Internet of Underwater Things and Big Marine Data Ana

IEEE Communications Surveys and Tutorials
23, 904-956
DOI: 10.1109/comst.2021.3053118

Citation Report

#	Article	IF	Citations
1	Simultaneous Wireless Information and Power Transfer With Cooperative Relaying for Next-Generation Wireless Networks: A Review. IEEE Access, 2021, 9, 71482-71504.	2.6	33
2	Emerging IoT domains, current standings and open research challenges: a review. PeerJ Computer Science, 2021, 7, e659.	2.7	14
3	On the Noise Effect of Fingerprinting-Based Positioning Error in Underwater Visible Light Networks. Sensors, 2021, 21, 5398.	2.1	2
4	Legal Protection of Artificial Intelligence Data and Algorithms from the Perspective of Internet of Things Resource Sharing. Wireless Communications and Mobile Computing, 2021, 2021, 1-10.	0.8	7
5	A Study of Standardizing Frequencies Using Channel Raster for Underwater Wireless Acoustic Sensor Networks. Sensors, 2021, 21, 5669.	2.1	2
6	Petahertz communication: Harmonizing optical spectra for wireless communications. Digital Communications and Networks, 2021, 7, 605-614.	2.7	13
7	On the scattering-induced fading for optical wireless links through seawater: statistical characterization and its applications. Optics Express, 2021, 29, 37101.	1.7	12
8	Simulation Test of Wireless Underground Sensor Network in Stadiums. Journal of Sensors, 2021, 2021, 1-12.	0.6	1
9	Visual Sensor-Based Image Analysis of the Relationship between Nutritional Diet and Athletic Ability of Sports Dance Athletes. Journal of Sensors, 2021, 2021, 1-15.	0.6	2
10	Image Classification Algorithm Based on Big Data and Multilabel Learning of Improved Convolutional Neural Network. Wireless Communications and Mobile Computing, 2021, 2021, 1-11.	0.8	1
11	Research on Recognition Method of Basketball Goals Based on Image Analysis of Computer Vision. Journal of Sensors, 2021, 2021, 1-11.	0.6	1
12	Comprehensive Evaluation of Teaching Ability Based on Network Communication Environment. Wireless Communications and Mobile Computing, 2021, 2021, 1-12.	0.8	3
13	AUV-Aided Hybrid Data Collection Scheme Based on Value of Information for Internet of Underwater Things. IEEE Internet of Things Journal, 2022, 9, 6944-6955.	5.5	26
14	Use of UIoT for Offshore Surveys Through Autonomous Vehicles. Polish Maritime Research, 2021, 28, 175-189.	0.6	13
15	Sports Policy and Training Decision Support Method Based on Wireless Sensor Network. Wireless Communications and Mobile Computing, 2021, 2021, 1-13.	0.8	0
16	IDBR: Iot Enabled Depth Base Routing Method for Underwater Wireless Sensor Network. Journal of Sensors, 2021, 2021, 1-8.	0.6	5
17	Study on DTN Routing Protocol of Vehicle Ad Hoc Network Based on Machine Learning. Wireless Communications and Mobile Computing, 2021, 2021, 1-10.	0.8	5
18	Study of Digital Painting Media Art Based on Wireless Network. Wireless Communications and Mobile Computing, 2021, 2021, 1-11.	0.8	6

