

# Thomas Newe

## List of Publications by Year in descending order

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Version: 2024-02-01

128  
papers

1,634  
citations

516215

16  
h-index

395343

33  
g-index

129  
all docs

129  
docs citations

129  
times ranked

1838  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic light-emitting devices (OLEDs) and OLED-based chemical and biological sensors: an overview. Journal Physics D: Applied Physics, 2008, 41, 133001.	1.3	266
2	Inspection-Class Remotely Operated Vehicles”A Review. Journal of Marine Science and Engineering, 2017, 5, 13.	1.2	131
3	A comparative review of wireless sensor network mote technologies. , 2009, , .		85
4	Challenges Associated with Implementing 5G in Manufacturing. Telecom, 2020, 1, 48-67.	1.6	75
5	Defence against Black Hole and Selective Forwarding Attacks for Medical WSNs in the IoT. Sensors, 2016, 16, 118.	2.1	64
6	Wireless Sensor Node hardware: A review. , 2008, , .		63
7	Securing Wireless Sensor Networks: Security Architectures. Journal of Networks, 2008, 3, .	0.4	60
8	Industrial IoT, Cyber Threats, and Standards Landscape: Evaluation and Roadmap. Sensors, 2021, 21, 3901.	2.1	57
9	Underwater Depth and Temperature Sensing Based on Fiber Optic Technology for Marine and Fresh Water Applications. Sensors, 2017, 17, 1228.	2.1	53
10	TDMA Protocol Requirements for Wireless Sensor Networks. , 2008, , .		45
11	Automated Ground Vehicle (AGV) and Sensor Technologies- A Review. , 2018, , .		39
12	Security for wireless sensor networks: A review. , 2009, , .		35
13	A secure end-to-end IoT solution. Sensors and Actuators A: Physical, 2017, 263, 291-299.	2.0	34
14	Securing future decentralised industrial IoT infrastructures: Challenges and free open source solutions. Future Generation Computer Systems, 2019, 93, 596-608.	4.9	33
15	An Optical Fibre Depth (Pressure) Sensor for Remote Operated Vehicles in Underwater Applications. Sensors, 2017, 17, 406.	2.1	27
16	Security Protocols for Use with Wireless Sensor Networks: A Survey of Security Architectures. , 2007, , .		26
17	Optical fibre cavity for ring-down experiments with low coupling losses. Measurement Science and Technology, 2010, 21, 094034.	1.4	24
18	Analysis of Hardware Encryption Versus Software Encryption on Wireless Sensor Network Motes. Lecture Notes in Electrical Engineering, 2008, , 3-14.	0.3	24

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19	Efficiently securing data on a wireless sensor network. Journal of Physics: Conference Series, 2007, 76, 012063.	0.3	23
20	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.	2.5	22
21	Stereo Vision Sensing: Review of existing systems. , 2018, , .		22
22	Prototype of a secure wireless patient monitoring system for the medical community. Sensors and Actuators A: Physical, 2012, 173, 55-65.	2.0	19
23	Object recognition within smart manufacturing. Procedia Manufacturing, 2019, 38, 408-414.	1.9	17
24	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.	2.0	15
25	An Overview of Popular Digital Image Processing Filtering Operations. , 2019, , .		15
26	Coexistence measurements and analysis of IEEE 802.15.4 with Wi-Fi and bluetooth for vehicle networks. , 2012, , .		14
27	Power Management in Operating Systems for Wireless Sensor Nodes. , 2007, , .		13
28	Configuration Tool for a Wireless Sensor Network Integrated Security Framework. Journal of Network and Systems Management, 2012, 20, 417-452.	3.3	13
29	2.4 GHz IEEE 802.15.4 channel interference classification algorithm running live on a sensor node. , 2012, , .		12
30	AES implementation on Xilinx FPGAs suitable for FPGA based WBSNs. , 2015, , .		12
31	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.	0.8	12
32	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, 265-286.	1.3	11
33	An Experimental Study of the Effects of External Physiological Parameters on the Photoplethysmography Signals in the Context of Local Blood Pressure (Hydrostatic Pressure) Tj ETQq1 1 0.7843142gBT /Overclock 10		10
34	Secure Hash Algorithm-3(SHA-3) implementation on Xilinx FPGAs, Suitable for IoT Applications. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-6.	0.4	10
35	Planning with parents for seriously ill children: Preliminary results on the development of the parental engagement scale. Palliative and Supportive Care, 2011, 9, 367-376.	0.6	9
36	An FPGA based reconfigurable IPsec ESP core suitable for IoT applications. , 2016, , .		9

