

# Mingsian R Bai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6638057/publications.pdf>

Version: 2024-02-01

85  
papers

1,308  
citations

430874

18  
h-index

395702

33  
g-index

102  
all docs

102  
docs citations

102  
times ranked

693  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of BEM (boundary element method)-based acoustic holography to radiation analysis of sound sources with arbitrarily shaped geometries. Journal of the Acoustical Society of America, 1992, 92, 533-549.	1.1	281
2	Fault diagnosis of rotating machinery using an intelligent order tracking system. Journal of Sound and Vibration, 2005, 280, 699-718.	3.9	69
3	Source identification system based on the time-domain nearfield equivalence source imaging: Fundamental theory and implementation. Journal of Sound and Vibration, 2007, 307, 202-225.	3.9	53
4	Development of an expert system for fault diagnosis in scooter engine platform using fuzzy-logic inference. Expert Systems With Applications, 2007, 33, 1063-1075.	7.6	46
5	Implementation of an active headset by using the H <sup>∞</sup> robust control theory. Journal of the Acoustical Society of America, 1997, 102, 2184-2190.	1.1	42
6	Estimation of sound power of baffled planar sources using radiation matrices. Journal of the Acoustical Society of America, 2002, 112, 876-883.	1.1	37
7	Impact localization combined with haptic feedback for touch panel applications based on the time-reversal approach. Journal of the Acoustical Society of America, 2011, 129, 1297-1305.	1.1	36
8	Optimal design of loudspeaker arrays for robust cross-talk cancellation using the Taguchi method and the genetic algorithm. Journal of the Acoustical Society of America, 2005, 117, 2802-2813.	1.1	35
9	Development of panel loudspeaker system: Design, evaluation and enhancement. Journal of the Acoustical Society of America, 2001, 109, 2751-2761.	1.1	33
10	On optimal retreat distance for the equivalent source method-based nearfield acoustical holography. Journal of the Acoustical Society of America, 2011, 129, 1407-1416.	1.1	32
11	An expert system for the diagnosis of faults in rotating machinery using adaptive order-tracking algorithm. Expert Systems With Applications, 2009, 36, 5424-5431.	7.6	31
12	Upmixing and Downmixing Two-channel Stereo Audio for Consumer Electronics. IEEE Transactions on Consumer Electronics, 2007, 53, 1011-1019.	3.6	30
13	Objective and subjective analysis of effects of listening angle on crosstalk cancellation in spatial sound reproduction. Journal of the Acoustical Society of America, 2006, 120, 1976-1989.	1.1	26
14	Optimized microphone deployment for near-field acoustic holography: To be, or not to be random, that is the question. Journal of Sound and Vibration, 2010, 329, 2809-2824.	3.9	25
15	Electroacoustic analysis of an electret loudspeaker using combined finite-element and lumped-parameter models. Journal of the Acoustical Society of America, 2009, 125, 3632-3640.	1.1	23
16	Experimental modeling and design optimization of push-pull electret loudspeakers. Journal of the Acoustical Society of America, 2010, 127, 2274-2281.	1.1	23
17	Application of convex optimization to acoustical array signal processing. Journal of Sound and Vibration, 2013, 332, 6596-6616.	3.9	20
18	Acoustical source characterization by using recursive Wiener filtering. Journal of the Acoustical Society of America, 1995, 97, 2657-2663.	1.1	18

#	ARTICLE	IF	CITATIONS
19	Robust control of a sensorless bass-enhanced moving-coil loudspeaker system. Journal of the Acoustical Society of America, 1999, 105, 3283-3289.	1.1	17
20	Reduction of electronic delay in active noise control systems – A multirate signal processing approach. Journal of the Acoustical Society of America, 2002, 111, 916-924.	1.1	17
21	Active feedforward noise control and signal tracking of headsets: Electroacoustic analysis and system implementation. Journal of the Acoustical Society of America, 2018, 143, 1613-1622.	1.1	17
22	Plant uncertainty analysis in a duct active noise control problem by using the H <sub>∞</sub> theory. Journal of the Acoustical Society of America, 1998, 104, 237-247.	1.1	16
23	Iterative algorithm for solving acoustic source characterization problems under block sparsity constraints. Journal of the Acoustical Society of America, 2018, 143, 3747-3757.	1.1	15
24	Active noise control of enclosed harmonic fields by using BEM-based optimization techniques. Applied Acoustics, 1996, 48, 15-32.	3.3	14
25	A study of fault diagnosis in a scooter using adaptive order tracking technique and neural network. Expert Systems With Applications, 2009, 36, 49-56.	7.6	14
26	Solution Strategies for Linear Inverse Problems in Spatial Audio Signal Processing. Applied Sciences (Switzerland), 2017, 7, 582.	2.5	14
27	Implementation issues of the nearfield equivalent source imaging microphone array. Journal of Sound and Vibration, 2011, 330, 545-558.	3.9	13
28	Study of acoustic resonance in enclosures using eigenanalysis based on boundary element methods. Journal of the Acoustical Society of America, 1992, 91, 2529-2538.	1.1	12
29	Free vibration of a thin spherical shell containing a compressible fluid. Journal of the Acoustical Society of America, 1994, 95, 3300-3310.	1.1	12
30	Active noise cancellation by using the linear quadratic Gaussian independent modal space control. Journal of the Acoustical Society of America, 1995, 97, 2664-2674.	1.1	12
31	Determination of optimal exciter deployment for panel speakers using the genetic algorithm. Journal of Sound and Vibration, 2004, 269, 727-743.	3.9	12
32	Regularization using Monte Carlo simulation to make optimal beamformers robust to system perturbations. Journal of the Acoustical Society of America, 2014, 135, 2808-2820.	1.1	11
33	Point focusing using loudspeaker arrays from the perspective of optimal beamforming. Journal of the Acoustical Society of America, 2015, 137, 3393-3410.	1.1	11
34	Digital Signal Processor Implementation of Active Noise Control Systems for Broadband Noise Cancellation in Engine Exhaust Systems. Japanese Journal of Applied Physics, 2000, 39, 4982-4986.	1.5	10
35	Microphone array signal processing with application in three-dimensional spatial hearing. Journal of the Acoustical Society of America, 2005, 117, 2112-2121.	1.1	10
36	Spatial sound field synthesis and upmixing based on the equivalent source method. Journal of the Acoustical Society of America, 2014, 135, 269-282.	1.1	10

