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	Scalable IoT Architecture for Monitoring IEQ Conditions in Public and Private Buildings. Energies, 2022, 15, 2270.	1.6	12
2	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
3	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
4	Advanced Trajectory Control for Piezoelectric Actuators Based on Robust Control Combined with Artificial Neural Networks. Applied Sciences (Switzerland), 2021, 11, 7390.	1.3	7
5	Design and Performance of a XBee 900 MHz Acquisition System Aimed at Industrial Applications. Applied Sciences (Switzerland), 2021, 11, 8174.	1.3	1
6	High-Performance Tracking for Piezoelectric Actuators Using Super-Twisting Algorithm Based on Artificial Neural Networks. Mathematics, 2021, 9, 244.	1.1	11
7	Provision of Frequency Response from Wind Farms: A Review. Energies, 2021, 14, 6689.	1.6	24
8	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
9	Reliable Control Applications with Wireless Communication Technologies: Application to Robotic Systems. Sensors, 2021, 21, 7107.	2.1	6
10	Maximum Power Point Tracking Techniques for Photovoltaic Panel: A Review and Experimental Applications. Energies, 2021, 14, 7806.	1.6	21
11	Sliding Mode Control with Dynamical Correction for Time-Delay Piezoelectric Actuator Systems. Materials, 2020, 13, 132.	1.3	9
12	Experimental Validation of a Sliding Mode Control for a Stewart Platform Used in Aerospace Inspection Applications. Mathematics, 2020, 8, 2051.	1.1	25
13	Advances in Tracking Control for Piezoelectric Actuators Using Fuzzy Logic and Hammerstein-Wiener Compensation. Mathematics, 2020, 8, 2071.	1.1	13
14	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
15	A Design-Oriented Engineering Course Involving Interactions With Stakeholders. IEEE Transactions on Education, 2020, 63, 283-290.	2.0	5
16	Longitudinal Collision Avoidance Based on Model Predictive Controllers and Fuzzy Inference Systems. , 2020, , .		2
17	Building Wireless Control Applications with XBee and LabVIEW. Applied Sciences (Switzerland), 2019, 9, 2379.	1.3	7
18	Sliding Mode-Based Robust Control for Piezoelectric Actuators with Inverse Dynamics Estimation. Energies, 2019, 12, 943.	1.6	18

#	Article	IF	Citations
19	Variable speed wind turbine control scheme using a robust wind torque estimation. Renewable Energy, 2019, 133, 354-366.	4.3	28
20	A Multidisciplinary PBL Approach for Teaching Industrial Informatics and Robotics in Engineering. IEEE Transactions on Education, 2018, 61, 21-28.	2.0	42
21	Adaptive Sliding Mode Control for a Double Fed Induction Generator Used in an Oscillating Water Column System. Energies, 2018, 11, 2939.	1.6	13
22	Learning basic robotics and VAL II programming with LEGO Mindstorms robots. , 2018, , .		0
23	Analyzing a ROS Based Architecture for Its Cross Reuse in ISO26262 Settings. Communications in Computer and Information Science, 2018, , 167-180.	0.4	1
24	A modular CPS architecture design based on ROS and Docker. International Journal on Interactive Design and Manufacturing, 2017, 11, 949-955.	1.3	29
25	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
26	Adaptive sliding mode control scheme for a wave power generation plant. , 2017, , .		0
27	Building IoT Applications with Raspberry Pi and Low Power IQRF Communication Modules. Electronics (Switzerland), 2016, 5, 54.	1.8	19
28	Towards a Generic Architecture for Building Modular CPS as Applied to Mobile Robotics. International Journal of Online Engineering, 2016, 12, 4.	0.5	4
29	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
30	Coupling light into photonic integrated circuits using non-periodic surfaces. , 2015, , .		0
31	Developing CPPS within IEC-61499 based on low cost devices. , 2015, , .		21
32	Flexible, modular, standard, free and affordable model for CPS control applied to mobile robotics. , 2015, , .		2
33	Building a CPS as an Educational Challenge. International Journal of Online and Biomedical Engineering, 2014, 10, 52.	0.9	3
34	Building industrial CPS with the IEC 61499 standard on low-cost hardware platforms. , 2014, , .		20
35	Dealing with intensive distributed video-traffic in reconfigurable automation applications. , 2014, , .		0
36	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

