Pedro Ponce

List of Publications by Year
in descending order

109 papers	1,157 citations	471061 17 h-index	500791 28 g-index
110 all docs	110 docs citations	110 times ranked	927 citing authors

#	Article	IF	Citations
1	Micro-grid an Integral Approach to Long-Term Sustainability. Strategies for Sustainability, 2022, , 181-212.	0.2	1
2	Expanding electric vehicles lifetime in power electronic stage using an optimized fuzzy logic controller. International Journal on Interactive Design and Manufacturing, 2022, 16, 49-63.	1.3	0
3	S4 Features and Artificial Intelligence for Designing a Robot against COVID-19â€"Robocov. Future Internet, 2022, 14, 22.	2.4	8
4	Use of Robotic Platforms as a Tool to Support STEM and Physical Education in Developed Countries: A Descriptive Analysis. Sensors, 2022, 22, 1037.	2.1	6
5	Using Deep Learning in Real-Time for Clothing Classification with Connected Thermostats. Energies, 2022, 15, 1811.	1.6	18
6	Improving the attention span of elementary school children for physical education through an NAO robotics platform in developed countries. International Journal on Interactive Design and Manufacturing, 2022, 16, 657-675.	1.3	5
7	Empowering saving energy at home through serious games on thermostat interfaces. Energy and Buildings, 2022, 263, 112026.	3.1	15
8	How to develop research skills among undergraduate engineering students to tackle current ongoing topics? A Smart-Grid case study. International Journal of Electrical Engineering and Education, 2021, 58, 113-141.	0.4	10
9	Role Assignment Analysis of an Assistive Robotic Platform in a High School Mathematics Class, Through a Gamification and Usability Evaluation. International Journal of Social Robotics, 2021, 13, 1063-1078.	3.1	10
10	Adaptive SMC based on the dynamic containment of the sliding variable. Journal of the Franklin Institute, 2021, 358, 1422-1447.	1.9	4
11	Sensing, Smart and Sustainable Systems Theory. , 2021, , 1-27.		1
12	Designing a Consumer Framework for Social Products Within a Gamified Smart Home Context. Lecture Notes in Computer Science, 2021, , 429-443.	1.0	5
13	Smart City Concept Based on Cyber-Physical Social Systems with Hierarchical Ethical Agents Approach. Lecture Notes in Computer Science, 2021, , 424-437.	1.0	3
14	Smart Cities Using Social Cyber-Physical Systems Driven by Education. , 2021, , .		2
15	Differentiated Teaching Based on Standardized Metrics Integrating Fuzzy Logic Type 2 Detection Theory: High School Caseâ€"PrepaTec, Mexico. Future Internet, 2021, 13, 98.	2.4	1
16	Design Framework Based on TEC21 Educational Model and Education 4.0 Implemented in a Capstone Project: A Case Study of an Electric Vehicle Suspension System. Sustainability, 2021, 13, 5768.	1.6	24
17	Energy Management System Based on a Gamified Application for Households. Energies, 2021, 14, 3445.	1.6	18
18	Education 4.0: Teaching the Basics of KNN, LDA and Simple Perceptron Algorithms for Binary Classification Problems. Future Internet, 2021, 13, 193.	2.4	11