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37	Remote acoustic analysis for tool condition monitoring. <i>Procedia Manufacturing</i> , 2019, 38, 840-847.	1.9	9
38	High Speed Implementation of a SHA-3 Core on Virtex-5 and Virtex-6 FPGAs. <i>Journal of Circuits, Systems and Computers</i> , 2016, 25, 1650069.	1.0	8
39	A Mote Interface for Fiber Optic Spectral Sensing With Real-Time Monitoring of the Marine Environment. <i>IEEE Sensors Journal</i> , 2013, 13, 2619-2625.	2.4	7
40	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, , .		7
41	Cloud computing and Internet of Things fusion: Cost issues. , 2017, , .		7
42	Can IoT escape Cloud QoS and Cost Pitfalls. , 2018, , .		7
43	Enabling secure time-series data sharing via homomorphic encryption in cloud-assisted IIoT. <i>Future Generation Computer Systems</i> , 2022, 133, 351-363.	4.9	7
44	A Survey of Authentication Mechanisms: Authentication for Ad-Hoc Wireless Sensor Networks. , 2007, , .		6
45	FPGA Based Reconfigurable IPSec AH Core Suitable for IoT Applications. , 2015, , .		6
46	Healthcare WSN: Cluster Elections and Selective Forwarding Defense. , 2015, , .		6
47	Secure and Efficient Key Coordination Algorithm for Line Topology Network Maintenance for Use in Maritime Wireless Sensor Networks. <i>Sensors</i> , 2016, 16, 2204.	2.1	6
48	An FPGA-based reconfigurable IPSec AH core with efficient implementation of SHA-3 for high speed IoT applications. <i>Security and Communication Networks</i> , 2016, 9, 3282-3295.	1.0	6
49	Hybrid Cloud SLAs for Industry 4.0: Bridging the Gap. <i>Annals of Emerging Technologies in Computing</i> , 2020, 4, 41-60.	1.0	6
50	Fibre-optic evanescent-wave field fluid concentration sensor. , 2009, , .		5
51	Bloom filter based data collection algorithm for wireless sensor networks. , 2017, , .		5
52	Trust security mechanism for maritime wireless sensor networks. <i>Concurrency Computation Practice and Experience</i> , 2017, 29, e3945.	1.4	5
53	An Efficient High Speed AES Implementation Using Traditional FPGA and LabVIEW FPGA Platforms. , 2018, , .		5
54	High Bandwidth Maritime Communication Systems – Review of Existing Solutions and New Proposals. , 2018, , .		5

