

Jun Liu

List of Publications by Year in descending order

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2,428
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159358

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times ranked

764
citing authors

#	ARTICLE	IF	CITATIONS
1	Adaptive Double Subspace Signal Detection in Gaussian Backgroundâ€”Part I: Homogeneous Environments. IEEE Transactions on Signal Processing, 2014, 62, 2345-2357.	3.2	150
2	Multichannel adaptive signal detection: basic theory and literature review. Science China Information Sciences, 2022, 65, .	2.7	97
3	Two Target Detection Algorithms for Passive Multistatic Radar. IEEE Transactions on Signal Processing, 2014, 62, 5930-5939.	3.2	93
4	A CFAR Adaptive Subspace Detector for First-Order or Second-Order Gaussian Signals Based on a Single Observation. IEEE Transactions on Signal Processing, 2011, 59, 5126-5140.	3.2	77
5	Tunable Adaptive Detection in Colocated MIMO Radar. IEEE Transactions on Signal Processing, 2018, 66, 1080-1092.	3.2	76
6	Signal detection with noisy reference for passive sensing. Signal Processing, 2015, 108, 389-399.	2.1	74
7	Adaptive Double Subspace Signal Detection in Gaussian Backgroundâ€”Part II: Partially Homogeneous Environments. IEEE Transactions on Signal Processing, 2014, 62, 2358-2369.	3.2	67
8	On the performance of the cross-correlation detector for passive radar applications. Signal Processing, 2015, 113, 32-37.	2.1	64
9	Moving Target Detection in Distributed MIMO Radar on Moving Platforms. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 1524-1535.	7.3	63
10	Modified Rao Test for Multichannel Adaptive Signal Detection. IEEE Transactions on Signal Processing, 2016, 64, 714-725.	3.2	62
11	Average SINR Calculation of a Persymmetric Sample Matrix Inversion Beamformer. IEEE Transactions on Signal Processing, 2016, 64, 2135-2145.	3.2	60
12	Rao tests for distributed target detection in interference and noise. Signal Processing, 2015, 117, 333-342.	2.1	59
13	Adaptive detection without training data in colocated MIMO radar. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 2469-2479.	2.6	56
14	Persymmetric adaptive target detection with distributed MIMO radar. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 372-382.	2.6	54
15	Multichannel signal detection in interference and noise when signal mismatch happens. Signal Processing, 2020, 166, 107268.	2.1	50
16	Optimal waveform design for generalized likelihood ratio and adaptive matched filter detectors using a diversely polarized antenna. Signal Processing, 2012, 92, 1126-1131.	2.1	48
17	Multipixel Anomaly Detection With Unknown Patterns for Hyperspectral Imagery. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 5557-5567.	7.2	48
18	Persymmetric Adaptive Detection of Subspace Signals: Algorithms and Performance Analysis. IEEE Transactions on Signal Processing, 2018, 66, 6124-6136.	3.2	47

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19	One-Step Persymmetric GLRT for Subspace Signals. IEEE Transactions on Signal Processing, 2019, 67, 3639-3648.	3.2	47
20	Distributed target detection in subspace interference plus Gaussian noise. Signal Processing, 2014, 95, 88-100.	2.1	44
21	Radar High-Speed Maneuvering Target Detection Based on Three-Dimensional Scaled Transform. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 2821-2833.	2.3	44
22	Multichannel Signal Detection Based on Wald Test in Subspace Interference and Gaussian Noise. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 1370-1381.	2.6	43
23	On the performance of a persymmetric adaptive matched filter. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 2605-2614.	2.6	38
24	Distributed Target Detection in Partially Homogeneous Environment When Signal Mismatch Occurs. IEEE Transactions on Signal Processing, 2018, 66, 3918-3928.	3.2	37
25	Bayesian Detection for MIMO Radar in Gaussian Clutter. IEEE Transactions on Signal Processing, 2018, 66, 6549-6559.	3.2	35
26	Performance Analysis of Adaptive Detectors for Point Targets in Subspace Interference and Gaussian Noise. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 429-441.	2.6	34
27	Persymmetric GLRT Detection in MIMO Radar. IEEE Transactions on Vehicular Technology, 2018, 67, 11913-11923.	3.9	33
28	Robust Detection in MIMO Radar With Steering Vector Mismatches. IEEE Transactions on Signal Processing, 2019, 67, 5270-5280.	3.2	33
29	Distributed Target Detection Exploiting Persymmetry in Gaussian Clutter. IEEE Transactions on Signal Processing, 2019, 67, 1022-1033.	3.2	33
30	Radar Adaptive Detection Architectures for Heterogeneous Environments. IEEE Transactions on Signal Processing, 2020, 68, 4307-4319.	3.2	32
31	Persymmetric adaptive detection of distributed targets in compound-Gaussian sea clutter with Gamma texture. Signal Processing, 2018, 152, 340-349.	2.1	31
32	Linear fusion for target detection in passive multistatic radar. Signal Processing, 2017, 130, 175-182.	2.1	27
33	Target detection exploiting covariance matrix structures in MIMO radar. Signal Processing, 2019, 154, 174-181.	2.1	27
34	Detection of a distributed target with direction uncertainty. IET Radar, Sonar and Navigation, 2014, 8, 1177-1183.	0.9	26
35	Constrained Radar Waveform Design for Range Profiling. IEEE Transactions on Signal Processing, 2021, 69, 1924-1937.	3.2	26
36	Robust GLRT approaches to signal detection in the presence of spatial-temporal uncertainty. Signal Processing, 2016, 118, 272-284.	2.1	24

