

# Tiago M Fernández-Caramés

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8224555/publications.pdf>

Version: 2024-02-01

85  
papers

4,908  
citations

117619  
34  
h-index

102480  
66  
g-index

85  
all docs

85  
docs citations

85  
times ranked

4357  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | A Collaborative Industrial Augmented Reality Digital Twin: Developing the Future of Shipyard 4.0. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 104-120.                      | 0.3 | 4         |
| 2  | Power Consumption Analysis for the Development of Energy Efficient Bluetooth 5 Based Real-Time Industrial IoT Systems. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 188-206. | 0.3 | 1         |
| 3  | Design and Experimental Validation of an Augmented Reality System With Wireless Integration for Context Aware Enhanced Show Experience in Auditoriums. IEEE Access, 2021, 9, 5466-5484.  | 4.2 | 4         |
| 4  | Developing the Next Generation of Augmented Reality Games for Pediatric Healthcare: An Open-Source Collaborative Framework Based on ARCore for Implementing Teaching, Training and Monitoring Applications. Sensors, 2021, 21, 1865.                 | 3.8 | 17        |
| 5  | Green IoT and Edge AI as Key Technological Enablers for a Sustainable Digital Transition towards a Smart Circular Economy: An Industry 5.0 Use Case. Sensors, 2021, 21, 5745.  | 3.8 | 107       |
| 6  | Next Generation Auto-Identification and Traceability Technologies for Industry 5.0: A Methodology and Practical Use Case for the Shipbuilding Industry. IEEE Access, 2021, 9, 140700-140730.   | 4.2 | 37        |
| 7  | Collaborative Augmented Digital Twin: A Novel Open-Source Augmented Reality Solution for Training and Maintenance Processes in the Shipyard of the Future. Engineering Proceedings, 2021, 7, 10.   | 0.4 | 1         |
| 8  | Design, Implementation and Validation of a Bluetooth 5 Real-Time Monitoring System for Large Indoor Environments. Engineering Proceedings, 2021, 7, 18.  | 0.4 | 1         |
| 9  | COVID-19 Digital Vaccination Passport Based on Blockchain with Its Own Cryptocurrency as a Reward and Mobile App for Its Use. Engineering Proceedings, 2021, 7, 35.  | 0.4 | 1         |
| 10 | From Pre-Quantum to Post-Quantum IoT Security: A Survey on Quantum-Resistant Cryptosystems for the Internet of Things. IEEE Internet of Things Journal, 2020, 7, 6457-6480.  | 8.7 | 114       |
| 11 | LoRaWAN and Blockchain based Safety and Health Monitoring System for Industry 4.0 Operators. Proceedings (mdpi), 2020, 42, 77.   | 0.2 | 4         |
| 12 | A Collaborative Augmented Reality Application for Training and Assistance during Shipbuilding Assembly Processes. Proceedings (mdpi), 2020, 54, .  | 0.2 | 6         |
| 13 | Decentralized P2P Broker for M2M and IoT Applications. Proceedings (mdpi), 2020, 54, .   | 0.2 | 2         |
| 14 | Use Case Based Blended Teaching of IIoT Cybersecurity in the Industry 4.0 Era. Applied Sciences (Switzerland), 2020, 10, 5607.   | 2.5 | 17        |
| 15 | Creating Collaborative Augmented Reality Experiences for Industry 4.0 Training and Assistance Applications: Performance Evaluation in the Shipyard of the Future. Applied Sciences (Switzerland), 2020, 10, 9073.                                    | 2.5 | 35        |
| 16 | Design, Implementation, and Empirical Validation of an IoT Smart Irrigation System for Fog Computing Applications Based on LoRa and LoRaWAN Sensor Nodes. Sensors, 2020, 20, 6865.   | 3.8 | 46        |
| 17 | Leveraging Blockchain for Sustainability and Open Innovation: A Cyber-Resilient Approach toward EU Green Deal and UN Sustainable Development Goals. , 2020, , .  |     | 6         |
