Lei Wan

List of Publications by Year
in descending order

98 papers	1,318 citations	394421 19 h-index	395702 33 g-index
98 all docs	98 docs citations	98 times ranked	1087 citing authors

#	ARTICLE	IF	CITATIONS
1	Adaptive Modulation and Coding for Underwater Acoustic OFDM. IEEE Journal of Oceanic Engineering, 2015, 40, 327-336.	3.8	128
2	Three-Dimensional Path Following of an Underactuated AUV Based on Fuzzy Backstepping Sliding Mode Control. International Journal of Fuzzy Systems, 2018, 20, 640-649.	4.0	90
3	DSP based receiver implementation for OFDM acoustic modems. Physical Communication, 2012, 5, 22-32.	2.1	81
4	OFDM-Modulated Dynamic Coded Cooperation in Underwater Acoustic Channels. IEEE Journal of Oceanic Engineering, 2015, 40, 159-168.	3.8	52
5	Path following of an Underactuated AUV Based on Fuzzy Backstepping Sliding Mode Control. International Journal of Advanced Robotic Systems, 2016, 13, 122.	2.1	52
6	An Energy Optimization Clustering Scheme for Multi-Hop Underwater Acoustic Cooperative Sensor Networks. IEEE Access, 2020, 8, 89171-89184.	4.2	50
7	Parameterizing both path amplitude and delay variations of underwater acoustic channels for block decoding of orthogonal frequency division multiplexing. Journal of the Acoustical Society of America, 2012, 131, 4672-4679.	1.1	49
8	Performance Comparison of Doppler Scale Estimation Methods for Underwater Acoustic OFDM. Journal of Electrical and Computer Engineering, 2012, 2012, 1-11.	0.9	44
9	Trajectory tracking control for underactuated unmanned surface vehicles with dynamic uncertainties. Journal of Central South University, 2016, 23, 370-378.	3.0	42
10	Serret-Frenet frame based on path following control for underactuated unmanned surface vehicles with dynamic uncertainties. Journal of Central South University, 2015, 22, 214-223.	3.0	41
11	Adaptive OFDMA with partial CSI for downlink underwater acoustic communications. Journal of Communications and Networks, 2016, 18, 387-396.	2.6	39
12	Comparison of sparse recovery algorithms for channel estimation in underwater acoustic OFDM with data-driven sparsity learning. Physical Communication, 2014, 13, 156-167.	2.1	33
13	A Sea-Sky Line Detection Method for Unmanned Surface Vehicles Based on Gradient Saliency. Sensors, 2016, 16, 543.	3.8	33
14	Accurate and Efficient Path Delay Estimation in OMP Based Sparse Channel Estimation for OFDM With Equispaced Pilots. IEEE Wireless Communications Letters, 2019, 8, 117-120.	5.0	32
15	DSP implementation of SISO and MIMO OFDM acoustic modems. , 2010, , .		30
16	Fundamentals and Advancements of Magnetic-Field Communication for Underwater Wireless Sensor Networks. IEEE Transactions on Antennas and Propagation, 2020, 68, 7555-7570.	5.1	28
17	Horizontal-Plane Trajectory-Tracking Control of an Underactuated Unmanned Marine Vehicle in the Presence of Ocean Currents. International Journal of Advanced Robotic Systems, 2016, 13, 83.	2.1	25
18	Modeling and simulation of a mini AUV in spatial motion. Journal of Marine Science and Application, 2009, 8, 7-12.	1.7	24