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37	A closed-form expression for false alarm rate of adaptive MIMO-GLRT detector with distributed MIMO radar. <i>Signal Processing</i> , 2013, 93, 2771-2776.	2.1	23
38	Persymmetric Subspace Detectors With Multiple Observations in Homogeneous Environments. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2020, 56, 3276-3284.	2.6	23
39	Complex Parameter Rao, Wald, Gradient, and Durbin Tests for Multichannel Signal Detection. <i>IEEE Transactions on Signal Processing</i> , 2022, 70, 117-131.	3.2	23
40	Adaptive array detection in noise and completely unknown jamming. , 2015, 46, 41-48.		22
41	Performance prediction of subspace-based adaptive detectors with signal mismatch. <i>Signal Processing</i> , 2016, 123, 122-126.	2.1	22
42	False Alarm Rate of the GLRT for Subspace Signals in Subspace Interference Plus Gaussian Noise. <i>IEEE Transactions on Signal Processing</i> , 2019, 67, 3058-3069.	3.2	22
43	Model for Non-Gaussian Sea Clutter Amplitudes Using Generalized Inverse Gaussian Texture. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2019, 16, 892-896.	1.4	22
44	Exact Performance Analysis of an Adaptive Subspace Detector. <i>IEEE Transactions on Signal Processing</i> , 2012, 60, 4945-4950.	3.2	19
45	Performance Analysis of the Generalized Likelihood Ratio Test in General Phased Array Radar Configuration. <i>IEEE Transactions on Signal Processing</i> , 2021, 69, 4544-4555.	3.2	18
46	Distributed Target Detectors With Capabilities of Mismatched Subspace Signal Rejection. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2017, 53, 888-900.	2.6	17
47	Persymmetric Detection of Radar Targets in Nonhomogeneous and Non-Gaussian Sea Clutter. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-9.	2.7	17
48	Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. <i>IEEE Signal Processing Letters</i> , 2020, 27, 1789-1793.	2.1	16
49	Detection Probability of a CFAR Matched Filter with Signal Steering Vector Errors. <i>IEEE Signal Processing Letters</i> , 2015, 22, 2474-2478.	2.1	14
50	Persymmetric Rao and Wald tests for adaptive detection of distributed targets in compound Gaussian noise. <i>IET Radar, Sonar and Navigation</i> , 2017, 11, 453-458.	0.9	14
51	Persymmetric adaptive detection in subspace interference plus gaussian noise. <i>Signal Processing</i> , 2020, 167, 107316.	2.1	14
52	A Sparse Learning Approach to the Detection of Multiple Noise-Like Jammers. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2020, 56, 4367-4383.	2.6	14
53	Training Data Assisted Anomaly Detection of Multi-Pixel Targets In Hyperspectral Imagery. <i>IEEE Transactions on Signal Processing</i> , 2020, 68, 3022-3032.	3.2	13
54	Persymmetric Adaptive Detection of Distributed Targets With Unknown Steering Vectors. <i>IEEE Transactions on Signal Processing</i> , 2020, 68, 4123-4134.	3.2	13