#	Article	IF	Citations
19	Examination on Security Performance Analysis Model of Internet of Things Assigned Based on Composite Security Key. Wireless Communications and Mobile Computing, 2021, 2021, 1-14.	0.8	0
20	Target Recognition Algorithm Based on Optical Sensor Data Fusion. Journal of Sensors, 2021, 2021, 1-12.	0.6	1
21	Design of Sports Training System and Motion Monitoring and Recognition under Wireless Sensor Network. Mobile Information Systems, 2021, 2021, 1-13.	0.4	2
22	Financial Big Data Based on Internet of Things and Wireless Network Communication. Wireless Communications and Mobile Computing, 2021, 2021, 1-12.	0.8	16
23	Fundamentals and Advancements of Topology Discovery in Underwater Acoustic Sensor Networks: A Review. IEEE Sensors Journal, 2021, 21, 21159-21174.	2.4	29
24	Traceability and Management Method of Supply Chain Information Based on Wireless Sensor Network. Wireless Communications and Mobile Computing, 2021, 2021, 1-15.	0.8	0
25	Design of 3D Modeling Face Image Library in Multimedia Film and Television. Journal of Sensors, 2021, 2021, 1-11.	0.6	2
26	Combined Application of CT Perfusion Imaging and CT Angiography in Imaging Diagnosis of Acute Cerebrovascular Diseases. Journal of Healthcare Engineering, 2021, 2021, 1-13.	1.1	1
27	Structural Analysis of Backfill Highway Subgrade on the Lower Bearing Capacity Foundation Using the Finite Element Method. Advances in Civil Engineering, 2021, 2021, 1-11.	0.4	7
28	RPA and Artificial Intelligence in Budget Management Based on Multiperspective Recognition Based on Network Communication Integration. Wireless Communications and Mobile Computing, 2021, 2021, 1-13.	0.8	2
29	AHP-Based Analysis Factors Influencing the Construction of a Smart City with Three-Dimensional Regional Color. Journal of Sensors, 2021, 2021, 1-11.	0.6	5
30	Analysis of Data Encryption Algorithms for Telecommunication Network-Computer Network Communication Security. Wireless Communications and Mobile Computing, 2021, 2021, 1-19.	0.8	6
31	Artificial Intelligence Imaging to Observe the Protective Effect of Hydrogen Sulfide on Acute Kidney Injury Caused by Urinary Sepsis. Journal of Sensors, 2021, 2021, 1-13.	0.6	1
32	Learning Recommendation Algorithm Based on Improved BP Neural Network in Music Marketing Strategy. Computational Intelligence and Neuroscience, 2021, 2021, 1-10.	1.1	3
33	Design Model of Urban Leisure Sports Public Facilities Based on Big Data and Machine Vision. Journal of Sensors, 2021, 2021, 1-14.	0.6	7
34	Variational Fuzzy Neural Network Algorithm for Music Intelligence Marketing Strategy Optimization. Computational Intelligence and Neuroscience, 2022, 2022, 1-10.	1.1	2
35	A survey on energy efficiency in underwater wireless communications. Journal of Network and Computer Applications, 2022, 198, 103295.	5.8	40
36	The Ever-Changing and Challenging Role of Ocean Observation: From Local Initiatives to an Oceanwide Collaborative Effort. Frontiers in Marine Science, 2022, 8, .	1.2	2