#	ARTICLE	IF	CITATIONS
19	S3 manufacturing process taxonomy. Journal of Manufacturing Processes, 2021, 67, 579-610.	2.8	4
20	Automation Pyramid as Constructor for a Complete Digital Twin, Case Study: A Didactic Manufacturing System. Sensors, 2021, 21, 4656.	2.1	23
21	Education 4.0: Teaching the Basis of Motor Imagery Classification Algorithms for Brain-Computer Interfaces. Future Internet, 2021, 13, 202.	2.4	4
22	YouTube Videos in the Virtual Flipped Classroom Model Using Brain Signals and Facial Expressions. Future Internet, 2021, 13, 224.	2.4	7
23	Real-Time Power Electronics Laboratory to Strengthen Distance Learning Engineering Education on Smart Grids and Microgrids. Future Internet, 2021, 13, 237.	2.4	6
24	Hardware implementation of metaheuristics through LabVIEW FPGA. Applied Soft Computing Journal, 2021, 113, 107908.	4.1	12
25	Enabling Systems for Intelligent Manufacturing in Industry 4.0. , 2021, , .		9
26	Driver's Personality and Behavior for Boosting Automobile Security and Sensing Health Problems Through Fuzzy Signal Detection Case Study: Mexico City. Sensors, 2021, 21, 7350.	2.1	0
27	A Decentralized Passive Islanding Detection Method Based on the Variations of Estimated Droop Characteristics. Energies, 2021, 14, 7759.	1.6	4
28	Smart Homes as Enablers for Depression Pre-Diagnosis Using PHQ-9 on HMI through Fuzzy Logic Decision System. Sensors, 2021, 21, 7864.	2.1	11
29	A Gamified HMI as a Response for Implementing a Smart-Sustainable University Campus. IFIP Advances in Information and Communication Technology, 2021, , 683-691.	0.5	8
30	DFT-based Phasor Estimator using a MAF with a Phase-Lead Compensator. , 2021, , .		1
31	Social creation networks for designing low income interfaces in programmable thermostats. Technology in Society, 2020, 62, 101299.	4.8	8
32	Novel Design Methodology for DC-DC Converters Applying Metaheuristic Optimization for Inductance Selection. Applied Sciences (Switzerland), 2020, 10, 4377.	1.3	12
33	Improved MPPT Algorithm for Photovoltaic Systems Based on the Earthquake Optimization Algorithm. Energies, 2020, 13, 3047.	1.6	16
34	Designing a Robust Controller Using SMC and Fuzzy Artificial Organic Networks for Brushed DC Motors. Energies, 2020, 13, 3091.	1.6	5
35	Tailored gamification and serious game framework based on fuzzy logic for saving energy in connected thermostats. Journal of Cleaner Production, 2020, 262, 121167.	4.6	41
36	A Non-Adaptive Single-Phase PLL Based on Discrete Half-Band Filtering to Suppress Severe Frequency Disturbances. Energies, 2020, 13, 1730.	1.6	3

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37	Empower saving energy into smart homes using a gamification structure by social products. , 2020, , .		12
38	Multi-sensor System, Gamification, and Artificial Intelligence for Benefit Elderly People. Studies in Systems, Decision and Control, 2020, , 207-235.	0.8	19
39	Simulation Framework for Load Management and Behavioral Energy Efficiency Analysis in Smart Homes. Lecture Notes in Computer Science, 2020, , 497-508.	1.0	3
40	S4 Product Design Framework: A Gamification Strategy Based on Type 1 and 2 Fuzzy Logic. Lecture Notes in Computer Science, 2020, , 509-524.	1.0	9
41	Implementing Robotic Platforms for Therapies Using Qualitative Factors in Mexico. Lecture Notes in Computer Science, 2020, , 123-131.	1.0	1
42	The Wit-Learning Methodology as a Means for Research Skills Acquisition. Advances in Educational Technologies and Instructional Design Book Series, 2020, , 196-222.	0.2	0
43	Improving the Attention Span of Elementary School Children in Mexico Through a S4 Technology Platform. Lecture Notes in Computer Science, 2020, , 525-532.	1.0	0
44	Usability perceptions and beliefs about smart thermostats by chi-square test, signal detection theory, and fuzzy detection theory in regions of Mexico. Frontiers in Energy, 2019, 13, 522-538.	1.2	9
45	RoboTICs: Implementation of a Robotic Assistive Platform in a Mathematics High School Class. , 2019, , .		4
46	Fast Execution of Black-Box Algorithms Through a Piece-Wise Linear Interpolation Technique. Arabian Journal for Science and Engineering, 2019, 44, 9443-9453.	1.7	0
47	Mobile Phone Usage Detection by ANN Trained with a Metaheuristic Algorithm â€. Sensors, 2019, 19, 3110.	2.1	10
48	Research Skills Enhancement through a Research-Based Wit-Learning Methodology. , 2019, , .		2
49	A Novel Design of Virtual Laboratory. , 2019, , .		4
50	A Robust Control Scheme for Renewable-Based Distributed Generators Using Artificial Hydrocarbon Networks. Energies, 2019, 12, 1896.	1.6	2
51	Improving education in developing countries using robotic platforms. International Journal on Interactive Design and Manufacturing, 2019, 13, 1401-1422.	1.3	16
52	Learning perceptions of Smart Grid class with laboratory for undergraduate students. International Journal on Interactive Design and Manufacturing, 2019, 13, 1423-1439.	1.3	2
53	A Novel Fuzzy-PSO Controller for Increasing the Lifetime in Power Electronics Stage for Brushless DC Drives. IEEE Access, 2019, 7, 47841-47855.	2.6	20
54	Sensing, smart and sustainable technologies for Agri-Food 4.0. Computers in Industry, 2019, 108, 21-36.	5.7	177