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37	A flexible time-triggered service for real-time CORBA. Computer Standards and Interfaces, 2014, 36, 531-544.	3.8	3
38	The challenge of building a cyber physical system as an educational experience. , 2014, , .		3
39	Towards silicon all-optical nanophotonic circuitry. , 2014, , .		0
40	Reconfiguring factory automation applications with FTT-MA. , 2013, , .		0
41	Combining moodle and redmine as e-learning tools in Project Based Learning of Industrial Electronics. , 2013, , .		10
42	FTT-MA: A Flexible Time-Triggered Middleware Architecture for Time Sensitive, Resource-Aware AmI Systems. Sensors, 2013, 13, 6229-6253.	2.1	7
43	Inverse design of novel nanophotonic structures. , 2013, , .		0
44	Designing High Performance Factory Automation Applications on Top of DDS. International Journal of Advanced Robotic Systems, 2013, 10, 205.	1.3	5
45	A time-triggered data distribution service for FTT-CORBA. , 2012, , .		5
46	Distribution middleware technologies for Cyber Physical Systems. , 2012, , .		5
47	Configurable cooperative middleware for the next generation of CPS. , 2012, , .		5
48	Towards Middleware-Based Cooperation Topologies for the Next Generation of CPS. International Journal of Online and Biomedical Engineering, 2012, 8, 20.	0.9	4
49	A Time-Triggered Middleware Architecture for Ubiquitous Cyber Physical System Applications. Lecture Notes in Computer Science, 2012, , 73-80.	1.0	7
50	Towards an Infrastructure Model for Composing and Reconfiguring Cyber-Physical Systems. Lecture Notes in Computer Science, 2012, , 282-289.	1.0	5
51	A Model for System Resources in Flexible Time-Triggered Middleware Architectures. Lecture Notes in Computer Science, 2012, , 215-226.	1.0	2
52	A CORBA Wrapper for Applications with Multiple Robots. International Journal of Online and Biomedical Engineering, 2011, 7, 4.	0.9	2
53	Towards a OMG DDS communication backbone for factory automation applications. , 2011, , .		5
54	Building complex remote learning laboratories. Computer Applications in Engineering Education, 2010, 18, 53-66.	2.2	9

#	Article	IF	Citations
55	Control communications with DDS using IEC61499 Service Interface Function Blocks. , 2010, , .		15
56	Supporting a reconfigurable real-time service-oriented middleware with FTT-CORBA. , 2010, , .		7
57	A Framework with Proactive Nodes for Scheduling and Optimizing Distributed Embedded Systems. Lecture Notes in Computer Science, 2010, , 236-245.	1.0	2
58	A Framework to Simplify the Creation of Remote Laboratories. International Journal of Online and Biomedical Engineering, 2010, 6, 25.	0.9	0
59	A novel framework for scheduling distributed tasks. , 2009, , .		0
60	Towards a modular and scalable design for the communications of electrical protection relays. , 2009, , .		8
61	Access to process data with OPC-DA using IEC61499 Service Interface Function Blocks. , 2009, , .		7
62	A Remote Laboratory for a Basic Course on Control Engineering. International Journal of Online and Biomedical Engineering, 2009, 5, 8.	0.9	8
63	Using a CORBA synchronous scheduling service in Pick&Place operations. , 2008, , .		1
64	A Novel Synchronous Scheduling Service for CORBA-RT Applications. , 2007, , .		9
65	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
66	Adding Synchronous Scheduling to CORBA-RT. , 2006, , .		4
67	A framework based on CORBA and OO technologies for remote access to industrial plants. , 2003, , .		2
68	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
69	Using object oriented technologies in factory automation. , 0, , .		7
70	Object-oriented based architecture for accessing remotely electrical protection relays. , 0, , .		2
71	Tracking Control for Piezoelectric Actuators with Advanced Feed-forward Compensation Combined with PI Control.. , 0, , .		5
72	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