The Future of Industrial Communication: Automation N of Things and Industry 4.0

IEEE Industrial Electronics Magazine

11, 17-27

DOI: 10.1109/mie.2017.2649104

Citation Report

#	Article	IF	Citations
1	Guest Editorial Special Section on Communications in Automationâ€“Innovation Drivers and New Trends. IEEE Transactions on Industrial Informatics, 2017, 13, 841-845.	7.2	5
2	Wireless High-Performance Communications: The Challenges and Opportunities of a New Target. IEEE Industrial Electronics Magazine, 2017, 11, 20-25.	2.3	83
3	A 0.5 V fully differential transimpedance amplifier in 65-nm CMOS technology. , 2017, , .		1
4	The Internet of Things: The Role of Reconfigurable Platforms. IEEE Industrial Electronics Magazine, 2017, 11, 6-19.	2.3	38
5	Towards monitoring of hybrid industrial networks. , 2017, , .		5
6	Smart metrology: the importance of metrology of decisions in the big data era. IEEE Instrumentation and Measurement Magazine, 2017, 20, 22-29.	1.2	19
7	Guest Editorial Special Section on New Perspectives on Wireless Communications in Automation: From Industrial Monitoring and Control to Cyber-Physical Systems. IEEE Transactions on Industrial Informatics, 2017, 13, 1393-1397.	7.2	19
8	Resource Optimization of Wireless Information and Energy Supply Control Systems With Massive MIMO. IEEE Communications Letters, 2017, 21, 2734-2737.	2.5	4
9	Challenges: Bridge between cloud and IoT. , 2017, , .		21
10	Industrial robotics in factory automation: From the early stage to the Internet of Things. , 2017, , .		64
11	The Prism: Efficient Signal Processing for the Internet of Things. IEEE Industrial Electronics Magazine, 2017, 11, 22-32.	2.3	26
12	Automatic mapping of cyber security requirements to support network slicing in software-defined networks. , 2017, , .		10
13	Changes to the automation architecture: Impact of technology on control systems algorithms. , 2017, , .		4
14	Enabling wireless technologies for industry 4.0: State of the art. , 2017, , .		30
15	Associative synthesis of finite state automata model of a controlled object with hyperdimensional computing. , 2017, , .		21
16	Open Source SCADA System for Advanced Monitoring of Industrial Processes. , 2017, , .		14
17	Performance Analysis of Reconfigurable Bandpass Filters With Continuously Tunable Center Frequency and Bandwidth. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4572-4583.	2.9	48
18	A multilayer link quality estimator for reliable machine-to-machine communication. , 2017, , .		0

#	Article	IF	Citations
19	Analysis of OPC unified architecture for healthcare applications. , 2017, , .		4
20	Multi-tier multi-access edge computing: The role for the fourth industrial revolution. , 2017, , .		38
21	Past, present and future trends in industrial electronics standardization. , 2017, , .		7
22	ARCNET Never Received Enough Credit [History]. IEEE Industry Applications Magazine, 2017, 23, 7-13.	0.3	0
23	Massive MIMO Unlicensed for High-Performance Indoor Networks. , 2017, , .		3
24	An architecture for implementing private local automation clouds built by CPS. , 2017, , .		12
25	Proof of Concept of Home IoT Connected Vehicles. Sensors, 2017, 17, 1289.	2.1	20
26	Performance Analysis of CSMA/CA and PCA for Time Critical Industrial IoT Applications. IEEE Transactions on Industrial Informatics, 2018, 14, 2281-2293.	7.2	22
27	Unicast QoS Routing Algorithms for SDN: A Comprehensive Survey and Performance Evaluation. IEEE Communications Surveys and Tutorials, 2018, 20, 388-415.	24.8	121
28	Precise Clock Synchronization in High Performance Wireless Communication for Time Sensitive Networking. IEEE Access, 2018, 6, 8944-8953.	2.6	37
29	Integrity for an Event Notification Within the Industrial Internet of Things by Using Group Signatures. IEEE Transactions on Industrial Informatics, 2018, 14, 3669-3678.	7.2	26
30	Broadcast tree construction framework in tactile internet via dynamic algorithm. Journal of Systems and Software, 2018, 136, 59-73.	3.3	9
31	Industrial Communication based on Modbus and Node-RED. Procedia Computer Science, 2018, 130, 583-588.	1.2	38
32	A Novel Mobile and Hierarchical Data Transmission Architecture for Smart Factories. IEEE Transactions on Industrial Informatics, 2018, 14, 3534-3546.	7.2	49
33	A smart energy harvester for axial-force measurements in vibrating environments. , 2018, , .		1
34	Evaluating challenges to Industry 4.0 initiatives for supply chain sustainability in emerging economies. Chemical Engineering Research and Design, 2018, 117, 168-179.	2.7	536
35	Dominating Set Algorithms for Wireless Sensor Networks Survivability. IEEE Access, 2018, 6, 17527-17532.	2.6	52
36	Engineering modeling for cyber physical systems. , 2018, , .		5

#	Article	IF	Citations
37	Industrial Cyberphysical Systems: Realizing Cloud-Based Big Data Infrastructures. IEEE Industrial Electronics Magazine, 2018, 12, 25-35.	2.3	73
38	<inline-formula> <tex-math notation="LaTeX">${mathsf{ENCLOSE}}$</tex-math> </inline-formula>: An Enhanced Wireless Interface for Communication in Factory Automation Networks. IEEE Transactions on Industrial Informatics, 2018, 14, 5346-5358.	7.2	16
39	IWSN Based on DWPT Using an Industrial Noisy Channel for Industry 4.0 Wireless Applications. , 2018, , .		0
40	Variable-Speed-Drive-Based Estimation of the Leakage Rate in Compressed Air Systems. IEEE Transactions on Industrial Electronics, 2018, 65, 8906-8914.	5.2	4
41	A software defined hierarchical communication and data management architecture for industry 4.0. , 2018, , .		15
42	Internet of Things for Smart Manufacturing System: Trust Issues in Resource Allocation. IEEE Internet of Things Journal, 2018, 5, 4418-4427.	5.5	56
43	Novel Power Management Scheme and Effects of Constrained On-Node Storage on Performance of MAC Layer for Industrial IoT Networks. IEEE Transactions on Industrial Informatics, 2018, 14, 2146-2158.	7.2	19
44	MQRP: Mobile sinks-based QoS-aware data gathering protocol for wireless sensor networks-based smart grid applications in the context of industry 4.0-based on internet of things. Future Generation Computer Systems, 2018, 82, 358-374.	4.9	52
45	Development of the digital model of the jewellery production process for resource optimisation and prediction. HKIE Transactions, 2018, 25, 229-236.	1.9	7
46	C-RAN Traffic Aggregation on Latency-Controlled Ethernet Links. Applied Sciences (Switzerland), 2018, 8, 2279.	1.3	3
47	Fundamental Constraints for Time-Slotted MAC Design in Wireless High Performance: The Realistic Perspective of Timing. , 2018, , .		2
48	An Overview of Trends and Developments of Internet of Things Applied to Industrial Systems. , 2018, , .		6
49	Future Networks 2030: Architecture & Requirements. , 2018, , .		82
50	An Adaptive Approach Based on Resource-Awareness Towards Power-Efficient Real-Time Periodic Task Modeling on Embedded IoT Devices. Processes, 2018, 6, 90.	1.3	32
51	Development of the iBeaconâ€™s Positioning Algorithm for Indoor Scenarios. , 2018, , .		11
53	Development of an Internet of Things Gateway Applied to a Multitask Industrial Plant. , 2018, , .		9
54	Real-time Performance Evaluation of LTE for IIoT. , 2018, , .		21
55	Wireless Sensor Networks in Industry 4.0: WirelessHART and ISA100.11a. , 2018, , .		6

#	Article	IF	Citations
56	Development of a QoS Provisioning Capable Cost-Effective SDN-based Switch for IoT Communication. , 2018, , .		3
57	Wireless Industrial Networks under Interference Conditions based on IEEE 802.15.4. , 2018, , .		2
58	Evaluation of the MQTT Protocol Latency over Different Gateways. , 2018, , .		5
59	A Microservice Architecture for the Industrial Internet-Of-Things. , 2018, , .		19
60	Realizing 5G vision through Cloud RAN: technologies, challenges, and trends. Eurasip Journal on Wireless Communications and Networking, 2018, 2018, .	1.5	39
61	Security-Enhanced Relay and Jammer Selection for Energy-Harvesting IoT Networks. , 2018, , .		1
62	Optimization of Real-Time Transmission Reliability on Wireless Industrial Automation Networks. , 2018, , .		3
63	Developing Secure IoT Services: A Security-Oriented Review of IoT Platforms. Symmetry, 2018, 10, 669.	1.1	15
64	An OPC UA Multi-Server Aggregator with Cache Management. , 2018, , .		5
65	Deep Learning Based Massive MIMO Beamforming for 5G Mobile Network. , 2018, , .		49
66	Real- Time Capable Internet Technologies for Wired Communication in the Industrial IoT-a Survey. , 2018, , .		4
67	Cloud-based Plug and Work architecture of the IIC Testbed Smart Factory Web. , 2018, , .		17
68	TTEthernet Transmission in Software-Defined Distributed Robot Intelligent Control System. Wireless Communications and Mobile Computing, 2018, 2018, 1-13.	0.8	3
69	IoT-Based Distributed Networked Control Systems Architecture. , 2018, , .		4
70	Latency evaluation for MQTT and WebSocket Protocols: an Industry 4.0 perspective. , 2018, , .		22
71	Applying Socket on Connecting EtherCAT and OpenPLC. , 2018, , .		0
72	Assessing the Impact of Full-Duplex Wireless in Real-Time Industrial Networks. , 2018, , .		1
73	An Embedded Cascade SVM Approach for face detection in the IoT Edge Layer. , 2018, , .		4

#	Article	IF	Citations
74	Monitoring of Intellectual Manufacturing as a Main Factor of the Cyber-Physical Building Systems Development. , 2018, , .		1
75	Development of a Smart Acceleration Measurement Unit for Industry 4.0. , 2018, , .		3
76	Network Service Slicing Supporting Ubiquitous Access in Passive Optical Networks. , 2018, , .		4
77	Emerging Trends in Hybrid Wireless Communication and Data Management for the Industry 4.0. Electronics (Switzerland), 2018, 7, 400.	1.8	32
78	RFC 4944: Per-Hop Fragmentation and Reassembly Issues. , 2018, , .		7
79	Industrial Wireless Systems Guidelines: Practical Considerations and Deployment Life Cycle. IEEE Industrial Electronics Magazine, 2018, 12, 6-17.	2.3	38
80	A Survey on Industrial Internet of Things: A Cyber-Physical Systems Perspective. IEEE Access, 2018, 6, 78238-78259.	2.6	384
81	Real-Time Wireless Vibration Monitoring Using SAW RFID Tags Coupled with Sensors. , 2018, , .		1
82	Bird Counting and Climate Monitoring using LoRaWAN in Swiftlet Farming for IR4.0 Applications. , 2018, , .		2
83	Automated Monitoring and LoRaWAN Control Mechanism for Swiftlet Bird House. , 2018, , .		3
84	A survey on the Development and Challenges of the Internet of Things (IoT) in China. , 2018, , .		9
85	Networked Electric Drives in the Industry 4.0. , 2018, , .		2
86	Towards Autonomic Mobile Network Operators. , 2018, , .		1
87	Distributed monitoring of heterogeneous robotic cells. A proposal for the footwear industry 4.0. International Journal of Computer Integrated Manufacturing, 2018, 31, 1205-1219.	2.9	14
88	Function-Aware Anomaly Detection Based on Wavelet Neural Network for Industrial Control Communication. Security and Communication Networks, 2018, 2018, 1-11.	1.0	5
89	Performance Modeling of IEEE 802.15.4-TSCH with Shared Access and ON-OFF traffic. , 2018, , .		3
90	The Internet of Things, Fog and Cloud continuum: Integration and challenges. Internet of Things (Netherlands), 2018, 3-4, 134-155.	4.9	195
91	A Customer Feedback Platform for Vehicle Manufacturing Compliant with Industry 4.0 Vision. Sensors, 2018, 18, 3298.	2.1	37

#	Article	IF	Citations
92	5G as Enabler for Industrie 4.0 Use Cases: Challenges and Concepts. , 2018, , .		38
93	Multivariate Sensor Data Analysis for Oil Refineries and Multi-mode Identification of System Behavior in Real-time. IEEE Access, 2018, 6, 64389-64405.	2.6	23
94	A OneM2M-Compliant Stacked Middleware Promoting IoT Research and Development. IEEE Access, 2018, 6, 63546-63559.	2.6	10
95	VR-CPES: A Novel Cyber-Physical Education Systems for Interactive VR Services Based on a Mobile Platform. Mobile Information Systems, 2018, 2018, 1-10.	0.4	6
96	Market Dynamics and Security Considerations of 5G. Journal of ICT Standardization, 2018, 5, 225-250.	0.6	1
97	Software- Defined Networking as an Enabler for Future Industrial Network Management. , 2018, , .		23
98	Towards the Adoption of Cyber-Physical Systems of Systems Paradigm in Smart Manufacturing Environments. , 2018, , .		14
99	Empirical Analysis of the Communication in Industrial Environment Based on G3-Power Line Communication and Influences from Electrical Grid. Electronics (Switzerland), 2018, 7, 194.	1.8	12
100	Leveraging OPC-UA discovery by software-defined networking and network function virtualization. , 2018, , .		3
101	Impact of Quality of Service on Cloud Based Industrial IoT Applications with OPC UA. Electronics (Switzerland), 2018, 7, 109.	1.8	52
102	Role-based visualization of industrial IoT-based systems. , 2018, , .		9
103	Security and Privacy for the Industrial Internet of Things: An Overview of Approaches to Safeguarding Endpoints. IEEE Signal Processing Magazine, 2018, 35, 76-87.	4.6	53
104	Smart grid communication and information technologies in the perspective of Industry 4.0: Opportunities and challenges. Computer Science Review, 2018, 30, 1-30.	10.2	251
105	Complex-Domain Super MDS: A New Framework for Wireless Localization With Hybrid Information. IEEE Transactions on Wireless Communications, 2018, 17, 7364-7378.	6.1	6
106	Intelligent Data Flow Management Based on Optical Label Switching Technology for Photonic Transport Network. , 2018, , .		0
107	Network Slicing in Industry 4.0 Applications: Abstraction Methods and End-to-End Analysis. IEEE Transactions on Industrial Informatics, 2018, 14, 5419-5427.	7.2	79
108	Industrial data-collector by enabling OPC-UA standard for Industry 4.0. , 2018, , .		9
109	The future of manufacturing industry: a strategic roadmap toward Industry 4.0. Journal of Manufacturing Technology Management, 2018, 29, 910-936.	3.3	839

#	Article	IF	Citations
110	Multistage Dynamic Packet Access Mechanism of Internet of Things. Mobile Information Systems, 2018, 2018, 1-16.	0.4	1
111	Industrial Internet of Things: Challenges, Opportunities, and Directions. IEEE Transactions on Industrial Informatics, 2018, 14, 4724-4734.	7.2	1,418
112	Maximizing industrial IoT network lifetime under latency constraints through edge data distribution. , 2018, , .		21
113	Towards hybrid wired-wireless networks in industrial applications. , 2018, , .		9
114	New Trends in the Practical Deployment of Industrial Wireless: From Noncritical to Critical Use Cases. IEEE Industrial Electronics Magazine, 2018, 12, 50-58.	2.3	60
115	A novel deep learning method for aircraft landing speed prediction based on cloud-based sensor data. Future Generation Computer Systems, 2018, 88, 552-558.	4.9	33
116	Towards the deployment of cloud robotics at factory shop floors: A prototype for smart material handling. , 2018, , .		12
117	QoS-Driven Adaptive Trust Service Coordination in the Industrial Internet of Things. Sensors, 2018, 18, 2449.	2.1	6
118	Internet of Nano-Things, Things and Everything: Future Growth Trends. Future Internet, 2018, 10, 68.	2.4	113
119	Smart Pedestrian Crossing Management at Traffic Light Junctions through a Fuzzy-Based Approach. Future Internet, 2018, 10, 15.	2.4	52
120	How Data Will Transform Industrial Processes: Crowdsensing, Crowdsourcing and Big Data as Pillars of Industry 4.0. Future Internet, 2018, 10, 24.	2.4	98
121	Design patterns for the industrial Internet of Things. , 2018, , .		58
122	Towards integration of Industrial Ethernet with 5G mobile networks. , 2018, , .		29
123	Modelling and automatic mapping of cyber security requirements for industrial applications: Survey, problem exposition, and research focus. , 2018, , .		7
124	A Calibrated Test-Set for Measurement of Access-Point Time Specifications in Hybrid Wired/Wireless Industrial Communication â€. Information (Switzerland), 2018, 9, 122.	1.7	1
125	Integration of Sensor and Actuator Networks and the SCADA System to Promote the Migration of the Legacy Flexible Manufacturing System towards the Industry 4.0 Concept. Journal of Sensor and Actuator Networks, 2018, 7, 23.	2.3	43
126	Efficient Deployment of Key Nodes for Optimal Coverage of Industrial Mobile Wireless Networks. Sensors, 2018, 18, 545.	2.1	9
127	Concept for the coexistence of standard and Real-time Ethernet. , 2018, , .		4

#	Article	IF	Citations
128	Application of Internet of Things Technology and Convolutional Neural Network Model in Bridge Crack Detection. IEEE Access, 2018, 6, 39442-39451.	2.6	47
129	Prism signal processing for machine condition monitoring I: Design and simulation. , 2018, , .		7
130	Anomaly Detection in Nanofibrous Materials by CNN-Based Self-Similarity. Sensors, 2018, 18, 209.	2.1	194
131	A Review on Human-Centered IoT-Connected Smart Labels for the Industry 4.0. IEEE Access, 2018, 6, 25939-25957.	2.6	117
132	Communication Abstraction Supports Network Resource Virtualisation in Automation. , 2018, , .		7
133	Stealthy Attacks in Cloud-Connected Linear Impulsive Systems. , 2018, , .		5
134	Experimental Analysis of the Efficiency of Shared Access in IEEE802.15.4-TSCH Networks with Sporadic Traffic. , 2018, , .		2
135	Industrial Data Space Architecture Implementation Using FIWARE. Sensors, 2018, 18, 2226.	2.1	44
136	Indoor massive MIMO deployments for uniformly high wireless capacity. , 2018, , .		4
137	An overview of current technologies and emerging trends in factory automation. International Journal of Production Research, 2019, 57, 5047-5067.	4.9	70
138	A Deception Model Robust to Eavesdropping Over Communication for Social Network Systems. IEEE Access, 2019, 7, 100881-100898.	2.6	19
139	Leveraging Industrial Communication in Technical Training Systems. , 2019, , .		1
140	A Hybrid Approach Using Oversampling Technique and Cost-Sensitive Learning for Bankruptcy Prediction. Complexity, 2019, 2019, 1-12.	0.9	51
141	A Real-Time Health 4.0 Framework with Novel Feature Extraction and Classification for Brain-Controlled IoT-Enabled Environments. Neural Computation, 2019, 31, 1915-1944.	1.3	2
142	Industrial wireless sensor and actuator networks in industry 4.0: Exploring requirements, protocols, and challengesâ€"A MAC survey. International Journal of Communication Systems, 2019, 32, e4074.	1.6	33
143	Design of 5G Dual-Antenna Passive Repeater Based On Machine Learning. , 2019, , .		7
144	Topology Detection as a Base for Efficient Management of Heterogeneous Industrial Network Systems Using Software-Defined Networking. , 2019, , .		4
145	Industrial IoT Projects Based on Automation Pyramid: Constraints and Minimum Requirements. Computer Communications and Networks, 2019, , 121-142.	0.8	2