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55	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.	0.4	5
56	A Simulated and Experimental Analysis of Evaporation Duct Effects on Microwave Communications in the Irish Sea. IEEE Transactions on Antennas and Propagation, 2022, 70, 4728-4737.	3.1	5
57	SoK: Context and Risk Aware Access Control for Zero Trust Systems. Security and Communication Networks, 2022, 2022, 1-20.	1.0	5
58	Investigation of binary liquid aqueous methanol and ethanol mixtures using meander-shaped fibre-optic evanescent-wave absorption sensors. , 2008, , .		4
59	Formal Verification of a Key Agreement Protocol for Wireless Sensor Networks. , 2012, , .		4
60	Memory storage administration of security encryption keys for line topology in maritime wireless sensor networks. , 2016, , .		4
61	Bloom filter-based efficient broadcast algorithm for the Internet of things. International Journal of Distributed Sensor Networks, 2017, 13, 155014771774974.	1.3	4
62	An efficient implementation of FPGA based high speed IPSec (AH/ESP) core. International Journal of Internet Protocol Technology, 2018, 11, 97.	0.2	4
63	Real-Time Secure/Unsecure Video Latency Measurement/Analysis with FPGA-Based Bump-in-the-Wire Security. Sensors, 2019, 19, 2984.	2.1	4
64	Integration of autonomous intelligent vehicles into manufacturing environments: Challenges. Procedia Manufacturing, 2019, 38, 1683-1690.	1.9	4
65	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.	1.3	4
66	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.	0.2	4
67	A tool for the security configuration of sensor networks. Journal of Physics: Conference Series, 2009, 178, 012043.	0.3	3
68	Security for Wireless Sensor Networks - Configuration Aid. Lecture Notes in Electrical Engineering, 2010, , 1-24.	0.3	3
69	Efficient High Speed Implementation of Secure Hash Algorithm-3 on Virtex-5 FPGA. , 2014, , .		3
70	Trust Security Mechanism for Marine Wireless Sensor Networks. , 0, , .		3
71	Bump in the wire (BITW) security solution for a marine ROV remote control application. Journal of Information Security and Applications, 2018, 38, 111-121.	1.8	3
72	Hybrid Cloud Computing QoS Glitches. , 2018, , .		3

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73	Resources Implications for Data Security in Wireless Sensor Network Nodes. , 2007, , .		2
74	On the logical verification of a group key agreement protocol for resource constrained mobile devices. , 2007, , .		2
75	Evaluation of key distribution protocols for use with wireless sensor networks. , 2009, , .		2
76	Low cost hydrocarbon spillage sensor for the marine environment with interfacing to a mote platform. , 2011, , .		2
77	Underwater pressure measurement using fibre optic extrinsic Fabry-Perot interferometric (EFPI) sensors. , 2014, , .		2
78	Medical WSN: Defense for selective forwarding attack. , 2015, , .		2
79	FPGA Based Real Time 'Secure' Body Temperature Monitoring Suitable for WBSN. , 2015, , .		2
80	Medical WSN: Power, routing and selective forwarding defense. , 2015, , .		2
81	Review and evaluation of WSN simulation tools in a cloud based environment. , 2016, , .		2
82	Reconfiguration of neighbouring nodes in coastal monitoring wireless sensor networks based on leader node recommendation. , 2017, , .		2
83	An Experimental Study of the Effects of the Evaporation Duct on Microwave Propagation. , 2019, , .		2
84	LabVIEW-FPGA based implementation of an Authenticated Encryption core. , 2019, , .		2
85	Federated Hybrid Clouds Service Level Agreements and Legal Issues. Advances in Intelligent Systems and Computing, 2019, , 471-486.	0.5	2
86	A multi-wavelength discriminating sensor with a wireless mote interface for aquatic pollution monitoring. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-4.	0.4	2
87	Cluster head election and rotation for medical-based wireless sensor networks. , 2017, , .		2
88	Hybrid Multi-Cloud Demystifying SLAs for Smart City Enterprises Using IoT Applications. Advances in Computer and Electrical Engineering Book Series, 2020, , 52-67.	0.2	2
89	Realisation of a minimum-knowledge identification and signature scheme. Computers and Security, 1998, 17, 253-264.	4.0	1
90	Key handling in wireless sensor networks. Journal of Physics: Conference Series, 2007, 76, 012060.	0.3	1

