

Roe Diamant

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3559254/publications.pdf>

Version: 2024-02-01

69
papers

1,709
citations

361413

20
h-index

315739

38
g-index

70
all docs

70
docs citations

70
times ranked

1298
citing authors

#	ARTICLE	IF	CITATIONS
1	A survey of techniques and challenges in underwater localization. Ocean Engineering, 2011, 38, 1663-1676.	4.3	420
2	Underwater Localization with Time-Synchronization and Propagation Speed Uncertainties. IEEE Transactions on Mobile Computing, 2013, 12, 1257-1269.	5.8	115
3	Low Probability of Detection for Underwater Acoustic Communication: A Review. IEEE Access, 2018, 6, 19099-19112.	4.2	71
4	Spatial Reuse Time-Division Multiple Access for Broadcast Ad Hoc Underwater Acoustic Communication Networks. IEEE Journal of Oceanic Engineering, 2011, 36, 172-185.	3.8	68
5	LOS and NLOS Classification for Underwater Acoustic Localization. IEEE Transactions on Mobile Computing, 2014, 13, 311-323.	5.8	50
6	The DESERT underwater framework v2: Improved capabilities and extension tools. , 2016, , .		48
7	Cooperative Authentication in Underwater Acoustic Sensor Networks. IEEE Transactions on Wireless Communications, 2019, 18, 954-968.	9.2	47
8	Enhanced Fuzzy-Based Local Information Algorithm for Sonar Image Segmentation. IEEE Transactions on Image Processing, 2020, 29, 445-460.	9.8	41
9	Observability Analysis of DVL/PS Aided INS for a Maneuvering AUV. Sensors, 2015, 15, 26818-26837.	3.8	40
10	Choosing the right signal. , 2012, , .		38
11	Adaptive Modulation for Long-Range Underwater Acoustic Communication. IEEE Transactions on Wireless Communications, 2020, 19, 6844-6857.	9.2	38
12	Fair and Throughput-Optimal Routing in Multimodal Underwater Networks. IEEE Transactions on Wireless Communications, 2018, 17, 1738-1754.	9.2	36
13	Closed Form Analysis of the Normalized Matched Filter With a Test Case for Detection of Underwater Acoustic Signals. IEEE Access, 2016, 4, 8225-8235.	4.2	35
14	A Statistically-Based Method for the Detection of Underwater Objects in Sonar Imagery. IEEE Sensors Journal, 2019, 19, 6858-6871.	4.7	34
15	Robust Spatial Reuse Scheduling in Underwater Acoustic Communication Networks. IEEE Journal of Oceanic Engineering, 2014, 39, 32-46.	3.8	32
16	On the Relationship Between the Underwater Acoustic and Optical Channels. IEEE Transactions on Wireless Communications, 2017, 16, 8037-8051.	9.2	31
17	Scalable Adaptive Networking for the Internet of Underwater Things. IEEE Internet of Things Journal, 2020, 7, 10023-10037.	8.7	28
18	Adaptive Error-Correction Coding Scheme for Underwater Acoustic Communication Networks. IEEE Journal of Oceanic Engineering, 2015, 40, 104-114.	3.8	25

#	ARTICLE	IF	CITATIONS
19	An Active Acoustic Track-Before-Detect Approach for Finding Underwater Mobile Targets. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 104-119.	10.8	24
20	Leveraging the Near-Far Effect for Improved Spatial-Reuse Scheduling in Underwater Acoustic Networks. IEEE Transactions on Wireless Communications, 2017, 16, 1480-1493.	9.2	22
21	A Reverse Bearings Only Target Motion Analysis for Autonomous Underwater Vehicle Navigation. IEEE Transactions on Mobile Computing, 2019, 18, 494-506.	5.8	22
22	A Hybrid Spatial Reuse MAC Protocol for Ad-Hoc Underwater Acoustic Communication Networks. , 2010, , .		21
23	Topology-Efficient Discovery: A Topology Discovery Algorithm for Underwater Acoustic Networks. IEEE Journal of Oceanic Engineering, 2018, 43, 1200-1214.	3.8	21
24	Combining Denoising Autoencoders and Dynamic Programming for Acoustic Detection and Tracking of Underwater Moving Targets. Sensors, 2020, 20, 2945.	3.8	21
25	Planning the verification, validation, and testing process: a case study demonstrating a decision support model. Journal of Engineering Design, 2017, 28, 171-204.	2.3	20
26	Unsupervised Local Spatial Mixture Segmentation of Underwater Objects in Sonar Images. IEEE Journal of Oceanic Engineering, 2019, 44, 1179-1197.	3.8	20
27	Detecting Submerged Objects Using Active Acoustics and Deep Neural Networks: A Test Case for Pelagic Fish. IEEE Transactions on Mobile Computing, 2022, 21, 2776-2788.	5.8	18
28	A Handshake-Based Protocol Exploiting the Near-Far Effect in Underwater Acoustic Networks. IEEE Wireless Communications Letters, 2016, 5, 308-311.	5.0	17
29	Bounds for Low Probability of Detection for Underwater Acoustic Communication. IEEE Journal of Oceanic Engineering, 2016, , 1-13.	3.8	16
30	Robust Interference Cancellation of Chirp and CW Signals for Underwater Acoustics Applications. IEEE Access, 2018, 6, 4405-4415.	4.2	15
31	Implementation of a multi-modal acoustic-optical underwater network protocol stack. , 2016, , .		14
32	A Parallel Decoding Approach for Mitigating Near-Far Interference in Internet of Underwater Things. IEEE Internet of Things Journal, 2020, 7, 9747-9759.	8.7	14
33	ASUNA: A Topology Data Set for Underwater Network Emulation. IEEE Journal of Oceanic Engineering, 2021, 46, 307-318.	3.8	14
34	Target detection using features for sonar images. IET Radar, Sonar and Navigation, 2020, 14, 1940-1949.	1.8	14
35	CFAR detection algorithm for objects in sonar images. IET Radar, Sonar and Navigation, 2020, 14, 1757-1766.	1.8	14
36	Joint Time and Spatial Reuse Handshake Protocol for Underwater Acoustic Communication Networks. IEEE Journal of Oceanic Engineering, 2013, 38, 470-483.	3.8	13