#	Article	IF	Citations
146	The Direction of Industry: A Literature Review on Industry 4.0. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 2129-2138.	0.6	33
147	Sustainable Development Challenges and Risks of Industry 4.0: A literature review. , 2019, , .		24
148	Multi-Source Heterogeneous Core Data Acquisition Method in Edge Computing Nodes. , 2019, , .		4
149	Building Wireless Control Applications with XBee and LabVIEW. Applied Sciences (Switzerland), 2019, 9, 2379.	1.3	7
150	Blockchain Empowered Resource Trading in Mobile Edge Computing and Networks. , 2019, , .		23
151	Real-time networks and protocols for factory automation and process control systems [scanning the issue]. Proceedings of the IEEE, 2019, 107, 939-943.	16.4	10
152	A Deep Learning Approach for Fusing Sensor Data from Screw Compressors. Sensors, 2019, 19, 2868.	2.1	9
153	Open Source Fog Architecture for Industrial IoT Automation Based on Industrial Protocols. , 2019, , .		2
154	Rate-Based Dynamic Shortest Path Algorithm for Efficiently Routing Multiple Flows in SDN. , 2019, , .		8
155	On the Evaluation of the NB-IoT Random Access Procedure in Monitoring Infrastructures. Sensors, 2019, 19, 3237.	2.1	28
156	A Temporally Hierarchical Deployment Architecture for an Enhanced Name Resolution System. Applied Sciences (Switzerland), 2019, 9, 2891.	1.3	4
157	Homomorphic Encryption and Network Coding in IoT Architectures: Advantages and Future Challenges. Electronics (Switzerland), 2019, 8, 827.	1.8	37
158	LBS: A Beacon Synchronization Scheme With Higher Schedulability for IEEE 802.15.4 Cluster-Tree-Based IoT Applications. IEEE Internet of Things Journal, 2019, 6, 8883-8896.	5.5	16
159	System of Sensors and Actuators for the Production of Water Used in the Manufacture of Medicines. Sensors, 2019, 19, 4488.	2.1	3
160	Software-defined Flow Reservation: Configuring IEEE 802.1Q Time-Sensitive Networks by the Use of Software-Defined Networking. , 2019, , .		21
161	Integration of open source hardware Arduino platform in automation systems applied to Smart Grids/Micro-Grids. Sustainable Energy Technologies and Assessments, 2019, 36, 100557.	1.7	33
162	Adoption of digital technologies of smart manufacturing in SMEs. Journal of Industrial Information Integration, 2019, 16, 100107.	4.3	123
163	Micro-Operator driven Local 5G Network Architecture for Industrial Internet. , 2019, , .		25

#	Article	IF	Citations
164	Consensus-based decision making in non-linearly multi-coupled IoT networked SLAM operations. International Journal of Electrical Engineering and Education, 2019, , 002072091988379.	0.4	3
165	A Novel Data Processing Technique for Expert Resonant Nano-Pillars Transducers: A Case Study Measuring Ethanol in Water and Wine Liquid Matrices. IEEE Access, 2019, 7, 129778-129788.	2.6	7
166	Moveable Production Systems for Sustainable Development and Trade: Limitations, Opportunities and Barriers. Sustainability, 2019, 11, 5154.	1.6	9
167	Latency Performance of 5G New Radio for Critical Industrial Control Systems. , 2019, , .		13
168	Stateâ€ofâ€theâ€Art and Future Challenges of UV Curable Polymerâ€Based Smart Materials for Printing Technologies. Advanced Materials Technologies, 2019, 4, 1800618.	3.0	203
169	Application and Experiments of 5G Technology Powered Industrial Internet. , 2019, , .		4
170	A Perspective on Wireless M-Bus for Smart Electricity Grids. , 2019, , .		4
171	Time-Sensitive Network Technology and Its Application in Energy Internet. , 2019, , .		3
172	Data Management in Industry 4.0: State of the Art and Open Challenges. IEEE Access, 2019, 7, 97052-97093.	2.6	99
173	Minimization of Energy Consumption Per Bit Using an Average Dwell-Time Approach for Wireless Networked Control Systems. IEEE Access, 2019, 7, 81839-81848.	2.6	3
174	Control as a Service: A Microservice Approach to Industry 4.0. , 2019, , .		13
175	Putting 5G into Production: Realizing a Smart Manufacturing Vertical Scenario. , 2019, , .		13
176	On the Design of a Wireless MES Solution for the Factories of the Future. , 2019, , .		4
177	Utilizing SDN Infrastructure to provide Smart Services from the Factory to the Cloud. , 2019, , .		5
178	Enabling Multi-Functional 5G and Beyond User Equipment: A Survey and Tutorial. IEEE Access, 2019, 7, 116975-117008.	2.6	82
179	The role of comprehensive function models in the management of heterogeneous industrial networks. , 2019, , .		0
180	Business Process Logic Controller: Business Process-aware Network Optimization for Smart Manufacturing. , 2019, , .		2
181	A Survey on Information and Communication Technologies for Industry 4.0: State-of-the-Art, Taxonomies, Perspectives, and Challenges. IEEE Communications Surveys and Tutorials, 2019, 21, 3467-3501.	24.8	216

#	Article	IF	Citations
182	Performance Evaluation of Generalized Frequency Division Multiplexing Systems Over Non-Linearities With Memory. IEEE Access, 2019, 7, 119131-119139.	2.6	4
183	Process Control with IIoT Capabilities of the Hollow Cathode Plasma Nitriding. , 2019, , .		3
184	Threat Management in Data-centric IoT-Based Collaborative Systems. ACM Transactions on Internet Technology, 2019, 19, 1-19.	3.0	3
185	ASAP: A Decentralized Slot Reservation Policy for Dynamic 6TiSCH Networks in Industrial IoT. , 2019, , .		8
186	Future Internet: trends and challenges. Frontiers of Information Technology and Electronic Engineering, 2019, 20, 1185-1194.	1.5	12
187	A novel online state-based anomaly detection system for process control networks. International Journal of Critical Infrastructure Protection, 2019, 27, 100323.	2.9	8
188	Design and Applications of Agile Factory AaaS Architecture Based on Container-based Virtualized Automation Control Unit. Procedia Computer Science, 2019, 151, 622-629.	1.2	5
189	Developing Safety Cultures for Industry 4.0. New Challenges for Professional Communication. , 2019, , .		3
190	Concept for Continuously Tunable Output Filters for Digital Transmitter Architectures. IEEE Access, 2019, 7, 123490-123504.	2.6	3
191	Dynamic Resource Discovery and Management for Edge Computing Based on SPF for HADR Operations. , 2019, , .		5
192	Marketing Innovations in Industry 4.0 and Their Impacts on Current Enterprises. Applied Sciences (Switzerland), 2019, 9, 3685.	1.3	14
193	A Blockchain-Based Solution for Enhancing Security and Privacy in Smart Factory. IEEE Transactions on Industrial Informatics, 2019, 15, 3652-3660.	7.2	242
194	A proactive task dispatching method based on future bottleneck prediction for the smart factory. International Journal of Computer Integrated Manufacturing, 2019, 32, 278-293.	2.9	42
195	A Blockchain-Enabled Trustless Crowd-Intelligence Ecosystem on Mobile Edge Computing. IEEE Transactions on Industrial Informatics, 2019, 15, 3538-3547.	7.2	102
196	Toward Cloud-Assisted Industrial IoT Platform for Large-Scale Continuous Condition Monitoring. Proceedings of the IEEE, 2019, 107, 1193-1205.	16.4	47
197	Performance, farmer perception, and the routinisation (RO) moderation on ERP post-implementation. Heliyon, 2019, 5, e01784.	1.4	11
198	Urban challenges and opportunities to promote sustainable food security through smart cities and the 4th industrial revolution. Land Use Policy, 2019, 87, 104065.	2.5	60
199	Multipath aware scheduling for high reliability and fault tolerance in low power industrial networks. Journal of Network and Computer Applications, 2019, 142, 25-36.	5.8	17

#	Article	IF	Citations
201	Bibliometric Analysis of Published Literature on Industry 4.0. , 2019, , .		21
202	Industrial Communication Systems and Their Future Challenges: Next-Generation Ethernet, IIoT, and 5G. Proceedings of the IEEE, 2019, 107, 944-961.	16.4	236
203	DA-DRLS: Drift adaptive deep reinforcement learning based scheduling for IoT resource management. Journal of Network and Computer Applications, 2019, 138, 51-65.	5.8	29
204	Industry 4.0: Emerging themes and future research avenues using a text mining approach. Computers in Industry, 2019, 109, 100-113.	5.7	156
205	Programmable intelligent spaces for IndustryÂ4.0: Indoor visual localization driving attocell networks. Transactions on Emerging Telecommunications Technologies, 2019, 30, e3610.	2.6	5
206	Performance Analysis of RF Energy Harvesting and Information Transmission Based on NOMA With Interfering Signal for IoT Relay Systems. IEEE Sensors Journal, 2019, 19, 7668-7682.	2.4	50
207	Improving devices communication in Industry 4.0 wireless networks. Engineering Applications of Artificial Intelligence, 2019, 83, 1-12.	4.3	26
208	An Approach to Supporting the Selection of Maintenance Experts in the Context of Industry 4.0. Applied Sciences (Switzerland), 2019, 9, 1848.	1.3	14
209	A Literature Survey on Open Platform Communications (OPC) Applied to Advanced Industrial Environments. Electronics (Switzerland), 2019, 8, 510.	1.8	68
210	Discrete Wavelet Packet Transform-Based Industrial Digital Wireless Communication Systems. Information (Switzerland), 2019, 10, 104.	1.7	12
211	Industry 4.0 applications in medical field: A brief review. Current Medicine Research and Practice, 2019, 9, 102-109.	0.1	154
212	Training a Hidden Markov Model-Based Knowledge Model for Autonomous Manufacturing Resources Allocation in Smart Shop Floors. IEEE Access, 2019, 7, 47366-47378.	2.6	6
213	An Intelligent Fuzzing Data Generation Method Based on Deep Adversarial Learning. IEEE Access, 2019, 7, 49327-49340.	2.6	27
214	Control Aware Radio Resource Allocation in Low Latency Wireless Control Systems. IEEE Internet of Things Journal, 2019, 6, 7878-7890.	5.5	43
215	An Effective Spectrum Handoff Based on Reinforcement Learning for Target Channel Selection in the Industrial Internet of Things. Sensors, 2019, 19, 1395.	2.1	17
216	Artificial Neural Networks Application to Support Plant Operation in the Wastewater Industry. IFIP Advances in Information and Communication Technology, 2019, , 257-265.	0.5	2
217	System architectures for Industrie 4.0 applications. Production Engineering, 2019, 13, 247-257.	1.1	64
218	Methodology for the development of in-line optical surface measuring instruments with a case study for additive surface finishing. Optics and Lasers in Engineering, 2019, 121, 271-288.	2.0	19

#	Article	IF	Citations
219	A Square Peg in a Round Hole: The Complex Path for Wireless in the Manufacturing Industry. IEEE Communications Magazine, 2019, 57, 109-115.	4.9	24
220	On the Combination of Multi-Cloud and Network Coding for Cost-Efficient Storage in Industrial Applications. Sensors, 2019, 19, 1673.	2.1	11
221	Industrial Communication Networks and the Future of Industrial Automation. , 2019, , .		7
222	Wireless Network Design for Emerging IIoT Applications: Reference Framework and Use Cases. Proceedings of the IEEE, 2019, 107, 1166-1192.	16.4	40
223	The role of big data analytics in industrial Internet of Things. Future Generation Computer Systems, 2019, 99, 247-259.	4.9	234
224	A Perspective on IEEE Time-Sensitive Networking for Industrial Communication and Automation Systems. Proceedings of the IEEE, 2019, 107, 1094-1120.	16.4	199
225	Whitelisting Without Collisions for Centralized Scheduling in Wireless Industrial Networks. IEEE Internet of Things Journal, 2019, 6, 5713-5721.	5.5	14
226	Coexistence Standardization of Operation Technology and Information Technology. Proceedings of the IEEE, 2019, 107, 962-976.	16.4	26
227	What happens when decision support systems fail? â€" the importance of usability on performance in erroneous systems. Behaviour and Information Technology, 2019, 38, 1225-1242.	2.5	25
228	Deep Learning Empowered Task Offloading for Mobile Edge Computing in Urban Informatics. IEEE Internet of Things Journal, 2019, 6, 7635-7647.	5.5	230
229	High-Reliability and Low-Latency Wireless Communication for Internet of Things: Challenges, Fundamentals, and Enabling Technologies. IEEE Internet of Things Journal, 2019, 6, 7946-7970.	5.5	170
230	ANN-Based Soft Sensor to Predict Effluent Violations in Wastewater Treatment Plants. Sensors, 2019, 19, 1280.	2.1	67
231	Expanding the Horizon of Mechanochromic Detection by Luminescent Shear Stress Sensor Supraparticles. Advanced Functional Materials, 2019, 29, 1901193.	7.8	28
232	High-Performance Wireless Networks for Industrial Control Applications: New Targets and Feasibility. Proceedings of the IEEE, 2019, 107, 1074-1093.	16.4	79
234	Thinger.io: An Open Source Platform for Deploying Data Fusion Applications in IoT Environments. Sensors, 2019, 19, 1044.	2.1	26
235	A Review on the Application of Blockchain to the Next Generation of Cybersecure Industry 4.0 Smart Factories. IEEE Access, 2019, 7, 45201-45218.	2.6	217
236	Time-slotted software-defined Industrial Ethernet for real-time Quality of Service in Industry 4.0. Future Generation Computer Systems, 2019, 99, 1-10.	4.9	20
237	Adaptive Time-Triggered Multi-Core Architecture. Designs, 2019, 3, 7.	1.3	10

#	Article	IF	Citations
238	Model Mediation to Overcome Light Limitationsâ€"Toward a Secure Tactile Internet System. Journal of Sensor and Actuator Networks, 2019, 8, 6.	2.3	13
239	Impacts of Internet of Things on Supply Chains: A
Framework for Warehousing. Social Sciences, 2019, 8, 84.	0.7	73
240	Using a Large Data Set to Improve Industrial Wireless Communications: Latency, Reliability, and Security. IEEE Industrial Electronics Magazine, 2019, 13, 6-12.	2.3	19
241	Optimal Edge Resource Allocation in IoT-Based Smart Cities. IEEE Network, 2019, 33, 30-35.	4.9	104
242	BLITZ. ACM Transactions on Sensor Networks, 2019, 15, 1-38.	2.3	9
243	WIA-FA and Its Applications to Digital Factory: A Wireless Network Solution for Factory Automation. Proceedings of the IEEE, 2019, 107, 1053-1073.	16.4	70
244	A Hybrid Computing Solution and Resource Scheduling Strategy for Edge Computing in Smart Manufacturing. IEEE Transactions on Industrial Informatics, 2019, 15, 4225-4234.	7.2	155
245	Smart Sensors Applications for a New Paradigm of a Production Line. Sensors, 2019, 19, 650.	2.1	36
246	Design optimization of WirelessHART networks in Cyber-Physical Systems. Journal of Systems Architecture, 2019, 97, 168-184.	2.5	7
247	Packet Detection by a Single OFDM Symbol in URLLC for Critical Industrial Control: A Realistic Study. IEEE Journal on Selected Areas in Communications, 2019, 37, 933-946.	9.7	22
248	An efficient social-like semantic-aware service discovery mechanism for large-scale Internet of Things. Computer Networks, 2019, 152, 210-220.	3.2	55
249	The impacts of Industry 4.0: a descriptive survey in the Italian manufacturing sector. Journal of Manufacturing Technology Management, 2019, 31, 1085-1115.	3.3	52
250	Online Period Selection for Wireless Control Systems. , 2019, , .		3
251	Corporate survival in Industry 4.0 era: the enabling role of lean-digitized manufacturing. Journal of Manufacturing Technology Management, 2019, 31, 1-30.	3.3	230
252	Prediction of QoS Outage Probability for Wireless Communication in Factory Environments. , 2019, , .		4
253	Why consider the human-in-the-loop in automated cyber-physical production systems? Two cases from cross-company cooperation. , 2019, , .		6
254	An Edge Computing Based Gateway for WIA-PA Networks. , 2019, , .		0
255	Industry 4.0 implications in machine vision metrology: an overview. Procedia Manufacturing, 2019, 41, 359-366.	1.9	42

#	Article	IF	Citations
256	Additive Manufacturing Applications in Industry 4.0: A Review. Journal of Industrial Integration and Management, 2019, 04, 1930001.	3.1	237
257	Communication Challenges and Solutions between Heterogeneous Industrial IoT Systems. , 2019, , .		7
258	Putting NFV into Reality: Physical Smart Manufacturing Testbed. , 2019, , .		3
259	Cyber Physical Systems and Internet of Things: Emerging Paradigms on Smart Cities. , 2019, , .		5
260	A Gigabit Real-time Ethernet for Manufacture Automation Control. , 2019, , .		2
261	Design and implementation of state-of-charge estimation based on back-propagation neural network for smart uninterruptible power system. International Journal of Distributed Sensor Networks, 2019, 15, 155014771989452.	1.3	3
262	MARGOT: Dynamic IoT Resource Discovery for HADR Environments. , 2019, , .		4
263	Model-based Engineering of modern Automation Structures with the Interdisciplinary Modeling Language (IML). , 2019, , .		0
264	Cyber-physical system for quality control of spur gears through artificial vision techniques. , 2019, , .		3
265	Applications of Internet of Things in Mushroom Farm Management. , 2019, , .		14
266	NFV-driven intrusion detection for smart manufacturing. , 2019, , .		2
267	Survey of Security Standards for an automated Industrie 4.0 compatible Manufacturing. , 2019, , .		7
268	OPC UA PubSub Implementation and Configuration. , 2019, , .		6
269	QoS Provisioning in 60 GHz Communications by Physical and Transport Layer Coordination. , 2019, , .		2
270	Time-Sensitive Networking in 5th Generation Cellular Networks - Current State and Open Topics. , 2019, , .		17
271	Design of Training Media for Internet of Things Training Based on Project-based Learning: A Case Study of Smart Factory Industry. , 2019, , .		2
272	An effective industrial control approach. , 0, , .		5
273	Compressible Source Separation in Industrial IoT Broadband Communication. , 2019, , .		4

#	Article	IF	Citations
274	â€œProducing Cloud-Nativeâ€• Smart Manufacturing Use Cases on Kubernetes. , 2019, , .		7
275	Design of Differential Rectifier Circuit Focusing on Load Fluctuation of Storage Capacitor During Charging. , 2019, , .		2
276	5G Ultra-Reliable Low-Latency Communication for Factory Automation at Millimetre Wave Bands. , 2019, , .		5
277	Industry 4.0 for Managing Logistic Service Providers Lifecycle. MATEC Web of Conferences, 2019, 301, 00014.	0.1	1
278	A New Paradigm for a Marketplace of Services: Smart Communities in the IoT Era. , 2019, , .		9
279	A Hybrid Method for Secure and Reliable Transmission on Industrial Automation and Control Networks in Industry 4.0. , 2019, , .		1
280	IIoT Based Smart Factory 4.0 over the Cloud. , 2019, , .		11
281	Roboticâ€aided IoT: automated deployment of a 6TiSCH network using an UGV. IET Wireless Sensor Systems, 2019, 9, 438-446.	1.3	8
282	A Discussion about the Implementation of a WSN to Industry 4.0 based on the IEEE 1451 Standard. , 2019, , .		5
283	An Integrated Multi-Sensor System for the In-Line Monitoring of Material Streams. , 2019, , .		2
284	Design and Development of Modbus/MQTT Gateway for Industrial IoT Cloud Applications Using Raspberry Pi. , 2019, , .		11
285	Enabling Multi-Tenant Networks for the Automation Industry. , 2019, , .		0
286	Efficient Pilot Allocation for URLLC Traffic in 5G Industrial IoT Networks. , 2019, , .		6
287	Security in Wireless Sensor Networks: A formal verification of protocols. , 2019, , .		1
288	Development of a Wireless Gateway for Industrial Internet of Things Applications. IEEE Latin America Transactions, 2019, 17, 1637-1644.	1.2	7
289	Directional Wideband Channel Measurements at 28 GHz in an Industrial Environment. , 2019, , .		27
290	Swarm Intelligence-Based Performance Optimization for Mobile Wireless Sensor Networks: Survey, Challenges, and Future Directions. IEEE Access, 2019, 7, 161524-161553.	2.6	38
291	Blockchain Technology for Intelligent Environments. Future Internet, 2019, 11, 213.	2.4	16