#	ARTICLE	IF	CITATIONS
37	Head-related transfer function (HRTF) synthesis based on a three-dimensional array model and singular value decomposition. <i>Journal of Sound and Vibration</i> , 2005, 281, 1093-1115.	3.9	9
38	Design and implementation of a space domain spherical microphone array with application to source localization and separation. <i>Journal of the Acoustical Society of America</i> , 2016, 139, 1058-1070.	1.1	9
39	Localization and separation of acoustic sources by using a 2.5-dimensional circular microphone array. <i>Journal of the Acoustical Society of America</i> , 2017, 142, 286-297.	1.1	9
40	Study of the acoustic feedback problem of active noise control by using the l1 and l2 vector space optimization approaches. <i>Journal of the Acoustical Society of America</i> , 1997, 102, 1004-1012.	1.1	8
41	Development and implementation of cross-talk cancellation system in spatial audio reproduction based on subband filtering. <i>Journal of Sound and Vibration</i> , 2006, 290, 1269-1289.	3.9	8
42	Kalman filter-based microphone array signal processing using the equivalent source model. <i>Journal of Sound and Vibration</i> , 2012, 331, 4940-4955.	3.9	8
43	Investigation on the reproduction performance versus acoustic contrast control in sound field synthesis. <i>Journal of the Acoustical Society of America</i> , 2014, 136, 1591-1600.	1.1	8
44	Audio enhancement and intelligent classification of household sound events using a sparsely deployed array. <i>Journal of the Acoustical Society of America</i> , 2020, 147, 11-24.	1.1	8
45	Expert diagnostic system for moving-coil loudspeakers using nonlinear modeling. <i>Journal of the Acoustical Society of America</i> , 2009, 125, 819-830.	1.1	7
46	Optimal design of resonant piezoelectric buzzer from a perspective of vibration-absorber theory. <i>Journal of the Acoustical Society of America</i> , 2007, 122, 1568-1580.	1.1	6
47	Multirate synthesis of reverberators using subband filtering. <i>Journal of Sound and Vibration</i> , 2009, 321, 1090-1108.	3.9	6
48	Particle velocity estimation based on a two-microphone array and Kalman filter. <i>Journal of the Acoustical Society of America</i> , 2013, 133, 1425-1432.	1.1	6
49	Acoustic Source Localization and Deconvolution-Based Separation. <i>Journal of Computational Acoustics</i> , 2015, 23, 1550008.	1.0	6
50	Time Difference of Arrival (TDOA)-Based Acoustic Source Localization and Signal Extraction for Intelligent Audio Classification. , 2018, , .		6
51	Effects of Directional Microphone and Transducer in Spatially Feedforward Active Noise Control System. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 6133-6137.	1.5	5
52	Comparative study of audio spatializers for dual-loudspeaker mobile phones. <i>Journal of the Acoustical Society of America</i> , 2007, 121, 298-309.	1.1	5
53	Optimal two-layer directive microphone array with application in near-field acoustical holography. <i>Journal of the Acoustical Society of America</i> , 2012, 132, 862-871.	1.1	5
54	Refined acoustic modeling and analysis of shotgun microphones. <i>Journal of the Acoustical Society of America</i> , 2013, 133, 2036-2045.	1.1	5

