Adnan Abu-Mahfouz

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/5465017/adnan-abu-mahfouz-publications-by-year.pdf

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

3,089 146 29 51 h-index g-index citations papers 6.47 4,288 3.8 191 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
146	Blockchain-Based Security Model for LoRaWAN Firmware Updates. <i>Journal of Sensor and Actuator Networks</i> , 2022 , 11, 5	3.8	1
145	The fourth industrial revolution in the food industry-Part I: Industry 4.0 technologies <i>Critical Reviews in Food Science and Nutrition</i> , 2022 , 1-17	11.5	12
144	A Critical Review of IoT-Connected Healthcare and Information Security in South Africa. <i>Lecture Notes in Networks and Systems</i> , 2022 , 739-746	0.5	1
143	A Survey on Machine Learning Software-Defined Wireless Sensor Networks (ML-SDWSNs): Current Status and Major Challenges. <i>IEEE Access</i> , 2022 , 10, 23560-23592	3.5	2
142	Long Short Term Memory Water Quality Predictive Model Discrepancy Mitigation Through Genetic Algorithm Optimisation and Ensemble Modeling. <i>IEEE Access</i> , 2022 , 10, 24638-24658	3.5	2
141	Peer-to-Peer Energy Trading in Smart Energy Communities: A Lyapunov-based Energy Control and Trading System. <i>IEEE Access</i> , 2022 , 1-1	3.5	2
140	An Updated Survey on the Convergence of Distributed Ledger Technology and Artificial Intelligence: Current State, Major Challenges and Future Direction. <i>IEEE Access</i> , 2022 , 1-1	3.5	O
139	Energy-Aware Hybrid MAC Protocol for IoT Enabled WBAN Systems. IEEE Sensors Journal, 2021, 1-1	4	6
138	A Survey of Intelligent Agro-climate Decision Support Tool for Small-Scale Farmers: An Integration of Indigenous Knowledge, Mobile Phone Technology and Smart Sensors. <i>Lecture Notes in Networks and Systems</i> , 2021 , 715-730	0.5	
137	. IEEE Sensors Journal, 2021 , 21, 6761-6774	4	15
136	Towards achieving efficient MAC protocols for WBAN-enabled IoT technology: a review. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2021 , 2021,	3.2	11
135	Adaptability of Assistive Mobility Devices and the Role of the Internet of Medical Things: Comprehensive Review. <i>JMIR Rehabilitation and Assistive Technologies</i> , 2021 , 8, e29610	3.2	2
134	IoT-Enabled Solid Waste Management in Smart Cities. Smart Cities, 2021, 4, 1004-1017	3.3	13
133	From Industry 4.0 to Agriculture 4.0: Current Status, Enabling Technologies, and Research Challenges. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 17, 4322-4334	11.9	104
132	Amplitude quantization method for autonomous threshold estimation in self-reconfigurable cognitive radio systems. <i>Physical Communication</i> , 2021 , 44, 101256	2.2	1
131	Power system events classification using genetic algorithm based feature weighting technique for support vector machine. <i>Heliyon</i> , 2021 , 7, e05936	3.6	2
130	Miscellaneous Energy Profile Management Scheme for Optimal Integration of Electric Vehicles in a Distribution Network Considering Renewable Energy Sources 2021 ,		2

(2020-2021)

