

Joseph Tabrikian

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

2,743
citations

279487

23
h-index

189595

50
g-index

103
all docs

103
docs citations

103
times ranked

1728
citing authors

#	ARTICLE	IF	CITATIONS
1	Target Detection and Localization Using MIMO Radars and Sonars. IEEE Transactions on Signal Processing, 2006, 54, 3873-3883.	3.2	921
2	The Rise of Radar for Autonomous Vehicles: Signal Processing Solutions and Future Research Directions. IEEE Signal Processing Magazine, 2019, 36, 20-31.	4.6	195
3	Source Localization Using Vector Sensor Array in a Multipath Environment. IEEE Transactions on Signal Processing, 2004, 52, 3096-3103.	3.2	131
4	GMM-based target classification for ground surveillance Doppler radar. IEEE Transactions on Aerospace and Electronic Systems, 2006, 42, 267-278.	2.6	115
5	Optimal Adaptive Waveform Design for Cognitive MIMO Radar. IEEE Transactions on Signal Processing, 2013, 61, 5075-5089.	3.2	97
6	Maximum A-Posteriori Probability Pitch Tracking in Noisy Environments Using Harmonic Model. IEEE Transactions on Speech and Audio Processing, 2004, 12, 76-87.	2.0	70
7	Maneuvering Target Tracking in the Presence of Glint using the Nonlinear Gaussian Mixture Kalman Filter. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 246-262.	2.6	70
8	Relationships between adaptive minimum variance beamforming and optimal source localization. IEEE Transactions on Signal Processing, 2000, 48, 1-12.	3.2	65
9	Barankin bounds for source localization in an uncertain ocean environment. IEEE Transactions on Signal Processing, 1999, 47, 2917-2927.	3.2	62
10	MMSE-Based Filtering in Presence of Non-Gaussian System and Measurement Noise. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 1153-1170.	2.6	62
11	Optimal Cognitive Beamforming for Target Tracking in MIMO Radar/Sonar. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 1440-1450.	7.3	55
12	Non-Bayesian Periodic Cram�r-Rao Bound. IEEE Transactions on Signal Processing, 2013, 61, 1019-1032.	3.2	46
13	General Classes of Performance Lower Bounds for Parameter Estimation�Part I: Non-Bayesian Bounds for Unbiased Estimators. IEEE Transactions on Information Theory, 2010, 56, 5045-5063.	1.5	44
14	Performance Analysis for Channel Estimation With 1-Bit ADC and Unknown Quantization Threshold. IEEE Transactions on Signal Processing, 2018, 66, 2557-2571.	3.2	44
15	An Efficient Vector Sensor Configuration for Source Localization. IEEE Signal Processing Letters, 2004, 11, 690-693.	2.1	37
16	Generalized Likelihood Ratio Test for Voiced-Unvoiced Decision in Noisy Speech Using the Harmonic Model. IEEE Transactions on Audio Speech and Language Processing, 2006, 14, 502-510.	3.8	36
17	Robust maximum-likelihood source localization in an uncertain shallow-water waveguide. Journal of the Acoustical Society of America, 1997, 101, 241-249.	0.5	35
18	General Classes of Performance Lower Bounds for Parameter Estimation�Part II: Bayesian Bounds. IEEE Transactions on Information Theory, 2010, 56, 5064-5082.	1.5	35

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19	Direction of Arrival Estimation in the Presence of Noise Coupling in Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2007, 55, 1940-1947.	3.1	28
20	Classification of multichannel EEG patterns using parallel hidden Markov models. Medical and Biological Engineering and Computing, 2012, 50, 319-328.	1.6	27
21	Blind Separation of Independent Sources Using Gaussian Mixture Model. IEEE Transactions on Signal Processing, 2007, 55, 3645-3658.	3.2	26
22	Bayesian Estimation in the Presence of Deterministic Nuisance Parametersâ€”Part I: Performance Bounds. IEEE Transactions on Signal Processing, 2015, 63, 6632-6646.	3.2	26
23	Cyclic Barankin-Type Bounds for Non-Bayesian Periodic Parameter Estimation. IEEE Transactions on Signal Processing, 2014, 62, 3321-3336.	3.2	24
24	Bayesian Parameter Estimation Using Periodic Cost Functions. IEEE Transactions on Signal Processing, 2012, 60, 1229-1240.	3.2	23
25	A Barankin-Type Bound on Direction Estimation Using Acoustic Sensor Arrays. IEEE Transactions on Signal Processing, 2011, 59, 431-435.	3.2	19
26	Cramér-Rao Bound for Constrained Parameter Estimation Using Lehmann-Unbiasedness. IEEE Transactions on Signal Processing, 2019, 67, 753-768.	3.2	19
27	Transmission Diversity Smoothing for Multi-Target Localization. , 0, , .		17
28	MIMO-AR System Identification and Blind Source Separation for GMM-Distributed Sources. IEEE Transactions on Signal Processing, 2009, 57, 1717-1730.	3.2	17
29	Blind MIMO-AR System Identification and Source Separation With Finite-Alphabet. IEEE Transactions on Signal Processing, 2010, 58, 990-1000.	3.2	16
30	Cognitive antenna selection for DOA estimation in automotive radar. , 2016, , .		16
31	A New Class of Bayesian Cyclic Bounds for Periodic Parameter Estimation. IEEE Transactions on Signal Processing, 2016, 64, 229-243.	3.2	16
32	Periodic CRB for non-Bayesian parameter estimation. , 2011, , .		15
33	Electrical Dispersion Compensation Equalizers in Optical Direct- and Coherent-Detection Systems. IEEE Transactions on Communications, 2006, 54, 2045-2050.	4.9	14
34	Performance bounds for constrained parameter estimation. , 2012, , .		14
35	Optimal Real-Weighted Beamforming With Application to Linear and Spherical Arrays. IEEE Transactions on Audio Speech and Language Processing, 2012, 20, 2575-2585.	3.8	14
36	Marginal Likelihood for Estimation and Detection Theory. IEEE Transactions on Signal Processing, 2007, 55, 3963-3974.	3.2	13