#	Article	IF	Citations
292	An Enhanced Tabu Search Based Receiver for Full-Spreading NOMA Systems. IEEE Access, 2019, 7, 159899-159917.	2.6	2
293	A Real-Time Software Defined Networking Framework for Next-Generation Industrial Networks. IEEE Access, 2019, 7, 164468-164479.	2.6	15
294	The Internet of Microfluidic Things: Perspectives on System Architecture and Design Challenges: Invited Paper. , 2019, , .		3
295	An Improved UAV-PHD Filter-Based Trajectory Tracking Algorithm for Multi-UAVs in Future 5G IoT Scenarios. Electronics (Switzerland), 2019, 8, 1188.	1.8	16
296	Management System of Integration of Informatization and Industrialization: GB/T 23000 Serial Chinese National Standards. , 2019, , .		0
297	5G into Profinet integration as a use case for network slicing. , 2019, , .		3
298	Migration of Legacy Industrial Automation Systems in the Context of Industry 4.0- A Comparative Study. , 2019, , .		8
299	Data Preprocessing for ANN-based Industrial Time-Series Forecasting with Imbalanced Data. , 2019, , .		3
300	Does User Generated Content Characterize Millennialsâ€™ Generation Behavior? Discussing the Relation between SNS and Open Innovation. Journal of Open Innovation: Technology, Market, and Complexity, 2019, 5, 96.	2.6	20
301	Ontologies for Industry 4.0. Knowledge Engineering Review, 2019, 34, .	2.1	56
302	Wireless Communication in Industrial Applications. , 2019, , .		20
303	Deployment Strategies for the Industrial IoT: A Case Study Based on Surface Mines. , 2019, , .		3
304	Secure and Flexible Deployment of Industrial Applications inside Cloud-Based Environments. , 2019, , .		6
305	An Axiomatic Categorisation Framework for the Dynamic Alignment of Disparate Functions in Cyber-physical Systems. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 3581-3590.	0.6	0
306	Industrial Edge Computing: Enabling Embedded Intelligence. IEEE Industrial Electronics Magazine, 2019, 13, 48-56.	2.3	87
307	Asset replacement in the context of Servitization. , 2019, , .		4
308	E-Event for Public Relation Services in IoT using Object Oriented Method. IOP Conference Series: Materials Science and Engineering, 2019, 662, 022060.	0.3	0
309	Cognitive Edge for Factory: a Case Study on Campus Networks enabling Smart Intralogistics. , 2019, , .		7

#	Article	IF	Citations
310	EasyPass. , 2019, , .		1
311	Research on Industrial Internet of Things Security Architecture and Protection Strategy. , 2019, , .		22
312	The use of 5G Non-Public Networks to support Industry 4.0 scenarios. , 2019, , .		48
313	Enabling Ultra Reliable Wireless Communications for Factory Automation with Distributed MIMO. , 2019, , .		5
314	Smart Appliances and RAMI 4.0: Management and Servitization of Ice Cream Machines. IEEE Transactions on Industrial Informatics, 2019, 15, 1007-1016.	7.2	34
315	Ultra-Low Latency (ULL) Networks: The IEEE TSN and IETF DetNet Standards and Related 5G ULL Research. IEEE Communications Surveys and Tutorials, 2019, 21, 88-145.	24.8	380
316	Low-Latency Networking: Where Latency Lurks and How to Tame It. Proceedings of the IEEE, 2019, 107, 280-306.	16.4	89
317	An IoT-based smart cities infrastructure architecture applied to a waste management scenario. Ad Hoc Networks, 2019, 87, 200-208.	3.4	99
318	Warranty and maintenance analysis of sensor embedded products using internet of things in industry 4.0. International Journal of Production Economics, 2019, 208, 483-499.	5.1	81
319	A review of Internet of Things (IoT) embedded sustainable supply chain for industry 4.0 requirements. Computers and Industrial Engineering, 2019, 127, 925-953.	3.4	602
320	Integrated scheduling for a distributed manufacturing system: a stochastic multi-objective model. Enterprise Information Systems, 2019, 13, 557-573.	3.3	31
321	The Tactile Internet for Industries: A Review. Proceedings of the IEEE, 2019, 107, 414-435.	16.4	122
322	A Roadmap Toward the Resilient Internet of Things for Cyber-Physical Systems. IEEE Access, 2019, 7, 13260-13283.	2.6	87
323	LOADng-IoT: An Enhanced Routing Protocol for Internet of Things Applications over Low Power Networks. Sensors, 2019, 19, 150.	2.1	23
324	An Introduction to OPC UA TSN for Industrial Communication Systems. Proceedings of the IEEE, 2019, 107, 1121-1131.	16.4	137
325	Evaluation of provincial integration degree of â€œinternet + industryâ€•based on matrix grey relational analysis. Grey Systems Theory and Application, 2019, 9, 31-44.	1.0	8
326	Quality-of-Service monitoring of hybrid industrial communication networks. Automatisierungstechnik, 2019, 67, 69-78.	0.4	3
327	Exploring Industry 4.0 technologies to enable circular economy practices in a manufacturing context. Journal of Manufacturing Technology Management, 2019, 30, 607-627.	3.3	488

#	Article	IF	Citations
328	The adoption stages (Evaluation, Adoption, and Routinisation) of ERP systems with business analytics functionality in the context of farms. Computers and Electronics in Agriculture, 2019, 156, 334-348.	3.7	46
329	Design of a machine tool control system for function reconfiguration and reuse in network environment. Robotics and Computer-Integrated Manufacturing, 2019, 56, 117-126.	6.1	20
330	Software defined service function chaining with failure consideration for fog computing. Concurrency Computation Practice and Experience, 2019, 31, e4953.	1.4	8
331	Internet of things and supply chain management: a literature review. International Journal of Production Research, 2019, 57, 4719-4742.	4.9	708
332	Big data for cyber physical systems in industry 4.0: a survey. Enterprise Information Systems, 2019, 13, 148-169.	3.3	373
333	A Stabilized Feedback Episodic Memory (SF-EM) and Home Service Provision Framework for Robot and IoT Collaboration. IEEE Transactions on Cybernetics, 2020, 50, 2110-2123.	6.2	14
334	An Interpretive Structural Analysis for Industry 4.0 Adoption Challenges. IEEE Transactions on Engineering Management, 2020, 67, 973-978.	2.4	66
335	Determinants of information and digital technology implementation for smart manufacturing. International Journal of Production Research, 2020, 58, 2384-2405.	4.9	159
336	Challenges and Issues of ICT in Industry 4.0. Lecture Notes in Mechanical Engineering, 2020, , 259-269.	0.3	15
337	A Survey of Intrusion Detection for In-Vehicle Networks. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 919-933.	4.7	188
338	A study on smart factory-based ambient intelligence context-aware intrusion detection system using machine learning. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 1405-1412.	3.3	55
339	Channel characterization of low voltage electric power distribution networks for PLC applications based on measurement campaign. International Journal of Electrical Power and Energy Systems, 2020, 116, 105554.	3.3	17
340	Differential Privacy Techniques for Cyber Physical Systems: A Survey. IEEE Communications Surveys and Tutorials, 2020, 22, 746-789.	24.8	335
341	Context-Aware Service Orchestration in Smart Environments. Smart Innovation, Systems and Technologies, 2020, , 35-45.	0.5	1
342	Distributed Clock Synchronization Based on Intelligent Clustering in Local Area Industrial IoT Systems. IEEE Transactions on Industrial Informatics, 2020, 16, 3697-3707.	7.2	31
343	A collaborative architecture of the industrial internet platform for manufacturing systems. Robotics and Computer-Integrated Manufacturing, 2020, 61, 101854.	6.1	72
344	Learning-Based Energy-Efficient Resource Management by Heterogeneous RF/VLC for Ultra-Reliable Low-Latency Industrial IoT Networks. IEEE Transactions on Industrial Informatics, 2020, 16, 5565-5576.	7.2	125
345	Underwater Internet of Things in Smart Ocean: System Architecture and Open Issues. IEEE Transactions on Industrial Informatics, 2020, 16, 4297-4307.	7.2	192

#	Article	IF	Citations
346	Industry 4.0, digitization, and opportunities for sustainability. Journal of Cleaner Production, 2020, 252, 119869.	4.6	828
347	Data management techniques for Internet of Things. Mechanical Systems and Signal Processing, 2020, 138, 106564.	4.4	84
348	Architecting and Deploying IoT Smart Applications: A Performanceâ€“Oriented Approach. Sensors, 2020, 20, 84.	2.1	40
349	Cross-Network Fusion and Scheduling for Heterogeneous Networks in Smart Factory. IEEE Transactions on Industrial Informatics, 2020, 16, 6059-6068.	7.2	30
350	A Control-Based Method to Meet TSO and DSO Ancillary Services Needs by Flexible End-Users. IEEE Transactions on Power Systems, 2020, 35, 1868-1880.	4.6	27
351	A Smart Collaborative Routing Protocol for Delay Sensitive Applications in Industrial IoT. IEEE Access, 2020, 8, 20413-20427.	2.6	21
352	Analysis on energy consumption in smart grid WSN using path operator calculus centrality based HSA-PSO algorithm. Soft Computing, 2020, 24, 10771-10783.	2.1	16
353	Dynamic programming of network slices in software-defined metro-core optical networks. Optical Switching and Networking, 2020, 36, 100551.	1.2	9
354	Optimal Downlinkâ€“Uplink Scheduling of Wireless Networked Control for Industrial IoT. IEEE Internet of Things Journal, 2020, 7, 1756-1772.	5.5	25
355	Cyber-physical production systems retrofitting in context of industry 4.0. Computers and Industrial Engineering, 2020, 139, 106193.	3.4	81
356	Optically Transparent 24 GHz Analog Front-End Based on Meshed Microstrip Lines for the Integration in a Self-Sufficient RFID Sensor Tag. IEEE Journal of Radio Frequency Identification, 2020, 4, 83-92.	1.5	4
357	On the Performance of Cloud Services and Databases for Industrial IoT Scalable Applications. Electronics (Switzerland), 2020, 9, 1435.	1.8	8
358	Sustainable Industry 4.0 in Production and Operations Management: A Systematic Literature Review. Sustainability, 2020, 12, 7982.	1.6	55
359	The Interaction between Internet, Sustainable Development, and Emergence of Society 5.0. Data, 2020, 5, 80.	1.2	42
360	Application of industry 4.0 technologies in SMEs for ethical and sustainable operations: Analysis of challenges. Journal of Cleaner Production, 2020, 275, 124063.	4.6	226
361	Polar code performance with Doppler shifts and reflections in Rayleigh fading for Industrial channels. , 2020, , .		0
362	A Middleware Platform for Intelligent Automation: An Industrial Prototype Implementation. Computers in Industry, 2020, 123, 103329.	5.7	36
363	Configuration Solution for TSN-based Industrial Networks utilizing SDN and OPC UA. , 2020, , .		19

#	Article	IF	Citations
364	The Impact of Rate Adaptation Algorithms on Wi-Fi-Based Factory Automation Systems. Sensors, 2020, 20, 5195.	2.1	7
365	Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the COVID-19 pandemic. Journal of Small Business and Entrepreneurship, 2022, 34, 123-140.	3.0	182
366	Logistics innovation capability and its impacts on the supply chain risks in the Industry 4.0 era. Modern Supply Chain Research and Applications, 2020, 2, 83-98.	1.8	60
367	Wireless Feedback Control With Variable Packet Length for Industrial IoT. IEEE Wireless Communications Letters, 2020, 9, 1586-1590.	3.2	20
368	Characterization of a smart transducer for axial force measurements in vibrating environments. Measurement: Journal of the International Measurement Confederation, 2020, 166, 108157.	2.5	5
369	Improvement of table tennis technology based on data mining in the environment of wireless sensor networks. International Journal of Distributed Sensor Networks, 2020, 16, 155014772096134.	1.3	5
370	MANAGING 5G LTE ADVANCED NETWORKS THROUGH MACHINE LEARNING INTELLIGENCE BASED SYSTEM. IOP Conference Series: Materials Science and Engineering, 2020, 928, 022139.	0.3	1
371	Improving MAC Protocols for Wireless Industrial Networks via Packet Prioritization and Cooperation. , 2020, , .		1
372	Sensor Data Reconstruction in Industrial Environments with Cellular Connectivity. , 2020, , .		7
373	Grand Challenges in Wireless Communications. Frontiers in Communications and Networks, 2020, 1, .	1.9	12
374	Leveraging Named Data Networking for Industrial Automation: Opportunities and Challenges. , 2020, , .		2
375	Work-in-Progress: Semantic Knowledge Base as a Solution for Heterogeneous Industrial Network Management. , 2020, , .		0
376	Modular hardware platform for the development of IoT devices implemented using multi-chip packaging technology. IOP Conference Series: Materials Science and Engineering, 2020, 862, 032012.	0.3	0
377	Average Age of Information in Short Packet Based Machine Type Communication. IEEE Transactions on Vehicular Technology, 2020, 69, 10306-10319.	3.9	65
378	Disruptive Maintenance Engineering 4.0. International Journal of Quality and Reliability Management, 2020, 37, 853-871.	1.3	23
379	Blockchain and the Industrial Internet of Things. Journal of Enterprise Information Management, 2022, 35, 1454-1476.	4.4	22
380	Performance of Private LTE on the Factory Floor. , 2020, , .		3
381	Next Generation Wi-Fi: Deployment Guidelines and Benefits of Massive MIMO for the Enterprise. , 2020, , .		0

#	Article	IF	Citations
382	Extended Synchronization Protocol Based on IEEE802.1AS for Improved Precision in Dynamic and Asymmetric TSN Hybrid Networks. , 2020, , .		11
383	Work-in-Progress: Compromising Security of Real-time Ethernet Devices by means of Selective Queue Saturation Attack. , 2020, , .		2
384	Predicting Machine Errors based on Adaptive Sensor Data Drifts in a Real World Industrial Setup. , 2020, , .		2
385	Decision Triggered Data Transmission and Collection in Industrial Internet of Things. , 2020, , .		1
386	Work-in-Progress: A Formal Approach to Verify Fault Tolerance in Industrial Network Systems. , 2020, , .		0
387	Research on Security of D2D Resource Sharing Based on Blockchain in Mobile Edge Network. , 2020, , .		2
388	A configuration tool for MQTT based OPC UA PubSub. , 2020, , .		4
389	Microservice Orchestration for Process Control in Industry 4.0. , 2020, , .		10
390	Throughput vs. Resilience in Multi-hop Wireless Sensor Networks with Periodic Packet Traffic. , 2020, , .		0
391	Using Global Honeypot Networks to Detect Targeted ICS Attacks. , 2020, , .		16
392	Real-time Industrial Communication by using OPC UA Field Level Communication. , 2020, , .		18
393	An Approach for Data Pipeline with Distributed Query Engine for Industrial Applications. , 2020, , .		5
394	Localisation in Wireless Networks using Deep Bidirectional Recurrent Neural Networks. , 2020, , .		0
395	Performance Analysis of Local 5G Operator Architectures for Industrial Internet. IEEE Internet of Things Journal, 2020, 7, 11559-11575.	5.5	32
396	Towards Consolidating Industrial Use Cases on a Common Fog Computing Platform. , 2020, , .		8
397	Reinforced Secure Gossiping Against DoS Attacks in Post-Disaster Scenarios. IEEE Access, 2020, 8, 178651-178669.	2.6	4
398	Towards Automated Security Evaluation within the Industrial Reference Architecture. , 2020, , .		1
399	Flexible Safety Systems for Smart Manufacturing. , 2020, , .		13

#	Article	IF	Citations
400	Comparison of 5G Enabled Control Loops for Production. , 2020, , .		6
401	On the impact of accurate radio link modeling on the performance of WirelessHART control networks. , 2020, , .		9
402	Bluetooth Low Energy Wireless Sensor Network Library in MATLAB Simulink. Journal of Sensor and Actuator Networks, 2020, 9, 38.	2.3	3
403	Survey on Security Concepts to Adapt Flexible Manufacturing and Operations Management based upon Multi-Agent Systems. , 2020, , .		6
404	Dynamic Adjustment Mechanism based on OPC-UA Architecture for IIoT Applications. , 2020, , .		2
405	A Cyber-Physical System Approach for Predictive Maintenance. , 2020, , .		5
406	Measurement and Characterization of an Indoor Industrial Environment at 3.7 and 28 GHz. , 2020, , .		32
407	AI-Inspired Non-Terrestrial Networks for IIoT: Review on Enabling Technologies and Applications. IoT, 2020, 1, 21-48.	2.3	23
408	Getting on Track â€“ Simulation-aided Design of Wireless IoT Sensor Systems. , 2020, , .		1
409	Component-Dependent Independent Component Analysis for Time-Sensitive Applications. , 2020, , .		7
410	Scheduling Low Latency Traffic for Wireless Control Systems in 5G Networks. , 2020, , .		8
411	Real-time control and management plane for edge-cloud deterministic and dynamic networks. Journal of Optical Communications and Networking, 2020, 12, 312.	3.3	10
412	OpenTSN: an open-source project for time-sensitive networking system development. CCF Transactions on Networking, 2020, 3, 51-65.	1.0	18
413	TinyML-Enabled Frugal Smart Objects: Challenges and Opportunities. IEEE Circuits and Systems Magazine, 2020, 20, 4-18.	2.6	167
414	Visible Light Communications for Industrial Applicationsâ€"Challenges and Potentials. Electronics (Switzerland), 2020, 9, 2157.	1.8	50
415	Measures to Improve the Accuracy and Reliability of Clock Synchronization in Time-Sensitive Networking. IEEE Access, 2020, 8, 192368-192378.	2.6	9
416	Practical Implementation of an OPC UA TSN Communication Architecture for a Manufacturing System. IEEE Access, 2020, 8, 200100-200111.	2.6	27
417	Implementation of Industry 4.0 Technologies in Embedded Systems for Contagion Mitigation and COVID-19 Control in Work Areas. , 2020, , .		3

#	Article	IF	Citations
418	Internet of Things and Blockchain Technologies for Food Safety Systems. , 2020, , .		8
419	Impact of Nonlinear Distortion with the Rapp Model on the GFDM System. , 2020, , .		6
420	Noisy Signals in Wastewater Treatment Plants data-driven control: Spectral Analysis approach for the design of ANN-IMC controllers. , 2020, , .		3
421	Parameter Identification for Bernoulli Serial Production Line Model. IEEE Transactions on Automation Science and Engineering, 2021, 18, 2115-2127.	3.4	8
422	A survey on time division multiple access scheduling algorithms for industrial networks. SN Applied Sciences, 2020, 2, 1.	1.5	4
423	Redefining Industry 4.0 and Its Enabling Technologies. Journal of Physics: Conference Series, 2020, 1569, 032025.	0.3	4
424	To the question of the cyber-physical systemsâ€™ implementation in construction for the smart cityâ€™s transition to a new development level. IOP Conference Series: Materials Science and Engineering, 2020, 913, 032070.	0.3	0
425	Towards Flexible Integration of 5G and IIoT Technologies in Industry 4.0: A Practical Use Case. Applied Sciences (Switzerland), 2020, 10, 7670.	1.3	26
426	Prioritization of important factors towards the status of industry 4.0 implementation utilizing AHP and ANP techniques. Benchmarking, 2020, 28, 695-720.	2.9	26
427	Towards Time-Sensitive Networking in Heterogeneous Platforms with Virtualization. , 2020, , .		8
428	A Concept for Wireless Network Integration in Production System Planning. , 2020, , .		1
429	Smart Manufacturing Retrofit for Brownfield Systems. Procedia Manufacturing, 2020, 42, 327-332.	1.9	27
430	OntoPowSys: A power system ontology for cross domain interactions in an eco industrial park. Energy and AI, 2020, 1, 100008.	5.8	31
431	Digital Transformation of the World Economy: Evaluation of the Global and Russian Internet of Things Markets. , 2020, , .		2
432	Automated Deployment of IoT Networks in Outdoor Scenarios using an Unmanned Ground Vehicle. , 2020, , .		5
433	Estimation of Probability Density Function Using Multi-bandwidth Kernel Density Estimation for Throughput. , 2020, , .		7
434	Optimized flow assignment for applications with strict reliability and latency constraints using path diversity. Journal of Computational Science, 2020, 44, 101163.	1.5	4
435	A Matching Game With Discard Policy for Virtual Machines Placement in Hybrid Cloud-Edge Architecture for Industrial IoT Systems. IEEE Transactions on Industrial Informatics, 2020, 16, 7046-7055.	7.2	24