#	Article	IF	Citations
37	Framing Cutting-Edge Integrative Deep-Sea Biodiversity Monitoring via Environmental DNA and Optoacoustic Augmented Infrastructures. Frontiers in Marine Science, 2022, 8, .	1.2	9
38	Dynamic-Detection-Based Trajectory Planning for Autonomous Underwater Vehicle to Collect Data From Underwater Sensors. IEEE Internet of Things Journal, 2022, 9, 13168-13178.	5.5	13
39	Priority based data gathering using multiple mobile sinks in cluster based UWSNs for oil pipeline leakage detection. Cluster Computing, 2022, 25, 1341-1354.	3.5	10
40	A Cooperative Routing Protocol Based on Q-Learning for Underwater Optical-Acoustic Hybrid Wireless Sensor Networks. IEEE Sensors Journal, 2022, 22, 1041-1050.	2.4	21
42	Nitrogen prediction in the Great Barrier Reef using finite element analysis with deep neural networks. Environmental Modelling and Software, 2022, 150, 105311.	1.9	3
43	Developing technological synergies between deep-sea and space research. Elementa, 2022, 10, .	1.1	8
44	An Intelligent Music Production Technology Based on Generation Confrontation Mechanism. Computational Intelligence and Neuroscience, 2022, 2022, 1-10.	1.1	0
45	On the Security of Full-Duplex Relay-Assisted Underwater Acoustic Network With NOMA. IEEE Transactions on Vehicular Technology, 2022, 71, 6255-6265.	3.9	6
46	Energy-Efficient UAV-Aided Ocean Monitoring Networks: Joint Resource Allocation and Trajectory Design. IEEE Internet of Things Journal, 2022, 9, 17871-17884.	5.5	6
47	Channel Modeling for Orbital Angular Momentum Based Underwater Wireless Optical Systems. IEEE Transactions on Vehicular Technology, 2022, 71, 5880-5895.	3.9	20
48	Towards the internet of underwater things: a comprehensive survey. Earth Science Informatics, 2022, 15, 735-764.	1.6	30
49	Analysis of Bank Credit Risk Evaluation Model Based on BP Neural Network. Computational Intelligence and Neuroscience, 2022, 2022, 1-11.	1.1	3
50	An Atlas of Piezoelectric Energy Harvesters in Oceanic Applications. Sensors, 2022, 22, 1949.	2.1	18
51	Security enhancement for adaptive optics aided longitudinal orbital angular momentum multiplexed underwater wireless communications. Optics Express, 2022, 30, 9745.	1.7	31
52	Assessing the Image Concept Drift at the OBSEA Coastal Underwater Cabled Observatory. Frontiers in Marine Science, 2022, 9, .	1.2	4
53	On the Underwater Acoustic Channel Effects on Uplink Multiple Access Techniques. , 2021, , .		3
54	Development and Testing of an OFDM Physical Layer for the DESERT Simulator. , 2021, , .		1
55	Comprehensive Evaluation of BIM Calculation Quantity in Domestic Construction Engineering Based on Fuzzy Comprehensive Evaluation. Computational Intelligence and Neuroscience, 2021, 2021, 1-21.	1.1	4

#	Article	IF	Citations
56	Resource electronic database for measuring regional cultural influence based on machine learning big data. IET Communications, 2022, 16, 510-520.	1.5	0
57	Security, energy efficiency, routing protocols and algorithms applied to underwater wireless sensor network. , 2021, , .		0
58	Wave Height Prediction Suitable for Maritime Transportation Based on Green Ocean of Things. IEEE Transactions on Artificial Intelligence, 2023, 4, 328-337.	3.4	2
59	Computer vision and deep learning for fish classification in underwater habitats: A survey. Fish and Fisheries, 2022, 23, 977-999.	2.7	35
60	Cluster-based AUV communication for delay-sensitive vulnerability detection using NDN. , 2022, , .		1
61	Integrating Multidisciplinary Observations in Vent Environments (IMOVE): Decadal Progress in Deep-Sea Observatories at Hydrothermal Vents. Frontiers in Marine Science, 2022, 9, .	1.2	5
62	Recent Progress of Air/Water Cross-Boundary Communications for Underwater Sensor Networks: A Review. IEEE Sensors Journal, 2022, 22, 8360-8382.	2.4	29
63	A Novel Neural Computing Model Applied to Estimate the Dynamic Modulus (DM) of Asphalt Mixtures by the Improved Beetle Antennae Search. Sustainability, 2022, 14, 5938.	1.6	15
64	Longâ€term automated visual monitoring of Antarctic benthic fauna. Methods in Ecology and Evolution, 2022, 13, 1746-1764.	2.2	9
65	Low-Latency Edge Video Analytics for On-Road Perception of Autonomous Ground Vehicles. IEEE Transactions on Industrial Informatics, 2023, 19, 1512-1523.	7.2	5
66	Deep Learning Enabled IRS for 6G Intelligent Transportation Systems: A Comprehensive Study. IEEE Transactions on Intelligent Transportation Systems, 2023, 24, 12973-12990.	4.7	10
67	Mobile Relaying-Based Reliable Data Collection in Underwater Acoustic Sensor Networks. IEEE Wireless Communications Letters, 2022, 11, 1795-1799.	3.2	7
68	Joint Hybrid 3D Beamforming Relying on Sensor-Based Training for Reconfigurable Intelligent Surface Aided TeraHertz-Based Multiuser Massive MIMO Systems. IEEE Sensors Journal, 2022, 22, 14540-14552.	2.4	9
69	A Last Line Naval Defense System Based on Underwater Wireless Sensor Network. , 2022, , .		0
70	An integrated acoustic/LoRa system for transmission of multimedia sensor data over an Internet of Underwater Things. Computer Communications, 2022, 192, 132-142.	3.1	2
71	Rotation Left Digits to Enhance the Security Level of Message Blocks Cryptography. IEEE Access, 2022, 10, 69388-69397.	2.6	10
72	Negatively Biased Solar Cell Optical Receiver for Underwater Wireless Optical Communication System With Low Peak Average Power Ratio. IEEE Photonics Journal, 2022, 14, 1-9.	1.0	4
73	Wearable Devices in Diving: Scoping Review. JMIR MHealth and UHealth, 2022, 10, e35727.	1.8	3