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55	Multichannel radar adaptive signal detection in interference and structure nonhomogeneity. Science China Information Sciences, 2017, 60, 1.	2.7	12
56	SINR Distribution for the Persymmetric SMI Beamformer With Steering Vector Mismatches. IEEE Transactions on Signal Processing, 2019, 67, 1382-1392.	3.2	12
57	Mismatched Signal Rejection Performance of the Persymmetric GLRT Detector. IEEE Transactions on Signal Processing, 2019, 67, 1610-1619.	3.2	12
58	Hyperspectral Anomaly Detection With Tensor Average Rank and Piecewise Smoothness Constraints. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8679-8692.	7.2	12
59	A weighted detector for mismatched subspace signals. Signal Processing, 2017, 140, 110-115.	2.1	11
60	Training Data Classification Algorithms for Radar Applications. IEEE Signal Processing Letters, 2019, 26, 1446-1450.	2.1	11
61	Adaptive multichannel detectors for distributed target based on gradient test. Signal Processing, 2022, 191, 108350.	2.1	11
62	GLRT-based generalized direction detector in partially homogeneous environment. Science China Information Sciences, 2019, 62, 1.	2.7	10
63	Persymmetric Rao test for MIMO radar in Gaussian disturbance. Signal Processing, 2019, 165, 30-36.	2.1	10
64	Performance analysis of reduced-dimension subspace signal filtering and detection in sample-starved environment. Journal of the Franklin Institute, 2019, 356, 629-653.	1.9	10
65	Persymmetric adaptive detection with improved robustness to steering vector mismatches. Signal Processing, 2020, 176, 107669.	2.1	10
66	Persymmetric detection of subspace signals based on multiple observations in the presence of subspace interference. Signal Processing, 2021, 183, 107964.	2.1	10
67	Analytical Performance of Rank-One Signal Detection in Subspace Interference Plus Gaussian Noise. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 1595-1601.	2.6	9
68	Rao and Wald Tests for Target Detection in Coherent Interference. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 1906-1921.	2.6	9
69	Adaptive Detection of Radar Targets in Heavy-Tailed Sea Clutter With Lognormal Texture. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-11.	2.7	9
70	Adaptive Subspace Detection Based on Gradient Test for Orthogonal Interference. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 1868-1877.	2.6	8
71	A Simpler Proof of Rapid Convergence Rate in Adaptive Arrays. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 135-136.	2.6	7
72	Target detection based on F-test in passive multistatic radar. , 2018, 79, 1-8.		7

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73	Adaptive Target Detection in Gaussian Clutter Edges. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 1662-1673.	2.6	6
74	Robust detection of distributed targets based on Rao test and Wald test. Signal Processing, 2021, 180, 107801.	2.1	6
75	Coincidence of the Rao Test, Wald Test and GLRT for anomaly detection in hyperspectral imagery. Signal Processing, 2020, 169, 107416.	2.1	5
76	Persymmetric Adaptive Array Detection of Spread Spectrum Signals. IEEE Transactions on Information Theory, 2020, 66, 7828-7834.	1.5	5
77	Target detection with persymmetric subspace models for steering vector mismatches in MIMO radars. , 2022, 126, 103480.		5
78	Adaptive detection using both the test and training data for disturbance correlation estimation. Signal Processing, 2017, 137, 309-318.	2.1	4
79	Target Detection in Passive Radar Under Noisy Reference Channel: A New Threshold-Setting Strategy. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 4711-4722.	2.6	4
80	Detection of a rank-one signal with limited training data. Signal Processing, 2021, 186, 108120.	2.1	4
81	Bayesian Detection for Radar Targets in Compound-Gaussian Sea Clutter. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	4
82	Multichannel Adaptive Detection Based on Gradient Test and Durbin Test in Deterministic Interference and Structure Nonhomogeneity. IEEE Signal Processing Letters, 2022, 29, 592-596.	2.1	4
83	False alarm rate of the GLRT-LQ detector in non-Gaussian and heterogeneous clutter. Aerospace Science and Technology, 2015, 47, 191-194.	2.5	3
84	Linear combination of local cross-correlation detectors in passive multistatic radar. , 2017, , .		3
85	Adaptive Subspace Signal Detection in Structured Interference Plus Compound Gaussian Sea Clutter. Remote Sensing, 2022, 14, 2274.	1.8	3
86	A tunable detector for distributed targets when signal mismatch occurs. Electronics Letters, 2021, 57, 594-596.	0.5	2
87	CFAR target detection for passive multistatic radar with compensation errors. , 2015, , .		1
88	Adaptive Detection of a Rank-One Signal Based on Wald Test. , 2019, , .		1
89	A Two-Step Detector for Distributed Target Detection. , 2019, , .		1
90	Robust GLRT Detection Exploiting Persymmetry in Partially Homogeneous Environments. , 2019, , .		1

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91	Adaptive Detection in Structure-Nonhomogeneity Environment: Designs and Comparisons. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	1
92	Exploiting persymmetry for adaptive detection in distributed MIMO radar. , 2016, , .		0
93	Rao Test With Improved Robustness for Range-Spread Target Detection. , 2021, , .		0
94	Persymmetric Detection of Subspace Signals Embedded in Subspace Interference and Gaussian Noise. , 2021, , .		0
95	Adaptive Detectors for Colocated MIMO Radar With Training Data. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	0
96	Detection architecture with improved classification capabilities for covariance structures. , 2022, 123, 103404.		0
97	GLRT for Adaptive Array Signal Detection in the Presence of Spatial Steering Vector Uncertainties. , 2021, , .		0