#	Article	IF	Citations
436	Lightweight Deep Learning Based Intelligent Edge Surveillance Techniques. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 1146-1154.	4.9	42
437	Comparing Admission Control Architectures for Real-Time Ethernet. IEEE Access, 2020, 8, 105521-105534.	2.6	7
438	Efficiency Analysis of Concurrently Driven Power Amplifiers. IEEE Access, 2020, 8, 91379-91393.	2.6	0
439	A Survey on Trend and Classification of Internet of Things Reviews. IEEE Access, 2020, 8, 111763-111782.	2.6	85
440	mIoT: Metamorphic IoT Platform for On-Demand Hardware Replacement in Large-Scaled IoT Applications. Sensors, 2020, 20, 3337.	2.1	20
441	Internet of Robotic Things in Smart Domains: Applications and Challenges. Sensors, 2020, 20, 3355.	2.1	75
442	Graphical modeling notation for data collection and analysis architectures in cyber-physical systems of systems. Journal of Industrial Information Integration, 2020, 19, 100155.	4.3	10
443	Adaptive Particle Swarm Optimisation based Energy Efficient Dynamic Correlation Behavior of Secondary Nodes in Cognitive Radio Sensor Networks. IET Communications, 2020, 14, 1658-1665.	1.5	7
444	Resilience through multicast â€“ An optimization model for multi-hop wireless sensor networks. Ad Hoc Networks, 2020, 107, 102239.	3.4	4
445	Efficient Obfuscation for Encrypted Identity-Based Signatures in Wireless Body Area Networks. IEEE Systems Journal, 2020, 14, 5320-5328.	2.9	7
446	Smart Sensor Architectures for Multimedia Sensing in IoMT. Sensors, 2020, 20, 1400.	2.1	6
447	Management of industrial communications slices: Towards the Application Driven Networking concept. Computer Communications, 2020, 155, 104-116.	3.1	4
448	Industry 4.0: How it is defined from a sociotechnical perspective and how much sustainability it includes â€“ A literature review. Journal of Cleaner Production, 2020, 259, 120856.	4.6	231
449	Enhancing Fault Detection in Time Sensitive Networks using Machine Learning. , 2020, , .		9
450	Toward 6G Networks: Use Cases and Technologies. IEEE Communications Magazine, 2020, 58, 55-61.	4.9	994
451	Why We Need Automation Models: Handling Complexity in Industry 4.0 and the Internet of Things. IEEE Industrial Electronics Magazine, 2020, 14, 29-40.	2.3	53
452	On LSP Lifecycle Model to Re-design Logistics Service: Case Studies of Thai LSPs. Sustainability, 2020, 12, 2394.	1.6	5
453	Designing lean value streams in the fourth industrial revolution era: proposition of technology-integrated guidelines. International Journal of Production Research, 2020, 58, 5020-5033.	4.9	69

#	Article	IF	Citations
454	SC-RPL: A Social Cognitive Routing for Communications in Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2020, 16, 7682-7690.	7.2	8
455	EEG-Based Neurohaptics Research: A Literature Review. IEEE Access, 2020, 8, 49313-49328.	2.6	25
456	Signal Detection for Underwater IoT Devices With Long and Sparse Channels. IEEE Internet of Things Journal, 2020, 7, 6664-6675.	5.5	16
457	Central Heating Cost Optimization for Smart-Homes with Fuzzy Logic and a Multi-Agent Architecture. Applied Sciences (Switzerland), 2020, 10, 4057.	1.3	3
458	Modeling Identifiable Data in Industrial Internet. IEEE Access, 2020, 8, 29140-29148.	2.6	5
459	Evaluation of the impact of Cloud Database services on Industrial IoT Applications. , 2020, , .		1
460	Integration of Industry 4.0 Related Technologies in Construction Industry: A Framework of Cyber-Physical System. IEEE Access, 2020, 8, 122908-122922.	2.6	113
461	Controller of Controllers Architecture for Management of Heterogeneous Industrial Networks. , 2020, , .		3
462	Denoising Autoencoders and LSTM-Based Artificial Neural Networks Data Processing for Its Application to Internal Model Control in Industrial Environmentsâ€"The Wastewater Treatment Plant Control Case. Sensors, 2020, 20, 3743.	2.1	25
463	Smart manufacturing process and system automation â€“ A critical review of the standards and envisioned scenarios. Journal of Manufacturing Systems, 2020, 56, 312-325.	7.6	259
464	Bearing Intelligent Fault Diagnosis in the Industrial Internet of Things Context: A Lightweight Convolutional Neural Network. IEEE Access, 2020, 8, 87329-87340.	2.6	36
465	The business model of intelligent manufacturing with Internet of Things and machine learning. Enterprise Information Systems, 2022, 16, 307-325.	3.3	15
466	The Application of Fog Computing and Internet of Things Technology in Music Resource Management Model. IEEE Access, 2020, 8, 11840-11847.	2.6	5
467	Predicting Enamel Layer Defects in an Automotive Paint Shop. IEEE Access, 2020, 8, 22748-22757.	2.6	1
468	Adaptive Group Routing and Scheduling in Multicast Time-Sensitive Networks. IEEE Access, 2020, 8, 37855-37865.	2.6	33
469	Scientific Landscape of Sustainable Urban and Rural Areas Research: A Systematic Scientometric Analysis. Sustainability, 2020, 12, 1293.	1.6	25
470	Survey on Wireless Technology Trade-Offs for the Industrial Internet of Things. Sensors, 2020, 20, 488.	2.1	66
471	802.11g Signal Strength Evaluation in an Industrial Environment. Internet of Things (Netherlands), 2020, 9, 100163.	4.9	10

#	Article	IF	Citations
472	Guest Editorial Special Section on AI-Driven Developments in 5G-Envisioned Industrial Automation: Big Data Perspective. IEEE Transactions on Industrial Informatics, 2020, 16, 1291-1295.	7.2	5
473	Design of and research on industrial measuring devices based on Internet of Things technology. Ad Hoc Networks, 2020, 102, 102072.	3.4	12
474	Improvement in Power Transmission Efficiency for Cavity Resonance-Enabled Wireless Power Transfer by Utilizing Probes With Variable Reactance. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2734-2744.	2.9	10
476	Towards Implementation of Frame Preemption Mechanism on FPGA Platform. , 2020, , .		2
477	An End-to-End Reliability Framework of the Internet of Things. Sensors, 2020, 20, 2439.	2.1	10
478	Combined access control model embedding configurable policy for fine-grained data security. Microprocessors and Microsystems, 2020, 75, 103060.	1.8	2
479	Factory Communications at the Dawn of the Fourth Industrial Revolution. Computer Standards and Interfaces, 2020, 71, 103433.	3.8	42
480	An Adaptive Fuzzy-PI Clock Servo Based on IEEE 1588 for Improving Time Synchronization Over Ethernet Networks. IEEE Access, 2020, 8, 61370-61383.	2.6	11
481	High-Performance Industrial Wireless: Achieving Reliable and Deterministic Connectivity Over IEEE 802.11 WLANs. IEEE Open Journal of the Industrial Electronics Society, 2020, 1, 28-37.	4.8	28
482	Smart logistics based on the internet of things technology: an overview. International Journal of Logistics Research and Applications, 2021, 24, 323-345.	5.6	141
483	Noise Removal in the Presence of Significant Anomalies for Industrial IoT Sensor Data in Manufacturing. IEEE Internet of Things Journal, 2020, 7, 7084-7096.	5.5	33
484	Performance of IDWPT/DWPT compared with OFDM under an Industrial Channel. Procedia Computer Science, 2020, 170, 396-402.	1.2	1
485	Field-Programmable System-on-Chip-Based Control System for Real-Time Distortion Correction in Optical Imaging. IEEE Transactions on Industrial Electronics, 2021, 68, 3370-3379.	5.2	14
486	Extending Network Programmability to the Things Overlay Using Distributed Industrial IoT Protocols. IEEE Transactions on Industrial Informatics, 2021, 17, 251-259.	7.2	17
487	A deep convolution generative adversarial networks based fuzzing framework for industry control protocols. Journal of Intelligent Manufacturing, 2021, 32, 441-457.	4.4	18
488	Model-Based Stealth Attack to Networked Control System Based on Real-Time Ethernet. IEEE Transactions on Industrial Electronics, 2021, 68, 7672-7683.	5.2	16
489	Joint Sampling Time and Resource Allocation for Power Efficiency in Industrial Cyberâ€“Physical Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 2600-2610.	7.2	9
490	Energy-Efficient Resource Allocation for Cognitive Industrial Internet of Things With Wireless Energy Harvesting. IEEE Transactions on Industrial Informatics, 2021, 17, 5668-5677.	7.2	29

#	Article	IF	Citations
491	Reinforcement Learning-Based Multislot Double-Threshold Spectrum Sensing With Bayesian Fusion for Industrial Big Spectrum Data. IEEE Transactions on Industrial Informatics, 2021, 17, 3391-3400.	7.2	77
492	CLPM: A Cooperative Link Prediction Model for Industrial Internet of Things Using Partitioned Stacked Denoising Autoencoder. IEEE Transactions on Industrial Informatics, 2021, 17, 3620-3629.	7.2	9
493	Transmission Scheduling With Order Constraints in WIA-FA-Based AGV Systems. IEEE Internet of Things Journal, 2021, 8, 381-392.	5.5	8
494	Deep Learning-Based DDoS-Attack Detection for Cyberâ€“Physical System Over 5G Network. IEEE Transactions on Industrial Informatics, 2021, 17, 860-870.	7.2	118
495	Digital-Twin-Enabled Intelligent Distributed Clock Synchronization in Industrial IoT Systems. IEEE Internet of Things Journal, 2021, 8, 4548-4559.	5.5	39
496	Big Data Analysis Technology for Electric Vehicle Networks in Smart Cities. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 1807-1816.	4.7	61
497	A knowledge-based Digital Shadow for machining industry in a Digital Twin perspective. Journal of Manufacturing Systems, 2021, 58, 168-179.	7.6	80
498	Expected impact of industry 4.0 technologies on sustainable development: A study in the context of Brazil's plastic industry. Sustainable Production and Consumption, 2021, 25, 102-122.	5.7	117
499	Programmable Logic Controllers in the Context of Industry 4.0. IEEE Transactions on Industrial Informatics, 2021, 17, 3523-3533.	7.2	37
500	Industry 4.0: defining the research agenda. Benchmarking, 2021, 28, 1858-1882.	2.9	42
501	Data-Augmentation-Based Cellular Traffic Prediction in Edge-Computing-Enabled Smart City. IEEE Transactions on Industrial Informatics, 2021, 17, 4179-4187.	7.2	19
502	8-QAM Division for Uplink Massive SIMO Systems. IEEE Wireless Communications Letters, 2021, 10, 48-52.	3.2	3
503	Throughput Optimization for Grant-Free Multiple Access With Multiagent Deep Reinforcement Learning. IEEE Transactions on Wireless Communications, 2021, 20, 228-242.	6.1	9
504	Modified Fuzzy-Based Smart Barricade Movement for Traffic Management System. Wireless Personal Communications, 2021, 116, 3351-3370.	1.8	5
505	An integrated ANPâ€“QFD approach for prioritization of customer and design requirements for digitalization in an electronic supply chain. Benchmarking, 2021, 28, 1213-1246.	2.9	10
506	Vessel to shore data movement through the Internet of Floating Things: A microservice platform at the edge. Concurrency Computation Practice and Experience, 2021, 33, e5988.	1.4	7
507	A blockchain-based architecture for secure and trustworthy operations in the industrial Internet of Things. Journal of Industrial Information Integration, 2021, 21, 100190.	4.3	67
508	Cyber-physical systems architectures for industrial internet of things applications in Industry 4.0: A literature review. Journal of Manufacturing Systems, 2021, 58, 176-192.	7.6	212

#	Article	IF	Citations
509	Event-driven tool condition monitoring methodology considering tool life prediction based on industrial internet. Journal of Manufacturing Systems, 2021, 58, 205-222.	7.6	39
510	Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. IEEE Transactions on Green Communications and Networking, 2021, 5, 512-525.	3.5	25
511	A Machine-Learning-Based Distributed System for Fault Diagnosis With Scalable Detection Quality in Industrial IoT. IEEE Internet of Things Journal, 2021, 8, 4339-4352.	5.5	28
512	Sensor-Fault Detection, Isolation and Accommodation for Digital Twins via Modular Data-Driven Architecture. IEEE Sensors Journal, 2021, 21, 4827-4838.	2.4	143
513	Cognitive Automation for Smart Decision-Making in Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2021, 17, 2152-2159.	7.2	15
514	Nonlinear MIMO for Industrial Internet of Things in Cyberâ€“Physical Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 5533-5541.	7.2	64
515	Deep-Reinforcement-Learning-Based Spectrum Resource Management for Industrial Internet of Things. IEEE Internet of Things Journal, 2021, 8, 3476-3489.	5.5	28
516	Challenges and Opportunities in Securing the Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2021, 17, 2985-2996.	7.2	135
517	CSRP: An Enhanced Protocol for Consistent Reservation of Resources in AVB/TSN. IEEE Transactions on Industrial Informatics, 2021, 17, 3640-3650.	7.2	0
518	Cooperative Jamming Secure Scheme for IWNs Random Mobile Users Aided by Edge Computing Intelligent Node Selection. IEEE Transactions on Industrial Informatics, 2021, 17, 4999-5009.	7.2	11
519	An Enhanced and Secure Cloud Infrastructure for e-Health Data Transmission. Wireless Personal Communications, 2021, 117, 109-127.	1.8	13
520	FlipIt Game Model-Based Defense Strategy Against Cyberattacks on SCADA Systems Considering Insider Assistance. IEEE Transactions on Information Forensics and Security, 2021, 16, 2791-2804.	4.5	15
521	Innovative Traceability Application in Medical Devices Industry Using the Identification and Resolution System for Industrial Internet. , 2021, , .		4
522	Internet of Robotic Things. Lecture Notes in Networks and Systems, 2021, , 82-87.	0.5	1
523	IEEE 802.1AS Clock Synchronization Performance Evaluation of an Integrated Wiredâ€“Wireless TSN Architecture. IEEE Transactions on Industrial Informatics, 2022, 18, 2986-2999.	7.2	25
524	Internet of Things and Robotic Applications in the Industrial Automation Process. Advances in Computer and Electrical Engineering Book Series, 2021, , 50-64.	0.2	2
525	Introduction of a 5G-Enabled Architecture for the Realization of Industry 4.0 Use Cases. IEEE Access, 2021, 9, 25508-25521.	2.6	44
526	Complex dynamical behaviors of a novel exponential hyperâ€“chaotic system and its application in fast synchronization and color image encryption. Science Progress, 2021, 104, 003685042110033.	1.0	19

#	Article	IF	Citations
527	Distributed and Multi-Task Learning at the Edge for Energy Efficient Radio Access Networks. IEEE Access, 2021, 9, 12491-12505.	2.6	7
528	A Traffic Scheduling Mechanism for Industrial Wireless Network Accessing IPv6 Internet. , 2021, , .		1
529	Design and Experimental Evaluation of the Proactive Transmission of Replicated Frames Mechanism over Time-Sensitive Networking. Sensors, 2021, 21, 756.	2.1	8
530	Wideband OFDM-Based Communications in Bus Topology as a Key Enabler for Industry 4.0 Networks. IEEE Access, 2021, 9, 114167-114178.	2.6	4
531	Transfer Learning for Disruptive 5G-Enabled Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2022, 18, 4000-4007.	7.2	16
532	Efficient and Fine-Grained Signature for IIoT With Resistance to Key Exposure. IEEE Internet of Things Journal, 2021, 8, 9189-9205.	5.5	10
533	5G Swarm Production: Advanced Industrial Manufacturing Concepts Enabled by Wireless Automation. IEEE Communications Magazine, 2021, 59, 48-54.	4.9	33
534	Cooperative Robotics and Machine Learning for Smart Manufacturing: Platform Design and Trends Within the Context of Industrial Internet of Things. IEEE Access, 2021, 9, 95444-95455.	2.6	20
535	Fog Computing in Industrial Internet of Things. Advances in Computer and Electrical Engineering Book Series, 2021, , 65-78.	0.2	0
536	Stochastic H_{âˆž} Robust Decentralized Tracking Control of Large-Scale Team Formation UAV Network System With Time-Varying Delay and Packet Dropout Under Interconnected Couplings and Wiener Fluctuations. IEEE Access, 2021, 9, 41976-41997.	2.6	15
537	Internet of Things: Technologies and Applications. Profiles in Operations Research, 2021, , 1-30.	0.3	0
538	Unified Attribute-Based Encryption Scheme for Industrial Internet of Things. , 2021, , .		1
539	A Review of Cybersecurity Guidelines for Manufacturing Factories in Industry 4.0. IEEE Access, 2021, 9, 23235-23263.	2.6	55
540	Interpersonal Internet Messaging Prospects in Industry 4.0 Era. Studies in Fuzziness and Soft Computing, 2021, , 285-295.	0.6	1
541	Simulation software design as a potential solution to the increasing complexity of industrial communication networks. Procedia CIRP, 2021, 97, 1-6.	1.0	2
542	Opportunities for connected healthcare. , 2021, , 1-30.		3
543	Cell-Free and User-Centric Massive MIMO Architectures for Reliable Communications in Indoor Factory Environments. IEEE Open Journal of the Communications Society, 2021, 2, 1390-1404.	4.4	9
544	Controlling Supervised Industry 4.0 Processes through Logic Rules and Tensor Deformation Functions. Informatica, 2021, , 217-245.	1.5	2

#	Article	IF	Citations
545	6G Enabling Technologies. Computer Communications and Networks, 2021, , 25-41.	0.8	5
546	A Hybrid Task Crash Recovery Solution for Edge Computing in IoT-Based Manufacturing. IEEE Access, 2021, 9, 106220-106231.	2.6	7
547	An Analysis of Critical Success Factors Using Analytical Hierarchy Process for Implementation of Lean with Industry 4.0 in SMEs. Lecture Notes in Mechanical Engineering, 2021, , 255-262.	0.3	3
548	Spatial Development of the Industrial Complex in the Context of the Digital Transformation of the Economy. , 0, , .		0
549	Industry 4.0 Privacy and Security Protocol Issues in Internet of Things. , 2021, , 1853-1876.		1
550	Model-Driven Approach for Realization of Data Collection Architectures for Cyber-Physical Systems of Systems to Lower Manual Implementation Efforts. Sensors, 2021, 21, 745.	2.1	5
551	Industry 4.0 and the circular economy: A literature review and recommendations for future research. Business Strategy and the Environment, 2021, 30, 2038-2060.	8.5	232
552	Industry 4.0, a revolution that requires technology and national strategies. Complex & Intelligent Systems, 2021, 7, 1311-1325.	4.0	130
553	Application of Machine Learning for Ransomware Detection in IoT Devices. Studies in Computational Intelligence, 2021, , 393-420.	0.7	12
554	Relay-Aided Wireless Sensor Network Discovery Algorithm for Dense Industrial IoT Utilizing ESPAR Antennas. IEEE Internet of Things Journal, 2021, 8, 16653-16665.	5.5	8
555	Industrial Internet of Learning (IIoL): IIoT based pervasive knowledge network for LPWANâ€"concept, framework and case studies. CCF Transactions on Pervasive Computing and Interaction, 2021, 3, 25-39.	1.7	12
556	A Migration Strategy for Profinet Toward Ethernet TSN-Based Field-Level Communication: An Approach to Accelerate the Adoption of Converged IT/OT Communication. IEEE Industrial Electronics Magazine, 2021, 15, 43-53.	2.3	11
557	Blockchain-Based Secure and Lightweight Authentication for Internet of Things. IEEE Internet of Things Journal, 2022, 9, 3321-3332.	5.5	28
558	Performance Evaluation of Skill-Based Order-Assignment in Production Environments with Multi-Agent Systems. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2021, , 1-1.	3.0	0
559	Evaluation of Influence of Principles Involved in Industry 4.0 Over Coal Industries Using TISM. , 2021, , 926-940.		0
560	Port and City Integration: Transportation Aspect. Transportation Research Procedia, 2021, 54, 890-899.	0.8	16
561	Performance Analysis of High-Speed Wavelength Division Multiplexing Communication Between Chaotic Secure and Optical Fiber Channels Using DP-16QAM Scheme. , 2021, , .		0
562	Enhancing SDN WISE with Slicing Over TSCH. Sensors, 2021, 21, 1075.	2.1	14

