	<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
58	Cognitive radar for target tracking in multipath scenarios. , 2010, , .		19
59	A Barankin-Type Bound on Direction Estimation Using Acoustic Sensor Arrays. IEEE Transactions on Signal Processing, 2011, 59, 431-435.	3.2	19
60	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
61	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
62	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
63	Estimating uterine source current during contractions using magnetomyography measurements. PLoS ONE, 2018, 13, e0202184.	1.1	18
64	MIMO radar detection of targets in compound-Gaussian clutter. , 2008, , .		17
65	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
66	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
67	Modeling Magnetomyograms of Uterine Contractions during Pregnancy Using a Multiscale Forward Electromagnetic Approach. PLoS ONE, 2016, 11, e0152421.	1.1	17
68	Manifold Optimization for Joint Design of MIMO-STAP Radars. IEEE Signal Processing Letters, 2020, 27, 1969-1973.	2.1	15
69	Further Results on the Cramér–Rao Bound for Sparse Linear Arrays. IEEE Transactions on Signal Processing, 2019, 67, 1493-1507.	3.2	14
70	Dense Super-Resolution Imaging of Molecular Orientation Via Joint Sparse Basis Deconvolution and Spatial Pooling. , 2019, , .		14
71	Constrained Cramér–Rao Bound on Robust Principal Component Analysis. IEEE Transactions on Signal Processing, 2011, 59, 5070-5076.	3.2	13
72	Robust principal component analysis based on low-rank and block-sparse matrix decomposition. , 2011, , .		12

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73	Minimizing Structural Bias in Single-Molecule Super-Resolution Microscopy. Scientific Reports, 2018, 8, 13133.	1.6	12
74	Grid-Less DOA Estimation Using Sparse Linear Arrays Based on Wasserstein Distance. IEEE Signal Processing Letters, 2019, 26, 838-842.	2.1	12
75	Quantifying accuracy and heterogeneity in single-molecule super-resolution microscopy. Nature Communications, 2020, 11, 6353.	5.8	12
76	The Stability of Low-Rank Matrix Reconstruction: A Constrained Singular Value View. IEEE Transactions on Information Theory, 2012, 58, 6079-6092.	1.5	11
77	Direction finding using sparse linear arrays with missing data. , 2017, , .		11
78	SAR Automatic Target Recognition Using Joint Low-Rank and Sparse Multiview Denoising. IEEE Geoscience and Remote Sensing Letters, 2018, , 1-5.	1.4	11
79	Estimating Gene Signals From Noisy Microarray Images. IEEE Transactions on Nanobioscience, 2008, 7, 142-153.	2.2	10
80	Polarimetric MIMO radar with distributed antennas for target detection. , 2009, , .		10
81	Optimal time-of-use electricity pricing using game theory. , 2012, , .		10
82	Multi-objective optimized OFDM radar waveform for target detection in multipath scenarios. , 2010, , .		9
83	Bat-inspired adaptive design of waveform and trajectory for radar. , 2008, , .		8
84	Target estimation using compressive sensing for distributed MIMO radar. , 2010, , .		8
85	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
86	Robustness of meta-analyses in finding gene Ã— environment interactions. PLoS ONE, 2017, 12, e0171446.	1.1	8
87	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
88	Biologically inspired coupled antenna array for direction of arrival estimation. , 2010, , .		7
89	OFDM radar waveform design for sparsity-based multi-target tracking. , 2010, , .		7
90	Adaptive design for distributed MIMO radar using sparse modeling. , 2010, , .		7

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91	Joint-sparse recovery in compressed sensing with dictionary mismatch. , 2013, , .		7
92	Modeling Smart Grid adoption via a social network model. , 2014, , .		7
93	OFDM MIMO radar design for low-angle tracking using mutual information. , 2009, , .		6
94	MIMO radar detection and adaptive design in compound-Gaussian clutter. , 2010, , .		6
95	Target tracking using monopulse MIMO radar with distributed antennas. , 2010, , .		6
96	Joint frequency-hopping waveform design for MIMO radar estimation using game theory. , 2013, , .		6
97	Computable Performance Bounds on Sparse Recovery. IEEE Transactions on Signal Processing, 2015, 63, 132-141.	3.2	6
98	Risk measures for power failures in transmission systems. Chaos, 2016, 26, 113110.	1.0	6
99	Target Detection via Cognitive Radars Using Change-Point Detection, Learning, and Adaptation. Circuits, Systems, and Signal Processing, 2021, 40, 233-261.	1.2	6
100	MIMO radar detection under phase synchronization errors. , 2010, , .		5
101	A low-complexity sparsity-based multi-target tracking algorithm for urban environments. , 2011, , .		5
102	Computable performance analysis of block-sparsity recovery. , 2011, , .		5
103	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
104	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
105	Adaptive Polarized Waveform Design for Target Tracking using Electromagnetic Vector Sensors. , 2007, , .		4
106	OFDM MIMO radar for low-grazing angle tracking. , 2009, , .		4
107	Acoustic vector-sensor beamforming in the presence of flow noise. , 2011, , .		4
108	Statistical design of position-encoded microsphere arrays at low target concentrations. , 2011, , .		4

