# Isidro Calvo

List of Publications by Year
in descending order



| 72 | 607 | 687220 13 | 794469 19 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 76 | 76 | 76 | 562 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Multidisciplinary PBL Approach for Teaching Industrial Informatics and Robotics in Engineering. IEEE Transactions on Education, 2018, 61, 21-28. | 2.0 | 42 |
| 2 | A modular CPS architecture design based on ROS and Docker. International Journal on Interactive Design and Manufacturing, 2017, 11, 949-955. | 1.3 | 29 |
| 3 | Variable speed wind turbine control scheme using a robust wind torque estimation. Renewable Energy, 2019, 133, 354-366. | 4.3 | 28 |
| 4 | Experimental Validation of a Sliding Mode Control for a Stewart Platform Used in Aerospace Inspection Applications. Mathematics, 2020, 8, 2051. | 1.1 | 25 |
| 5 | Provision of Frequency Response from Wind Farms: A Review. Energies, 2021, 14, 6689. | 1.6 | 24 |
| 6 | Developing CPPS within IEC-61499 based on low cost devices. , 2015, , . | | 21 |
| 7 | Maximum Power Point Tracking Techniques for Photovoltaic Panel: A Review and Experimental Applications. Energies, 2021, 14, 7806. | 1.6 | 21 |
| 8 | A methodology based on distributed object-oriented technologies for providing remote access to industrial plants. Control Engineering Practice, 2006, 14, 975-990. | 3.2 | 20 |
| 9 | Building industrial CPS with the IEC 61499 standard on low-cost hardware platforms. , 2014, , . | | 20 |
| 10 | Building IoT Applications with Raspberry Pi and Low Power IQRF Communication Modules. Electronics (Switzerland), 2016, 5, 54. | 1.8 | 19 |
| 11 | Towards a methodology to build virtual reality manufacturing systems based on free open software technologies. International Journal on Interactive Design and Manufacturing, 2017, 11, 569-580. | 1.3 | 18 |
| 12 | Sliding Mode-Based Robust Control for Piezoelectric Actuators with Inverse Dynamics Estimation. Energies, 2019, 12, 943. | 1.6 | 18 |
| 13 | Feedforward Compensation Analysis of Piezoelectric Actuators Using Artificial Neural Networks with Conventional PID Controller and Single-Neuron PID Based on Hebb Learning Rules. Energies, 2020, 13, 3929. | 1.6 | 16 |
| 14 | Control communications with DDS using IEC61499 Service Interface Function Blocks. , 2010, , . | | 15 |
| 15 | Adaptive Sliding Mode Control for a Double Fed Induction Generator Used in an Oscillating Water Column System. Energies, 2018, 11, 2939. | 1.6 | 13 |
| 16 | Advances in Tracking Control for Piezoelectric Actuators Using Fuzzy Logic and Hammerstein-Wiener Compensation. Mathematics, 2020, 8, 2071. | 1.1 | 13 |
| 17 | Real time observer and control scheme for a wind turbine system based on a high order sliding modes. Journal of the Franklin Institute, 2021, 358, 5795-5819. | 1.9 | 12 |
| 18 | Scalable IoT Architecture for Monitoring IEQ Conditions in Public and Private Buildings. Energies, 2022, 15, 2270. | 1.6 | 12 |

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|---|---|---|---|
| 19 | High-Performance Tracking for Piezoelectric Actuators Using Super-Twisting Algorithm Based on Artificial Neural Networks. Mathematics, 2021, 9, 244. | 1.1 | 11 |
| 20 | Combining moodle and redmine as e-learning tools in Project Based Learning of Industrial Electronics. , 2013, , . | | 10 |
| 21 | Inverse design and topology optimization of novel photonic crystal broadband passive devices for photonic integrated circuits. Applied Physics A: Materials Science and Processing, 2014, 115, 433-438. | 1.1 | 10 |
| 22 | A Novel Synchronous Scheduling Service for CORBA-RT Applications. , 2007, , . | | 9 |
| 23 | Building complex remote learning laboratories. Computer Applications in Engineering Education, 2010, 18, 53-66. | 2.2 | 9 |
| 24 | Sliding Mode Control with Dynamical Correction for Time-Delay Piezoelectric Actuator Systems. Materials, 2020, 13, 132. | 1.3 | 9 |
| 25 | Double Fed Induction Generator Control Design Based on a Fuzzy Logic Controller for an Oscillating Water Column System. Energies, 2021, 14, 3499. | 1.6 | 9 |
| 26 | Towards a modular and scalable design for the communications of electrical protection relays. , 2009, , . | | 8 |
| 27 | A Remote Laboratory for a Basic Course on Control Engineering. International Journal of Online and Biomedical Engineering, 2009, 5, 8. | 0.9 | 8 |
| 28 | Using object oriented technologies in factory automation. , 0, , . | | 7 |
| 29 | Access to process data with OPC-DA using IEC61499 Service Interface Function Blocks. , 2009, , . | | 7 |
| 30 | Supporting a reconfigurable real-time service-oriented middleware with FTT-CORBA. , 2010, , . | | 7 |
| 31 | FTT-MA: A Flexible Time-Triggered Middleware Architecture for Time Sensitive, Resource-Aware AmI Systems. Sensors, 2013, 13, 6229-6253. | 2.1 | 7 |
| 32 | Building Wireless Control Applications with XBee and LabVIEW. Applied Sciences (Switzerland), 2019, 9, 2379. | 1.3 | 7 |
| 33 | Advanced Trajectory Control for Piezoelectric Actuators Based on Robust Control Combined with Artificial Neural Networks. Applied Sciences (Switzerland), 2021, 11, 7390. | 1.3 | 7 |
| 34 | A Time-Triggered Middleware Architecture for Ubiquitous Cyber Physical System Applications. Lecture Notes in Computer Science, 2012, , 73-80. | 1.0 | 7 |
| 35 | Reliable Control Applications with Wireless Communication Technologies: Application to Robotic Systems. Sensors, 2021, 21, 7107. | 2.1 | 6 |
| 36 | Towards a OMG DDS communication backbone for factory automation applications. , 2011, , . | | 5 |