#	ARTICLE	IF	CITATIONS
37	NLOS identification using a hybrid ToA-signal strength algorithm for underwater acoustic localization. , 2010, , .		12
38	A Machine Learning Approach for Dead-Reckoning Navigation at Sea Using a Single Accelerometer. IEEE Journal of Oceanic Engineering, 2014, 39, 672-684.	3.8	12
39	Data Packet Structure and Modem Design for Dynamic Underwater Acoustic Channels. IEEE Journal of Oceanic Engineering, 2019, 44, 837-849.	3.8	12
40	Clustering Approach for Detection and Time of Arrival Estimation of Hydroacoustic Signals. IEEE Sensors Journal, 2016, 16, 5308-5318.	4.7	11
41	Tracking the Slipper Lobster Using Acoustic Tagging: Testbed Description. IEEE Journal of Oceanic Engineering, 2020, 45, 577-585.	3.8	11
42	An efficient method to measure reliability of underwater acoustic communication links. Journal of Ocean Engineering and Science, 2016, 1, 129-134.	4.3	10
43	Dead Reckoning for Trajectory Estimation of Underwater Drifters under Water Currents â€. Journal of Marine Science and Engineering, 2020, 8, 205.	2.6	10
44	A Time Difference of Arrival Based Target Motion Analysis for Localization of Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2022, 71, 326-338.	6.3	10
45	Optimal Transmission Scheduling in Small Multimodal Underwater Networks. IEEE Wireless Communications Letters, 2019, 8, 368-371.	5.0	9
46	Bathymetry-aided underwater acoustic localization using a single passive receiver. Journal of the Acoustical Society of America, 2019, 146, 4774-4789.	1.1	9
47	Localization of Acoustically Tagged Marine Animals in Under-Ranked Conditions. IEEE Transactions on Mobile Computing, 2021, 20, 1126-1137.	5.8	9
48	Feature Set for Classification of Man-Made Underwater Objects in Optical and SAS Data. IEEE Sensors Journal, 2022, 22, 6027-6041.	4.7	8
49	A Clustering Approach for the Detection of Acoustic/Seismic Signals of Unknown Structure. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1017-1029.	6.3	7
50	Underwater Acoustic Detection and Localization with a Convolutional Denoising Autoencoder. , 2019, , .		7
51	Efficient link discovery for underwater networks. , 2016, , .		6
52	Anchorless underwater acoustic localization. , 2017, , .		6
53	A graph localization approach to assist a diver-in-distress. , 2017, , .		6
54	A Factor-Graph Clustering Approach for Detection of Underwater Acoustic Signals. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 702-706.	3.1	5

#	ARTICLE	IF	CITATIONS
55	Graph-Based Clustering of Dolphin Whistles. IEEE/ACM Transactions on Audio Speech and Language Processing, 2021, 29, 2216-2227.	5.8	5
56	Prediction of Water Current Using a Swarm of Submerged Drifters. IEEE Sensors Journal, 2020, 20, 11598-11607.	4.7	4
57	THEMO: The Texas A&M - University of Haifa - Eastern Mediterranean Observatory. , 2018, , .		3
58	Cross-Sensor Quality Assurance for Marine Observatories. Remote Sensing, 2020, 12, 3470.	4.0	3
59	A Graph Localization Approach for Underwater Sensor Networks to Assist a Diver in Distress. Sensors, 2021, 21, 1306.	3.8	3
60	A Multispectral Target Detection in Sonar Imagery. , 2021, , .		3
61	Robust Automatic Detector And Feature Extractor For Dolphin Whistles. , 2019, , .		2
62	Origami-Inspired Adaptive Acoustic Tank for Optimal Reflection Mitigation. IEEE Sensors Journal, 2020, 20, 15193-15203.	4.7	2
63	Detection of Dolphin Whistle-Like Biomimicking Signals by Phase Analysis. IEEE Access, 2022, 10, 36868-36876.	4.2	2
64	Joint time and spatial reuse handshake protocol for underwater acoustic communication networks. , 2011, , .		1
65	Under-ranked localization of Acoustically Tagged Mobile Marine Animals. , 2018, , .		1
66	Communication Operations at THEMO: the Texas A&M - University of Haifa - Eastern Mediterranean Observatory. , 2018, , .		1
67	Robust Graph Localization for Underwater Acoustic Networks. , 2021, , .		1
68	Design of an Optimal Testbed for Acoustic Tags: Test Case for Marine Megafauna. Frontiers in Marine Science, 0, 9, .	2.5	1
69	ThreatDetect: An Autonomous Platform to secure Marine Infrastructures. NATO Science for Peace and Security Series B: Physics and Biophysics, 2020, , 271-281.	0.3	0