| 18 | Blockchain Technologies in Practice. IEEE Software, 2020, 37, 17-25.   | 1.8 | 3         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Design and Empirical Validation of a Bluetooth 5 Fog Computing Based Industrial CPS Architecture for Intelligent Industry 4.0 Shipyard Workshops. <i>IEEE Access</i> , 2020, 8, 45496-45511.   | 4.2 | 23        |
| 20 | Fake News, Disinformation, and Deepfakes: Leveraging Distributed Ledger Technologies and Blockchain to Combat Digital Deception and Counterfeit Reality. <i>IT Professional</i> , 2020, 22, 53-59.   | 1.5 | 41        |
| 21 | Teaching and Learning IoT Cybersecurity and Vulnerability Assessment with Shodan through Practical Use Cases. <i>Sensors</i> , 2020, 20, 3048.   | 3.8 | 19        |
| 22 | Creating the Internet of Augmented Things: An Open-Source Framework to Make IoT Devices and Augmented and Mixed Reality Systems Talk to Each Other. <i>Sensors</i> , 2020, 20, 3328.   | 3.8 | 34        |
| 23 | Building Decentralized Fog Computing-Based Smart Parking Systems: From Deterministic Propagation Modeling to Practical Deployment. <i>IEEE Access</i> , 2020, 8, 117666-117688.  | 4.2 | 15        |
| 24 | Towards Post-Quantum Blockchain: A Review on Blockchain Cryptography Resistant to Quantum Computing Attacks. <i>IEEE Access</i> , 2020, 8, 21091-21116.  | 4.2 | 227       |
| 25 | Design and Empirical Validation of a LoRaWAN IoT Smart Irrigation System. <i>Proceedings (mdpi)</i> , 2020, 42, .  | 0.2 | 21        |
| 26 | Design and Experimental Validation of a LoRaWAN Fog Computing Based Architecture for IoT Enabled Smart Campus Applications. <i>Sensors</i> , 2019, 19, 3287.   | 3.8 | 51        |
| 27 | Enabling the Internet of Mobile Crowdsourcing Health Things: A Mobile Fog Computing, Blockchain and IoT Based Continuous Glucose Monitoring System for Diabetes Mellitus Research and Care. <i>Sensors</i> , 2019, 19, 3319.                         | 3.8 | 98        |
| 28 | Towards Next Generation Teaching, Learning, and Context-Aware Applications for Higher Education: A Review on Blockchain, IoT, Fog and Edge Computing Enabled Smart Campuses and Universities. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4479. | 2.5 | 95        |
| 29 | A Review on IoT Deep Learning UAV Systems for Autonomous Obstacle Detection and Collision Avoidance. <i>Remote Sensing</i> , 2019, 11, 2144.   | 4.0 | 91        |
| 30 | Clock Frequency Impact on the Performance of High-Security Cryptographic Cipher Suites for Energy-Efficient Resource-Constrained IoT Devices. <i>Sensors</i> , 2019, 19, 15.   | 3.8 | 23        |
| 31 | A Review on Blockchain Technologies for an Advanced and Cyber-Resilient Automotive Industry. <i>IEEE Access</i> , 2019, 7, 17578-17598.  | 4.2 | 229       |
| 32 | Towards an Autonomous Industry 4.0 Warehouse: A UAV and Blockchain-Based System for Inventory and Traceability Applications in Big Data-Driven Supply Chain Management. <i>Sensors</i> , 2019, 19, 2394.   | 3.8 | 198       |
| 33 | Analysis, Design and Empirical Validation of a Smart Campus Based on LoRaWAN. <i>Proceedings (mdpi)</i> , 2019, 4, 7.  | 0.2 | 2         |
| 34 | A Review on the Application of Blockchain to the Next Generation of Cybersecure Industry 4.0 Smart Factories. <i>IEEE Access</i> , 2019, 7, 45201-45218.   | 4.2 | 217       |
| 35 | Towards the Internet of Augmented Things: An Open-source Framework to Interconnect IoT Devices and Augmented Reality Systems. <i>Proceedings (mdpi)</i> , 2019, 42, .  | 0.2 | 6         |
| 36 | Wireless Channel Assessment of Auditoriums for the Deployment of Augmented Reality Systems for Enhanced Show Experience of Impaired Persons. <i>Proceedings (mdpi)</i> , 2019, 42, .   | 0.2 | 2         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | A Review on Industrial Augmented Reality Systems for the Industry 4.0 Shipyard. IEEE Access, 2018, 6, 13358-13375.   | 4.2 | 295       |