#	Article	IF	Citations
19	ACOA-AFSA Fusion Dynamic Coded Cooperation Routing for Different Scale Multi-Hop Underwater Acoustic Sensor Networks. IEEE Access, 2020, 8, 186773-186788.	4.2	24
20	A low-complexity orthogonal matching pursuit based channel estimation method for time-varying underwater acoustic OFDM systems. Applied Acoustics, 2019, 148, 246-250.	3.3	21
21	Environment-aware communication channel quality prediction for underwater acoustic transmissions: A machine learning method. Applied Acoustics, 2021, 181, 108128.	3.3	19
22	Heading Control System Design for a Micro-USV Based on an Adaptive Expert S-PID Algorithm. Polish Maritime Research, 2018, 25, 6-13.	1.9	19
23	Fault-tolerant trajectory tracking control for unmanned surface vehicle with actuator faults based on a fast fixed-time system. ISA Transactions, 2022, 130, 79-91.	5.7	18
24	Vision-based system of AUV for an underwater pipeline tracker. China Ocean Engineering, 2012, 26, 547-554.	1.6	17
25	The acute toxic effects of hexavalent chromium on the liver of marine medaka (Oryzias melastigma). Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2020, 231, 108734.	2.6	17
26	Design of motion control system of pipeline detection AUV. Journal of Central South University, 2017, 24, 637-646.	3.0	16
27	Model predictive controller design for the dynamic positioning system of a semi-submersible platform. Journal of Marine Science and Application, 2012, 11, 361-367.	1.7	15
28	Uncalibrated Visual Servoing for Underwater Vehicle Manipulator Systems with an Eye in Hand Configuration Camera. Sensors, 2019, 19, 5469.	3.8	14
29	Selective Dynamic Coded Cooperative Communications for Multi-Hop Underwater Acoustic Sensor Networks. IEEE Access, 2019, 7, 70552-70563.	4.2	13
30	Fine Doppler scale estimations for an underwater acoustic CP-OFDM system. Signal Processing, 2020, 170, 107439.	3.7	13
31	Object detection and tracking method of AUV based on acoustic vision. China Ocean Engineering, 2012, 26, 623-636.	1.6	12
32	Artificial potential field-based swarm finding of the unmanned surface vehicles in the dynamic ocean environment. International Journal of Advanced Robotic Systems, 2020, 17, 172988142092530.	2.1	12
33	PB-ACR: Node Payload Balanced Ant Colony Optimal Cooperative Routing for Multi-Hop Underwater Acoustic Sensor Networks. IEEE Access, 2021, 9, 57165-57178.	4.2	12
34	Adaptive OFDMA for downlink underwater acoustic communications. , 2014, , .		10
35	Design of X-rudder autonomous underwater vehicle's quadruple-rudder allocation with Lévy flight character. International Journal of Advanced Robotic Systems, 2017, 14, 172988141774173.	2.1	10
36	Clustering Cloud-Like Model-Based Targets Underwater Tracking for AUVs. Sensors, 2019, 19, 370.	3.8	10

#	Article	IF	Citations
37	The Application of PSO-AFSA Method in Parameter Optimization for Underactuated Autonomous Underwater Vehicle Control. Mathematical Problems in Engineering, 2017, 2017, 1-14.	1.1	9
38	Robust composite neural dynamic surface control for the path following of unmanned marine surface vessels with unknown disturbances. International Journal of Advanced Robotic Systems, 2018, 15, 172988141878664.	2.1	9
39	Routing failure prediction and repairing for AUV-assisted underwater acoustic sensor networks in uncertain ocean environments. Applied Acoustics, 2022, 186, 108479.	3.3	9
40	Fuzzy neural network control of underwater vehicles based on desired state programming. Journal of Marine Science and Application, 2006, 5, 1-4.	1.7	8
41	Further results on multicarrier MFSK based underwater acoustic communications. Physical Communication, 2016, 18, 15-27.	2.1	8
42	An integrated GPS/DR navigation system for AUV. Journal of Marine Science and Application, 2006, 5, 8-13.	1.7	6
43	Adaptive recurrent neural network motion control for observation class remotely operated vehicle manipulator system with modeling uncertainty. Advances in Mechanical Engineering, 2018, 10, 168781401880409.	1.6	6
44	Analysis of SNR Metrics for a Typical Underwater Acoustic OFDM System. IEEE Access, 2019, 7, 183565-183579.	4.2	6
45	A fuzzy motion control of AUV based on apery intelligence. , 2009, , .		5
46	Analysis of Underwater OFDM Performance During a 2-Month Deployment in Chesapeake Bay. Marine Technology Society Journal, 2014, 48, 52-64.	0.4	5
47	Hybrid Strategy-based Coordinate Controller for an Underwater Vehicle Manipulator System Using Nonlinear Disturbance Observer. Robotica, 2019, 37, 1710-1731.	1.9	5
48	Adaptive chattering-free terminal sliding-mode control for full-order nonlinear system with unknown disturbances and model uncertainties. International Journal of Advanced Robotic Systems, 2020, 17, 172988142092529.	2.1	5
49	A Novel Changing Athlete Body Real-Time Visual Tracking Algorithm Based on Distractor-Aware SiamRPN and HOG-SVM. Electronics (Switzerland), 2020, 9, 378.	3.1	5
50	Double Interpolation-Based Linear Fitting for OMP Channel Estimation in OFDM Systems. IEEE Communications Letters, 2021, 25, 2908-2912.	4.1	5
51	Design and Reliability Analysis of a Tunnel-Detection AUV Based on a Heterogeneous Dual CPU Hot Redundancy System. Electronics (Switzerland), 2021, 10, 22.	3.1	5
52	AUV modeling and motion control strategy design. Journal of Marine Science and Application, 2010, 9, 379-385.	1.7	4
53	Simultaneous localization and mapping of autonomous underwater vehicle using looking forward sonar. Journal of Shanghai Jiaotong University (Science), 2012, 17, 91-97.	0.9	4
54	Backstepping Control Method for the Trajectory Tracking for the Underactuated Autonomous Underwater Vehicle. Advanced Materials Research, 0, 798-799, 484-488.	0.3	4

