Aijun Song

List of Publications by Year
in descending order

54 papers	835 citations	759233 12 h-index	552781 26 g-index
55 all docs	55 docs citations	55 times ranked	514 citing authors

#	Article	IF	Citations
1	Reinforcement Learning-Based Trajectory Optimization for Data Muling With Underwater Mobile Nodes. IEEE Access, 2022, 10, 38774-38784.	4.2	2
2	Multi-Layered Recursive Least Squares for Time-Varying System Identification. IEEE Transactions on Signal Processing, 2022, 70, 2280-2292.	5.3	8
3	Statistical analysis and hybrid modeling of high-frequency underwater acoustic channels affected by wind-driven surface waves. Journal of the Acoustical Society of America, 2022, 151, 3266-3279.	1.1	4
4	A Kriged Compressive Sensing Approach to Reconstruct Acoustic Fields From Measurements Collected by Underwater Vehicles. IEEE Journal of Oceanic Engineering, 2021, 46, 294-306.	3.8	12
5	Exploiting Spatial–Temporal Joint Sparsity for Underwater Acoustic Multiple-Input–Multiple-Output Communications. IEEE Journal of Oceanic Engineering, 2021, 46, 352-369.	3.8	16
6	Frequency-Domain Decision Feedback Equalization for Single-Carrier Transmissions in Fast Time-Varying Underwater Acoustic Channels. IEEE Journal of Oceanic Engineering, 2021, 46, 704-716.	3.8	15
7	Impacts of channel fluctuations on least-squares channel estimation in underwater acoustic communications. Journal of the Acoustical Society of America, 2021, 149, 3929-3942.	1.1	2
8	A Low Complexity Aggregation Method for Underwater On-Pipe Sensor Network. , 2021, , .		0
9	Self-Interference Channel Characterization in Underwater Acoustic In-Band Full-Duplex Communications Using OFDM. , 2020, , .		5
10	Design and Evaluation of an Acoustic Modem for a Small Autonomous Unmanned Vehicle. Sensors, 2019, 19, 2923.	3.8	7
11	Topology Optimization of Long-Thin Sensor Networks in Under-Ice Environments. IEEE Journal of Oceanic Engineering, 2019, 44, 1264-1278.	3.8	5
12	Virtual MIMO Transmissions for Underwater Acoustic Communications with Moving Platforms. , 2019, , .		1
13	Prefix-Free Frequency Domain Equalization for Underwater Acoustic Single Carrier Transmissions. IEEE Access, 2018, 6, 2578-2588.	4.2	12
14	Adaptive Modulation for Underwater Acoustic Communications Based on Reinforcement Learning. , 2018, , .		30
15	Underwater acoustic intensity field reconstruction by kriged compressive sensing. , 2018, , .		2
16	Distributed compressed sensing based channel estimation for underwater acoustic multiband transmissions. Journal of the Acoustical Society of America, 2018, 143, 3985-3996.	1.1	23
17	Underwater acoustic channel characteristics and communication performance at 85 kHz. Journal of the Acoustical Society of America, 2017, 142, EL350-EL355.	1.1	23
18	Time reversal acoustic communication receivers: DSP implementation and fast channel estimation. Physical Communication, 2016, 19, 38-46.	2.1	1