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91	On the Formal Verification of the SNEP Key Agreement Protocol for Wireless Sensor Networks. , 2007, , .		1
92	The Impact of Java and Public Key Cryptography in Wireless Sensor Networking. , 2008, , .		1
93	Power considerations when using high capacity data storage on wireless sensor motes. , 2009, , .		1
94	On the (im)possibility of denial of service attacks exploiting authentication overhead in WSNs. , 2009, , .		1
95	Setting up secure wireless sensor networks. , 2009, , .		1
96	Development of a prototyping platform for the integration of multiple fiber optic sensing devices to a SHIMMER&lt;sup>&#x2122;&lt;/sup> system for in-situ maritime monitoring.. , 2009, , .		1
97	Novel passive fibre-cavity design for ring-down experiments using a multimode optical waveguide. , 2009, , .		1
98	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
99	MARSSeNs: A modular architecture for the security of sensor networks. , 2011, , .		1
100	Development of a discriminating fibre optic sensing array for wireless real time analysis of the maritime environment. , 2012, , .		1
101	Logboat â€” A simulation framework enabling CAN security assessments. , 2016, , .		1
102	Implementing Secure Key Coordination Scheme for Line Topology Wireless Sensor Networks. , 0, , .		1
103	A comparative study of Image Filters and Machine Learning for use in Machined Part Recognition. , 2019, , .		1
104	The Stream Exchange Protocol: A Secure and Lightweight Tool for Decentralized Connection Establishment. Sensors, 2021, 21, 4969.	2.1	1
105	Wireless Sensor Node Hardware. , 2014, , 1-15.		1
106	Medical IoT systems: architecture and security. , 0, , .		1
107	Comparison and overview of Wireless sensor network systems for Medical Applications. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-6.	0.4	1
108	Secure Time Series Data Sharing with Fine-Grained Access Control in Cloud-Enabled IIoT. , 2022, , .		1

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109	Learning, self-scheduling TDMA (LeSS-TDMA) for wireless sensor networks. , 2008, , .		0
110	SENSORCOMM 2008 Preface. , 2008, , .		0
111	Learning, self-scheduling TDMA (LeSS-TDMA) for sensor networks. , 2008, , .		0
112	Novel multimode fibre-cavity for ring-down experiments. , 2009, , .		0
113	Review of platforms and security protocols suitable for wireless sensor networks. , 2009, , .		0
114	Selection application for platforms and security protocols suitable for wireless sensor networks. Journal of Physics: Conference Series, 2009, 178, 012034.	0.3	0
115	A novel and scalable key management scheme for wireless sensor networks. , 2010, , .		0
116	Large-core fibre-cavity design for ring-down experiments. , 2010, , .		0
117	Towards integrated security for sensor network applications. , 2010, , .		0
118	Logically Optimized Smallest FPGA Architecture for SHA- 3 Core. Communications in Computer and Information Science, 2014, , 195-203.	0.4	0
119	An optical fibre sensor for combined point pressure measurement and spatially resolved temperature measurement. , 2015, , .		0
120	Optical fibre multi-parameter sensing with secure cloud based signal capture and processing. Proceedings of SPIE, 2016, , .	0.8	0
121	Foreword by Guest Editors for the Special Issue on the 2016 Global Conference on Wireless and Optical Communications (GCWOC™16). Wireless Personal Communications, 2017, 95, 215-221.	1.8	0
122	Future Proofing IoT Embedded Platforms for Cryptographic Primitives Support. , 2018, , .		0
123	Middleware Application, Suitable to Build an Automated and Connected Smart Manufacturing Environment. , 0, , .		0
124	Optical fibre pressure sensors based on Extrinsic Fabry Perot Interferometer (EFPI) for the depth Control in marine environment. , 2015, , .		0
125	An efficient implementation of FPGA based high speed IPSec (AH/ESP) core. International Journal of Internet Protocol Technology, 2018, 11, 97.	0.2	0
126	ICST 2018 Welcome Message. , 2018, , .		0



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127	Marine based Wireless Sensor Networks: Challenges and Requirements. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-5.	0.4	0
128	SmartCrypt: Secure Storing and Sharing of Time Series Data Streams in IIoT. , 2022, , .		0