#	Article	IF	Citations
55	A Monocular Vision Measurement Algorithm Based on the Underwater Robot. Applied Mechanics and Materials, 0, 532, 165-169.	0.2	4
56	Saliency motivated pulse coupled neural network for underwater laser image segmentation. Journal of Shanghai Jiaotong University (Science), 2016, 21, 289-296.	0.9	4
57	Design of novel sliding-mode controller for high-velocity AUV with consideration of residual dead load. Journal of Central South University, 2018, 25, 121-130.	3.0	4
58	Chirp Z-Transform Based Sparse Channel Estimation for Underwater Acoustic OFDM in Clustered Channels. , 2018, , .		4
59	An Underwater Image Enhancement Method for Simultaneous Localization and Mapping of Autonomous Underwater Vehicle. , 2019, , .		4
60	Depth-trim mapping control of underwater vehicle with fins. China Ocean Engineering, 2011, 25, 657-667.	1.6	3
61	Hierarchical Map Building Based UKF-SLAM Approach for AUV. Applied Mechanics and Materials, 2013, 437, 793-797.	0.2	3
62	Research on autonomous underwater vehicle wall following based on reinforcement learning and multi-sonar weighted round robin mode. International Journal of Advanced Robotic Systems, 2020, 17, 172988142092531.	2.1	3
63	Fuzzy Preprocessing and Clustering Analysis Method of Underwater Multiple Targets in Forward Looking Sonar Image for AUV Tracking. International Journal of Fuzzy Systems, 2020, 22, 1261-1276.	4.0	3
64	Multibody System-Based Adaptive Formation Scheme for Multiple Under-Actuated AUVs. Sensors, 2020, 20, 1943.	3.8	3
65	Research on Hot Corrosion Behavior of DZ40M and K452 Superalloys in NaCl Molten Salt. Materials, 2022, 15, 1512.	2.9	3
66	Object Track in Underwater Sonar Images. , 2009, , .		2
67	Design and reliability analysis of DP-3 dynamic positioning control architecture. China Ocean Engineering, 2011, 25, 709-720.	1.6	2
68	Dynamic network coded cooperative OFDM for underwater data collection. , 2012, , .		2
69	An Image Segmentation Method of Underwater Targets Based on Active Contour Model. Applied Mechanics and Materials, 2014, 511-512, 457-461.	0.2	2
70	Research on reconstructive fault-tolerant control of an X-rudder AUV. , 2016, , .		2
71	Further Interpolation Methods for Doppler Scale Estimation in Underwater Acoustic CP-OFDM Systems. , 2019, , .		2
72	Low cost, faster detection of cognitive radio through filter banks with bandpass sampling. Physical Communication, 2019, 33, 1-8.	2.1	2