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109	Ambiguity function analysis for passive multistatic radar using UMTS signals. , 2014, , .		4
110	The eta-Model—Maximum Likelihood, Cramér–Rao Bounds, and Hypothesis Testing. IEEE Transactions on Signal Processing, 2017, 65, 3234-3246.	3.2	4
111	Performance analysis of coarray-based MUSIC and the Cramér-Rao bound. , 2017, , .		4
112	Designing machine learning workflows with an application to topological data analysis. PLoS ONE, 2019, 14, e0225577.	1.1	4
113	A myofibre model for the study of uterine excitation-contraction dynamics. Scientific Reports, 2020, 10, 16221.	1.6	4
114	Sparsity-Assisted Signal Denoising and Pattern Recognition in Time-Series Data. Circuits, Systems, and Signal Processing, 2022, 41, 249-298.	1.2	4
115	Slow-time multi-frequency radar for target detection in multipath scenarios. , 2010, , .		3
116	Biologically inspired coupled beampattern design. , 2010, , .		3
117	3D Electromagnetic imaging using compressive sensing. , 2010, , .		3
118	Adaptive waveform design for colocated MIMO radar using sparse modeling. , 2011, , .		3
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	Experimental verification of 2D sparse electromagnetic imaging. , 2012, , .		3
122	Distributed source processing with linear nested arrays. , 2014, , .		3
123	Cramer-Rao bound analysis for passive multistatic radar using UMTS signals. , 2014, , .		3
124	Continuous sparse recovery for direction of arrival estimation with co-prime arrays. , 2014, , .		3
125	Semidefinite Programming for Computable Performance Bounds on Block-Sparsity Recovery. IEEE Transactions on Signal Processing, 2016, 64, 4455-4468.	3.2	3
126	Array Response Kernel for EEG in Four-Shell Ellipsoidal Geometry. , 2006, , .		2

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127	Performance analysis of support recovery with joint sparsity constraints. , 2009, , .		2
128	Support recovery for source localization based on overcomplete signal representation. , 2010, , .		2
129	Computable quantification of the stability of sparse signal reconstruction. , 2010, , .		2
130	Sparsity-based estimation for target detection in multipath scenarios. , 2011, , .		2
131	Sparsity-based MIMO noise radar for multiple target estimation. , 2012, , .		2
132	Distributed demand response for plug-in electrical vehicles in the smart grid. , 2013, , .		2
133	Hybrid energy storage and generation planning with large renewable penetration. , 2013, , .		2
134	Distributed data association for multiple-target tracking using game theory. , 2013, , .		2
135	Calibrating nested sensor arrays with model errors. , 2014, , .		2
136	Electro-Mechanical Ionic Channel Modeling for Uterine Contractions and Oxytocin Effect during Pregnancy. Sensors, 2019, 19, 4898.	2.1	2
137	Sequential Detection for a Target in Compound-Gaussian Clutter. , 2006, , .		1
138	Polarization diversity for detecting targets in inhomogeneous clutter. , 2007, , .		1
139	The stability of low-rank matrix reconstruction: A constrained singular value perspective. , 2010, , .		1
140	Electromagnetic imaging using compressive sensing. , 2010, , .		1
141	Sparse through-the-wall imaging. , 2011, , .		1
142	Compressed LED Illumination Sensing. IEEE Signal Processing Letters, 2011, 18, 587-590.	2.1	1
143	Illumination sensing using sparse modeling. , 2011, , .		1
144	MIMO radar sensitivity analysis for target detection. , 2011, , .		1

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145	Multiple Rao-Blackwellized particle filtering for target tracking in urban environments. , 2011, , .		1
146	Performance analysis of biologically inspired coupled circular antenna array. , 2011, , .		1
147	Game theoretic approach for polarimetric MIMO radar waveform design. , 2012, , .		1
148	Hierarchical particle filtering for target tracking in multi-modal sensor networks. , 2012, , .		1
149	Genome-wide meta-regression of gene-environment interaction. , 2012, , .		1
150	Multipole-based sparse electromagnetic imaging. , 2014, , .		1
151	Direction of arrival estimation using nested vector-sensor arrays via tensor modeling. , 2014, , .		1
152	Hybrid opportunistic radar over long term evolution networks. , 2015, , .		1
153	A novel physics-driven fast parallel three-dimension radar imaging method. , 2016, , .		1
154	Underdetermined DOA estimation with unknown source number in nonuniform noise. , 2018, , .		1
155	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
156	Barankin Bound for Multiple Change-Point Estimation. , 2007, , .		0
157	Polarization Diversity for Detecting Targets in Heavy Inhomogeneous Clutter. , 2007, , .		0
158	Statistical design of a 3D microarray with position-encoded microspheres. , 2009, , .		0
159	Sparsity-enforced regression based on over-complete dictionary. , 2011, , .		0
160	Cell type specific analysis of human transcriptome data. , 2012, , .		0
161	Price theory framework for target tracking using multi-modal sensors. , 2012, , .		0
162	Frequency-hopping code design for colocated MIMO radar using sparse modeling. , 2012, , .		0

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163	Iterative sparse through-the-wall imaging. , 2012, , .		0
164	Distributed optimization via adaptive regularization for large problems with separable constraints. , 2013, , .		0
165	Sparse MIMO radar with phase mismatch. , 2013, , .		0
166	Joint sequential target state estimation and clock synchronization in wireless sensor networks. , 2014, , .		0
167	Knowledge-aided object-oriented three-dimensional microwave imaging. , 2016, , .		0
168	Microwave imaging of dielectric targets using higher-order sparse processing. , 2017, , .		0
169	Target tracking via recursive Bayesian state estimation in radar networks. , 2017, , .		0
170	Local clustering via approximate heat kernel PageRank with subgraph sampling. Scientific Reports, 2021, 11, 15786.	1.6	0
171	Containing epidemics in a local cluster via antidote distribution and partial quarantine. Physical Review E, 2021, 104, 034307.	0.8	0