Yixin Yang

List of Publications by Year
in descending order

73 papers	688 citations	687363 13 h-index	677142 22 g-index
75 all docs	75 docs citations	75 times ranked	434 citing authors

#	Article	IF	Citations
1	Theoretical and Practical Solutions for High-Order Superdirectivity of Circular Sensor Arrays. IEEE Transactions on Industrial Electronics, 2013, 60, 203-209.	7.9	62
2	Robust high-order superdirectivity of circular sensor arrays. Journal of the Acoustical Society of America, 2014, 136, 1712-1724.	1.1	52
3	Source localization in the deep ocean using a convolutional neural network. Journal of the Acoustical Society of America, 2020, 147, EL314-EL319.	1.1	34
4	Adaptive Beamforming With Sensor Position Errors Using Covariance Matrix Construction Based on Subspace Bases Transition. IEEE Signal Processing Letters, 2019, 26, 19-23.	3.6	28
5	Wideband sparse spatial spectrum estimation using matrix filter with nulling in a strong interference environment. Journal of the Acoustical Society of America, 2018, 143, 3891-3898.	1.1	27
6	Robust Superdirective Frequency-Invariant Beamforming for Circular Sensor Arrays. IEEE Signal Processing Letters, 2017, 24, 1193-1197.	3.6	25
7	Sparse Bayesian DOA Estimation Using Hierarchical Synthesis Lasso Priors for Off-Grid Signals. IEEE Transactions on Signal Processing, 2020, 68, 872-884.	5.3	25
8	A Direct Position Determination Approach for Underwater Acoustic Sensor Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 13033-13044.	6.3	21
9	Matrix-Regularized Multiple Kernel Learning via <inline-formula> <tex-math notation="LaTeX">$(r,~p)$ </tex-math> </inline-formula> Norms. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4997-5007.	11.3	19
10	Broadband pattern synthesis for circular sensor arrays. Journal of the Acoustical Society of America, 2014, 136, EL153-EL158.	1.1	18
11	Robust Adaptive Beamforming with Sensor Position Errors Using Weighted Subspace Fitting-Based Covariance Matrix Reconstruction. Sensors, 2018, 18, 1476.	3.8	18
12	Localized Multiple Kernel Learning With Dynamical Clustering and Matrix Regularization. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 486-499.	11.3	16
13	A variational Bayesian strategy for solving the DOA estimation problem in sparse array. , 2019, 90, 28-35.		15
14	Robust Covariance Matrix Reconstruction Algorithm for Time-Domain Wideband Adaptive Beamforming. IEEE Transactions on Vehicular Technology, 2019, 68, 1405-1416.	6.3	15
15	Sparse spatial spectral estimation in directional noise environment. Journal of the Acoustical Society of America, 2016, 140, EL263-EL268.	1.1	14
16	Low Sidelobe Range Profile Synthesis for Sonar Imaging Using Stepped-Frequency Pulses. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 218-221.	3.1	14
17	Long-term ambient noise statistics in the northeast South China Sea. Journal of the Acoustical Society of America, 2019, 145, EL501-EL507.	1.1	14
18	Perception matters: Exploring imperceptible and transferable anti-forensics for GAN-generated fake face imagery detection. Pattern Recognition Letters, 2021, 146, 15-22.	4.2	13

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19	Source localization by matching sound intensity with a vertical array in the deep ocean. Journal of the Acoustical Society of America, 2019, 146, EL477-EL481.	1.1	12
20	Low-rank enhanced convolutional sparse feature detection for accurate diagnosis of gearbox faults. Mechanical Systems and Signal Processing, 2021, 150, 107215.	8.0	12
21	High-Order Superdirectivity of Circular Sensor Arrays Mounted on Baffles. Acta Acustica United With Acustica, 2016, 102, 80-93.	0.8	11
22	On the Impact of Regularization Variation on Localized Multiple Kernel Learning. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 2625-2630.	11.3	11
23	A general superdirectivity model for arbitrary sensor arrays. Eurasip Journal on Advances in Signal Processing, 2015, 2015, .	1.7	10
24	Analysis of moving source characteristics using polynomial chirplet transform. Journal of the Acoustical Society of America, 2015, 137, EL320-EL326.	1.1	9
25	Hybrid phase shift and shifted sideband beamforming for large-aperture MIMO sonar imaging. IET Radar, Sonar and Navigation, 2017, 11, 1782-1789.	1.8	9
26	A distributed subband valley fusion (DSVF) method for low frequency broadband target localization. Journal of the Acoustical Society of America, 2018, 143, 2269-2278.	1.1	9
27	Target Feature Extraction for Passive Sonar Based on Two Cepstrums. , 2008, , .		8
28	A Super-Resolution Direction of Arrival Estimation Algorithm for Coprime Array via Sparse Bayesian Learning Inference. Circuits, Systems, and Signal Processing, 2018, 37, 1907-1934.	2.0	8
29	A Correlation-Aware Sparse Bayesian Perspective for DOA Estimation With Off-Grid Sources. IEEE Transactions on Antennas and Propagation, 2019, 67, 7661-7666.	5.1	8
30	Robust Adaptive Beamforming for Uniform Linear Arrays With Sensor Gain and Phase Uncertainties. IEEE Access, 2019, 7, 2677-2685.	4.2	8
31	Nonnegative Bounded Convolutional Sparse Learning Method for Envelope Feature Deconvolution. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8666-8679.	4.7	8
32	Root sparse asymptotic minimum variance for off-grid direction-of-arrival estimation. Signal Processing, 2019, 163, 225-231.	3.7	7
33	Nonuniform linear array DOA estimation using EM criterion. , 2019, 86, 36-41.		7
34	Subspace-based direction of arrival estimation in colored ambient noise environments. , 2020, 99, 102650.		7
35	Using deconvolution to suppress range sidelobes for MIMO sonar imaging. Applied Acoustics, 2022, 186, 108491.	3.3	7
36	Unidirectional acoustic probe based on the particle velocity gradient. Journal of the Acoustical Society of America, 2016, 139, EL179-EL183.	1.1	6