#	Article	IF	Citations
74	Adaptive Optics for Orbital Angular Momentum-Based Internet of Underwater Things Applications. IEEE Internet of Things Journal, 2022, 9, 24281-24299.	5.5	42
75	Water Care System (WCS) for Numeric Water Quality Criteria (NWQC) with IoT/IoUTâ€“Educational Implications of Sustainability Goal SDG 14. , 2022, , .		1
76	Intelligent Optimization Design of Automatic Sorting Robot Process. Journal of Sensors, 2022, 2022, 1-8.	0.6	1
77	Motion Control Analysis of Tennis Robot Based on Ant Colony Algorithm. Journal of Sensors, 2022, 2022, 1-8.	0.6	2
78	Construction of Robot Computer Image Segmentation Model Based on Partial Differential Equation. Journal of Sensors, 2022, 2022, 1-8.	0.6	0
79	A Drifter-Based Self-Powered Piezoelectric Sensor for Ocean Wave Measurements. Sensors, 2022, 22, 5050.	2.1	3
80	Dynamic Path Planning Analysis of Warehouse Handling Robot. Journal of Sensors, 2022, 2022, 1-7.	0.6	1
81	Passive Localization Algorithm using a Highly Integrated Acoustic Sensor Array. , 2022, , .		0
82	A Real-Time Acoustic Spectrum Analyzer on FPGA for the Internet of Underwater Things. , 2022, , .		0
83	Underwater Light Field Retention : Neural Rendering for Underwater Imaging. , 2022, , .		17
84	A Multi-Level Trust Framework for the Internet of Underwater Things. , 2022, , .		0
85	Construction and Simulation of Deep Learning Algorithm for Robot Vision Tracking. Journal of Sensors, 2022, 2022, 1-6.	0.6	1
86	Construction and Risk Analysis of Marketing System Based on AI. Scientific Programming, 2022, 2022, 1-9.	0.5	1
87	Machine learning applied to big data from marine cabled observatories: A case study of sablefish monitoring in the NE Pacific. Frontiers in Marine Science, 0, 9, .	1.2	8
88	Performance Analysis of Cross-Layer Design for Internet of Underwater Things. IEEE Sensors Journal, 2022, 22, 15429-15434.	2.4	6
89	Marine Internet of Things Platforms for Interoperability of Marine Robotic Agents: An Overview of Concepts and Architectures. Journal of Marine Science and Engineering, 2022, 10, 1279.	1.2	11
90	UAV-Assisted Multi-Access Computation Offloading via Hybrid NOMA and FDMA in Marine Networks. IEEE Transactions on Network Science and Engineering, 2023, 10, 113-127.	4.1	21
91	A Survey on Mobility of Edge Computing Networks in IoT: State-of-the-Art, Architectures, and Challenges. IEEE Communications Surveys and Tutorials, 2022, 24, 2329-2365.	24.8	16