| 38 | A Practical Evaluation of Commercial Industrial Augmented Reality Systems in an Industry 4.0 Shipyard. IEEE Access, 2018, 6, 8201-8218.  | 4.2 | 136       |
| 39 | A Practical Evaluation on RSA and ECC-Based Cipher Suites for IoT High-Security Energy-Efficient Fog and Mist Computing Devices. Sensors, 2018, 18, 3868.                            | 3.8 | 81        |
| 40 | A Practical Performance Comparison of ECC and RSA for Resource-Constrained IoT Devices. , 2018, , .  |     | 50        |
| 41 | Towards The Internet-of-Smart-Clothing: A Review on IoT Wearables and Garments for Creating Intelligent Connected E-Textiles. Electronics (Switzerland), 2018, 7, 405.               | 3.1 | 192       |
| 42 | Design and Practical Evaluation of a Family of Lightweight Protocols for Heterogeneous Sensing through BLE Beacons in IoT Telemetry Applications. Sensors, 2018, 18, 57.             | 3.8 | 43        |
| 43 | A Cost-Effective IoT System for Monitoring Indoor Radon Gas Concentration. Sensors, 2018, 18, 2198.  | 3.8 | 58        |
| 44 | A Review on the Use of Blockchain for the Internet of Things. IEEE Access, 2018, 6, 32979-33001.   | 4.2 | 737       |
| 45 | A Fog Computing and Cloudlet Based Augmented Reality System for the Industry 4.0 Shipyard. Sensors, 2018, 18, 1798.  | 3.8 | 104       |
| 46 | A Fog Computing Based Cyber-Physical System for the Automation of Pipe-Related Tasks in the Industry 4.0 Shipyard. Sensors, 2018, 18, 1961.  | 3.8 | 47        |
| 47 | A Plug-and-Play Human-Centered Virtual TEDS Architecture for the Web of Things. Sensors, 2018, 18, 2052.   | 3.8 | 27        |
| 48 | A Review on Human-Centered IoT-Connected Smart Labels for the Industry 4.0. IEEE Access, 2018, 6, 25939-25957.   | 4.2 | 117       |
| 49 | Design, Implementation and Practical Evaluation of an IoT Home Automation System for Fog Computing Applications Based on MQTT and ZigBee-WiFi Sensor Nodes. Sensors, 2018, 18, 2660. | 3.8 | 144       |
| 50 | Design of a Fog Computing, Blockchain and IoT-Based Continuous Glucose Monitoring System for Crowdsourcing mHealth. Proceedings (mdpi), 2018, 4, .                                   | 0.2 | 25        |
| 51 | A UAV and Blockchain-Based System for Industry 4.0 Inventory and Traceability Applications. Proceedings (mdpi), 2018, 4, .   | 0.2 | 20        |
| 52 | RSS stabilization techniques for a real-time passive UHF RFID pipe monitoring system for smart shipyards. , 2017, , .  |     | 18        |
| 53 | Reverse engineering the communications protocol of an RFID public transportation card. , 2017, , .   |     | 19        |
| 54 | An IoT Monitoring System for Precision Viticulture. , 2017, , .  |     | 15        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | An Open-Source IoT Power Outlet System for Scheduling Appliance Operation Intervals Based on Real-Time Electricity Cost. , 2017, , .   |     | 3         |
| 56 | Enabling automatic event detection for the pipe workshop of the shipyard 4.0. , 2017, , .  |     | 14        |
| 57 | A Practical Evaluation of a High-Security Energy-Efficient Gateway for IoT Fog Computing Applications. Sensors, 2017, 17, 1978.  | 3.8 | 96        |
| 58 | Reverse Engineering and Security Evaluation of Commercial Tags for RFID-Based IoT Applications. Sensors, 2017, 17, 28.   | 3.8 | 57        |
| 59 | VineSens: An Eco-Smart Decision-Support Viticulture System. Sensors, 2017, 17, 465.  | 3.8 | 63        |
| 60 | An Electricity Price-Aware Open-Source Smart Socket for the Internet of Energy. Sensors, 2017, 17, 643.  | 3.8 | 57        |
