Thomas Newe

List of Publications by Citations

103 papers	1,014 citations	16 h-index	28 g-index
129 ext. papers	1,301 ext. citations	2.1 avg, IF	4.73 L-index

#	Paper	IF	Citations
103	Organic light-emitting devices (OLEDs) and OLED-based chemical and biological sensors: an overview. *Journal Physics D: Applied Physics*, **2008**, 41, 133001	3	223
102	Inspection-Class Remotely Operated Vehicles A Review. *Journal of Marine Science and Engineering* , **2017**, 5, 13	2.4	64
101	A comparative review of wireless sensor network mote technologies **2009**,		59
100	Defence against Black Hole and Selective Forwarding Attacks for Medical WSNs in the IoT. *Sensors*, **2016**, 16,	3.8	46
99	Wireless Sensor Node hardware: A review **2008**,		41
98	Underwater Depth and Temperature Sensing Based on Fiber Optic Technology for Marine and Fresh Water Applications. *Sensors*, **2017**, 17,	3.8	34
97	Challenges Associated with Implementing 5G in Manufacturing. *Telecom*, **2020**, 1, 48-67	1.8	31
96	TDMA Protocol Requirements for Wireless Sensor Networks **2008**,		30
95	Securing Wireless Sensor Networks: Security Architectures. *Journal of Networks*, **2008**, 3,		30
94	Security for wireless sensor networks: A review **2009**,		25
93	A secure end-to-end IoT solution. *Sensors and Actuators A: Physical*, **2017**, 263, 291-299	3.9	21
92	Security Protocols for Use with Wireless Sensor Networks: A Survey of Security Architectures **2007**,		20
91	Efficiently securing data on a wireless sensor network. *Journal of Physics: Conference Series*, **2007**, 76, 012063	0.3	19
90	Optical fibre cavity for ring-down experiments with low coupling losses. *Measurement Science and Technology*, **2010**, 21, 094034	2	18
89	Prototype of a secure wireless patient monitoring system for the medical community. *Sensors and Actuators A: Physical*, **2012**, 173, 55-65	3.9	17
88	Securing future decentralised industrial IoT infrastructures: Challenges and free open source solutions. *Future Generation Computer Systems*, **2019**, 93, 596-608	7.5	17
87	An Optical Fibre Depth (Pressure) Sensor for Remote Operated Vehicles in Underwater Applications. *Sensors*, **2017**, 17,	3.8	16

86	Analysis of Hardware Encryption Versus Software Encryption on Wireless Sensor Network Motes. *Lecture Notes in Electrical Engineering*, **2008**, 3-14	0.2	15
85	Automated Ground Vehicle (AGV) and Sensor Technologies- A Review **2018**,		14
84	On the implementation and evaluation of an elliptic curve based cryptosystem for Java enabled Wireless Sensor Networks. *Sensors and Actuators A: Physical*, **2009**, 156, 394-405	3.9	12
83	Industrial IoT, Cyber Threats, and Standards Landscape: Evaluation and Roadmap. *Sensors*, **2021**, 21,	3.8	11
82	Object recognition within smart manufacturing. *Procedia Manufacturing*, **2019**, 38, 408-414	1.5	11
81	2.4 GHz IEEE 802.15.4 channel interference classification algorithm running live on a sensor node **2012**,		10
80	Configuration Tool for a Wireless Sensor Network Integrated Security Framework. *Journal of Network and Systems Management*, **2012**, 20, 417-452	2.1	10
79	Coexistence measurements and analysis of IEEE 802.15.4 with Wi-Fi and bluetooth for vehicle networks **2012**,		10
78	Power Management in Operating Systems for Wireless Sensor Nodes **2007**,		9
77	Motion artefact minimization from photoplethysmography based non-invasive hemoglobin sensor based on an envelope filtering algorithm. *Measurement: Journal of the International Measurement Confederation*, **2018**, 115, 288-298	4.6	9
76	Stereo Vision Sensing: Review of existing systems **2018**,		9
75	A Lightweight Classification Algorithm for External Sources of Interference in IEEE 802.15.4-Based Wireless Sensor Networks Operating at the 2.4 GHz. *International Journal of Distributed Sensor Networks*, **2014**, 10, 265286	1.7	8
74	Planning with parents for seriously ill children: preliminary results on the development of the parental engagement scale. *Palliative and Supportive Care*, **2011**, 9, 367-76	2.5	7
73	Secure Hash Algorithm-3(SHA-3) implementation on Xilinx FPGAs, Suitable for IoT Applications. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-6	0.4	7
72	Cloud computing and Internet of Things fusion: Cost issues **2017**,		6
71	An Experimental Study of the Effects of External Physiological Parameters on the Photoplethysmography Signals in the Context of Local Blood Pressure (Hydrostatic Pressure Changes). *Sensors*, **2017**, 17,	3.8	6
70	AES implementation on Xilinx FPGAs suitable for FPGA based WBSNs **2015**,		6
69	An FPGA based reconfigurable IPSec ESP core suitable for IoT applications **2016**,		6

