Hussein T Mouftah

List of Publications by Year
in descending order

146 papers	4,173 citations	346980 22 h-index
147 all docs	147 docs citations	147 times ranked

286692
43
g-index

4398
citing authors

#	Article	IF	Citations
1	Internet of Things –integrated IR–UWB technology for healthcare applications. Concurrency Computation Practice and Experience, 2020, 32, e5454.	1.4	23
2	Decision-Based Cooperative Spectrum Sensing Using Random Medium-Access Sequential Reporting. Canadian Journal of Electrical and Computer Engineering, 2020, 43, 181-189.	1.5	0
3	On the Feasibility of Deep Learning in Sensor Network Intrusion Detection. IEEE Networking Letters, 2019, 1, 68-71.	1.5	195
4	Concentration-Encoded Molecular Communication in Nanonetworks. Part 2: Performance Evaluation. Modeling and Optimization in Science and Technologies, 2017, , 35-56.	0.7	0
5	Sensing as a Service in Cloud-Centric Internet of Things Architecture. , 2017, , 460-490.		0
6	Concentration-Encoded Molecular Communication in Nanonetworks. Part 1: Fundamentals, Issues, and Challenges. Modeling and Optimization in Science and Technologies, 2017, , 3-34.	0.7	1
7	ENTRUST: Energy trading under uncertainty in smart grid systems. Computer Networks, 2016, 110, 232-242.	3.2	17
8	Concentration-Encoded Subdiffusive Molecular Communication: Theory, Channel Characteristics, and Optimum Signal Detection. IEEE Transactions on Nanobioscience, 2016, 15, 533-548.	2.2	26
9	A Survey on Cross-Layer Quality-of-Service Approaches in WSNs for Delay and Reliability-Aware Applications. IEEE Communications Surveys and Tutorials, 2016, 18, 525-552.	24.8	85
10	Sensing services in cloud-centric Internet of Things: A survey, taxonomy and challenges. , 2015, , .		21
11	Delay Critical Smart Grid Applications and Adaptive QoS Provisioning. IEEE Access, 2015, 3, 1367-1378.	2.6	29
12	Energy-Efficient Information and Communication Infrastructures in the Smart Grid: A Survey on Interactions and Open Issues. IEEE Communications Surveys and Tutorials, 2015, 17, 179-197.	24.8	343
13	A Comprehensive Study of Sampling-Based Optimum Signal Detection in Concentration-Encoded Molecular Communication. IEEE Transactions on Nanobioscience, 2014, 13, 208-222.	2.2	67
14	Reputation-based sensing-as-a-service for crowd management over the cloud. , 2014, , .		17
15	Managing connection costs in heterogeneous wireless networks. Wireless Communications and Mobile Computing, 2014, 14, 1176-1188.	0.8	0
16	Strength-based optimum signal detection in concentration-encoded pulse-transmitted OOK molecular communication with stochastic ligand-receptor binding. Simulation Modelling Practice and Theory, 2014, 42, 189-209.	2.2	27
17	Smart grid monitoring with service differentiation via EPON and wireless sensor network convergence. Optical Switching and Networking, 2014, 14, 53-68.	1.2	17
18	Priority- and Delay-Aware Medium Access for Wireless Sensor Networks in the Smart Grid. IEEE Systems Journal, 2014, 8, 608-618.	2.9	54

#	ARTICLE	IF	CITATIONS
19	Trustworthy Sensing for Public Safety in Cloud-Centric Internet of Things. IEEE Internet of Things Journal, 2014, 1, 360-368.	5.5	185
20	A four-way-handshake protocol for energy forwarding networks in the smart grid. Ad Hoc Networks, 2014, 22, 83-92.	3.4	5
21	Performance Analysis of Convolutional Coding Techniques in Diffusion-Based Concentration-Encoded PAM Molecular Communication Systems. BioNanoScience, 2013, 3, 270-284.	1.5	133
22	A self-optimized random access protocol for an infrastructure-less mission critical wireless networking system. Telecommunication Systems, 2013, 52, 2133-2144.	1.6	4
23	Quality-of-service-aware fiber wireless sensor network gateway design for the smart grid. , 2013, , .		13
24	A traffic adaptive inter-cluster head delay control scheme in WSNs. , 2013, , .		4
25	Two-stage report generation in long-reach EPON for enhanced delay performance. Computer Communications, 2013, 36, 1570-1580.	3.1	8
26	A Reliable IEEE 802.15.4 Model for Cyber Physical Power Grid Monitoring Systems. IEEE Transactions on Emerging Topics in Computing, 2013, 1, 258-272.	3.2	24
27	Smart grid forensic science: applications, challenges, and open issues. , 2013, 51, 68-74.		65
28	Smart Grid Communications: Opportunities and Challenges. , 2013, , 631-663.		14
29	Strength Based Receiver Architecture and Communication Range and Rate Dependent Signal Detection Characteristics of Concentration Encoded Molecular Communication. , 2012, , .		10
30	Cyber security for smart grid communications: Part I. , 2012, 50, 16-17.		11
31	Suresense: sustainable wireless rechargeable sensor networks for the smart grid. IEEE Wireless Communications, 2012, 19, 30-36.	6.6	116
32	A review of techniques and technologies for sand and dust storm detection. Reviews in Environmental Science and Biotechnology, 2012, 11, 305-322.	3.9	67
33	Energy efficiency in the extended-reach fiber-wireless access networks. IEEE Network, 2012, 26, 28-35.	4.9	39
34	A low latency data transmission scheme for smart grid condition monitoring applications. , 2012, , .		13
35	DRIFT: Differentiated RF Power Transmission for Wireless Sensor Network deployment in the smart grid. , 2012, , .		16
36	Low-latency smart grid asset monitoring for load control of energy-efficient buildings. , 2012, , .		1