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37	A modular neural network for direction-of-arrival estimation of two sources. <i>Neurocomputing</i> , 2011, 74, 3092-3102.	3.5	13
38	On the limitations of Barankin type bounds for MLE threshold prediction. <i>Signal Processing</i> , 2015, 108, 622-627.	2.1	12
39	Underwater source detection using a spatial stationarity test. <i>Journal of the Acoustical Society of America</i> , 2001, 109, 1053-1063.	0.5	11
40	Fast Approximate Joint Diagonalization of Positive Definite Hermitian Matrices. , 2007, , .		11
41	Hybrid lower bound via compression of the sampled CLR function. , 2009, , .		11
42	A General Class of Outage Error Probability Lower Bounds in Bayesian Parameter Estimation. <i>IEEE Transactions on Signal Processing</i> , 2012, 60, 2152-2166.	3.2	11
43	Bayesian Estimation in the Presence of Deterministic Nuisance Parametersâ€™Part II: Estimation Methods. <i>IEEE Transactions on Signal Processing</i> , 2015, 63, 6647-6658.	3.2	11
44	Speech Source Separation in Convolutional Environments Using Space-Time-Frequency Analysis. <i>Eurasip Journal on Advances in Signal Processing</i> , 2006, 2006, 1.	1.0	10
45	Maximum A Posteriori Probability Multiple-Pitch Tracking Using the Harmonic Model. <i>IEEE Transactions on Audio Speech and Language Processing</i> , 2011, 19, 2210-2221.	3.8	10
46	Uniformly Best Biased Estimators in Non-Bayesian Parameter Estimation. <i>IEEE Transactions on Information Theory</i> , 2011, 57, 7635-7647.	1.5	9
47	Waveform design for sequential detection with subspace interference. , 2012, , .		9
48	A new lower bound on the mean-square error of unbiased estimators. <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 2008, , .	1.8	8
49	QML-Based Joint Diagonalization of Positive-Definite Hermitian Matrices. <i>IEEE Transactions on Signal Processing</i> , 2010, 58, 4656-4673.	3.2	8
50	Cognitive antenna selection for optimal source localization. , 2015, , .		7
51	Cognitive Antenna Selection for Automotive Radar Using Bobrovsky-Zakai Bound. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2021, 15, 892-903.	7.3	7
52	Frequency Diverse Array Signal Optimization: From Non-Cognitive to Cognitive Radar. <i>IEEE Transactions on Signal Processing</i> , 2021, 69, 6206-6220.	3.2	7
53	Source localization in a waveguide using polynomial rooting. <i>IEEE Transactions on Signal Processing</i> , 1996, 44, 1861-1871.	3.2	6
54	MIMO-AR System Identification and Blind Source Separation using GMM. , 2007, , .		6