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37	An upper bound for the directivity index of superdirective acoustic vector sensor arrays. Journal of the Acoustical Society of America, 2016, 140, EL410-EL415.	1.1	6
38	Parameter estimation of underwater moving sources by using matched Wigner transform. Applied Acoustics, 2016, 101, 5-14.	3.3	6
39	Arbitrary-order superdirectivity of circular sensor arrays. Journal of the Acoustical Society of America, 2020, 148, 1425-1435.	1.1	6
40	Off-grid DOA estimation through variational Bayesian inference in colored noise environment. , 2021, 111, 102967.		6
41	Doppler chirplet transform for the velocity estimation of a fast moving acoustic source of discrete tones. Journal of the Acoustical Society of America, 2019, 145, EL34-EL38.	1.1	5
42	Sensor Localization for Highly Deformed Partially Calibrated Arrays With Moving Targets. IEEE Signal Processing Letters, 2019, 26, 372-376.	3.6	5
43	Off-grid DOA estimation of correlated sources for nonuniform linear array through hierarchical sparse recovery in a Bayesian framework and asymptotic minimum variance criterion. Signal Processing, 2021, 178, 107813.	3.7	5
44	3D Underwater Uncooperative Target Tracking for a Time-Varying Non-Gaussian Environment by Distributed Passive Underwater Buoys. Entropy, 2021, 23, 902.	2.2	5
45	Convolutional plug-and-play sparse optimization for impulsive blind deconvolution. Mechanical Systems and Signal Processing, 2021, 161, 107877.	8.0	5
46	Phase-Mode Circular Multi-channel Hydrophone with Super Directivity. , 2007, , .		4
47	Robust target feature extraction based on modified cochlear filter analysis model. , 2013, , .		4
48	Joint calibration of array shape and sensor gain/phase for highly deformed arrays using wideband signals. Signal Processing, 2019, 165, 222-232.	3.7	4
49	An uncertainty-set-shrinkage-based covariance matrix reconstruction algorithm for robust adaptive beamforming. Multidimensional Systems and Signal Processing, 2021, 32, 263-279.	2.6	4
50	Verification and Evaluation of Lateral Wave Propagation in Marine Environment. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 2413-2417.	4.0	4
51	Design of unidirectional acoustic probes with flexible directivity patterns using two acoustic particle velocity sensors. Journal of the Acoustical Society of America, 2018, 144, EL13-EL19.	1.1	3
52	Electromagnetic fields in air produced by underwater magnetic dipoles with attitude variation in real marine environment. Journal of Electromagnetic Waves and Applications, 2019, 33, 1978-1995.	1.6	3
53	Deconvolving Range Profile for Sonar Imaging Using Stepped-Frequency LFM Pulses. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 954-958.	3.1	3
54	A cluster-based direct source localization approach for large-aperture horizontal line arrays. Journal of the Acoustical Society of America, 2020, 147, EL50-EL54.	1.1	3

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55	Single Hydrophone Passive Source Range Estimation Using Phase-Matched Filter. Journal of Marine Science and Engineering, 2022, 10, 866.	2.6	3
56	Joint signal detection and recovery via Blind Signal Separation. , 2010, , .		2
57	Spatio-temporal distribution of evaporation duct for the South China Sea. , 2014, , .		2
58	A time-frequency analysis approach to dispersion curve estimation for single-hydrophone acoustic signals in shallow water. JASA Express Letters, 2021, 1, .	1.1	2
59	Direction-of-arrival estimation for coherent signals through covariance-based grid free compressive sensing. JASA Express Letters, 2021, 1, 094801.	1.1	2
60	Sparse Bayesian learning for wideband direction-of-arrival estimation via beamformer power outputs in a strong interference environment. JASA Express Letters, 2022, 2, .	1.1	2
61	Optimum design on time domain wideband beamformer with constant beamwidth for sonar systems. , 0, , .		1
62	Array gain for a circular array mounted on a sphere. , 2009, , .		1
63	A method for obtaining sensor array manifold using sound field calculation. Acoustical Science and Technology, 2010, 31, 129-136.	0.5	1
64	Reverberation nulling and echo enhancement at low frequency using waveguide invariance. Science Bulletin, 2011, 56, 142-150.	1.7	1
65	Two schemes for forward scattering detection: An experimental demonstration. , 2016, , .		1
66	Second-order cone programming with probabilistic regularization for robust adaptive beamforming. Journal of the Acoustical Society of America, 2017, 141, EL199-EL204.	1.1	1
67	Robust Direction-Finding Method for Sensor Gain and Phase Uncertainties in Non-uniform Environment. Circuits, Systems, and Signal Processing, 2020, 39, 1943-1964.	2.0	1
68	Beamforming for Circular Array Based on Mode Decomposition of Sound Field. , 2006, , .		0
69	Mode Decomposition Beamformer for a Baffled Circular Array. , 2006, , .		0
70	Beamspace DOA estimation algorithms with robustness against fast-moving strong interferers. , 2006, , .		0
71	Experimental Studies on Direction Finding Via Blind Beamforming. , 2007, , .		0
72	Superdirectivity solutions of circular arrays with acoustic particle velocity sensors. , 2020, 106, 102811.		0

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73	Array shape calibration with phase unwrapping techniques for highly deformed arrays. IET Radar, Sonar and Navigation, 2021, 15, 1397.	1.8	0