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37	Quality of service in Plug-in Electric Vehicle charging infrastructure. , 2012, , .		24
38	Supply and load management for the smart distribution grid using wireless networks. , 2012, , .		4
39	Delay-Constrained Admission and Bandwidth Allocation for Long-Reach EPON. Journal of Networks, 2012, 7, .	0.4	9
40	Cryptographic security models for eHealth P2P database management systems network. , 2011, , .		8
41	Performance analysis of SLA-aware connection provisioning in optical networks. , 2011, , .		0
42	Towards cellular IP address assignment in wireless heterogeneous sensor networks. , 2011, , .		7
43	Session-wise private data exchange in eHealth peer-to-peer database management systems. , 2011, , .		3
44	Adaptive Sleeping Periods in IEEE 802.15.4 for Efficient Energy Savings: Markov-Based Theoretical Analysis. , 2011, , .		13
45	Hybrid Markov model for availability-guaranteed connection provisioning in optical WDM networks. , 2011, , .		1
46	Efficient Authentication Mechanism for PEV Charging Infrastructure. , 2011, , .		10
47	Concealing of the Sink Location in WSNs by artificially homogenizing traffic intensity. , 2011, , .		16
48	Characterization of intersymbol interference in concentration-encoded unicast molecular communication. , 2011, , .		27
49	Extending Beacon-Enabled IEEE 802.15.4 to Achieve Efficient Energy Savings: Simulation-Based Performance Analysis. , 2011, , .		1
50	An Efficient Adaptive Backoff Algorithm for Wireless Sensor Networks. , 2011, , .		4
51	Management of PHEV batteries in the smart grid: Towards a cyber-physical power infrastructure. , 2011, , .		32
52	Self-stability of slotted ALOHA by limiting the number of retransmission trials in infrastructure-less wireless networks. Telecommunication Systems, 2011, 52, 435.	1.6	0
53	Towards energy-efficient hybrid Fiber-Wireless Access Networks. , 2011, , .		5
54	Analysis of Plug-in Hybrid Electrical Vehicle admission control in the smart grid. , 2011, , .		15

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55	Wireless Sensor Networks for smart grid applications. , 2011, , .		39
56	Communication-based Plug-In Hybrid Electrical Vehicle load management in the smart grid. , 2011, , .		31
57	A Survey of Architectures and Localization Techniques for Underwater Acoustic Sensor Networks. IEEE Communications Surveys and Tutorials, 2011, 13, 487-502.	24.8	359
58	Bandwidth Distribution Solutions for Performance Enhancement in Long-Reach Passive Optical Networks. IEEE Communications Surveys and Tutorials, 2011, , .	24.8	26
59	Reliable overlay topology design for the smart microgrid network. IEEE Network, 2011, 25, 38-43.	4.9	99
60	Cost-Aware Smart Microgrid Network design for a sustainable smart grid. , 2011, , .		17
61	Optimization models for reliable long-reach PON deployment. , 2011, , .		6
62	On the characteristics of concentration-encoded multi-level amplitude modulated unicast molecular communication. , 2011, , .		13
63	A Web-Based Application of TELOSB Sensor Network. Mobile Information Systems, 2011, 7, 147-163.	0.4	3
64	Wireless Sensor Networks for Cost-Efficient Residential Energy Management in the Smart Grid. IEEE Transactions on Smart Grid, 2011, 2, 314-325.	6.2	521
65	A Random Access Protocol with Multi-Packet Reception for Infrastructure-Less Wireless Autonomic Networks. Wireless Personal Communications, 2011, 56, 447-456.	1.8	5
66	Wireless multimedia sensor and actor networks for the next generation power grid. Ad Hoc Networks, 2011, 9, 542-551.	3.4	151
67	Management of PHEV charging from the smart grid using sensor web services. , 2011, , .		9
68	Security Mechanism for Multi-Domain Vehicle-to-Grid Infrastructure. , 2011, , .		17
69	A Protocol for Sink Location Privacy Protection in Wireless Sensor Networks. , 2011, , .		2
70	A comprehensive study of concentration-encoded unicast molecular communication with binary pulse transmission. , 2011, , .		16
71	Power saving clusters for energy-efficient design of fiber-wireless access networks. , 2010, , .		15
72	Wireless Sensor Networks for domestic energy management in smart grids. , 2010, , .		37