129	Software-Defined Power Grids: A Survey on Opportunities and Taxonomy for Microgrids. <i>IEEE Access</i> , 2021 , 9, 98973-98991	3.5	1
128	AI-Enabled Threat Intelligence and Hunting Microservices for Distributed Industrial IoT System. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 1-1	11.9	1
127	SurveilNet: A Lightweight Anomaly Detection System for Cooperative IoT Surveillance Networks. <i>IEEE Sensors Journal</i> , 2021 , 1-1	4	1
126	Performance Evaluation of Spreading Factors in LoRa Networks. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2021 , 203-215	0.2	
125	A Review of Metaheuristic Techniques for Optimal Integration of Electrical Units in Distribution Networks. <i>IEEE Access</i> , 2021 , 9, 5046-5068	3.5	9
124	A LoRaWAN IoT enabled Trash Bin Level Monitoring System. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 1-1	11.9	3
123	Energy-efficient distributed heterogeneous clustered spectrum-aware cognitive radio sensor network for guaranteed quality of service in smart grid. <i>International Journal of Distributed Sensor Networks</i> , 2021 , 17, 155014772110283	1.7	3
122	Radio Resource Allocation Improvements in Cognitive Radio Sensor Network for Smart Grid: Investigative Study and Solutions. <i>International Journal of Sensors, Wireless Communications and Control</i> , 2021 , 11, 666-688	0.4	0
121	A Review of Research Works on Supervised Learning Algorithms for SCADA Intrusion Detection and Classification. <i>Sustainability</i> , 2021 , 13, 9597	3.6	6
120	Transactive Energy: State-of-the-Art in Control Strategies, Architectures, and Simulators. <i>IEEE Access</i> , 2021 , 9, 131552-131573	3.5	2
119	. IEEE Access, 2021 , 9, 28237-28250	3.5	4
118	A Spreading Factor Congestion Status-Aware Adaptive Data Rate Algorithm. <i>Journal of Sensor and Actuator Networks</i> , 2021 , 10, 70	3.8	O
117	Low Power Wide Area Network, Cognitive Radio and the Internet of Things: Potentials for Integration. <i>Sensors</i> , 2020 , 20,	3.8	7
116	Enabling a Battery-Less Sensor Node Using Dedicated Radio Frequency Energy Harvesting for Complete Off-Grid Applications. <i>Energies</i> , 2020 , 13, 5402	3.1	1
115	Data Imputation in Wireless Sensor Networks Using a Machine Learning-Based Virtual Sensor. Journal of Sensor and Actuator Networks, 2020 , 9, 25	3.8	5
114	A Review of Machine Learning Approaches to Power System Security and Stability. <i>IEEE Access</i> , 2020 , 8, 113512-113531	3.5	59
113	Adaptive threshold techniques for cognitive radio-based low power wide area network. <i>Transactions on Emerging Telecommunications Technologies</i> , 2020 , 31, e3908	1.9	4
112	A Survey on the Viability of Confirmed Traffic in a LoRaWAN. <i>IEEE Access</i> , 2020 , 8, 9296-9311	3.5	20

111	Artificial Intelligence Techniques for Cognitive Sensing in Future IoT: State-of-the-Art, Potentials, and Challenges. <i>Journal of Sensor and Actuator Networks</i> , 2020 , 9, 21	3.8	11
110	A cuckoo search optimization-based forward consecutive mean excision model for threshold adaptation in cognitive radio. <i>Soft Computing</i> , 2020 , 24, 9683-9704	3.5	2
109	WaterGrid-Sense: A LoRa-Based Sensor Node for Industrial IoT Applications. <i>IEEE Sensors Journal</i> , 2020 , 20, 2722-2729	4	16
108	CACC: Context-aware congestion control approach for lightweight CoAP/UDP-based Internet of Things traffic. <i>Transactions on Emerging Telecommunications Technologies</i> , 2020 , 31, e3822	1.9	8
107	Cognitive Radio in Low Power Wide Area Network for IoT Applications: Recent Approaches, Benefits and Challenges. <i>IEEE Transactions on Industrial Informatics</i> , 2020 , 16, 7489-7498	11.9	14
106	IoT in the Wake of COVID-19: A Survey on Contributions, Challenges and Evolution. <i>IEEE Access</i> , 2020 , 8, 186821-186839	3.5	62
105	A Survey on the Security of Low Power Wide Area Networks: Threats, Challenges, and Potential Solutions. <i>Sensors</i> , 2020 , 20,	3.8	7
104	Comprehensive Review of SDN Controller Placement Strategies. <i>IEEE Access</i> , 2020 , 8, 170070-170092	3.5	20
103	. IEEE Access, 2020 , 8, 188641-188672	3.5	10
102	Behavioural Intrusion Detection in Water Distribution Systems Using Neural Networks. <i>IEEE Access</i> , 2020 , 8, 190403-190416	3.5	3
101	New Discrete Cuckoo Search Optimization Algorithms for Effective Route Discovery in IoT-Based Vehicular Ad-Hoc Networks. <i>IEEE Access</i> , 2020 , 8, 145469-145488	3.5	5
100	A Survey on Adaptive Data Rate Optimization in LoRaWAN: Recent Solutions and Major Challenges. <i>Sensors</i> , 2020 , 20,	3.8	36
99	SDNMMA Generic SDN-Based Modular Management System for Wireless Sensor Networks. <i>IEEE Systems Journal</i> , 2020 , 14, 2347-2357	4.3	8
98	Data Aggregation in Software-Defined Wireless Sensor Networks: A Review 2019 ,		1
97	Analysis of SDN-Based Security Challenges and Solution Approaches for SDWSN Usage 2019,		3
96	A delay-aware spectrum handoff scheme for prioritized time-critical industrial applications with channel selection strategy. <i>Computer Communications</i> , 2019 , 144, 112-123	5.1	3
95	Performance measurements of communication access technologies and improved cognitive radio model for smart grid communication. <i>Transactions on Emerging Telecommunications Technologies</i> , 2019 , 30, e3653	1.9	2
94	Attack detection in water distribution systems using machine learning. <i>Human-centric Computing and Information Sciences</i> , 2019 , 9,	5.4	25