#	Article	IF	Citations
19	Acoustic communication channel model in the under-ice environment. , 2016, , .		3
20	Optimization of LDPC Codes over the Underwater Acoustic Channel. International Journal of Distributed Sensor Networks, 2016, 12, 8906985.	2.2	3
21	Interference cancellation in in-band full-duplex underwater acoustic systems. , 2015, , .		13
22	Iterative estimation of doubly selective underwater acoustic channel using basis expansion models. Ad Hoc Networks, 2015, 34, 52-61.	5.5	7
23	Arrival-time fluctuations of coherent reflections from surface gravity water waves. Journal of the Acoustical Society of America, 2014, 135, EL226-EL231.	1.1	7
24	Cooperatively Mapping of the Underwater Acoustic Channel by Robot Swarms. , 2014, , .		9
25	Iterative estimation of the time-varying underwater acoustic channel using basis expansion models. , 2013, , .		1
26	Three-dimensional mapping of evolving internal waves during the Shallow Water 2006 experiment. Journal of the Acoustical Society of America, 2013, 134, EL7-EL13.	1.1	9
27	Multiband transmissions for underwater acoustic communication. Proceedings of Meetings on Acoustics, 2013, , .	0.3	1
28	Time reversal multiple-input/multiple-output acoustic communication enhanced by parallel interference cancellation. Journal of the Acoustical Society of America, 2012, 131, 281-291.	1.1	76
29	Channel simulation for underwater acoustic communication network. , 2012, , .		0
30	Time reversal acoustic communication for multiband transmission. Journal of the Acoustical Society of America, 2012, 131, EL283-EL288.	1.1	11
31	Coherent reflection from surface gravity water waves during reciprocal acoustic transmissions. Journal of the Acoustical Society of America, 2012, 132, EL290-EL295.	1.1	18
32	Coherent underwater acoustic communication: Channel modeling and receiver design. , 2012, , .		0
33	Arrival time fluctuation of normal modes caused by solitary internal waves. AIP Conference Proceedings, 2012, , .	0.4	2
34	Capacity and Statistics of Measured Underwater Acoustic Particle Velocity Channels. Proceedings of Meetings on Acoustics, 2012, , .	0.3	2
35	Image transmission over the underwater acoustic channel via compressive sensing. , 2011, , .		15
36	Underwater acoustic communication channel simulation using parabolic equation. , 2011, , .		12

#	Article	IF	Citations
37	Experimental Demonstration of Underwater Acoustic Communication by Vector Sensors. IEEE Journal of Oceanic Engineering, 2011, 36, 454-461.	3.8	72
38	Time Reversal Receivers for High Data Rate Acoustic Multiple-Inputâ€"Multiple-Output Communication. IEEE Journal of Oceanic Engineering, 2011, 36, 525-538.	3.8	57
39	Delay and Doppler spreads in underwater acoustic particle velocity channels. Journal of the Acoustical Society of America, 2011, 129, 2015-2025.	1.1	8
40	Passive Time Reversal Acoustic Communications Through Shallow-Water Internal Waves. IEEE Journal of Oceanic Engineering, 2010, 35, 756-765.	3.8	36
41	An overview of underwater acoustic communication via particle velocity channels: Channel modeling and transceiver design. Proceedings of Meetings on Acoustics, 2010, , .	0.3	1
42	Impact of source depth on coherent underwater acoustic communications. Journal of the Acoustical Society of America, 2010, 128, 555-558.	1.1	23
43	Simulation of underwater acoustic networks with field measurements. , 2009, , .		0
44	Effect of reflected and refracted signals on coherent underwater acoustic communication: Results from the Kauai experiment (KauaiEx 2003). Journal of the Acoustical Society of America, 2009, 126, 2359-2366.	1.1	35
45	Multichannel combining and equalization for underwater acoustic MIMO channels. , 2008, , .		20
46	Impact of ocean variability on coherent underwater acoustic communications during the Kauai experiment (KauaiEx). Journal of the Acoustical Society of America, 2008, 123, 856-865.	1.1	157
47	Time reversal receivers for underwater acoustic communication using vector sensors. , 2008, , .		18
48	High-frequency acoustic propagation in the presence of ocean variability in KauaiEx. , 2007, , .		9
49	Some super-orthogonal space-time trellis codes based on non-PSK MTCM. IEEE Transactions on Wireless Communications, 2005, 4, 1214-1221.	9.2	6
50	Decision Feedback Differential Detection for Differential Orthogonal Space-Time Modulation With APSK Signals Over Flat-Fading Channels. IEEE Transactions on Wireless Communications, 2004, 3, 1873-1878.	9.2	2
51	Unitary Spaceâ€"Time Codes From Alamouti's Scheme With APSK Signals. IEEE Transactions on Wireless Communications, 2004, 3, 2374-2384.	9.2	10
52	Linear Equalization Combined with Multiple Symbol Decision Feedback Detection for Differential Space-Time Modulation. Eurasip Journal on Advances in Signal Processing, 2002, 2002, 1.	1.7	3
53	Decision feedback differential detection for differential orthogonal space-time modulation with APSK signals over frequency-non-selective fading channels. , 0, , .		2
54	Generalized Equalization for Underwater Acoustic Communications. , 0, , .		13