#	Article	IF	Citations
92	Balancing QoS and Security in the Edge: Existing Practices, Challenges, and 6G Opportunities With Machine Learning. IEEE Communications Surveys and Tutorials, 2022, 24, 2419-2448.	24.8	17
93	Distributed Deep Learning and Energy-Efficient Real-Time Image Processing at the Edge for Fish Segmentation in Underwater Videos. IEEE Access, 2022, 10, 117796-117807.	2.6	4
94	A Communication Interface for Multilayer Cloud Computing Architecture for Low Cost Underwater Vehicles*. IFAC-PapersOnLine, 2022, 55, 77-82.	0.5	1
95	Adaptive Visible Light Positioning with MSE Inner Loop for Underwater Environment. , 2022, , .		2
96	State Diagnosis and Monitoring Method of Robot Electric Power Equipment Based on Data Mining. International Transactions on Electrical Energy Systems, 2022, 2022, 1-7.	1.2	1
97	A Survey on Integrated Sensing, Communication, and Computing Networks for Smart Oceans. Journal of Sensor and Actuator Networks, 2022, 11, 70.	2.3	3
98	U-star. , 2022, , .		7
99	A Multi-Controllers Architecture for Software-Defined Underwater Acoustic Sensor Networks. , 2022, , .		1
100	Establishment of line-of-sight optical links between autonomous underwater vehicles: Field experiment and performance validation. Applied Ocean Research, 2022, 129, 103385.	1.8	3
101	Maritime Communications: A Survey on Enabling Technologies, Opportunities, and Challenges. IEEE Internet of Things Journal, 2023, 10, 3525-3547.	5.5	29
102	Underwater Wireless Sensor Networks: Enabling Technologies for Node Deployment and Data Collection Challenges. IEEE Internet of Things Journal, 2023, 10, 3500-3524.	5.5	11
103	A comprehensive and systematic literature review on the big data management techniques in the internet of things. Wireless Networks, 2023, 29, 1085-1144.	2.0	7
104	Subcarrier Index Modulation Aided Non-Coherent Chaotic Communication System forÂUnderwater Acoustic Communications. Lecture Notes in Computer Science, 2022, , 621-634.	1.0	0
105	Environment-Aware AUV Trajectory Design and Resource Management for Multi-Tier Underwater Computing. IEEE Journal on Selected Areas in Communications, 2023, 41, 474-490.	9.7	14
106	An SDN-Enabled Framework for a Load-Balanced and QoS-Aware Internet of Underwater Things. IEEE Internet of Things Journal, 2023, 10, 7824-7834.	5.5	6
107	A Survey on UAV-Aided Maritime Communications: Deployment Considerations, Applications, and Future Challenges. IEEE Open Journal of the Communications Society, 2023, 4, 56-78.	4.4	27
108	Graph-powered learning methods in the Internet of Things: A survey. Machine Learning With Applications, 2023, 11, 100441.	3.0	6
109	Poster: Near-Zero Power Underwater Acoustic Networks Using Scatter Communications Principles. , 2022, , .		0

#	Article	IF	Citations
110	Five Facets of 6G: Research Challenges and Opportunities. ACM Computing Surveys, 2023, 55, 1-39.	16.1	29
111	Blockchain for Internet of Underwater Things: State-of-the-Art, Applications, Challenges, and Future Directions. Sustainability, 2022, 14, 15659.	1.6	15
112	Upscaling Fog Computing in Oceans for Underwater Pervasive Data Science Using Low-Cost Micro-Clouds. ACM Transactions on Internet of Things, 2023, 4, 1-29.	3.4	3
113	Recent Advances, Future Trends, Applications and Challenges of Internet of Underwater Things (IoUT): A Comprehensive Review. Journal of Marine Science and Engineering, 2023, 11, 124.	1.2	16
114	Graph coloring-based multichannel MAC protocol in distributed underwater acoustic sensor networks. Frontiers in Marine Science, 0, 9, .	1.2	1
115	AUV-Aided Opticalâ€"Acoustic Hybrid Data Collection Based on Deep Reinforcement Learning. Sensors, 2023, 23, 578.	2.1	4
116	Pattern Analysis in Marine Data Classification and Recognition. Advances in Library and Information Science, 2022, , 142-159.	0.2	0
117	A Channel Modified Underwater Image Enhancement Algorithm. , 2022, , .		1
118	Demo: Bi-static Scatter Underwater Acoustic Communications. , 2022, , .		1
119	How Reinforcement Learning is Helping to Solve Internet-of-Underwater-Things Problems. IEEE Internet of Things Magazine, 2022, 5, 24-29.	2.0	3
120	Federated Learning for IoUT: Concepts, Applications, Challenges and Future Directions. IEEE Internet of Things Magazine, 2022, 5, 36-41.	2.0	11
121	Underwater Wireless Communication System with the Internet of Underwater Things. , 2022, , .		3
122	ESPC-BCS-Net: A network-based CS method for underwater image compression and reconstruction. Frontiers in Marine Science, 0, 10, .	1.2	0
123	Intrusion Detection for Marine Meteorological Sensor Network. , 2022, , .		1
124	A comprehensive Blockchain-oriented secure framework for SDN/Fog-based IoUT. International Journal of Information Security, 2023, 22, 1163-1175.	2.3	3
125	Optimal Power Allocation for Multiuser Photon-Counting Underwater Optical Wireless Communications Under Poisson Shot Noise. IEEE Transactions on Communications, 2023, 71, 2230-2245.	4.9	2
126	The Development of a Marine Internet of Things System Architecture for the Control of Heterogeneous Robotic Agents. , 2022, , .		0
127	TARIQ: Towards Area Adjustment and Rounding of Intermediate Nodes for Quadrilateration in Blockchain Enabled Underwater Beacon Node Localization. , 2022, , .		0