68	Real-Time Video Latency Measurement between a Robot and Its Remote Control Station: Causes and Mitigation. *Wireless Communications and Mobile Computing*, **2018**, 2018, 1-19	1.9	6
67	High Speed Implementation of a SHA-3 Core on Virtex-5 and Virtex-6 FPGAs. *Journal of Circuits, Systems and Computers*, **2016**, 25, 1650069	0.9	5
66	**2015**,		5
65	Secure and Efficient Key Coordination Algorithm for Line Topology Network Maintenance for Use in Maritime Wireless Sensor Networks. *Sensors*, **2016**, 16,	3.8	5
64	Bloom filter based data collection algorithm for wireless sensor networks **2017**,		4
63	An FPGA-based reconfigurable IPSec AH core with efficient implementation of SHA-3 for high speed IoT applications. *Security and Communication Networks*, **2016**, 9, 3282-3295	1.9	4
62	A Mote Interface for Fiber Optic Spectral Sensing With Real-Time Monitoring of the Marine Environment. *IEEE Sensors Journal*, **2013**, 13, 2619-2625	4	4
61	Healthcare WSN: Cluster Elections and Selective Forwarding Defense **2015**,		4
60	Novel miniature pressure and temperature optical fibre sensor based on an extrinsic Fabry-Perot Interferometer (EFPI) and Fibre Bragg Gratings (FBG) for the Ocean environment **2014**,		4
59	Fibre-optic evanescent-wave field fluid concentration sensor **2009**,		4
58	A Survey of Authentication Mechanisms: Authentication for Ad-Hoc Wireless Sensor Networks **2007** ,		4
57	High Bandwidth Maritime Communication Systems Review of Existing Solutions and New Proposals **2018**,		4
56	Efficient High Speed Implementation of Secure Hash Algorithm-3 on Virtex-5 FPGA **2014**,		3
55	Trust Security Mechanism for Marine Wireless Sensor Networks **2015**,		3
54	Formal Verification of a Key Agreement Protocol for Wireless Sensor Networks **2012**,		3
53	A tool for the security configuration of sensor networks. *Journal of Physics: Conference Series*, **2009**, 178, 012043	0.3	3
52	Investigation of binary liquid aqueous methanol and ethanol mixtures using meander-shaped fibre-optic evanescent-wave absorption sensors **2008**,		3
51	Efficient and High Speed FPGA Bump in the Wire Implementation for Data Integrity and Confidentiality Services in the IoT. *Smart Sensors, Measurement and Instrumentation*, **2017**, 259-285	0.3	3

50	Tenant - Vendor and Third-Party Agreements for the Cloud: Considerations for Security Provision. *International Journal of Software Engineering and Its Applications*, **2016**, 10, 449-460	0.1	3
49	Integration of autonomous intelligent vehicles into manufacturing environments: Challenges. *Procedia Manufacturing*, **2019**, 38, 1683-1690	1.5	3
48	**2018**,		3
47	Can IoT escape Cloud QoS and Cost Pitfalls **2018**,		3
46	Medical WSN: Power, routing and selective forwarding defense **2015**,		2
45	Integration of an MES and AIV Using a LabVIEW Middleware Scheduler Suitable for Use in Industry 4.0 Applications. *Applied Sciences (Switzerland)*, **2020**, 10, 7054	2.6	2
44	Reconfiguration of neighbouring nodes in coastal monitoring wireless sensor networks based on leader node recommendation **2017**,		2
43	Bump in the wire (BITW) security solution for a marine ROV remote control application. *Journal of Information Security and Applications*, **2018**, 38, 111-121	3.5	2
42	Medical WSN: Defense for selective forwarding attack **2015**,		2
41	Security for Wireless Sensor Networks Configuration Aid. *Lecture Notes in Electrical Engineering*, **2010**, 1-24	0.2	2
40	**2007**,		2
39	A multi-wavelength discriminating sensor with a wireless mote interface for aquatic pollution monitoring. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-4	0.4	2
38	Federated Hybrid Clouds Service Level Agreements and Legal Issues. *Advances in Intelligent Systems and Computing*, **2019**, 471-486	0.4	2
37	Cluster head election and rotation for medical-based wireless sensor networks **2017**,		2
36	Memory storage administration of security encryption keys for line topology in maritime wireless sensor networks **2016**,		2
35	Remote acoustic analysis for tool condition monitoring. *Procedia Manufacturing*, **2019**, 38, 840-847	1.5	2
34	An Overview of Popular Digital Image Processing Filtering Operations **2019**,		2
33	An efficient implementation of FPGA based high speed IPSec (AH/ESP) core. *International Journal of Internet Protocol Technology*, **2018**, 11, 97	0.3	1