#	ARTICLE	IF	CITATIONS
55	Electroacoustic analysis, design, and implementation of a small balanced armature speaker. Journal of the Acoustical Society of America, 2014, 136, 2554-2560.	1.1	5
56	Active control of noise in a duct using the sparsely coded time-domain underdetermined multichannel inverse filters. Journal of the Acoustical Society of America, 2019, 146, 1371-1381.	1.1	5
57	ACTIVE CANCELLATION OF NOISE IN A CAR CABIN USING THE ZERO SPILLOVER CONTROLLER. Journal of Sound and Vibration, 2000, 235, 787-800.	3.9	4
58	Analysis and DSP Implementation of a Broadband Duct ANC System Using Spatially Feedforward Structure. Journal of Vibration and Acoustics, Transactions of the ASME, 2001, 123, 129-136.	1.6	4
59	Optimal design of panel speaker array with omnidirectional characteristics. Journal of the Acoustical Society of America, 2002, 112, 1944-1952.	1.1	4
60	Optimization and implementation of piezoelectric radiators using the genetic algorithm. Journal of the Acoustical Society of America, 2003, 113, 3197.	1.1	4
61	Bayesian approach of nearfield acoustic reconstruction with particle filters. Journal of the Acoustical Society of America, 2013, 133, 4032-4043.	1.1	4
62	A two-stage noise source identification technique based on a farfield random parametric array. Journal of the Acoustical Society of America, 2017, 141, 2978-2988.	1.1	4
63	Modeling of reverberant room responses for two-dimensional spatial sound field analysis and synthesis. Journal of the Acoustical Society of America, 2017, 142, 1953-1964.	1.1	4
64	Feedforward active noise global control using a linearly constrained beamforming approach. Journal of Sound and Vibration, 2022, , 117190.	3.9	4
65	Design and implementation of a hybrid sub-band acoustic echo canceller (AEC). Journal of Sound and Vibration, 2009, 321, 1069-1089.	3.9	3
66	Optimal design of minimum mean-square error noise reduction algorithms using the simulated annealing technique. Journal of the Acoustical Society of America, 2009, 125, 934-943.	1.1	3
67	Speech enhancement using an equivalent source inverse filtering-based microphone array. Journal of the Acoustical Society of America, 2010, 127, 1373-1380.	1.1	3
68	Impedance measurement techniques for one-port and two-port networks. Journal of the Acoustical Society of America, 2015, 138, 2279-2290.	1.1	3
69	An integrated analysis-synthesis array system for spatial sound fields. Journal of the Acoustical Society of America, 2015, 137, 1366-1376.	1.1	3
70	A Heterogeneous Unmanned Ground Vehicle and Blimp Robot Team for Search and Rescue using Data-driven Autonomy and Communication-aware Navigation. , 2022, 2, 557-594.		3
71	Synthesis of a robust broadband duct ANC system using convex programming approach. Journal of the Acoustical Society of America, 2002, 111, 1751-1757.	1.1	2
72	Integration of a Quantitative Feedback Theory (QFT)-Based Active Noise Canceller and 3D Audio Processor to Headsets. Journal of Vibration and Acoustics, Transactions of the ASME, 2007, 129, 567-576.	1.6	2

#	ARTICLE	IF	CITATIONS
73	A Ring Silencer Design for Reducing Noise of Axial Fan. Fluctuation and Noise Letters, 2003, 03, L259-L264.	1.5	1
74	Upmixing and Downmixing Two-Channel Stereo Audio for Consumer Electronics. , 2007, , .		1
75	Adaptive Sub-Band Acoustic Echo Cancellation Algorithms for Echo Paths Involving Nonlinear Amplifiers and Transducers. Asian Journal of Control, 2013, 15, 1655-1665.	3.0	1
76	Robust binaural rendering with the time-domain underdetermined multichannel inverse prefilters. Journal of the Acoustical Society of America, 2019, 146, 1302-1313.	1.1	1
77	Analysis and synthesis of three-dimensional sound fields using a hybrid microphone array and a 3-layered loudspeaker array. Journal of Sound and Vibration, 2019, 443, 666-682.	3.9	1
78	A multichannel learning-based approach for sound source separation in reverberant environments. Eurasip Journal on Audio, Speech, and Music Processing, 2021, 2021, .	2.1	1
79	Broadband Spatially Feedforward Active Noise Control Algorithms Using a Comb Filter. Journal of Vibration and Acoustics, Transactions of the ASME, 2003, 125, 18-23.	1.6	0
80	Special Issue on "Advances in Active Control of Sound and Vibration" Editorial. Asian Journal of Control, 2013, 15, 1563-1565.	3.0	0
81	Farfield and Nearfield Source Identification for Machine Tools Using Microphone Array Imaging Systems. Procedia Engineering, 2014, 79, 345-354.	1.2	0
82	An Application of Miniature Microphone Arrays to Stereophonic Recording Compatible to Conventional Practice. AES: Journal of the Audio Engineering Society, 2015, 63, 267-279.	1.0	0
83	Array model interpolation and subband iterative adaptive filters applied to beamforming-based acoustic echo cancellation. Journal of the Acoustical Society of America, 2016, 139, 863-874.	1.1	0
84	Upmixing and Downmixing Two-Channel Stereo Audio for Consumer Electronics. , 2007, , .		0
85	Acoustic modal analysis of room responses from the perspective of state-space balanced realization with application to field interpolation. Journal of the Acoustical Society of America, 2022, 152, 240-250.	1.1	0