93	Analysis of the Narrow Band Internet of Things (NB-IoT) Technology 2019 ,		13
92	An Effective Spectrum Handoff Based on Reinforcement Learning for Target Channel Selection in the Industrial Internet of Things. <i>Sensors</i> , 2019 , 19,	3.8	14
91	Wireless Power Transfer for LoRa Low-Power wide-area Networks (LPWANs) 2019,		3
90	Modelling noise and pulse width modulation interference in indoor visible light communication channels. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 106, 40-47	2.8	7
89	Solving Management Problems in Water Distribution Networks: A Survey of Approaches and Mathematical Models. <i>Water (Switzerland)</i> , 2019 , 11, 562	3	14
88	Evaluating the LoRaWAN Protocol Using a Permanent Outdoor Testbed. <i>IEEE Sensors Journal</i> , 2019 , 19, 4726-4733	4	26
87	Efficient controller placement and reelection mechanism in distributed control system for software defined wireless sensor networks. <i>Transactions on Emerging Telecommunications Technologies</i> , 2019 , 30, e3588	1.9	14
86	A survey on low-power wide area networks for IoT applications. <i>Telecommunication Systems</i> , 2019 , 71, 249-274	2.3	33
85	Real-Time Dynamic Hydraulic Model of Water Distribution Networks. Water (Switzerland), 2019, 11, 470) 3	11
84	Computational and experimental study for the desalination of petrochemical industrial effluents using direct contact membrane distillation. <i>Applied Water Science</i> , 2019 , 9, 1	5	6
83	Technology Coexistence in LPWANs-A Comparative Analysis for Spectrum Optimization 2019,		3
82	Energy Consumption Challenges in Clustered Cognitive Radio Sensor Networks: A Review 2019,		4
81	Comparative Study of Artificial Intelligence Based Intrusion Detection for Software-Defined Wireless Sensor Networks 2019 ,		1
80	A Review of Artificial Intelligence Based Intrusion Detection for Software-Defined Wireless Sensor Networks 2019 ,		4
79	A Comparison of Data Aggregation Techniques in Software-Defined Wireless Sensor Network 2019 ,		2
78	Impact of Pressure-Driven Demand on Background Leakage Estimation in Water Supply Networks. <i>Water (Switzerland)</i> , 2019 , 11, 1600	3	7
77	Real Time Security Assessment of the Power System Using a Hybrid Support Vector Machine and Multilayer Perceptron Neural Network Algorithms. <i>Sustainability</i> , 2019 , 11, 3586	3.6	13
76	Histogram partitioning algorithms for adaptive and autonomous threshold estimation in cognitive radioBased industrial wireless sensor networks. <i>Transactions on Emerging Telecommunications Technologies</i> , 2019 , 30, e3679	1.9	

75	A Review of Wireless Sensor Network Localisation Based on Software Defined Networking 2019,		1
74	A Review of Gateway Placement Algorithms on Internet of Things 2019 ,		4
73	Effect of Pipe Materials on Background Leakage Estimate Using Graph-Based Hydraulic Model: An Extended Study 2019 , 245-254		
7 ²	Improved Two-Stage Spectrum Sensing for Cognitive Radio Networks. <i>Journal of Advanced Computational Intelligence and Intelligent Informatics</i> , 2019 , 23, 1052-1062	0.4	O
71	Towards Cognitive Radio in Low Power Wide Area Network for Industrial IoT Applications 2019,		4
70	Secure Firmware Updates in the Internet of Things: A survey 2019 ,		3
69	Wireless Power Transfer for IoT Devices - A Review 2019 ,		8
68	A Distributed Control System for Software Defined Wireless Sensor Networks Through Containerisation 2019 ,		3
67	Device Authentication Schemes in IoT: A Review 2019 ,		2
66	Exploring Control-Message Quenching in SDN-based Management of 6LoWPANs 2019 ,		3
65	RPL-Based on Load Balancing Routing objective Functions for IoTs in Distributed Networks 2019,		3
64	A Review of LoRaWAN Simulators: Design Requirements and Limitations 2019,		7
63	Fog Orchestrator as an Enabler for Security in Fog Computing: A Review 2019,		1
62	A Sea Rescue Operation System Based On LoRa 2019 ,		2
61	A Survey on LPWAN Technologies in WBAN for Remote Health-Care Monitoring. Sensors, 2019, 19,	3.8	31
60	Fragmentation-Based Distributed Control System for Software-Defined Wireless Sensor Networks. <i>IEEE Transactions on Industrial Informatics</i> , 2019 , 15, 901-910	11.9	29
59	A comparative analysis of local and global adaptive threshold estimation techniques for energy detection in cognitive radio. <i>Physical Communication</i> , 2018 , 29, 1-11	2.2	17
58	Software defined wireless sensor networks application opportunities for efficient network management: A survey. <i>Computers and Electrical Engineering</i> , 2018 , 66, 274-287	4.3	97