#	Article	IF	Citations
563	Heterogeneous and dependable networks in industry â€“ A survey. Computers in Industry, 2021, 125, 103388.	5.7	40
564	Towards Agile Standardization: Testbeds in Support of Standardization for the IIoT. IEEE Transactions on Engineering Management, 2021, 68, 59-74.	2.4	15
565	Industrial Control under Non-Ideal Measurements: Data-Based Signal Processing as an Alternative to Controller Retuning. Sensors, 2021, 21, 1237.	2.1	2
566	Innovative Multi-Layered Architecture for Heterogeneous Automation and Monitoring Systems: Application Case of a Photovoltaic Smart Microgrid. Sustainability, 2021, 13, 2234.	1.6	62
567	Predictive Maintenance 4.0 Applied in Electrical Power Systems. , 2021, , .		12
568	Technology Innovations toward Sustainable Growth of Small Medium Enterprise (SMEs): Aftermath COVID-19 Pandemic. International Journal of Academic Research in Business and Social Sciences, 2021, 11, .	0.0	1
569	A multi-layer trust-based middleware framework for handling interoperability issues in heterogeneous IOTs. Cluster Computing, 2021, 24, 2133-2160.	3.5	17
570	AN EFFICIENT METHOD TO AUTOMATE POTHOLE DETECTION IN ROAD SURFACE USING IOT. , 2021, 5, .		1
571	AI-Empowered Software-Defined WLANs. IEEE Communications Magazine, 2021, 59, 54-60.	4.9	5
572	Application of Infusion Control System Based on Internet of Things Technology in Joint Orthopedics Nursing Work. Journal of Healthcare Engineering, 2021, 2021, 1-11.	1.1	10
573	The Challenges of Artificial Intelligence in Wireless Networks for the Internet of Things: Exploring Opportunities for Growth. IEEE Industrial Electronics Magazine, 2021, 15, 16-29.	2.3	27
574	Novel Approach to Collect and Process Power Quality Data in Medium-Voltage Distribution Grids. Symmetry, 2021, 13, 460.	1.1	11
575	A Polishing Robot Force Control System Based on Time Series Data in Industrial Internet of Things. ACM Transactions on Internet Technology, 2021, 21, 1-22.	3.0	4
576	Robots in Industry: The Past, Present, and Future of a Growing Collaboration With Humans. IEEE Industrial Electronics Magazine, 2021, 15, 50-61.	2.3	36
577	Tunnelling and Mirroring Operational Technology Data with IP-based Middlewares. , 2021, , .		2
578	Role of Internet of Things (IoT) in Adoption of Industry 4.0. Journal of Industrial Integration and Management, 2022, 07, 515-533.	3.1	45
579	A smart reporting framework as an application of multi-agent system in machining industry. International Journal of Computer Integrated Manufacturing, 2021, 34, 470-486.	2.9	9
580	Defragmenting the 6LoWPAN Fragmentation Landscape: A Performance Evaluation. Sensors, 2021, 21, 1711.	2.1	3

#	Article	IF	Citations
581	Big Data Analysis of Internet of Things System. ACM Transactions on Internet Technology, 2021, 21, 1-15.	3.0	29
582	Comparative Assessment of Process Mining for Supporting IoT Predictive Security. IEEE Transactions on Network and Service Management, 2021, 18, 1092-1103.	3.2	6
583	Feasibility Study on Virtual Process Controllers as Basis for Future Industrial Automation Systems. , 2021, , .		10
584	Energy Management Agent Frameworks: Scalable, Flexible, and Efficient Architectures for 5G Vertical Industries. IEEE Industrial Electronics Magazine, 2021, 15, 62-73.	2.3	5
585	Time-predictable routing algorithm for Time-Sensitive Networking: Schedulable guarantee of Time-Triggered streams. Computer Communications, 2021, 172, 183-195.	3.1	10
586	Optimization-assisted water supplement mechanism with energy efficiency in IoT based greenhouse. Journal of Intelligent and Fuzzy Systems, 2021, 40, 10163-10182.	0.8	7
587	BiDrac Industry 4.0 framework: Application to an Automotive Paint Shop Process. Control Engineering Practice, 2021, 109, 104757.	3.2	11
588	TTAS: Trusted Token Authentication Service of Securing SCADA Network in Energy Management System for Industrial Internet of Things. Sensors, 2021, 21, 2685.	2.1	8
589	Static and dynamic approaches in industrial metrology in the framework of measuring enterprise productivity. Journal of Physics: Conference Series, 2021, 1889, 042053.	0.3	1
590	Artificial-Intelligence-Driven Customized Manufacturing Factory: Key Technologies, Applications, and Challenges. Proceedings of the IEEE, 2021, 109, 377-398.	16.4	85
591	Methodology of Implementing Virtual Reality in Education for Industry 4.0. Sustainability, 2021, 13, 5049.	1.6	33
592	Industry 4.0 smart reconfigurable manufacturing machines. Journal of Manufacturing Systems, 2021, 59, 481-506.	7.6	147
593	Industry 4.0: a step towards achieving the SDGs? A critical literature review. Discover Sustainability, 2021, 2, 1.	1.4	19
594	Cooperative PSK constellation design and power allocation for massive MIMO uplink communications. , 2021, 111, 102935.		2
595	On Fast and Accurate 3D RFID Mobile Localization. , 2021, , .		3
596	Future Industrial Networks in Process Automation: Goals, Challenges, and Future Directions. Applied Sciences (Switzerland), 2021, 11, 3345.	1.3	10
597	Sensors Data Analysis in Supervisory Control and Data Acquisition (SCADA) Systems to Foresee Failures with an Undetermined Origin. Sensors, 2021, 21, 2762.	2.1	14
598	Extending Reference Broadcast Infrastructure Synchronization Protocol in IEEE 802.11 as Enabler for the Industrial Internet of Things. , 2021, , .		3

#	Article	IF	Citations
599	A lightweight and provable secure identity-based generalized proxy signcryption (IBGPS) scheme for Industrial Internet of Things (IIoT). Journal of Information Security and Applications, 2021, 58, 102625.	1.8	27
600	Assessing the Complexity of Intelligent Parksâ€™ Internet of Things Big Data System. Complexity, 2021, 2021, 1-12.	0.9	2
601	CoSiNeT: A Lightweight Clock Synchronization Algorithm for Industrial IoT. , 2021, , .		2
602	Challenges in Sensors Technology for Industry 4.0 for Futuristic Metrological Applications. Mapan - Journal of Metrology Society of India, 2021, 36, 215-226.	1.0	42
603	Secure authenticated key exchange for WSNs in IoT applications. Journal of Supercomputing, 2021, 77, 13897-13910.	2.4	8
604	Remote monitoring and control system for the energy self-sufficient bioethanol distiller. IOP Conference Series: Earth and Environmental Science, 2021, 749, 012034.	0.2	0
606	A relational analysis of drivers and barriers of lean manufacturing. TQM Journal, 2022, 34, 845-876.	2.1	12
607	Design and Development of Semantic Ontology for Large Scale Manufacturing Industry with Help of Expert Miner. SSRG International Journal of Engineering Trends and Technology, 2021, 69, 186-189.	0.3	0
608	Effects of Tactile Textures on Preference in Visuo-Tactile Exploration. ACM Transactions on Applied Perception, 2021, 18, 1-13.	1.2	4
609	Digitalisation and Innovation in the Steel Industry in Polandâ€"Selected Tools of ICT in an Analysis of Statistical Data and a Case Study. Energies, 2021, 14, 3034.	1.6	31
610	The Impacts of the Fourth Industrial Revolution on Smart and Sustainable Cities. Sustainability, 2021, 13, 7165.	1.6	12
611	An LSTM based Malicious Traffic Attack Detection in Industrial Internet. , 2021, , .		1
612	Delay and Jitter Analysis in Industrial Control Systems: A Paper Mill Case Study. , 2021, , .		0
613	Static Timing Analysis of OPC UA PubSub. , 2021, , .		4
614	A review of logistics Internet-of-Things: Current trends and scope for future research. Journal of Industrial Information Integration, 2021, 22, 100194.	4.3	67
615	TSCH and RPL Joining Time Model for Industrial Wireless Sensor Networks. Sensors, 2021, 21, 3904.	2.1	5
616	Edge Artificial Intelligence for Industrial Internet of Things Applications: An Industrial Edge Intelligence Solution. IEEE Industrial Electronics Magazine, 2021, 15, 28-36.	2.3	25
617	An Unsupervised TinyML Approach Applied for Pavement Anomalies Detection Under the Internet of Intelligent Vehicles. , 2021, , .		16

#	Article	IF	Citations
618	6G Opportunities Arising from Internet of Things Use Cases: A Review Paper. Future Internet, 2021, 13, 159.	2.4	33
619	Abstraction-based Multi-object Acoustic Anomaly Detection for Low-complexity Big Data Analysis. , 2021, , .		6
620	Enhancing the Performance of Industry 4.0 Scenarios via Serverless Processing at the Edge. , 2021, , .		3
621	Heterogeneous Synchronization in Converged Wired and Wireless Time-Sensitive Networks. , 2021, , .		6
622	Distributed Multiuser MIMO for LiFi in Industrial Wireless Applications. Journal of Lightwave Technology, 2021, 39, 3420-3433.	2.7	24
623	Impact of Industry 4.0 and Digitization on Labor Market for 2030-Verification of Keynesâ€™ Prediction. Sustainability, 2021, 13, 7703.	1.6	24
624	Intrusion Detection System for MQTT Protocol Based on Intelligent One-Class Classifiers. Lecture Notes in Networks and Systems, 2022, , 249-260.	0.5	1
625	Network Traffic Prediction via Deep Graph-Sequence Spatiotemporal Modeling Based on Mobile Virtual Reality Technology. Wireless Communications and Mobile Computing, 2021, 2021, 1-12.	0.8	6
626	Matrix Factorization-Based RSS Interpolation for Radio Environment Prediction. IEEE Wireless Communications Letters, 2021, 10, 1464-1468.	3.2	1
627	An Experimental Framework for 5G Wireless System Integration into Industry 4.0 Applications. Energies, 2021, 14, 4444.	1.6	28
628	Active disturbance rejection-based industrial cascade control plant with cloud monitoring. Journal of Engineering, Design and Technology, 2022, 20, 1280-1296.	1.1	1
629	Automatic control of motors through Simocode pro, and its effect on the performance of the process of filling and dispensing of chemical inputs. Indonesian Journal of Electrical Engineering and Computer Science, 2021, 23, 179.	0.7	0
630	Artificial intelligence for supply chain resilience: learning from Covid-19. International Journal of Logistics Management, 2022, 33, 1246-1268.	4.1	119
631	Dronology and 3D Printing as a Catalyst for International Trade in Industry 4.0.. WSEAS Transactions on Environment and Development, 2021, 17, 740-757.	0.3	1
632	An innovative industrial control system architecture for realâ€time response, faultâ€tolerant operation and seamless plant integration. Journal of Engineering, 2021, 2021, 569.	0.6	1
633	Constellation Design for Noncoherent Massive SIMO Systems in URLLC Applications. IEEE Transactions on Communications, 2021, 69, 4387-4401.	4.9	5
634	Industry 4.0 And Ethical Challenges In Developing Countries: A Case Study On Pakistan. , 2021, , .		0
635	IoT-based Intelligent Energy Efficiency Management System for Smart Industries (IoT-IEEMS). , 2021, , .		2

#	Article	IF	Citations
636	Digital twins-based remote semi-physical commissioning of flow-type smart manufacturing systems. Journal of Cleaner Production, 2021, 306, 127278.	4.6	91
637	Industrial Engineers of the Future â€“ A Concept for a Profession that is Evolving. Advances in Science, Technology and Engineering Systems, 2021, 6, 72-79.	0.4	0
638	Monitoring System for Tracking a PV Generator in an Experimental Smart Microgrid: An Open-Source Solution. Sustainability, 2021, 13, 8182.	1.6	27
639	Multipath TCP Meets Transfer Learning: A Novel Edge-Based Learning for Industrial IoT. IEEE Internet of Things Journal, 2021, 8, 10299-10307.	5.5	24
640	Wireless Control of Modular Multilevel Converter Submodules. IEEE Transactions on Power Electronics, 2021, 36, 8439-8453.	5.4	19
641	Organizational Agility in Industry 4.0: A Systematic Literature Review. Sustainability, 2021, 13, 8272.	1.6	43
642	Machine Learning and Deep Learning for Malware and Ransomware Attacks in 6G Network. , 2021, , .		5
643	A Survey on Battery-Less RFID-Based Wireless Sensors. Micromachines, 2021, 12, 819.	1.4	20
644	Implementing Industry 4.0 principles. Computers and Industrial Engineering, 2021, 158, 107379.	3.4	69
645	Industry 4.0: Latent Dirichlet Allocation and clustering based theme identification of bibliography. Engineering Applications of Artificial Intelligence, 2021, 103, 104280.	4.3	13
646	Emerging IoT domains, current standings and open research challenges: a review. PeerJ Computer Science, 2021, 7, e659.	2.7	14
647	Methodology for Digital Transformation with Internet of Things and Cloud Computing: A Practical Guideline for Innovation in Small- and Medium-Sized Enterprises. Sensors, 2021, 21, 5355.	2.1	17
648	SACR: A Stability-Aware Cluster-Based Routing Protocol for Cognitive Radio Sensor Networks. IEEE Sensors Journal, 2021, 21, 17350-17359.	2.4	18
649	Joint Lossy Compression and Power Allocation in Low Latency Wireless Communications for IIoT: A Cross-Layer Approach. IEEE Transactions on Communications, 2021, 69, 5106-5120.	4.9	8
650	Cascading Failure Dynamics against Intentional Attack for Interdependent Industrial Internet of Things. Complexity, 2021, 2021, 1-15.	0.9	9
651	An Efficient On-Demand Hardware Replacement Platform for Metamorphic Functional Processing in Edge-Centric IoT Applications. Electronics (Switzerland), 2021, 10, 2088.	1.8	3
652	Industry 5.0: A survey on enabling technologies and potential applications. Journal of Industrial Information Integration, 2022, 26, 100257.	4.3	411
653	Wireless Positioning in Underground Mines: Challenges and Recent Advances. IEEE Industrial Electronics Magazine, 2021, 15, 39-48.	2.3	14

#	Article	IF	Citations
654	UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. IEEE Transactions on Green Communications and Networking, 2021, 5, 1333-1344.	3.5	18
655	PILLARS IN THE MAKING, INDUSTRY 4.0 ON THE HORIZON. International Journal of the Analytic Hierarchy Process, 2021, 13, .	0.2	0
656	Outage statistics of double gammaâ€“gamma random process and its application to cooperative optical wireless communication relay systems. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 0, , e2958.	1.2	0
657	Passive Network Synchronization Based on Concurrent Observations in Industrial IoT Systems. IEEE Internet of Things Journal, 2021, 8, 14028-14038.	5.5	6
658	Bringing Time-Sensitive Networking to Wireless Professional Private Networks. Wireless Personal Communications, 2021, 121, 1255-1271.	1.8	9
659	An Experimental Evaluation of WIA-FA and IEEE 802.11 Networks for Discrete Manufacturing. IEEE Transactions on Industrial Informatics, 2021, 17, 6260-6271.	7.2	8
660	Design and Performance of a XBee 900 MHz Acquisition System Aimed at Industrial Applications. Applied Sciences (Switzerland), 2021, 11, 8174.	1.3	1
661	Detection of Denial of Service Attacks in an MQTT Environment Using a One-Class Approach. Advances in Intelligent Systems and Computing, 2022, , 84-93.	0.5	0
662	A Survey on Task Offloading in Multi-access Edge Computing. Journal of Systems Architecture, 2021, 118, 102225.	2.5	96
663	IDCT: Intelligent Data Collection Technique for IoT-Enabled Heterogeneous Wireless Sensor Networks in Smart Environments. IEEE Sensors Journal, 2021, 21, 21099-21112.	2.4	20
664	Delineating the Implications of Dispersing Teams and Teleworking in an Agile UK Construction Sector. Sustainability, 2021, 13, 9981.	1.6	15
665	Measuring the effect of automatically authored video aid on assembly time for procedural knowledge transfer among operators in adaptive assembly stations. International Journal of Production Research, 0, , 1-16.	4.9	4
666	Industrial Wireless Control Networks: From WIA to the Future. Engineering, 2022, 8, 18-24.	3.2	11
667	Energy efficiency in extrusion-related polymer processing: A review of state of the art and potential efficiency improvements. Renewable and Sustainable Energy Reviews, 2021, 147, 111219.	8.2	32
668	Examining the role of emotional intelligence as a moderator for virtual communication and decision making effectiveness during the COVID-19 crisis: revisiting task technology fit theory. Annals of Operations Research, 2021, , 1-17.	2.6	9
669	Human-cyber-physical system for production and operation decision optimization in smart steel plants. Science China Technological Sciences, 2022, 65, 247-260.	2.0	9
670	A comprehensive overview of framework for developing sustainable energy internet: From things-based energy network to services-based management system. Renewable and Sustainable Energy Reviews, 2021, 150, 111409.	8.2	41
671	Age of Information and Performance Analysis for UAV-Aided IoT Systems. IEEE Internet of Things Journal, 2021, 8, 14447-14457.	5.5	38

#	Article	IF	Citations
672	Reliable Minimum Cycle Time of 5G NR Based on Data-Driven Channel Characterization. IEEE Transactions on Industrial Informatics, 2021, 17, 7401-7411.	7.2	4
673	Mapping the Impacts of Industry 4.0 on Performance Measurement Systems. IEEE Latin America Transactions, 2021, 19, 1912-1923.	1.2	12
674	Dynamic Deterministic Digital Infrastructure for Time-Sensitive Applications in Factory Floors. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-14.	1.9	9
675	Blockchain and the â€˜Internet of Things' for the construction industry: research trends and opportunities. Automation in Construction, 2021, 132, 103942.	4.8	74
676	A Softwarized Intrusion Detection System for the RPL-based Internet of Things networks. Future Generation Computer Systems, 2021, 125, 698-714.	4.9	12
677	Analysis of typical PLC pulses for sensing high-impedance faults based on time-domain reflectometry. International Journal of Electrical Power and Energy Systems, 2022, 135, 107168.	3.3	7
678	Digital Platform for Maritime Port Ecosystem: Port of Hamburg Case. Transportation Research Procedia, 2021, 54, 909-917.	0.8	18
679	Parallel Route Optimization and Service Assurance in Energy-Efficient Software-Defined Industrial IoT Networks. IEEE Access, 2021, 9, 24682-24696.	2.6	20
680	Blockchain-Based Industrial Internet of Things for the Integration of Industrial Process Automation Systems. Advances in Data Mining and Database Management Book Series, 2021, , 163-186.	0.4	0
681	The Project Management of Industry 4.0 Strategy for Software Houses. , 2021, , 322-335.		0
682	The Alignment of Civil Engineering Tools and Equipment Between TVET Colleges and Industries. Advances in Higher Education and Professional Development Book Series, 2021, , 29-48.	0.1	2
683	Design of Single-Layer Metasurface Filter by Conformational Space Annealing Algorithm for 5G mm-Wave Communications. IEEE Access, 2021, 9, 29764-29774.	2.6	20
684	Lean industry 4.0: a digital value stream approach to process improvement. Procedia Manufacturing, 2021, 54, 19-24.	1.9	18
685	Bandwidth Allocation of Stream-Reservation Traffic in TSN. IEEE Transactions on Network and Service Management, 2022, 19, 741-755.	3.2	10
686	Big Data and Analytics in Industry 4.0. Advances in Science, Technology and Innovation, 2020, , 57-72.	0.2	8
687	Electrical Internet of Things - EIoT: A Platform for the Data Management in Electrical Systems. Advances in Intelligent Systems and Computing, 2020, , 49-65.	0.5	1
688	Data Fusion-Based AI Algorithms in the Context of IIoTS. EAI/Springer Innovations in Communication and Computing, 2020, , 17-38.	0.9	6
689	Time Series Display for Knowledge Discovery on Selective Laser Melting Machines. Lecture Notes in Computer Science, 2019, , 280-290.	1.0	2