#	Article	IF	Citations
128	Artificial intelligence for fish behavior recognition may unlock fishing gear selectivity. Frontiers in Marine Science, 0, 10, .	1.2	8
129	Efficient Dynamic Distributed Resource Slicing in 6G Multi-Access Edge Computing Networks With Online ADMM and Message Passing Graph Neural Networks. IEEE Transactions on Mobile Computing, 2024, 23, 2614-2638.	3.9	0
130	Unmanned Aerial Vehicle Aided Hybrid Two-Tier Maritime Edge Computing Networks. , 2022, , .		0
131	Blockchain for unmanned underwater drones: Research issues, challenges, trends and future directions. Journal of Network and Computer Applications, 2023, 215, 103649.	5.8	9
146	Collaboration of Mixed Reality for Interactive Visualization of Ocean Mapping. , 2023, , .		0
150	Research on Bank Credit Risk Assessment Based on BP Neural Network. , 2023, , .		1
156	A smart ocean observation system for reliable real-time measurements. , 2023, , .		0
157	Contextual Multi-armed Bandits for Data Caching in Intermittently-Connected Lossy Maritime Networks. , 2023, , .		1
163	Performance Evaluation of Underwater Visible Light Positioning Algorithms Using Realistic Propagation Model. , 2023, , .		0
164	Frame Error Rate Restricted AUV Relaying Data Collection in Underwater Acoustic Sensor Networks. , 2023, , .		0
168	T-SAPR: An Efficient Q-Learning Trust-based Secure Routing Protocol for Underwater Acoustic Sensor Networks. , 2023, , .		0
169	Non-Coherent Underwater Acoustic Space Modulation System Based on Time Difference of Arrival. , 2023, , .		0
173	Learning Hierarchical Management Policies for Data Queues with Applications to Maritime Networking. , 2023, , .		0
174	Marine Data Observability using KPIS: An MDSE Approach. , 2023, , .		0
182	On the Impact of Mobility on the Underwater Optical IoT Architecture for Positioning and Communication. , 2023, , .		0
183	On Propagation of OAM Modes Carried by Partially Coherent Laguerre-Gaussian Beams in Weak Oceanic Turbulence with Wide Range Parameters. , 2023, , .		0
185	Machine Learning and Deep Learning Techniques for Predictive Modeling of Marine Ecosystem â€“ A case of Flic en Flac Region, Mauritius. , 2023, , .		0
188	Risk Avoidance System of Unmanned Surface Vehicle Based on GeoNetworking Communication Mode. , 2023, , .		0

#	Article	IF	Citations
189	Time-Space Characteristics Simulation and Analysis of Acoustic Channel in Shallow Waters. , 2023, , .		0
191	An Updatable Key Management Scheme forÂUnderwater Wireless Sensor Networks. Lecture Notes in Computer Science, 2024, , 474-485.	1.0	0