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55	Optimal Bayesian parameter estimation with periodic criteria. , 2010, , .		6
56	Adaptive waveform design for target enumeration in cognitive radar. , 2013, , .		6
57	Bayesian cyclic bounds for periodic parameter estimation. , 2013, , .		6
58	Detection of One-Lung Intubation Incidents. Annals of Biomedical Engineering, 2008, 36, 1844-1855.	1.3	5
59	A general class of lower bounds on the probability of error in multiple hypothesis testing. , 2008, , .		5
60	Maximum directivity beamformer for spherical-aperture microphones. , 2009, , .		5
61	Optimal sequential waveform design for cognitive radar. , 2012, , .		5
62	Performance analysis for pilot-based 1-bit channel estimation with unknown quantization threshold. , 2016, , .		5
63	Ambiguity function for sequential antenna selection. , 2016, , .		5
64	Bobrovskyâ€™Zakai-Type Bound for Periodic Stochastic Filtering. IEEE Signal Processing Letters, 2018, 25, 1460-1464.	2.1	5
65	Detection of environmental mismatch in a shallow water waveguide. IEEE Transactions on Signal Processing, 1999, 47, 2181-2190.	3.2	4
66	Low complexity bit and power allocation for MIMO-OFDM systems using space-frequency beamforming. Signal Processing, 2013, 93, 1961-1975.	2.1	4
67	The Risk-Unbiased CramÃ©râ€™Rao Bound for Non-Bayesian Multivariate Parameter Estimation. IEEE Transactions on Signal Processing, 2018, 66, 4920-4934.	3.2	4
68	Radar target classification using doppler signatures of human locomotion models. IEEE Transactions on Aerospace and Electronic Systems, 2007, 43, 1510-1522.	2.6	4
69	MMSE-Based speech enhancement using the harmonic model. , 2008, , .		3
70	A new lower bound based on weighted fourier transform of the likelihood ratio function. , 2008, , .		3
71	Efficient Computation of MSE Lower Bounds via Matching Pursuit. IEEE Signal Processing Letters, 2017, 24, 1798-1802.	2.1	3
72	General classes of Bayesian lower bounds for outage error probability and MSE. , 2009, , .		2

#	ARTICLE	IF	CITATIONS
73	Bayesian Cram�r-Rao type bound for risk-unbiased estimation with deterministic nuisance parameters. , 2014, , .		2
74	Mean-cyclic-error lower bounds via integral transform of likelihood-ratio function. , 2016, , .		2
75	Adaptive waveform design for target detection with sequential composite hypothesis testing. , 2016, , .		2
76	New observations on efficiency of variance estimation of white Gaussian signal with unknown mean. , 2016, , .		2
77	Limitations of Constrained CRB and an Alternative Bound. , 2018, , .		2
78	Cram�r-Rao Bound Under Norm Constraint. IEEE Signal Processing Letters, 2019, 26, 1393-1397.	2.1	2
79	Detection of Modeling Misspecification Using Cross-Entropy Test. , 2019, , .		2
80	Parametric Estimation of Cumulants. , 0, , .		1
81	Suboptimal space-frequency waveform design for MIMO-OFDM systems. , 2010, , .		1
82	On order relations between lower bounds on the MSE of unbiased estimators. , 2010, , .		1
83	Achievable MSE lower bounds in non-Bayesian Biased estimation. , 2010, , .		1
84	Outage error probability lower bounds in vector parameter estimation. , 2010, , .		1
85	A risk-unbiased approach to a new Cram�r-Rao bound. , 2016, , .		1
86	Optimal biased estimation using Lehmann-unbiasedness. , 2017, , .		1
87	A Sequential Framework for Composite Hypothesis Testing. IEEE Transactions on Signal Processing, 2018, 66, 5484-5499.	3.2	1
88	Optimal Antenna Selection Sequence for MIMO Radar. , 2019, , .		1
89	Capon's Time-Frequency Representation with Nonstationary AR Autocorrelation. , 0, , .		0
90	Asymptotic Analysis of Marginal-Likelihood Based Estimators for m-Dependent Processes. , 2006, , .		0

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91	A new lower bound on the mean-square error of biased estimators. , 2008, , .		0
92	Risk-unbiased bound for random signal estimation in the presence of unknown deterministic channel. , 2015, , .		0
93	Cramér-Rao-type bound for state estimation in linear discrete-time system with unknown system parameters. , 2015, , .		0
94	Multivariate Bayesian Cram©r-Rao-Type Bound for Stochastic Filtering Involving Periodic States. , 2018, , .		0
95	Efficient Computation of MSE Lower Bounds via Matching Pursuit. , 2018, , .		0
96	Waveform optimization for FDA Radar. , 2019, , .		0
97	In Remembrance of Peter Schultheiss [In Memoriam]. IEEE Signal Processing Magazine, 2021, 38, 10-10.	4.6	0
98	Performance limits on underwater acoustic matchedéfield processing. Journal of the Acoustical Society of America, 1997, 101, 3156-3156.	0.5	0
99	Composite Hypothesis Tests for Detection of Modeling Misspecification. IEEE Transactions on Signal Processing, 2022, 70, 351-365.	3.2	0
100	Model Selection via Misspecified Cram©r-Rao Bound Minimization. , 2022, , .		0