#	Article	IF	Citations
690	Technological Change and Logistics Development in European Ports. Strategies for Sustainability, 2020, , 73-88.	0.2	18
691	A CPS-Based IIoT Architecture Using Level Diagnostics Model for Smart Factory. Lecture Notes in Computer Science, 2020, , 577-587.	1.0	2
692	Towards Post-Quantum Security for Cyber-Physical Systems: Integrating PQC into Industrial M2M Communication. Lecture Notes in Computer Science, 2020, , 295-316.	1.0	17
693	Towards Osmotic Computing: Looking at Basic Principles and Technologies. Advances in Intelligent Systems and Computing, 2018, , 906-915.	0.5	14
694	WEVA: A Complete Solution for Industrial Internet of Things. Lecture Notes in Computer Science, 2017, , 231-238.	1.0	12
695	An Introduction to Healthcare 4.0. , 2019, , 1-15.		17
696	Semantic communications between distributed cyber-physical systems towards collaborative automation for smart manufacturing. Journal of Manufacturing Systems, 2020, 55, 348-359.	7.6	52
697	Development of cyber physical system based manufacturing system design for process optimization. IOP Conference Series: Materials Science and Engineering, 2020, 997, 012048.	0.3	10
698	Private 5G: The Future of Industrial Wireless. IEEE Industrial Electronics Magazine, 2020, 14, 136-145.	2.3	114
699	Intelligent-Driven Green Resource Allocation for Industrial Internet of Things in 5G Heterogeneous Networks. IEEE Transactions on Industrial Informatics, 2022, 18, 520-530.	7.2	28
700	Dependable mesh networking patterns. , 2019, , .		8
701	The shift to 6G communications: vision and requirements. Human-centric Computing and Information Sciences, 2020, 10, .	6.1	130
702	IoT Devices Signals Processing Based on Shepard Local Approximation Operators Defined in Riesz MV-Algebras. Informatica, 2020, , 131-142.	1.5	11
703	3.4/4.0 GHz Tunable Resonant Cavity in SIW Technology Using Metal Post and PIN Diode on a Low-Cost Biasing Network for 5G Applications. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2020, 19, 94-105.	0.4	4
704	Solving a Classical Optimization ProblemUsing GAMS Optimizer Package: Economic Dispatch ProblemImplementation. IngenierÃa Y Ciencia, 2017, 13, 39-63.	0.3	16
705	Citywide Cellular Traffic Prediction Based on a Hybrid Spatiotemporal Network. Algorithms, 2020, 13, 20.	1.2	16
706	A Survey of Enabling Technologies for Smart Communities. Smart Cities, 2021, 4, 54-77.	5.5	33
707	Interdisciplinary Higher Education. Advances in Higher Education and Professional Development Book Series, 2019, , 1-22.	0.1	2

#	Article	IF	Citations
708	The Project Management of Industry 4.0 Strategy for Software Houses. Advances in Logistics, Operations, and Management Science Book Series, 2019, , 228-241.	0.3	1
709	Sustainable Supply Chain Management in the Era of Digitialization. Advances in Human Resources Management and Organizational Development Book Series, 2020, , 446-460.	0.2	23
710	Evaluation of Influence of Principles Involved in Industry 4.0 Over Coal Industries Using TISM. Advances in Logistics, Operations, and Management Science Book Series, 2019, , 244-262.	0.3	1
711	The Internet of Things (IoT) and its Application Domains. International Journal of Computer Applications, 2019, 182, 36-49.	0.2	63
712	Enabling Wireless Power Transfer and Multiple Antennas Selection to IoT Network Relying on NOMA. Elektronika Ir Elektrotechnika, 2020, 26, 59-65.	0.4	3
713	DSLs and Middleware Platforms in a Model-Driven Development Approach for Secure Predictive Maintenance Systems in Smart Factories. Lecture Notes in Computer Science, 2021, , 146-161.	1.0	7
714	A Machine Learning-based Methodology for in-Process Fluid Characterisation with Photonic Sensors. IEEE Sensors Journal, 2021, , 1-1.	2.4	0
715	Accurate End-to-End Delay Bound Analysis for Large-Scale Network Via Experimental Comparison. IEICE Transactions on Communications, 2022, E105.B, 472-484.	0.4	0
716	Multicast Scheduling in SDN WISE to Support Mobile Nodes in Industrial Wireless Sensor Networks. IEEE Access, 2021, 9, 141651-141666.	2.6	8
718	Application of Federated Learning in Industrial Internet with Device Identifier. , 2021, , .		2
719	Efficient Path and Charge (P&C) Scheduling for a Mobile Charger to Improve Survivability and Throughput of Sensors with Adaptive Sensing Rates. , 2021, , .		0
720	The Effect of Time-Sensitive Networking Onto Performance and Robustness of Power Grid Protection. , 2021, , .		2
721	Frontiers of Transdisciplinary Research in Tactile Internet with Human-in-the-Loop. , 2021, , .		7
722	DSLs for Model Driven Development of Secure Interoperable Automation Systems with EdgeX Foundry. , 2021, , .		11
723	PoC Design: A Methodology for Proof-of-Concept (PoC) Development on Internet of Things Connected Dynamic Environments. Security and Communication Networks, 2021, 2021, 1-12.	1.0	6
724	Multi-Domain Time-Sensitive Networksâ€"Control Plane Mechanisms for Dynamic Inter-Domain Stream Configuration. Electronics (Switzerland), 2021, 10, 2477.	1.8	4
725	Sustainable supplier selection based on industry 4.0 initiatives within the context of circular economy implementation in supply chain operations. Production Planning and Control, 2023, 34, 999-1019.	5.8	47
726	How can open innovation support SMEs in the adoption of I4.0 technologies? An empirical analysis. R and D Management, 2022, 52, 615-632.	3.0	19

#	Article	IF	Citations
727	A Review of 4IR/5IR Enabling Technologies and Their Linkage to Manufacturing Supply Chain. Technologies, 2021, 9, 77.	3.0	8
728	The application of industry 4.0 technologies in pandemic management: Literature review and case study. Healthcare Analytics, 2021, 1, 100008.	2.6	19
729	An SDN-Enabled Architecture for IT/OT Converged Networks: A Proposal and Qualitative Analysis under DDoS Attacks. Future Internet, 2021, 13, 258.	2.4	7
730	TinyML Meets IoT: A Comprehensive Survey. Internet of Things (Netherlands), 2021, 16, 100461.	4.9	96
731	Automatische Evaluierung von Anforderungen bezÃ¼glich der Informationssicherheit fÃ¼r das zukÃ¼nftige industrielle Netzwerkmanagement. Informatik Aktuell, 2018, , 49-58.	0.4	2
732	Distributed Path Reconfiguration and Data Forwarding in Industrial IoT Networks. Lecture Notes in Computer Science, 2018, , 29-41.	1.0	3
733	Feedback Presentation for Workers in Industrial Environments â€“ Challenges and Opportunities. Lecture Notes in Computer Science, 2018, , 248-261.	1.0	3
734	A Design of Modbus Communication Class for Multiple SCU Connections. The Journal of Korean Institute of Information Technology, 2018, 16, 67-73.	0.1	0
735	Guest Editorial Special Section on Industrial Communication Technologies and Systems. IEEE Transactions on Industrial Informatics, 2018, 14, 2062-2065.	7.2	2
736	Doing More With Less. Advances in Logistics, Operations, and Management Science Book Series, 2019, , 1-17.	0.3	0
737	Towards Cyber-Physical Infrastructure as-a-Service (CPIaaS) in the Era of Industry 4.0. Communications in Computer and Information Science, 2019, , 310-321.	0.4	11
738	RT-WiFi Approach to Handle Real-Time Communication: An Experimental Evaluation. Lecture Notes in Computer Science, 2019, , 290-303.	1.0	1
739	Communication Model of Smart Substation for Cyber-Detection Systems. Communications in Computer and Information Science, 2019, , 256-271.	0.4	4
740	Practical Implementation of Industry 4.0 Based on Open Access Tools and Technologies. IFIP Advances in Information and Communication Technology, 2019, , 94-103.	0.5	3
741	On the importance of cryptographic agility for industrial automation. Automatisierungstechnik, 2019, 67, 402-416.	0.4	4
742	Data fusion based onâ€line product quality evaluation of ternary cathode material cyberâ€physical systems. IET Cyber-Physical Systems: Theory and Applications, 2019, 4, 353-364.	1.9	1
744	Wireless water usage monitoring system for home / small premises. Indonesian Journal of Electrical Engineering and Computer Science, 2019, 15, 704.	0.7	3
745	ReFIT: Reliability Challenges and Failure Rate Mitigation Techniques for IoT Systems. Communications in Computer and Information Science, 2020, , 123-142.	0.4	1

#	Article	IF	Citations
746	A Bibliometric study on Industry 4.0. International Journal of Professional Business Review, 2019, 4, 35-42.	0.2	1
747	A Seamless Self-configuring EtherCAT Master Redundancy Protocol. Communications in Computer and Information Science, 2020, , 381-395.	0.4	0
748	IoT Integration in Industryâ€"A Literature Review. Lecture Notes in Mechanical Engineering, 2020, , 9-17.	0.3	9
749	Data Science Approaches to Quality Control in Manufacturing: A Review of Problems, Challenges and Architecture. Communications in Computer and Information Science, 2020, , 45-65.	0.4	8
751	Communication supervision function for verticals in 4G networks and beyond: Traffic anomaly detection from aggregated LTE MAC layer reports using a LSTM-RNN. , 2020, , .		2
753	Evaluating Arrowhead Framework for Dynamic Condition Monitoring Applications and Edge Computing in Mining. , 2020, , .		1
754	Internet of Robotic Things in Industry 4.0: Applications, Issues and Challenges. , 2020, , .		2
755	Bulk data transfer in Controller Area Networks for Industry 4.0. , 2020, , .		1
756	Industria 4.0. Inventio, 2020, 16, .	0.0	2
757	Application of Virtualization Technologies in Novel Industrial Automation: Catalyst or Show-Stopper?. , 2020, , .		5
758	Using Li-Fi to Improve SCADA Communications. , 2020, , .		2
759	GEOSPATIAL SENSOR WEB ADAPTOR FOR INTEGRATING DIVERSE INTERNET OF THINGS PROTOCOLS WITHIN SMART CITY. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-4-2020, 115-121.	0.0	2
760	Multi-drive control and condition monitoring in networked electric drives with EtherCAT. , 2020, , .		1
761	Clock Synchronization in Future Industrial Networks: Applications, Challenges, and Directions. , 2020, , .		6
762	ContextualizaciÃ³n de la cuarta revoluciÃ³n industrial, Industria 4.0, Industria 5.0 y tecnologÃa 5G con el sector Defensa y Seguridad. Perspectivas En Inteligencia, 2021, 12, 245-258.	0.2	1
763	Reliable Control Applications with Wireless Communication Technologies: Application to Robotic Systems. Sensors, 2021, 21, 7107.	2.1	6
764	An Investigation to the Industry 4.0 Readiness of Manufacturing Enterprises. Journal of Global Information Management, 2021, 29, 1-20.	1.4	17
765	Cybersecurity of Industrial Internet of Things. Advances in Information Security, Privacy, and Ethics Book Series, 2020, , 47-68.	0.4	6

#	Article	IF	Citations
766	On the suitability of 6TiSCH for industrial wireless communication. Technologien Fuˋr Die Intelligente Automation, 2020, , 34-48.	0.3	4
767	Multi-criteria ranking of available forms of promotional activities: A case analysis. Anali Ekonomskog Fakulteta U Subotici, 2020, , 153-169.	0.1	0
768	Wireless Sensor Network Aided Assembly Line Monitoring According to Expectations of Industry 4.0. Applied Sciences (Switzerland), 2021, 11, 25.	1.3	8
769	Adaptive Extraction-Based Independent Component Analysis for Time-Sensitive Applications. , 2020, , .		4
770	Y-Net: A Dual Path Model for High Accuracy Blind Source Separation. , 2020, , .		5
771	On Ad Hoc Communication in Industrial Environments. Applied Sciences (Switzerland), 2020, 10, 9126.	1.3	5
772	Application Design of Farmbot Mobile App Using Internet of Things on Android. IOP Conference Series: Materials Science and Engineering, 0, 982, 012055.	0.3	1
773	An Optimal Resource Allocation Method for IIoT Network. , 2021, , .		8
774	Reconfigurable Intelligent Surfaces in Challenging Environments: Underwater, Underground, Industrial and Disaster. IEEE Access, 2021, 9, 150214-150233.	2.6	24
775	Certificateless signature schemes in Industrial Internet of Things: A comparative survey. Computer Communications, 2022, 181, 116-131.	3.1	18
776	DADC: A Novel Duty-cycling Scheme for IEEE 802.15.4 Cluster-tree-based IoT Applications. ACM Transactions on Internet Technology, 2022, 22, 1-26.	3.0	2
777	QoS-Based Routing Algorithm for Software-Defined Network Using Ant Colony Optimization. Lecture Notes in Networks and Systems, 2020, , 37-45.	0.5	1
778	Analysis and Diagnostic of Colombian Automated Manufacturing Production. Journal of Engineering and Applied Sciences, 2020, 15, 1322-1329.	0.2	0
779	An Energy-Efficient Context Aware Solution for Environmental Assessment. IFAC-PapersOnLine, 2020, 53, 756-761.	0.5	1
780	Opportunities for Industrial Control. IFAC-PapersOnLine, 2020, 53, 7839-7844.	0.5	0
781	Abstraction models for 5G mobile networks integration into industrial networks and their evaluation. Technologien Fuˋr Die Intelligente Automation, 2020, , 88-101.	0.3	0
782	Industry 4.0 Privacy and Security Protocol Issues in Internet of Things. Advances in Computer and Electrical Engineering Book Series, 2020, , 193-217.	0.2	0
783	Software-Based Time-Aware Shaper for Time-Sensitive Networks. IEICE Transactions on Communications, 2020, E103.B, 167-180.	0.4	1

#	Article	IF	Citations
784	HSA-SPC: Hybrid Spectrum Access with Spectrum Prediction and Cooperation for Performance Enhancement of Multiuser Cognitive Radio Network. Computer Networks, 2022, 203, 108596.	3.2	2
785	Hierarchical Time-frequency Synchronization Mechanism for Time Sensitive Networking. , 2020, , .		0
786	Event-aware Hierarchical Routing with Differential Compression to Extend WSN Lifetime. , 2020, , .		1
787	Slicing-enabled private 4G/5G network for industrial wireless applications. , 2020, , .		7
788	A PCE-Based Framework for Future Internet Deterministic and Time-Sensitive Networks. , 2020, , .		0
789	The productivity impact of the digitally connected 5 â€“ layer stack in manufacturing enterprises. Procedia CIRP, 2021, 104, 342-350.	1.0	2
790	A context-aware information-based clone node attack detection scheme in Internet of Things. Journal of Network and Computer Applications, 2022, 197, 103271.	5.8	9
791	Identification of Graph Thinking in Solving Mathematical Problems Naturally. Participatory Educational Research, 2022, 9, 118-135.	0.4	0
792	Syndrome Diagnostics - Fault Detection and Isolation for Complex Systems using Causation-based AI. , 2021, , .		0
793	Application Based Energy Optimization for Computation Offloading in Hierarchical MEC Network. , 2021, , .		1
794	Transfer Learning Approach for the Design of Basic Control Loops in Wastewater Treatment Plants. , 2021, , .		4
795	The performance of openSAFETY protocol via IEEE 802.11 wireless communication. , 2021, , .		4
796	LETRA: Mapping Legacy Ethernet-Based Traffic into TSN Traffic Classes. , 2021, , .		6
797	Avoiding Keep-Alive Messages by exposing 5G Channel State Information to Applications. , 2021, , .		0
798	Network Planning and Coverage Optimization for Mobile Campus Networks. , 2021, , .		2
799	How Does the Interactivity of Social Media Affect the Adoption of New Green Products?. Frontiers in Psychology, 2021, 12, 786372.	1.1	2
800	A Systematic Modelling Procedure to Design Agent-Oriented Control to Coalition of Capabilitiesâ€"In the Context of I4.0 as Virtual Assets (AAS). Computers, 2021, 10, 161.	2.1	2
801	Roadmap on signal processing for next generation measurement systems. Measurement Science and Technology, 2022, 33, 012002.	1.4	12

#	Article	IF	Citations
802	Efficient Encryption Algorithm for Data Security in Big Data Cloud Environment. International Journal for Research in Applied Science and Engineering Technology, 2021, 9, 1127-1131.	0.1	0
803	Towards post-quantum security for cyber-physical systems: Integrating PQC into industrial M2M communication1. Journal of Computer Security, 2021, , 1-31.	0.5	1
804	News Feed Advertising and Positive Attitude: An Interpretation Model Based on Information Processing. Frontiers in Psychology, 2021, 12, 724140.	1.1	1
805	Cybersecurity of Offshore Oil and Gas Production Assets Under Trending Asset Digitalization Contexts: A Specific Review of Issues and Challenges in Safety Instrumented Systems. European Journal for Security Research, 0, , 1.	2.0	3
806	Starting points for digital shop floor management in production enterprises. Procedia CIRP, 2021, 104, 212-216.	1.0	4
807	WLAN Interference Identification Using a Convolutional Neural Network for Factory Environments. Journal of Communications, 2021, , 276-283.	1.3	7
808	Channel-State-Based Fingerprinting Against Physical Access Attack in Industrial Field Bus Network. IEEE Internet of Things Journal, 2022, 9, 9557-9573.	5.5	7
810	CapBad: Content-Agnostic, Payload-Based Anomaly Detector for Industrial Control Protocols. IEEE Internet of Things Journal, 2022, 9, 12542-12554.	5.5	13
812	Optimization of Fusion Center Parameters With Threshold Selection in Multiple Antenna and Censoring-Based Cognitive Radio Network. IEEE Sensors Journal, 2022, 22, 4709-4721.	2.4	5
813	Techno-Economic Evaluation of 5G Technology for Automated Guided Vehicles in Production. Electronics (Switzerland), 2022, 11, 192.	1.8	3
814	A cost aware topology formation scheme for latency sensitive applications in edge infrastructure-as-a-service paradigm. Journal of Network and Computer Applications, 2022, 199, 103303.	5.8	10
815	Industry 4.0 and the Challenges Faced by STEM Education. , 2020, , .		5
816	Scheduling Data Allocation in Packet Based Wireless Communication System Using Data Mining. , 2020, , .		0
817	Use cases and success stories of a data analytics system in an automotive Paint Shop. , 2020, , .		3
818	Optimum Sensor Value Transmission Scheduling for Linear Wireless Networked Control Systems. , 2020, , .		3
819	Industry 4.0 and Circular Economy: Integrated or disarticulated concepts? A research agenda. GEPROS: GestÃ£o Da ProduÃ§Ã£o, OperaÃ§Ãµes E Sistemas, 2020, 15, 48-77.	0.0	1
820	When will my PLC support Mirai? The security economics of large-scale attacks against Internet-connected ICS devices. , 2020, , .		5
821	Develop an EtherCAT and DeviceNet Gateway for a Smart Factory. , 2020, , .		1