(2018-2018)

57	Techno-Economic Feasibility of Hybrid Solar Photovoltaic and Battery Energy Storage Power System for a Mobile Cellular Base Station in Soshanguve, South Africa. <i>Energies</i> , 2018 , 11, 1572	3.1	17
56	Predictive Uncertainty Estimation in Water Demand Forecasting Using the Model Conditional Processor. <i>Water (Switzerland)</i> , 2018 , 10, 475	3	12
55	A Survey of Anomaly Detection in Industrial Wireless Sensor Networks with Critical Water System Infrastructure as a Case Study. <i>Sensors</i> , 2018 , 18,	3.8	56
54	Cryptography Methods for Software-Defined Wireless Sensor Networks 2018,		9
53	Localised information fusion techniques for location discovery in wireless sensor networks. <i>International Journal of Sensor Networks</i> , 2018 , 26, 12	0.8	37
52	Robustness of Parameter-Less Remote Real-Time Pressure Control in Water Distribution Systems. <i>Springer Water</i> , 2018 , 449-463	0.3	
51	Pressure Management Strategies for Water Loss Reduction in Large-Scale Water Piping Networks: A Review. <i>Springer Water</i> , 2018 , 465-480	0.3	8
50	A Survey on 5G Networks for the Internet of Things: Communication Technologies and Challenges. <i>IEEE Access</i> , 2018 , 6, 3619-3647	3.5	603
49	A Survey on Vehicle Security Systems: Approaches and Technologies 2018,		3
48	Programmable Node in Software-Defined Wireless Sensor Networks: A Review 2018 ,		4
47	Analysis of IoT-Enabled Solutions in Smart Waste Management 2018,		9
46	Analysis of Notable Security Issues in SDWSN 2018 ,		3
45	A Survey on Data Imputation Techniques: Water Distribution System as a Use Case. <i>IEEE Access</i> , 2018 , 6, 63279-63291	3.5	29
44	Software Defined Wireless Sensor Networks Mangement and Security Challenges: A Review 2018,		2
43	Machine Learning Techniques for Traffic Identification and Classifiacation in SDWSN: A Survey 2018		15
42	Analysis of Energy Infficiency Challenges in Cognititive Radio Sensor Networks 2018,		3
41	Overlay Virtualized Wireless Sensor Networks for Application in Industrial Internet of Things: A Review. <i>Sensors</i> , 2018 , 18,	3.8	18
40	AC INDUCED CORROSION ASSESSMENT OF BURIED PIPELINES NEAR HVTLS: A CASE STUDY OF SOUTH AFRICA. <i>Progress in Electromagnetics Research B</i> , 2018 , 81, 45-61	0.7	2