#	Article	IF	Citations
73	Simulation of the effect of nonuniform fouling thickness on an axial compressor stage performance. Advances in Mechanical Engineering, 2021, 13, 168781402110304.	1.6	2
74	SESQP-based semi-submersible platform thrust allocation. , 2011, , .		1
75	Underwater simultaneous localization and mapping based on forward-looking sonar. Journal of Marine Science and Application, 2011, 10, 371-376.	1.7	1
76	A Design Methodology for Lithium-Ion Battery Management System and its Application to an Autonomous Underwater Vehicle. Advanced Materials Research, 0, 383-390, 7175-7182.	0.3	1
77	The Fault Tolerable Control System Structure of SY-II Remote Operated Vehicle. Advanced Materials Research, 0, 308-310, 1483-1491.	0.3	1
78	An anthropomorphic controlled hand prosthesis system. Journal of Zhejiang University: Science C, 2012, 13, 769-780.	0.7	1
79	Adaptive AUV formation strategy under acoustic communication conditions. , 2014, , .		1
80	AUV's Executer Fault-Tolerant Control Based on ADRC. Advanced Materials Research, 0, 1006-1007, 581-585.	0.3	1
81	Corrections to "Adaptive Modulation and Coding for Underwater Acoustic OFDM"[L. Wan, H. Zhou, X. Xu, Y. Huang, S. Zhou, Z. Shi, and J.-H. Cui, IEEE J. Ocean. Eng., vol. 40, no. 2, pp. 327–336, Apr. 2015. DOI: 10.1109/JOE.2014.2323365]. IEEE Journal of Oceanic Engineering, 2015, 40, 753-753.	3.8	1
82	Study on the Performance Variation of Compressor Under Salt Fog Scale. , 2018, , .		1
83	Numerical and experimental study on hydrodynamic bulbous bow hull-form optimization for various service conditions due to slow steaming of container vessel. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2019, 233, 1103-1122.	0.5	1
84	Influence of Chopped Carbon Fibers on a Novel Mechanical Enhanced Micro-porous Propellants. Combustion Science and Technology, 2022, 194, 3277-3293.	2.3	1
85	A New Feature Extraction Method for Underwater Targets. Advanced Materials Research, 2010, 171-172, 518-522.	0.3	0
86	Semi-Physical Acoustic Vision Simulation System of Autonomous Underwater Vehicle. Applied Mechanics and Materials, 0, 128-129, 1006-1009.	0.2	0
87	Predictive S Control of AUV Based on Model of Support Vector Machine. Advanced Materials Research, 2011, 340, 421-428.	0.3	0
88	Tracking Control of Underactuated Unmanned Surface Vessels Based on the Dynamic Fuzzy Neural Network. Advanced Materials Research, 2012, 562-564, 2188-2196.	0.3	0
89	Joint linear precoding and nonbinary LDPC coding for underwater acoustic OFDM. , 2012, , .		0
90	Wavelet moment invariants extraction of underwater laser vision image. Journal of Shanghai Jiaotong University (Science), 2013, 18, 712-718.	0.9	0

#	Article	IF	Citations
91	Adaptive S Surface Controller for Hover Control of Underwater Vehicles. Applied Mechanics and Materials, 2014, 563, 224-228.	0.2	0
92	Remote operated vehicle tether disturbances analysis and target tracking control. , 2014, , .		0
93	Corrections to "OFDM-Modulated Dynamic Coded Cooperation in Underwater Acoustic Channels"[Y. Chen, Z.-H. Wang, L. Wan, H. Zhou, S. Zhou, and X. Xu, IEEE J. Ocean. Eng., vol. 40, no. 1, pp. 159–168, Jan. 2015. DOI: 10.1109/JOE.2014.2304254. IEEE Journal of Oceanic Engineering, 2015, 40, 752-752.	3.8	0
94	Analysis of Effective Signal to Noise Ratio Performance of a Typical Underwater Acoustic OFDM System. , 2018, , .		0
95	A Depth Control Method of Underactuated AUVs Based on Residual Buoyancy Identification. , 2018, , .		0
96	USV attitude angle optimization method based on gradient descent method and S-plane combined filtering. , 2019, , .		0
97	Surface Multi-target Tracking Algorithm Based on Data Association of Information Fusion. , 2019, , .		0
98	Joint CFO, Gridless Channel Estimation and Data Detection for Underwater Acoustic OFDM Systems. IEEE Journal of Oceanic Engineering, 2022, 47, 1215-1230.	3.8	0