#	Article	IF	Citations
822	Blockchain-based machine-to-machine communication in the industry 4.0 applied at the industrial mining environment. , 2020, , .		3
823	Simulative Assessments of Credit-Based Shaping and Asynchronous Traffic Shaping in Time-Sensitive Networking. , 2020, , .		6
824	Particle Swarm Optimization Advances in Internet of Things Industry. Springer Tracts in Nature-inspired Computing, 2022, , 93-110.	1.2	1
825	Improving interoperability of Virtual Commissioning toolchains by using OPC-UA-based technologies. , 2021, , .		1
826	Applicability Investigation of Transmission Power Optimization Method for Concurrently Communicating Access-Points Using Channel Bonding and Non-Bonding in WLAN. , 2021, , .		0
827	Feasibility Investigations of Access-Point Transmission Power Optimization Method under Co-use of Channel Bonding and Non Channel Bonding in Wireless Local-Area Network. , 2021, , .		1
828	Experimental assessment of TSN support in heterogeneous platforms with virtualization for automotive applications. , 2021, , .		1
829	Synchronization of Electrical Drives via EtherCAT Fieldbus Communication Modules. Energies, 2022, 15, 604.	1.6	13
830	Achieving Low Latency in Massive Access: A Mean-Field Approach. IEEE Journal on Selected Areas in Communications, 2022, 40, 1473-1488.	9.7	3
831	A bibliometric review of research on digital identity: Research streams, influential works and future research paths. Journal of Manufacturing Systems, 2022, 62, 523-538.	7.6	8
832	Intelligent One-Class Classifiers for the Development of an Intrusion Detection System: The MQTT Case Study. Electronics (Switzerland), 2022, 11, 422.	1.8	11
833	A survey of application research based on blockchain smart contract. Wireless Networks, 2022, 28, 635-690.	2.0	61
834	Rainbow-Link: Beam-Alignment-Free and Grant-Free mmW Multiple Access Using True-Time-Delay Array. IEEE Journal on Selected Areas in Communications, 2022, 40, 1692-1705.	9.7	9
835	Optimising data visualisation in the process control and IIoT environments. International Journal on Smart Sensing and Intelligent Systems, 2022, 15, 1-14.	0.4	1
836	A Comprehensive Survey on the Internet of Things with the Industrial Marketplace. Sensors, 2022, 22, 730.	2.1	48
837	When IEEE 802.11 and 5G Meet Time-Sensitive Networking. IEEE Open Journal of the Industrial Electronics Society, 2022, 3, 14-36.	4.8	29
838	Design of IIoT device to parse data directly to scada systems using LoRa physical layer. International Journal on Smart Sensing and Intelligent Systems, 2022, 15, 1-13.	0.4	1
839	Design of Edge Computing for 5G-Enabled Tactile Internet-Based Industrial Applications. IEEE Communications Magazine, 2022, 60, 60-66.	4.9	17

#	Article	IF	Citations
840	Application of the Internet of Things (IoT) to Fight the COVID-19 Pandemic. Internet of Things, 2022, , 83-103.	1.3	4
841	Unified Performance Analysis of Stochastic Clustered Cooperative Systems With Distance-Based Relay Selection. IEEE Transactions on Wireless Communications, 2022, 21, 6180-6194.	6.1	3
842	Effective capacity maximization of two-way full-duplex and half-duplex relays with finite block length packets transmission. Wireless Networks, 2022, 28, 1079-1096.	2.0	1
843	On the Reliability of Industrial Internet of Things from Systematic Perspectives: Evaluation Approaches, Challenges, and Open Issues. IETE Technical Review (Institution of Electronics and) Tj ETQq1 1 0.784314 rgBT /Overlock	2.4	0
844	Modulation Division based User Grouping Communication for Massive SIMO in IIoT. , 2021, , .		0
845	Internet of wearable things. , 2022, , 295-310.		2
846	IoT and Blockchain for Secured Supply Chain Management. Advances in Business Information Systems and Analytics Book Series, 2022, , 145-160.	0.3	0
847	Integrating a data analytics system in automotive manufacturing: background, methodology and learned lessons. Procedia Computer Science, 2022, 200, 718-726.	1.2	1
848	Timely Device Status Updates in Industrial Wireless Monitoring Systems Under Resource Constraints. IEEE Internet of Things Journal, 2022, 9, 18791-18805.	5.5	1
849	Deterministic Latency/Jitter-Aware Service Function Chaining Over Beyond 5G Edge Fabric. IEEE Transactions on Network and Service Management, 2022, 19, 2148-2162.	3.2	13
850	A Comprehensive Review on Time Sensitive Networks with a Special Focus on Its Applicability to Industrial Smart and Distributed Measurement Systems. Sensors, 2022, 22, 1638.	2.1	25
851	Experimental Evaluation of the Deterministic Wireless Communication System Industrial LTE. , 2022, , .		0
852	Identification and Classification of the Communication Data of Automated Guided Vehicles and Autonomous Mobile Robots. , 2022, , .		1
853	Hijacking of unmanned surface vehicles: A demonstration of attacks and countermeasures in the field. Journal of Field Robotics, 2022, 39, 631-649.	3.2	7
854	An Aggregated Data Integration Approach to the Web and Cloud Platforms through a Modular REST-Based OPC UA Middleware. Sensors, 2022, 22, 1952.	2.1	6
855	Millimeter-Wave Smart Antenna Solutions for URLLC in Industry 4.0 and Beyond. Sensors, 2022, 22, 2688.	2.1	17
857	Applications of Wireless Sensor Networks and Internet of Things Frameworks in the Industry Revolution 4.0: A Systematic Literature Review. Sensors, 2022, 22, 2087.	2.1	232
858	Demystifying In-Vehicle Intrusion Detection Systems: A Survey of Surveys and a Meta-Taxonomy. Electronics (Switzerland), 2022, 11, 1072.	1.8	25

#	Article	IF	Citations
859	Cognitive Modeling of Digital Production Factors. , 2022, , .		0
860	Optical metrology for digital manufacturing: a review. International Journal of Advanced Manufacturing Technology, 2022, 120, 4271-4290.	1.5	25
861	ML-Based 5G Network Slicing Security: A Comprehensive Survey. Future Internet, 2022, 14, 116.	2.4	29
862	IoT real time system for monitoring lithium-ion battery long-term operation in microgrids. Journal of Energy Storage, 2022, 51, 104596.	3.9	43
863	Lossy Data Compression for IoT Sensors: A Review. Internet of Things (Netherlands), 2022, 19, 100516.	4.9	9
864	Continuous Testing and SLA Management of 5G Networks for Industrial Automation. , 2021, , .		3
865	Digital Estimation of Three-tank System over Networks with Packets Loss based on TrueTime. , 2021, , .		0
866	Application and Research of Deep Mining of Health Medical Big Data Based on Internet of Things. , 2021, , .		0
867	EcoWaste: A Smart Waste Platform Enabling Circular Economy. , 2021, , .		2
868	BACE: Blockchain-based Access Control at the Edge for Industrial Control Devices of Industry 4.0. , 2021, , .		2
869	Ubiquitous System Integration as a Service in Smart Factories. , 2021, , .		3
870	TSCH Multiflow Scheduling with QoS Guarantees: A Comparison of SDN with Common Schedulers. Applied Sciences (Switzerland), 2022, 12, 119.	1.3	5
871	Evaluating the practical limitations of TinyML: an experimental approach. , 2021, , .		2
872	A Modulation Division Based Physical Layer Authentication in Wireless Communication Systems. , 2021, , .		0
873	Understanding firm survival in aÂglobal crisis. International Marketing Review, 2023, 40, 829-868.	2.2	7
874	In-Network Processing for Low-Latency Industrial Anomaly Detection in Softwarized Networks. , 2021, , .		3
875	Plant Factory: A New Playground of Industrial Communication and Computing. Sensors, 2022, 22, 147.	2.1	10
876	Reliability Analysis of the Proactive Transmission of Replicated Frames Mechanism over Time-Sensitive Networking. Sensors, 2021, 21, 8427.	2.1	1

#	Article	IF	Citations
877	A Layered Middleware for OT/IT Convergence to Empower Industry 5.0 Applications. Sensors, 2022, 22, 190.	2.1	18
878	A method to determine the tolerable time of national top-level nodes failure. , 2021, , .		0
879	CoSiWiNeT: A Clock Synchronization Algorithm for Wide Area IIoT Network. Applied Sciences (Switzerland), 2021, 11, 11985.	1.3	4
880	In-Network Processing Acoustic Data for Anomaly Detection in Smart Factory. , 2021, , .		11
881	Reliable Routing and Scheduling in Time-Sensitive Networks. , 2021, , .		6
882	Analyzing the 6G Technology. Advances in Wireless Technologies and Telecommunication Book Series, 2022, , 52-71.	0.3	0
884	Age of Information in CSMA-Based Networks With Bursty Update Traffic. IEEE Access, 2022, 10, 44088-44105.	2.6	2
885	Privacy-Preserving Anomaly Detection in Cloud Manufacturing Via Federated Transformer. IEEE Transactions on Industrial Informatics, 2022, 18, 8977-8987.	7.2	6
886	Distributed resource allocation for D2D communications underlaying cellular network based on Stackelberg game. Eurasip Journal on Wireless Communications and Networking, 2022, 2022, .	1.5	2
887	Analyzing Industry 4.0 trends through the Technology Roadmapping Method. Procedia Computer Science, 2022, 201, 511-518.	1.2	5
888	Best Regional Practices for Digital Transformation in Industry: The Case of the Industry 4.0 Program in Portugal. Lecture Notes in Information Systems and Organisation, 2022, , 163-181.	0.4	2
889	Evaluation of PLC4X based Middleware as Integrator of Brownfield systems into Industrial Cyber-Physical Systems. IFAC-PapersOnLine, 2022, 55, 427-432.	0.5	0
890	Generation of Substitution Box Structures Based on Blum Blum Shub Random Number Outputs. , 2022, , .		3
891	Recent review of Distributed Denial of Service Attacks in the Internet of Things. , 2022, , .		6
892	A Comparative Institutional Analysis on the Integration of E-Learning in Higher Education. Advances in Mobile and Distance Learning Book Series, 2022, , 37-59.	0.4	0
893	Heterogeneous Network Access and Fusion in Smart Factory: A Survey. ACM Computing Surveys, 2023, 55, 1-31.	16.1	4
895	A Secure Encoding Mechanism Against Deception Attacks on Multisensor Remote State Estimation. IEEE Transactions on Information Forensics and Security, 2022, 17, 1959-1969.	4.5	10
896	Deep Reinforcement Learning aided No-wait Flow Scheduling in Time-Sensitive Networks. , 2022, , .		6

#	Article	IF	Citations
897	Efficient Schedule of Path and Charge for a Mobile Charger to Improve Survivability and Throughput of Sensors with Adaptive Sensing Rates. IEICE Transactions on Communications, 2022, E105.B, 1380-1389.	0.4	0
898	Accelerating Industrial IoT Acoustic Data Separation With In-Network Computing. IEEE Internet of Things Journal, 2023, 10, 3901-3916.	5.5	4
899	Advanced Analytics as a Service in Smart Factories. , 2022, , .		4
900	Investigation of Resource Constraints for the Automation of Industrial Security Risk Assessments. , 2022, , .		4
901	Improving performance and cyber-attack resilience in multi-firewall industrial networks. , 2022, , .		4
902	IP-based Architecture for an Edge Cloud enabled Factory: Concept and Requirements. , 2022, , .		3
903	Timing Analysis of TSN-Enabled OPC UA PubSub. , 2022, , .		4
904	Proactive Dual Connectivity for Automated Guided Vehicles in Outdoor Industrial Environment. IEEE Access, 2022, 10, 54149-54163.	2.6	1
905	Implementation of a Secure LoRaWAN System for Industrial Internet of Things Integrated With IPFS and Blockchain. IEEE Systems Journal, 2022, 16, 5455-5464.	2.9	13
906	Enabling Deterministic Communications for End-to-End Connectivity with Software-Defined Time-Sensitive Networking. IEEE Network, 2022, 36, 34-40.	4.9	7
907	The Alignment of Civil Engineering Tools and Equipment Between TVET Colleges and Industries. , 2022, , 219-234.		0
908	Measurement of master node delay in networked control systems. Measurement and Control, 0, , 002029402210980.	0.9	0
909	Techno-Economics of LiFi in IoT Applications. , 2022, , .		4
910	Prototype of 5G Integrated with TSN for Edge-Controlled Mobile Robotics. Electronics (Switzerland), 2022, 11, 1666.	1.8	8
911	Industry 4.0 and 5g technology on firms network. Brazilian Journal of Operations and Production Management, 2021, 19, 1-18.	0.8	1
912	Exploring the Application Sphere of the Internet of Things in Industry 4.0: A Review, Bibliometric and Content Analysis. Sensors, 2022, 22, 4276.	2.1	39
913	LoRa support for long-range real-time inter-cluster communications over Bluetooth Low Energy industrial networks. Computer Communications, 2022, 192, 57-65.	3.1	14
914	A Survey of Real-Time Ethernet Modeling and Design Methodologies: From AVB to TSN. ACM Computing Surveys, 2023, 55, 1-36.	16.1	37

#	Article	IF	Citations
915	HERMES: Heuristic Multi-queue Scheduler for TSN Time-Triggered Traffic with Zero Reception Jitter Capabilities. , 2022, , .		9
917	RIS-Aided Smart Manufacturing: Information Transmission and Machine Health Monitoring. IEEE Internet of Things Journal, 2022, 9, 22930-22943.	5.5	2
918	A Novel Communication Method Using PWM and Capture Function of DSP for Parallel Controlled Power Electronics Systems. IEEE Access, 2022, 10, 68266-68280.	2.6	2
919	Enabling Deterministic Tasks with Multi-Access Edge Computing in 5G Networks. IEEE Communications Magazine, 2022, 60, 36-42.	4.9	3
920	Enabling URLLC in 5G NR IIoT Networks: A Full-Stack End-to-End Analysis. , 2022, , .		9
921	Toward the Web of Industrial Things: A Publish-Subscribe Oriented Architecture for Data and Power Management. Sensors, 2022, 22, 4882.	2.1	2
922	Progressive Construction of k-identifiable Networks. , 2022, , .		0
924	An interoperable and flat Industrial Internet of Things architecture for low latency data collection in manufacturing systems. Journal of Systems Architecture, 2022, 129, 102631.	2.5	14
925	Bearing fault diagnosis using transfer learning and self-attention ensemble lightweight convolutional neural network. Neurocomputing, 2022, 501, 765-777.	3.5	54
926	Integration of industrial IoT architectures for dynamic scheduling. Computers and Industrial Engineering, 2022, 171, 108387.	3.4	7
927	From Industry 4.0 towards Industry 5.0: A Review and Analysis of Paradigm Shift for the People, Organization and Technology. Energies, 2022, 15, 5221.	1.6	84
930	Implementation of a High-precision TIME-aware Shaper in TSN. , 2022, , .		0
931	Predictive Maintenance in Electrical Machines: An Edge Computing Approach. , 2022, , .		0
932	Towards digital twin-enabled DevOps for CPS providing architecture-based service adaptation & verification at runtime. , 2022, , .		4
933	Connected Vehicles and Motor Factories of the Future Adopting 5G Technology for Vehicle-to-Factory Communications. , 2022, , .		0
934	Toward a Failures Model for Communication of Decentralized Applications with Blockchain Networks Applied in the Industrial Environment. IEEE Wireless Communications, 2022, 29, 40-46.	6.6	1
936	Leveraging big data analytics in 5Gâ€enabled IoT and industrial IoT for the development of sustainable smart cities. Transactions on Emerging Telecommunications Technologies, 2022, 33, .	2.6	11
937	The Impact Factors of Industry 4.0 on ESG in the Energy Sector. Sustainability, 2022, 14, 9198.	1.6	21

#	Article	IF	Citations
938	Hybrid Visual and Optimal Elliptic Curve Cryptography for Medical Image Security in Iot. ECTI Transactions on Computer and Information Technology, 2022, 16, 324-337.	0.4	3
939	Improved bio-inspired security scheme for privacy-preserving in the internet of things. Peer-to-Peer Networking and Applications, 2022, 15, 2488-2502.	2.6	4
940	Health Monitoring of Employees for Industry 4.0. Journal of Nanomaterials, 2022, 2022, 1-8.	1.5	1
941	Cybersecurity in the Automotive Industry: A Systematic Literature Review (SLR). Journal of Computer Information Systems, 2023, 63, 716-734.	2.0	1
942	South Africa in the era of Industry 4.0: An Insightful Investigation. Scientometrics, 0, , .	1.6	0
943	A Low-Cost Online Data Acquisition and Processing System for Industrial Pollutantsâ€™ Monitoring. Advances in Multimedia, 2022, 2022, 1-13.	0.2	0
944	An Efficient IIoT Gateway for Cloudâ€“Edge Collaboration in Cloud Manufacturing. Machines, 2022, 10, 850.	1.2	6
945	The Impact of Mobility on Physical Layer Security of 5G IoT Networks. IEEE/ACM Transactions on Networking, 2023, 31, 1042-1055.	2.6	6
946	Evaluation of ICT for Networked Control Systems of Latency-Critical Applications in Production. Procedia CIRP, 2022, 112, 238-243.	1.0	0
947	Sustainable Hyperautomation in High-Tech Manufacturing Industries: A Case of Linear Electromechanical Actuators. IEEE Access, 2022, 10, 98204-98219.	2.6	1
948	Fog Computing Security and Privacy for Internet of Things (IoT) and Industrial Internet of Things (IIoT) Applications: State of the Art. Internet of Things, 2022, , 145-157.	1.3	1
949	Applied Artificial Intelligence in Manufacturing and Industrial Production Systems: PEST Considerations for Engineering Managers. IEEE Engineering Management Review, 2023, 51, 52-62.	1.0	2
950	Configuration Solution for SDN-Based Networks Interacting with Industrial Applications. Technologien Fuì‚r Die Intelligente Automation, 2022, , 145-158.	0.3	0
951	eRDAC: Efficient and Reliable Remote Direct Access and Control for Embedded Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 3685-3696.	1.9	2
952	Aggregate Production Planning and Scheduling in the Industry 4.0 Environment. Procedia Computer Science, 2022, 204, 784-793.	1.2	2
953	Advancements in Industrial Cyber-Physical Systems: An Overview and Perspectives. IEEE Transactions on Industrial Informatics, 2023, 19, 716-729.	7.2	15
954	Plug and Work with OPC UA at the Field Level: Integration of Low-Level Devices. Technologien Fuì‚r Die Intelligente Automation, 2022, , 63-75.	0.3	0
955	Industrial Internet of Things for Safety Management Applications: A Survey. IEEE Access, 2022, 10, 83415-83439.	2.6	16

#	Article	IF	Citations
956	A Novel QoS-Aware Multi-Connectivity Scheme for Wireless IIoT. IEEE Access, 2022, 10, 104123-104134.	2.6	0
957	Blockchain-Based Industrial Internet of Things for the Integration of Industrial Process Automation Systems. , 2022, , 986-1009.		0
958	Energy-aware disjoint dominating sets-based whale optimization algorithm for data collection in WSNs. Journal of Supercomputing, 2023, 79, 4318-4350.	2.4	3
960	An Infrastructure for Enabling Dynamic Fault Tolerance in Highly-Reliable Adaptive Distributed Embedded Systems Based on Switched Ethernet. Sensors, 2022, 22, 7099.	2.1	3
961	Gamification in training with next generation AI- virtual reality, animation design and immersive technology. Journal of Experimental and Theoretical Artificial Intelligence, 0, , 1-14.	1.8	3
963	Analysis of the Role of 5G Communication Technology Based on Intelligent Sensor Network in the Construction and Design of the Internet of Things in Free Trade Zones. Journal of Sensors, 2022, 2022, 1-7.	0.6	0
964	Impact of the Internet of Things on Psychology: A Survey. Smart Cities, 2022, 5, 1193-1207.	5.5	3
965	Constellation Design for Energy-Based Noncoherent Massive SIMO Systems Over Correlated Channels. IEEE Wireless Communications Letters, 2022, 11, 2165-2169.	3.2	2
966	The Impact of Logistics on Four Dimensions of Food Security in Developing Countries. Journal of the Knowledge Economy, 0, , .	2.7	0
967	Associative Rules-Driven Intelligent Production Schedule Control System for Digital Manufacturing Ecosystem. IFAC-PapersOnLine, 2022, 55, 2526-2532.	0.5	1
968	Joint Optimization of OFDM and Channel Coding for URLLC in Industrial Channels. IEEE Transactions on Industrial Informatics, 2023, 19, 7656-7666.	7.2	1
969	SDN-TSCH: Enabling Software Defined Networking for Scheduled Wireless Networks with Traffic Isolation. , 2022, , .		6
970	Edge Computing Based Autonomous Robot for Secured Industrial IoT. , 2022, , .		0
971	The Impact of Li-Fi Technology on Industrial Wireless Sensors Networks. , 2022, , .		0
972	Concurrent OPC UA information model access, enabling real-time OPC UA PubSub. , 2022, , .		3
973	Transfer Learning Suitability Metric for ANN-based Industrial Controllers. , 2022, , .		0
974	The Impact of Artificial Intelligence and Supply Chain Resilience on the Companies Supply Chains Performance: The Moderating Role of Supply Chain Dynamism. Lecture Notes in Networks and Systems, 2023, , 17-28.	0.5	1
975	5G forÂSmart Production. , 2023, , 327-333.		1