39	Topology Discovery Protocol for Software Defined Wireless Sensor Network: Solutions and Open Issues 2018 ,		8
38	Efficient Two Stage Spectrum Sensing for Cognitive Radios 2018 ,		3
37	A Survey on Software-Defined Wireless Sensor Networks: Challenges and Design Requirements. <i>IEEE Access</i> , 2017 , 5, 1872-1899	3.5	254
36	Pressure Management of Water Distribution Systems via the Remote Real-Time Control of Variable Speed Pumps. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2017 , 143, 04017045	2.8	33
35	. IEEE Access, 2017 , 5, 6661-6667	3.5	26
34	Towards Achieving a Reliable Leakage Detection and Localization Algorithm for Application in Water Piping Networks: An Overview. <i>IEEE Access</i> , 2017 , 5, 20272-20285	3.5	67
33	Integrated treatment of acid mine drainage using BOF slag, lime/soda ash and reverse osmosis (RO): Implication for the production of drinking water. <i>Desalination</i> , 2017 , 424, 45-52	10.3	33
32	. IEEE Access, 2017 , 5, 19084-19098	3.5	60
31	LoRa and LoRaWAN testbeds: A review 2017 ,		39
30	2017,		21
30 29	2017, Software defined wireless sensor networks security challenges 2017,		21
29	Software defined wireless sensor networks security challenges 2017 ,		12
29	Software defined wireless sensor networks security challenges 2017, IoT devices and applications based on LoRa/LoRaWAN 2017, Security in software-defined wireless sensor networks: Threats, challenges and potential solutions		12 63
29 28 27	Software defined wireless sensor networks security challenges 2017, IoT devices and applications based on LoRa/LoRaWAN 2017, Security in software-defined wireless sensor networks: Threats, challenges and potential solutions 2017,		126333
29 28 27 26	Software defined wireless sensor networks security challenges 2017, IoT devices and applications based on LoRa/LoRaWAN 2017, Security in software-defined wireless sensor networks: Threats, challenges and potential solutions 2017, Utilising artificial intelligence in software defined wireless sensor network 2017,		12 63 33 20
29 28 27 26 25	Software defined wireless sensor networks security challenges 2017, IoT devices and applications based on LoRa/LoRaWAN 2017, Security in software-defined wireless sensor networks: Threats, challenges and potential solutions 2017, Utilising artificial intelligence in software defined wireless sensor network 2017, Improving northbound interface communication in SDWSN 2017,		12 63 33 20 4

(2013-2017)

21	Software Defined Networking for Improved Wireless Sensor Network Management: A Survey. <i>Sensors</i> , 2017 , 17,	3.8	116
20	Estimation of Water Demand in Water Distribution Systems Using Particle Swarm Optimization. <i>Water (Switzerland)</i> , 2017 , 9, 593	3	18
19	Leakage Detection and Estimation Algorithm for Loss Reduction in Water Piping Networks. <i>Water</i> (Switzerland), 2017 , 9, 773	3	38
18	Overview, Comparative Assessment and Recommendations of Forecasting Models for Short-Term Water Demand Prediction. <i>Water (Switzerland)</i> , 2017 , 9, 887	3	31
17	Localised Information Fusion Techniques for Location Discovery in Wireless Sensor Networks. <i>International Journal of Sensor Networks</i> , 2017 , 1, 1	0.8	12
16	Parameter-Less Remote Real-Time Control for the Adjustment of Pressure in Water Distribution Systems. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2017 , 143, 04017050	2.8	29
15	Real-time Adjustment of Pressure to Demand in Water Distribution Systems: Parameter-less P-controller Algorithm. <i>Procedia Engineering</i> , 2016 , 154, 391-397		20
14	Real-time Dynamic Hydraulic Model for Water Distribution Networks: Steady State Modelling 2016 ,		6
13	2016,		2
12	A key distribution scheme using elliptic curve cryptography in wireless sensor networks 2016 ,		26
11	A Simple Security Architecture for Smart Water Management System. <i>Procedia Computer Science</i> , 2016 , 83, 1164-1169	1.6	49
10	Real-time Dynamic Hydraulic Model for Potable Water Loss Reduction. <i>Procedia Engineering</i> , 2016 , 154, 99-106		39
9	2015,		23
8	Smart water meter system for user-centric consumption measurement 2015 ,		56
7	Toward developing a distributed autonomous energy management system (DAEMS) 2015,		16
6	Wireless gas sensing in South African underground platinum mines 2014,		4
5	Distance Bounding: A Practical Security Solution for Real-Time Location Systems. <i>IEEE Transactions on Industrial Informatics</i> , 2013 , 9, 16-27	11.9	44
4	Evaluating ALWadHA for providing secure localisation for wireless sensor networks 2013 ,		22

3	An efficient distributed localisation algorithm for wireless sensor networks: based on smart reference-selection method. <i>International Journal of Sensor Networks</i> , 2013 , 13, 94	0.8	32
2	ns-2 extension to simulate localization system in wireless sensor networks 2011 ,		28
1	An optimization-based congestion control for constrained application protocol. <i>International Journal of Network Management</i> ,e2178	1.8	1