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55	Open innovation laboratory in electrical energy education based on the knowledge economy. International Journal of Electrical Engineering and Education, 2019, , 002072091982971.	0.4	5
56	Power Electronics in the Engineering Field: A Perception Comparison between Undergraduate and Graduate Students Using Fuzzy Logic Type 2 Signal Detection Theory. , 2019, , .		0
57	Framework for promoting social interaction and physical activity in elderly people using gamification and fuzzy logic strategy. , 2019, , .		8
58	The Next Generation of Social Products Based on Sensing, Smart and Sustainable (S3) Features: A Smart Thermostat as Case Study. IFAC-PapersOnLine, 2019, 52, 2390-2395.	0.5	19
59	A Model Using Artificial Neural Networks and Fuzzy Logic for Knowing the Consumer on Smart Thermostats as a S3 Product. Lecture Notes in Computer Science, 2019, , 430-439.	1.0	6
60	Bounded Region Optimization of PID Gains for Grid Forming Inverters with Genetic Algorithms. Lecture Notes in Computer Science, 2019, , 277-289.	1.0	0
61	Designing Fuzzy Artificial Organic Networks Using Sliding-Mode Control. Lecture Notes in Computer Science, 2019, , 546-556.	1.0	0
62	A new configuration of 2 electromagnetic power generators for mechanical energy conversion by spinning a ferrite magnet in flat form. International Journal of Energy Research, 2018, 42, 1262-1276.	2.2	1
63	Doubly fed induction generator (DFIG) wind turbine controlled by artificial organic networks. Soft Computing, 2018, 22, 2867-2879.	2.1	25
64	Robotic platform for teaching maths in junior high school. International Journal on Interactive Design and Manufacturing, 2018, 12, 1349-1360.	1.3	13
65	Open Innovation Laboratory for Rapid Realisation of Sensing, Smart and Sustainable Products: Motives, Concepts and Uses in Higher Education. IFIP Advances in Information and Communication Technology, 2018, , 156-163.	0.5	6
66	Sensing, Smart and Sustainable Products to Support Health and Well-Being in Communities. , 2018, , .		5
67	Framework for communicating with consumers using an expectation interface in smart thermostats. Energy and Buildings, 2017, 145, 44-56.	3.1	22
68	ANFIS and MPC controllers for a reconfigurable lower limb exoskeleton. Soft Computing, 2017, 21, 571-584.	2.1	8
69	Experiences in interactive collaborative learning using an open innovation laboratory: The design methodologies course as case study. , 2017, , .		7
70	Overview of Real-Time Simulation as a Supporting Effort to Smart-Grid Attainment. Energies, 2017, 10, 817.	1.6	34
71	Fuzzy Logic Type 1 and 2 for Social Robots and Apps for Children with Autism. , 2017, , .		3
72	Robust control for buck voltage converter under resistive and inductive varying load. , 2016, , .		8