#	Article	IF	Citations
976	Digital financing for SMEs' recovery in the post-COVID era: A bibliometric review. Frontiers in Sustainable Cities, 0, 4, .	1.2	0
977	Multiâ€loop networked control system design subject to interchange attack. Asian Journal of Control, 2023, 25, 1706-1714.	1.9	1
978	An Interoperable Digital Twin with the IEEE 1451 Standards. Sensors, 2022, 22, 7590.	2.1	9
979	Adaptive Sliding Mode Control for Motor Cyber Physical System. , 2022, , .		0
980	An IoT-based and cloud-assisted AI-driven monitoring platform forÂsmart manufacturing: design architecture and experimental validation. Journal of Manufacturing Technology Management, 2023, 34, 507-534.	3.3	4
981	Research on the standardization model of data semantics in the knowledge graph construction of Oil&Gas industry. Computer Standards and Interfaces, 2023, 84, 103705.	3.8	2
982	Beyond playful learning â€“ Serious games for the human-centric digital transformation of production and a design process model. Technology in Society, 2022, 71, 102140.	4.8	18
983	Automatische Bewertung und Ãœberwachung von Safety & Security Eigenschaften: Strukturierung und Ausblick. Technologien Fuˆr Die Intelligente Automation, 2022, , 117-130.	0.3	0
984	CANopen Flying Master Over TSN. Technologien Fuˆr Die Intelligente Automation, 2022, , 245-256.	0.3	0
985	Intelligent and Low Overhead Network Synchronization for Large-Scale Industrial IoT Systems in the 6G Era. IEEE Network, 2023, 37, 76-84.	4.9	1
986	Cloud and Edge Computing for Smart Management of Power Electronic Converter Fleets: A Key Connective Fabric to Enable the Green Transition. IEEE Industrial Electronics Magazine, 2023, 17, 6-19.	2.3	6
987	Deep Reinforcement Learning-Based Deterministic Routing and Scheduling for Mixed-Criticality Flows. IEEE Transactions on Industrial Informatics, 2023, 19, 8806-8816.	7.2	3
988	Digital Twin Techniques for Power Electronics-Based Energy Conversion Systems: A Survey of Concepts, Application Scenarios, Future Challenges, and Trends. IEEE Industrial Electronics Magazine, 2023, 17, 20-36.	2.3	9
989	Accurate and Efficient Digital Twin Construction Using Concurrent End-to-End Synchronization and Multi-Attribute Data Resampling. IEEE Internet of Things Journal, 2023, 10, 4857-4870.	5.5	5
990	A Survey on FEC Techniques for Industrial Wireless Communications. IEEE Open Journal of the Industrial Electronics Society, 2022, 3, 674-699.	4.8	4
991	Automatic Synthesis of Containerized Industrial Cyber-Physical Systems: A Case Study. IEEE Transactions on Industrial Informatics, 2023, 19, 8262-8273.	7.2	1
992	A blockchain 3.0 paradigm for digital twins in construction project management. Automation in Construction, 2023, 145, 104645.	4.8	18
993	Machine Learning for Industry 4.0: A Systematic Review Using Deep Learning-Based Topic Modelling. Sensors, 2022, 22, 8641.	2.1	12

#	Article	IF	Citations
994	Pulse Based GFDM Modulation Technique for Future Generation Communication Systems. European Journal of Education and Pedagogy, 2022, 6, 1-8.	0.2	3
995	A Machine Vision Development Framework for Product Appearance Quality Inspection. Applied Sciences (Switzerland), 2022, 12, 11565.	1.3	1
996	Exploring the Cyber Technology Critical Success Factors for Sustainable Building Projects: A Stationary Analysis Approach. Sustainability, 2022, 14, 14998.	1.6	3
997	Research on the Innovation Efficiency of Chinese Industrial IOT Companies Based on the Three-Stage DEA Method. , 2023, , 337-347.		0
998	Sparse Vector Coding for Short-Packet Transmission on Industrial Communications: Reference Architecture and Design Challenges. IEEE Open Journal of the Industrial Electronics Society, 2023, 4, 1-13.	4.8	1
999	Enhancing Reliability by Combining Manufacturing Processes and Private 5G Networks. , 2022, , .		1
1000	Cyberattack Impact Reduction using Software-Defined Networking for Cyber-Physical Production Systems. , 2022, , .		1
1001	A Study on Path Loss Modeling using ResNet and Pre-Training with Free Space Path Loss. , 2022, , .		1
1002	Feature Extraction of Tweet data Characteristics to Determine Community Habits. , 2022, , .		2
1003	Wavelet Packet Division Multiplexing (WPDM)-Aided Industrial WSNs. , 2022, , .		0
1004	Semantic Level of Interoperability by Proposing an IEEE 1451 Family of Standards Ontology. , 2022, , .		1
1005	IoT Enabled -Cloud based Smart Parking System for 5G Service. , 2022, , .		1
1006	The IEEE 802.15.13 Standard for Optical Wireless Communications in Industry 4.0. , 2022, , .		1
1007	Techno-Economics of LiFi compared to Wi-Fi in Industrial IoT applications. , 2022, , .		0
1008	ÐšÐ›Ð®Ð§ÐžÐ'Ð† ÐÐŸÐÐ¯ÐœÐšÐ˜ Ð"ÐžÐ¡Ð›Ð†Ð"Ð–Ð•ÐÐ¬ Ð¡Ð†Ð›Ð¬ÐÐ˜ÐšÐžÐ'Ð˜Ð¥ ÐœÐ•ÐÐ•Ð– ÐÐ•Ð¨ÐŒÐ£Ð£ Ð"Ðž 6G (Ð		
1009	Four Mode Demultiplexer Based on Branched Silicon Waveguides For Photonics Interconnects. , 2022, , .		0
1010	Resource Allocation in Downlink VLC-NOMA Systems for Factory Automation Scenario. Sensors, 2022, 22, 9407.	2.1	4
1011	TinyML for Ultra-Low Power AI and Large Scale IoT Deployments: A Systematic Review. Future Internet, 2022, 14, 363.	2.4	39

#	Article	IF	Citations
1012	Wireless Communications for Smart Manufacturing and Industrial IoT: Existing Technologies, 5G and Beyond. Sensors, 2023, 23, 73.	2.1	5
1013	Performance Analysis of OPC UA for Industrial Interoperability towards Industry 4.0. IoT, 2022, 3, 507-525.	2.3	5
1014	Game theory in network security for digital twins in industry. Digital Communications and Networks, 2023, , .	2.7	2
1015	An Analysis of the Literature on Industry 4.0 and the Major Technologies. , 2023, , 19-39.		0
1016	Detecting DDoS issues under 5G with ResNet. , 2023, , .		1
1017	Ultra-Low-Voltage Clock References. Analog Circuits and Signal Processing Series, 2023, , 91-127.	0.3	0
1018	Quo vadis Automation?. Automatisierungstechnik, 2023, 71, 6-15.	0.4	2
1019	An imperative role of 6G communication with perspective of industry 4.0: Challenges and research directions. Sustainable Energy Technologies and Assessments, 2023, 56, 103047.	1.7	14
1020	Fine-Tuning for Propagation Modeling of Different Frequencies with Few Data. , 2022, , .		3
1021	DIPLOMA VERICIFATION USING BY BLOCKCHAIN TECHNOLOGY. Aurum MÃ¼hendislik Sistemleri Ve MimarlÄ±k Dergisi, 0, , .	0.3	0
1022	A Novel Countermeasure for Selective Forwarding Attacks in IoT Networks. , 2022, , .		1
1023	Multitask Offloading Strategy for Edge Computing in Time-Sensitive Networking. Mobile Information Systems, 2022, 2022, 1-17.	0.4	0
1024	Lightweight XOR based FEC Algorithm for Fragment Forwarding in 6LoWPAN Networks. , 2022, , .		0
1025	Distributed Resource Allocation for URLLC in IIoT Scenarios: A Multi-Armed Bandit Approach. , 2022, , .		4
1026	Real-Time Wireless Control with Non-orthogonal HARQ. , 2022, , .		0
1027	Upgrade of Global Value Chain: Establishing Holistic Innovation in World-Class Enterprises. , 2023, , 185-207.		0
1028	Reference Architectures forÂClosing theÂIT/OT Gap. , 2023, , 95-123.		0
1029	Optimized Tuning of LOADng Routing Protocol Parameters for IoT. Computer Systems Science and Engineering, 2023, 46, 1549-1561.	1.9	1

#	Article	IF	Citations
1030	Application-Aware Network Traffic Management in MEC-Integrated Industrial Environments. Future Internet, 2023, 15, 42.	2.4	1
1031	Wireless Technologies for Industry 4.0 Applications. Energies, 2023, 16, 1349.	1.6	1
1032	Decision Making Model for Identifying the Cyber Technology Implementation Benefits for Sustainable Residential Building: A Mathematical PLS-SEM Approach. Sustainability, 2023, 15, 2458.	1.6	6
1033	Integration of E-health and Internet of Things. , 2023, , 1-22.		0
1035	Future prospects for the biodegradability of conventional plastics. , 2023, , 361-375.		0
1036	WLAN Throughput Prediction Using Deep Learning with Throughput, RSS, and COR. , 2022, , .		0
1037	Real-Time Scheduling of Asynchronous TSN Traffic. , 2022, , .		0
1038	Industrial multi-link collaborative data sharing method based on blockchain. , 2022, , .		0
1039	Wireless Sensor Security Issues on Data Link Layer: A Survey. Computers, Materials and Continua, 2023, 75, 4065-4084.	1.5	2
1040	Block Chain Driven Marketing Resources in Mobile Edge Computing and System. , 2023, , .		0
1041	An Evaluative Study on IoT Ecosystem for Smart Predictive Maintenance (IoT-SPM) in Manufacturing: Multiview Requirements and Data Quality. IEEE Internet of Things Journal, 2023, 10, 11160-11184.	5.5	9
1042	The Edge Application of Machine Learning Techniques for Fault Diagnosis in Electrical Machines. Sensors, 2023, 23, 2649.	2.1	9
1043	Transfer Learning in wastewater treatment plants control: Measuring the transfer suitability. Journal of Process Control, 2023, 124, 36-53.	1.7	3
1044	A comprehensive systematic review of integration of time sensitive networking and 5G communication. Journal of Systems Architecture, 2023, 138, 102852.	2.5	5
1045	Cost optimization of omnidirectional offloading in two-tier cloudâ€“edge federated systems. Journal of Network and Computer Applications, 2023, 215, 103630.	5.8	2
1046	Online Hybrid Kernel Learning Machine with Dynamic Forgetting Mechanism. Communications in Computer and Information Science, 2023, , 273-285.	0.4	0
1047	The Role of Deep Learning in Parking Space Identification andç‡©redictionç‡¬ystems. Computers, Materials and Continua, 2023, 75, 761-784.	1.5	0
1048	Towards Critical Industrial Wireless Control: Prototype Implementation and Experimental Evaluation on URLLC. IEEE Communications Magazine, 2023, , 1-7.	4.9	1

#	Article	IF	Citations
1049	A Stochastic Model for Performance Evaluation of Hybrid Network Architectures of IoT with an Improved Design. IETE Journal of Research, 0, , 1-15.	1.8	1
1050	Integration of 5G and OPC UA for Smart Manufacturing of the Future. , 2023, , .		3
1051	The titans sustainability and industry 4.0 working for the planet earth. GeSec, 2023, 14, 1953-1965.	0.1	14
1052	ETVO: Effectively Measuring Tactile Internet With Experimental Validation. IEEE Transactions on Mobile Computing, 2024, 23, 2054-2065.	3.9	1
1053	The Implications of Triple Transformation on ESG in the Energy Sector: Fuzzy-Set Qualitative Comparative Analysis (fsQCA) and Structural Equation Modeling (SEM) Findings. Energies, 2023, 16, 2090.	1.6	3
1054	Statistical CSI-based Beamforming Design for Massive MIMO-enabled URLLC Networks. , 2022, , .		0
1055	When Operation Technology Meets Information Technology: Challenges and Opportunities. Future Internet, 2023, 15, 95.	2.4	6
1056	Determination of Anthropometric Lengths of Body Segments Using Machine Vision Systems. Machines, 2023, 11, 369.	1.2	0
1057	Exploring the Adoption of Cyber (Digital) Technology for Sustainable Construction: A Structural Equation Modeling of Critical Success Factors. Sustainability, 2023, 15, 5043.	1.6	7
1058	The Role of Internet-of-Things for Service Transformation. SAGE Open, 2023, 13, 215824402311592.	0.8	1
1059	System reliability in IoT-based data collecting systems using low-cost particulate matter sensors. , 2023, , 15-34.		0
1060	Leveraging the Role of Dynamic Reconfigurable Antennas in Viewpoint of Industry 4.0 and Beyond. Research, 2023, 6, .	2.8	0
1061	Impact of emerging technologies on digital manufacturing: Insights from literature review. Materials Today: Proceedings, 2023, , .	0.9	2
1062	Techno-economic study of very dense optical wireless access using visible or infrared light. Journal of Optical Communications and Networking, 2023, 15, B33.	3.3	4
1063	A Flexible Retransmission Scheme for Reliable and Real-Time Transmissions in Industrial Wireless Networks for Factory Automation. IEEE Transactions on Vehicular Technology, 2023, 72, 10867-10878.	3.9	2
1064	Industry 4.0 at Brazilian modular consortium: work, process and knowledge in engine supply chain. Production, 0, 33, .	1.3	3
1065	EEG Channel Optimization for Wireless BMI-based Robot Interaction for Internet of Robotic Things. , 2023, , .		3
1066	Cyber Technology Implementation Barriers for Sustainable Buildings: A Novel Mathematical Partial Least Square Structural Equation Modelling. Buildings, 2023, 13, 1052.	1.4	3

#	Article	IF	Citations
1067	Microservice-Oriented Architecture for Industry 4.0. Eng, 2023, 4, 1179-1197.	1.2	1
1069	A distributed network-aware TSCH scheduling. , 2023, , .		1
1074	Industry 4.0 implementation in electronics manufacturing industry â€“ A case study. AIP Conference Proceedings, 2023, , .	0.3	0
1075	Impact of Industrial Internet Development on China's Urban Economy - Based on DID Model. , 2022, , .		0
1076	Online Learning-based Trust Prediction for Reliable and Energy-efficient Transmission. , 2023, , .		0
1078	Buffer Management for TSN-Enabled End Stations. , 2023, , .		0
1080	Static Analysis of Packet Forwarding and Filtering Configurations in Industrial Networks. , 2023, , .		0
1081	A Wireless Transceiver for Control Area Networks: Proof-of-Concept Implementation. , 2023, , .		0
1082	A Survey of Industry in Cambodia and Future Prospects Industry 4.0. , 2023, , .		0
1083	Industry 4.0: Developing Center of Excellence for PLC Lab in the field of Automation. , 2023, , .		0
1084	Learning, Un-Learning, and Relearning in 4IR in Rural Environments. , 2022, , .		0
1086	Distributed Filtering inÂIndustrial Networks. Communications in Computer and Information Science, 2023, , 80-93.	0.4	0
1087	Cyber-Physical Automation. Springer Handbooks, 2023, , 379-404.	0.3	0
1088	Performance Analysis of Eight-Channel WDM Optical Network with Different Optical Amplifiers for Industry 4.0. EAI/Springer Innovations in Communication and Computing, 2023, , 197-212.	0.9	2
1089	Globalization in Action: Industry 4.0 Development Model for Turkey. , 2023, , 317-332.		0
1090	The Smart Analysis of Poisson Distribution Pattern Based Industrial Automation in Industry 4.0. , 2023, , .		1
1094	Wireless Location Tracking via Complex-Domain Super MDS with Time Series Self-Localization Information. , 2023, , .		0
1095	Robotics and Artificial Intelligence in the Nuclear Industry: From Teleoperation to Cyber Physical Systems. Studies in Computational Intelligence, 2023, , 123-166.	0.7	0

#	Article	IF	Citations
1101	Blockchain-Based and Fuzzy Logic-Enabled False Data Discovery for the Intelligent Autonomous Vehicular System. , 2023, , .		1
1106	FedTIU: Securing Virtualized PLCs Against DDoS Attacks Using a Federated Learning Enabled Threat Intelligence Unit. , 2023, , .		1
1107	Heterogeneity in Time Delays between Mutually Synchronized 24 GHz Oscillators. , 2023, , .		1
1108	A Blockchain-based Method for Monitoring User-plane Congestion in Mobile Core Network. , 2023, , .		0
1110	RNN-Based Path Loss Modeling with Variable-Size Map Data in Urban Environments. , 2023, , .		0
1115	Methods for ensuring effective RF spectrum usage in the organization of IoT devices communication. AIP Conference Proceedings, 2023, , .	0.3	0
1116	Extended Reference Broadcast Infrastructure Synchronization Protocol in 5G and Beyond. , 2023, , .		0
1117	Determining the Target Security Level for Automated Security Risk Assessments. , 2023, , .		0
1118	Generation of Synthetic Data to Improve Security Monitoring for Cyber-Physical Production Systems. , 2023, , .		0
1124	Instant Messaging Application for 5G Core Network. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2023, , 110-121.	0.2	0
1126	The Benefits of Using Industry 4.0 in the Manufacturing Sector. Environmental Footprints and Eco-design of Products and Processes, 2024, , 83-103.	0.7	0
1129	A Layered Architecture Enabling Metaverse Applications in Smart Manufacturing Environments. , 2023, , .		1
1130	Evaluation Concept for Prototypical Implementation towards Automated Security Risk Assessments. , 2023, , .		0
1131	Experimental Analysis of Wireless TSN Networks for Real-time Applications. , 2023, , .		1
1132	Network Digital Twins: A Key-Enabler for Zero-Touch Management in Industrial Communication Systems. , 2023, , .		0
1133	Dependability and Security Aspects of Network-Centric Control. , 2023, , .		1
1134	Introducing Guard Frames to Ensure Schedulability of All TSN Traffic Classes. , 2023, , .		0
1141	SMQTT: A Lightweight Clock Synchronization Algorithm for IoT Devices Using MQTT. , 2023, , .		1

#	Article	IF	Citations
1142	Industry Revolution 4.0: From Industrial Automation to Industrial Autonomy. , 2024, , 321-356.		0
1144	Multi-criteria model for IT outsourcer selection. AIP Conference Proceedings, 2023, , .	0.3	0
1146	Settling Issues in IEEE 802.1AS Networks in PI Based Clock Servos. , 2023, , .		0
1147	PVDF composite-based smart sensor. , 2023, , .		0
1150	Millimeter Wave Path Loss Modeling using Multi-Resolution Map Based on ResNet. , 2023, , .		0
1152	Broadband Inverted L-Shaped DRA for IoT Applications. , 2023, , .		0
1153	Isotropic Radiation Coverage in IoT: Water Drop-Shaped Ultra-Wideband Antenna. , 2023, , .		0
1156	IT zur Vernetzung und Kommunikation in der Automatisierungstechnik. , 2023, , 105-129.		0
1158	Optimising a Formulated Cost Model to Minimise Labour Cost of Computer Networking Infrastructure: A Systematic Review. Communications in Computer and Information Science, 2024, , 427-442.	0.4	0
1160	A Domain-Driven Model Generation Framework for Cyber-Physical Production Systems. , 2023, , .		0
1163	Revisiting the Automation Pyramid for the Industry 4.0. , 2023, , .		0
1170	Holistic Monitoring: Advanced Metrics for Heterogeneous Industrial Networks. , 2023, , .		0
1173	An Operational 5G Edge Cloud-Controlled Robotic Cell Environment Based on MQTT and OPC UA. , 2023, , .		0
1175	IoT Based Control of Robotic Manipulator using Arbotix-M Microcontroller. , 2023, , .		0
1176	Environmental effects and sustainable hydropower development: A review of deployment research, environmental valuation and iot sensors integration. AIP Conference Proceedings, 2024, , .	0.3	0
1178	Monitoring and Control of Motor Drive Parameters Using Internet of Things Protocol for Industrial Automation. Lecture Notes in Electrical Engineering, 2024, , 93-101.	0.3	0
1180	Transmission Timing Scheduling Method for Station Groups with Different Packet Generation Periods in Smart Factory Environment. , 2024, , .		0
1182	NexGuard: Industrial Cyber-Physical System DÃ©fense Using Ensemble Feature Selection and Explainable Deep Learning Techniques. , 2023, , .		0

#	Article	IF	Citations