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73	On the characterization of binary concentration-encoded molecular communication in nanonetworks. Nano Communication Networks, 2010, 1, 289-300.	1.6	267
74	Periodic GATE Optimization (PGO): A New Service Scheme for Long-Reach Passive Optical Networks. IEEE Systems Journal, 2010, 4, 440-448.	2.9	16
75	Greening the availability design of optical WDM networks. , 2010, , .		18
76	An Efficient TDMA Scheme with Dynamic Slot Assignment in Clustered Wireless Sensor Networks. , 2010, , .		5
77	Intrusion Detection System for WSN-Based Intelligent Transportation Systems. , 2010, , .		9
78	Availability and cost constrained fast planning of Passive Optical Networks under various survivability policies. , 2010, , .		3
79	Credible-BGP: A Hybrid Cryptosystem to Secure BGP. , 2010, , .		0
80	Reliability model for extending cluster lifetime using Backup Cluster Heads in cluster-based Wireless Sensor Networks. , 2010, , .		17
81	Improved two-factor user authentication in wireless sensor networks. , 2010, , .		88
82	Pre-broadcast based time efficient privacy protocol for secure vehicular communications. , 2010, , .		1
83	QoS-based MAC protocol for medical wireless body area sensor networks. , 2010, , .		15
84	SLA-Aware Protection Switching in optical WDM networks. , 2010, , .		1
85	TOU-Aware Energy Management and Wireless Sensor Networks for Reducing Peak Load in Smart Grids. , 2010, , .		59
86	On SLA constraints in dynamic bandwidth allocation for long-reach passive optical networks. , 2010, , .		4
87	Periodic GATE Optimization (PGO) in Long-Reach Passive Optical Networks. , 2010, , .		6
88	Using wireless sensor networks for energy-aware homes in smart grids. , 2010, , .		41
89	Urgency-Based MAC Protocol for Wireless Sensor Body Area Networks. , 2010, , .		44
90	The impact of smart grid residential energy management schemes on the carbon footprint of the household electricity consumption. , 2010, , .		16

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91	Performance comparison between dynamic protection schemes in Survivable WDM mesh networks. , 2010, , .		2
92	Performance Analysis of Threshold Call Admission Policy for Multi-class Traffic in Low Earth Orbit Mobile Satellite Systems. , 2010, , .		9
93	A framework for distributed provisioning availability-guaranteed least-cost lightpaths in WDM mesh networks. , 2010, , .		1
94	Reliable and fast restoration for a survivable wireless-optical broadband access network. , 2010, , .		13
95	Prohibitive-link Detection and Routing Protocol. , 2009, , .		0
96	A Mapping of Wireless Network Boundaries Using Localised Alpha-Shapes. , 2009, , .		1
97	Effect of Jamming Signals on Wireless Ad Hoc and Sensor Networks. , 2009, , .		4
98	QUATTRO: QoS-Capable Cross-Layer MAC Protocol for Wireless Sensor Networks. , 2009, , .		11
99	Survivability Approaches Using p-Cycles in WDM Mesh Networks Under Static Traffic. IEEE/ACM Transactions on Networking, 2009, 17, 671-683.	2.6	30
100	Localized power–aware alternate routing for wireless ad hoc networks. Wireless Communications and Mobile Computing, 2009, 9, 882-893.	0.8	3
101	A survey of dynamic bandwidth allocation algorithms for Ethernet Passive Optical Networks. Optical Switching and Networking, 2009, 6, 151-162.	1.2	100
102	Optimization for Fault Localization in All-Optical Networks. Journal of Lightwave Technology, 2009, 27, 4832-4840.	2.7	6
103	MARE: An Efficient Reservation-Based MAC Protocol for IEEE 802.11s Mesh Networks. , 2009, , .		7
104	WSN Architectures for Intelligent Transportation Systems. , 2009, , .		27
105	Distributed Holding-Time-Aware shared-path-protection provisioning framework for optical networks. , 2009, , .		2
106	Performance evaluation of dynamic P-cycle protection methods in WDM optical networks. , 2009, , .		2
107	Credible BGP – Extensions to BGP for Secure Networking. , 2009, , .		3
108	A Retransmission Cut-Off Random Access Protocol with Multi-packet Reception Capability for Wireless Networks. , 2009, , .		3