32	Real-Time Secure/Unsecure Video Latency Measurement/Analysis with FPGA-Based Bump-in-the-Wire Security. *Sensors*, **2019**, 19,	3.8	1
31	Underwater pressure measurement using fibre optic extrinsic Fabry-Perot interferometric (EFPI) sensors **2014**,		1
30	Bloom filter based efficient broadcast algorithm for the Internet of things. *International Journal of Distributed Sensor Networks*, **2017**, 13, 155014771774974	1.7	1
29	Implementing Secure Key Coordination Scheme for Line Topology Wireless Sensor Networks **2017**,		1
28	**2015**,		1
27	Competition at the Wireless Sensor Network MAC Layer: Low Power Probing interfering with X-MAC. *Journal of Physics: Conference Series*, **2011**, 307, 012038	0.3	1
26	On the (im)possibility of denial of service attacks exploiting authentication overhead in WSNs **2009**,		1
25	**2009**,		1
24	Development of a prototyping platform for the integration of multiple fiber optic sensing devices to a SHIMMER system for in-situ maritime monitoring. **2009**,		1
23	Evaluation of key distribution protocols for use with wireless sensor networks **2009**,		1
22	Low cost hydrocarbon spillage sensor for the marine environment with interfacing to a mote platform **2011**,		1
21	MArSSeNs: A modular architecture for the security of sensor networks **2011**,		1
20	Realisation of a minimum-knowledge identification and signature scheme. *Computers and Security*, **1998**, 17, 253-264	4.9	1
19	**2008**,		1
18	On the logical verification of a group key agreement protocol for resource constrained mobile devices **2007**,		1
17	On the Formal Verification of the SNEP Key Agreement Protocol for Wireless Sensor Networks **2007**,		1
16	A Simulated and Experimental Analysis of Evaporation Duct Effects on Microwave Communications in the Irish Sea. *IEEE Transactions on Antennas and Propagation*, **2022**, 1-1	4.9	1
15	Hybrid Multi-Cloud Demystifying SLAs for Smart City Enterprises Using IoT Applications. *Advances in Computer and Electrical Engineering Book Series*, **2020**, 52-67	0.3	1

List of Publications

14	Hybrid Cloud SLAs for Industry 4.0: Bridging the Gap. *Annals of Emerging Technologies in Computing*, **2020**, 4, 41-60	1.2	1
13	Wireless Sensor Node Hardware **2014**, 1-15		1
12	Review and evaluation of WSN simulation tools in a cloud based environment **2016**,		1
11	An Experimental Study of the Effects of the Evaporation Duct on Microwave Propagation **2019**,		1
10	A comparitive study of Image Filters and Machine Learning for use in Machined Part Recognition **2019**,		1
9	Hybrid Cloud Computing QoS Glitches **2018**,		1
8	Enabling secure time-series data sharing via homomorphic encryption in cloud-assisted IIoT. *Future Generation Computer Systems*, **2022**, 133, 351-363	7.5	1
7	Trust security mechanism for maritime wireless sensor networks. *Concurrency Computation Practice and Experience*, **2017**, 29, e3945	1.4	0
6	Key handling in wireless sensor networks. *Journal of Physics: Conference Series*, **2007**, 76, 012060	0.3	0
5	Comparison and overview of Wireless sensor network systems for Medical Applications. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-6	0.4	0
4	Foreword by Guest Editors for the Special Issue on the 2016 Global Conference on Wireless and Optical Communications (GCWOC16). *Wireless Personal Communications*, **2017**, 95, 215-221	1.9	
3	Logically Optimized Smallest FPGA Architecture for SHA- 3 Core. *Communications in Computer and Information Science*, **2014**, 195-203	0.3	
2	Selection application for platforms and security protocols suitable for wireless sensor networks. *Journal of Physics: Conference Series*, **2009**, 178, 012034	0.3	
1	Marine based Wireless Sensor Networks: Challenges and Requirements. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-5	0.4	