| 61 | Towards the Internet of Smart Trains: A Review on Industrial IoT-Connected Railways. Sensors, 2017, 17, 1457.  | 3.8 | 167       |
| 62 | A Methodology for Evaluating Security in Commercial RFID Systems. , 2017, , .  |     | 17        |
| 63 | Home Automation System Based on Intelligent Transducer Enablers. Sensors, 2016, 16, 1595.  | 3.8 | 38        |
| 64 | A Review on Internet of Things for Defense and Public Safety. Sensors, 2016, 16, 1644.   | 3.8 | 172       |
| 65 | Smart Pipe System for a Shipyard 4.0. Sensors, 2016, 16, 2186.   | 3.8 | 46        |
| 66 | The ITG Smart Water Station. , 2015, , .   |     | 0         |
| 67 | An Intelligent Power Outlet System for the Smart Home of the Internet of Things. International Journal of Distributed Sensor Networks, 2015, 11, 214805.   | 2.2 | 52        |
| 68 | Evaluation of H.264/AVC over IEEE 802.11p vehicular networks. Eurasip Journal on Advances in Signal Processing, 2013, 2013, .  | 1.7 | 3         |
| 69 | A decision-aided channel estimation strategy for the IEEE 802.11p standard. , 2012, , .  |     | 1         |
| 70 | Real-time personal protective equipment monitoring system. Computer Communications, 2012, 36, 42-50.   | 5.1 | 103       |
| 71 | Performance evaluation of multiple-antenna IEEE 802.11p transceivers using an FPGA-based MIMO vehicular channel emulator. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, . | 2.4 | 7         |
| 72 | Enabling Collaborative Musical Activities through Wireless Sensor Networks. International Journal of Distributed Sensor Networks, 2012, 8, 314078.   | 2.2 | 6         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Mobile WiMAX for vehicular applications: Performance evaluation and comparison against IEEE 802.11p/a. Computer Networks, 2011, 55, 3784-3795.  | 5.1 | 10        |
| 74 | A Decision-Aided Strategy for Enhancing Transmissions in Wireless OSTBC-Based Systems. Lecture Notes in Computer Science, 2011, , 500-507.  | 1.3 | 1         |
| 75 | FPGA-Based Vehicular Channel Emulator for Real-Time Performance Evaluation of IEEE 802.11p Transceivers. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, .                   | 2.4 | 14        |
| 76 | FPGA-based vehicular channel emulator for evaluation of IEEE 802.11p transceivers. , 2009, , .  |     | 11        |
| 77 | A comparative study of STBC transmissions at 2.4GHz over indoor channels using a 2x2 MIMO testbed. Wireless Communications and Mobile Computing, 2008, 8, 1149-1164.                                | 1.2 | 13        |
| 78 | FlexVehd: A flexible testbed for vehicular radio interfaces. , 2008, , .  |     | 4         |
| 79 | A distributed multilayer architecture enabling end-user access to MIMO testbeds. , 2008, , .  |     | 4         |
| 80 | Performance of STBC transmissions with real data. , 2007, , .   |     | 4         |
| 81 | A Flexible Testbed for the Rapid Prototyping of MIMO Baseband Modules. , 2006, , .  |     | 3         |
| 82 | An IoT and Blockchain Based System for Monitoring and Tracking Real-Time Occupancy for COVID-19 Public Safety. , 0, , .   |     | 9         |
| 83 | Analysis, Design and Practical Validation of an Augmented Reality Teaching System Based on Microsoft HoloLens 2 and Edge Computing. , 0, , .  |     | 7         |
| 84 | Errealitate areagotuko sistema baten diseinu eta balioztatze esperimentalak haririk gabeko integrazioarekin, auditoriumetan desgaitasuna pairatzen duten pertsonen esperientzia hobetzeko. , 0, , . |     | 0         |
| 85 | Introductory Chapter: On the Convergence of Blockchain and Artificial Intelligence - Opportunities and Challenges. , 0, , .   |     | 0         |