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109	Security impacts on establishing MPLS/BGP VPNs. Security and Communication Networks, 2008, 1, 269-275.	1.0	0
110	An energyâ€efficient localized topology control algorithm for wireless <i>ad hoc</i> and sensor networks. International Journal of Communication Systems, 2008, 21, 1205-1220.	1.6	13
111	Fast Routing Algorithms for Lightpath Establishment in Wavelength-Routed Optical Networks. Journal of Lightwave Technology, 2008, 26, 1744-1751.	2.7	10
112	Performance optimization for fault localization in all-optical networks. , 2008, , .		3
113	Service reliability with enhanced failure recovery rate for multiple failures in survivable optical networks. , 2008, , .		4
114	Parallel Fixed-Alternative-Routing Based Provisioning Framework for Distributed Controlled Survivable WDM Mesh Networks. , 2008, , .		1
115	Connection provisioning constrained to fault localization in all-optical networks. , 2008, , .		2
116	Availability analysis and Connection provisioning in overlapping shared segment protection for optical networks. , 2008, , .		2
117	Distributed fault localization for multi-domain all-optical networks without power monitoring. , 2008, , .		0
118	Arranging shareability dynamically for the availability-constrained design of optical transport networks. , 2008, , .		10
119	Optimization for minimizing fault localization time in all-optical networks. , 2008, , .		3
120	Distributed fault localization for multi-domain all-optical networks without power monitoring. , 2008, , .		0
121	A novel distributed destination routing-based Availability-Aware provisioning framework for differentiated protection services in optical mesh networks. , 2008, , .		2
122	A novel distributed availability-aware provisioning framework for differentiated protection services in optical mesh networks. Canadian Conference on Electrical and Computer Engineering, 2008, , .	0.0	1
123	Energy-Efficient Geographical Forwarding Algorithm for Wireless Ad Hoc and Sensor Networks. , 2008, , .		3
124	Performance evaluation of LVM fault-localization protocol for all-optical networks. Canadian Conference on Electrical and Computer Engineering, 2008, , .	0.0	0
125	Integrated Routing and Wavelength Assignment and signaling in shared protection framework for survivable WDM optical mesh networks. , 2008, , .		1
126	Distributed fault localization for multi-domain all-optical networks with partial power monitoring. , 2008, , .		0

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127	Differentiated Availability-Aware Connection Provisioning in Optical Transport Networks. , 2008, , .		2
128	Parallel distributed lightpath control and management for survivable optical mesh networks. , 2008, , .		3
129	Connection provisioning with feasible shareability determination for availability-aware design of optical networks. , 2008, , .		6
130	Hierarchical Location Service for Large Scale Wireless Sensor Networks with Mobile Sinks. , 2007, , .		11
131	A New Absolute QoS Differentiation Scheme Supporting Best-Effort Class in OBS Networks. , 2007, , .		4
132	Achieving Reliability Over Cluster-Based Wireless Sensor Networks Using Backup Cluster Heads. , 2007, , .		11
133	Absolute QoS Differentiation with Best-Effort Class Support in Optical Burst Switching Networks. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	3
134	Efficient Localized Topology Control Algorithm. , 2007, , .		4
135	Multi-channel Busy-tone Multiple Access for Scalable Wireless Mesh Network. , 2007, , .		2
136	A delay-based provisioning for Ethernet passive optical networks. , 2007, , .		2
137	A Dynamic Hierarchical Mobility Management Protocol for Next Generation Wireless Metropolitan Area Networks. , 2007, , .		2
138	A scalable multicast routing protocol for building shortest path trees. International Journal of Communication Systems, 2007, 20, 993-1009.	1.6	2
139	A Segmentation-Based Dropping Scheme in OBS Networks. , 2006, , .		1
140	A Fast Class-of-Service Packet Scheduling for Ethernet Passive Optical Networks. , 2006, , .		1
141	Performance of Fast Routing Algorithms in Large Optical Switches Built on the Vertical Stacking of Banyan Structures. Cluster Computing, 2004, 7, 219-224.	3.5	10
142	Virtual Topology Design and Reconfiguration of Virtual Private Networks (VPNs) over All-Optical WDM Networks. Photonic Network Communications, 2004, 7, 255-266.	1.4	11
143	QoS routing through alternate paths in wirelessad hoc networks. International Journal of Communication Systems, 2004, 17, 233-252.	1.6	9
144	A hop-by-hop delay-constrained routing algorithm with explicit loop avoidance and backup routing information. International Journal of Communication Systems, 2004, 17, 459-478.	1.6	0

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145	Frame-level performance measurement in an ATM test-bed environment: methodologies and experiences. International Journal of Network Management, 2004, 14, 279-286.	1.4	0
146	Sensing as a Service in Cloud-Centric Internet of Things Architecture. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 83-115.	0.3	4