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| 37 | A time-triggered data distribution service for FTT-CORBA. , 2012, , . | | 5 |
| 38 | Distribution middleware technologies for Cyber Physical Systems. , 2012, , . | | 5 |
| 39 | Configurable cooperative middleware for the next generation of CPS. , 2012, , . | | 5 |
| 40 | Designing High Performance Factory Automation Applications on Top of DDS. International Journal of Advanced Robotic Systems, 2013, 10, 205. | 1.3 | 5 |
| 41 | A Design-Oriented Engineering Course Involving Interactions With Stakeholders. IEEE Transactions on Education, 2020, 63, 283-290. | 2.0 | 5 |
| 42 | Towards an Infrastructure Model for Composing and Reconfiguring Cyber-Physical Systems. Lecture Notes in Computer Science, 2012, , 282-289. | 1.0 | 5 |
| 43 | Tracking Control for Piezoelectric Actuators with Advanced Feed-forward Compensation Combined with PI Control.. , 0, , . | | 5 |
| 44 | Adding Synchronous Scheduling to CORBA-RT. , 2006, , . | | 4 |
| 45 | Towards Middleware-Based Cooperation Topologies for the Next Generation of CPS. International Journal of Online and Biomedical Engineering, 2012, 8, 20. | 0.9 | 4 |
| 46 | Towards a Generic Architecture for Building Modular CPS as Applied to Mobile Robotics. International Journal of Online Engineering, 2016, 12, 4. | 0.5 | 4 |
| 47 | Key Vulnerabilities of Industrial Automation and Control Systems and Actions to Prevent Cyber-Attacks. International Journal of Online Engineering, 2016, 12, 9. | 0.5 | 4 |
| 48 | USING UML FOR MODELLING REMOTE ACCESS TO MANUFACTURING SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 213-218. | 0.4 | 3 |
| 49 | Building a CPS as an Educational Challenge. International Journal of Online and Biomedical Engineering, 2014, 10, 52. | 0.9 | 3 |
| 50 | A flexible time-triggered service for real-time CORBA. Computer Standards and Interfaces, 2014, 36, 531-544. | 3.8 | 3 |
| 51 | The challenge of building a cyber physical system as an educational experience. , 2014, , . | | 3 |
| 52 | Object-oriented based architecture for accessing remotely electrical protection relays. , 0, , . | | 2 |
| 53 | A CORBA Wrapper for Applications with Multiple Robots. International Journal of Online and Biomedical Engineering, 2011, 7, 4. | 0.9 | 2 |
| 54 | Flexible, modular, standard, free and affordable model for CPS control applied to mobile robotics. , 2015, , . | | 2 |

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|---|---|---|---|
| 55 | A framework based on CORBA and OO technologies for remote access to industrial plants. , 2003, , . | | 2 |
| 56 | A Framework with Proactive Nodes for Scheduling and Optimizing Distributed Embedded Systems. Lecture Notes in Computer Science, 2010, , 236-245. | 1.0 | 2 |
| 57 | A Model for System Resources in Flexible Time-Triggered Middleware Architectures. Lecture Notes in Computer Science, 2012, , 215-226. | 1.0 | 2 |
| 58 | Longitudinal Collision Avoidance Based on Model Predictive Controllers and Fuzzy Inference Systems. , 2020, , . | | 2 |
| 59 | Using a CORBA synchronous scheduling service in Pick&Place operations. , 2008, , . | | 1 |
| 60 | Design and Performance of a XBee 900 MHz Acquisition System Aimed at Industrial Applications. Applied Sciences (Switzerland), 2021, 11, 8174. | 1.3 | 1 |
| 61 | Analyzing a ROS Based Architecture for Its Cross Reuse in ISO26262 Settings. Communications in Computer and Information Science, 2018, , 167-180. | 0.4 | 1 |
| 62 | Application of Differential Evolution as method of pitch control setting in a wind turbine. Renewable Energy and Power Quality Journal, 0, , 660-666. | 0.2 | 1 |
| 63 | Design of a PBL Experience in the Field of Sustainability for Industrial Informatics. Advances in Intelligent Systems and Computing, 2021, , 338-347. | 0.5 | 1 |
| 64 | A novel framework for scheduling distributed tasks. , 2009, , . | | 0 |
| 65 | Reconfiguring factory automation applications with FTT-MA. , 2013, , . | | 0 |
| 66 | Inverse design of novel nanophotonic structures. , 2013, , . | | 0 |
| 67 | Dealing with intensive distributed video-traffic in reconfigurable automation applications. , 2014, , . | | 0 |
| 68 | Towards silicon all-optical nanophotonic circuitry. , 2014, , . | | 0 |
| 69 | Coupling light into photonic integrated circuits using non-periodic surfaces. , 2015, , . | | 0 |
| 70 | Adaptive sliding mode control scheme for a wave power generation plant. , 2017, , . | | 0 |
| 71 | Learning basic robotics and VAL II programming with LEGO Mindstorms robots. , 2018, , . | | 0 |
| 72 | A Framework to Simplify the Creation of Remote Laboratories. International Journal of Online and Biomedical Engineering, 2010, 6, 25. | 0.9 | 0 |