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73	Grid-side inverter thermal cycling analysis of 1.6 MW Doubly-Fed Induction Generation wind turbine and life-time estimation. , 2016, , .		1
74	Swarm-Based Nature-Inspired Algorithm and Genetic Algorithms for Optimizing a Sun Tracker Trajectory. Applied Artificial Intelligence, 2016, 30, 97-124.	2.0	3
75	End user perceptions toward smart grid technology: Acceptance, adoption, risks, and trust. Renewable and Sustainable Energy Reviews, 2016, 60, 587-598.	8.2	41
76	Design based on fuzzy signal detection theory for a semi-autonomous assisting robot in children autism therapy. Computers in Human Behavior, 2016, 55, 28-42.	5.1	15
77	Technology transfer motivation analysis based on fuzzy type 2 signal detection theory. AI and Society, 2016, 31, 245-257.	3.1	6
78	Type-2 Fuzzy membership function design method through a piecewise-linear approach. Expert Systems With Applications, 2015, 42, 7530-7540.	4.4	11
79	Towards a Reconfigurable Inferior Limbs Exoskeleton for Assistive, Rehabilitation, and Empowering Application. IFAC-PapersOnLine, 2015, 48, 1496-1501.	0.5	2
80	The development of an artificial organic networks toolkit for LabVIEW. Journal of Computational Chemistry, 2015, 36, 478-492.	1.5	25
81	A novel robust liquid level controller for coupled-tanks systems using artificial hydrocarbon networks. Expert Systems With Applications, 2015, 42, 8858-8867.	4.4	25
82	Real-time hardware ANN-QFT robust controller for reconfigurable micro-machine tool. International Journal of Advanced Manufacturing Technology, 2015, 79, 1-20.	1.5	41
83	A new approach to uncertainty description through accomplishment membership functions. Expert Systems With Applications, 2015, 42, 7895-7904.	4.4	3
84	Alternative Classification Techniques for Brain-Computer Interfaces for Smart Sensor Manufacturing Environments. IFAC-PapersOnLine, 2015, 48, 680-685.	0.5	7
85	Interval Type 2 Fuzzy Logic Controller for Rotor Voltage of a Doubly-Fed Induction Generator and Pitch Angle of Wind Turbine Blades. IFAC-PapersOnLine, 2015, 48, 2195-2202.	0.5	7
86	Experimental Fuzzy Logic Controller Type 2 for a Quadrotor Optimized by ANFIS. IFAC-PapersOnLine, 2015, 48, 2435-2441.	0.5	8
87	Experimental study for FPGA PID position controller in CNC micro-machines. IFAC-PapersOnLine, 2015, 48, 2203-2207.	0.5	6
88	Robust QFT-based control of DTC-speed loop of an induction motor under different load conditionsÃ•. IFAC-PapersOnLine, 2015, 48, 2429-2434.	0.5	5
89	Simulation to Implementation as Good Practices for Teaching Power Electronics to Undergraduate Students: Fuzzy Sliding Mode Control for DC Motors. Advances in Power Electronics, 2014, 2014, 1-9.	0.8	6
90	Neural network and fuzzy logic in a speed close loop for DTC induction motors. , 2014, , .		2

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91	Artificial hydrocarbon networks fuzzy inference systems for CNC machines position controller. International Journal of Advanced Manufacturing Technology, 2014, 72, 1465-1479.	1.5	22
92	Adaptive noise filtering based on artificial hydrocarbon networks: An application to audio signals. Expert Systems With Applications, 2014, 41, 6512-6523.	4.4	35
93	Model and Control for Coupled Tanks Using Labview. , 2013, , .		12
94	Applications of Fuzzy Ensemble Approaches in Modeling, Forecasting, and Control. Mathematical Problems in Engineering, 2013, 2013, 1-2.	0.6	0
95	Artificial Hydrocarbon Networks Fuzzy Inference System. Mathematical Problems in Engineering, 2013, 2013, 1-13.	0.6	23
96	Integrated Intelligent Control and Fault System for Wind Generators. Intelligent Automation and Soft Computing, 2013, 19, 373-389.	1.6	6
97	Towards Sustainability of Protected Agriculture: Automatic Control and Structural Technologies Integration of an Intelligent Greenhouse. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 366-371.	0.4	11
98	Soft Computing Based On LabVIEW. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 975-981.	0.4	0
99	Control Systems Spectrum For Sustainability. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 270-276.	0.4	0
100	Real Time Simulation for DC and AC Motors Based on LabVIEW FPGAs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1777-1784.	0.4	2
101	Electric Vehicle Powertrain Control with Fuzzy Indirect Vector Control. , 2012, , .		1
102	A Novel Speed Control for DC Motors: Sliding Mode Control, Fuzzy Inference System, Neural Networks and Genetic Algorithms. , 2012, , .		5
103	Real time systems for teaching induction motor drives. , 2012, , .		1
104	Fuzzy C-Means Clustering Technique Applied for Modeling Parameters of an Intelligent Greenhouse Open Control System. , 2011, , .		4
105	A Supervised Adaptive Neuro-Fuzzy Inference System controller for a Hybrid Electric Vehicle's power train system. , 2011, , .		6
106	Artificial Organic Networks. , 2011, , .		28
107	Intelligent Wheelchair and Virtual Training by LabVIEW. Lecture Notes in Computer Science, 2010, , 422-435.	1.0	4
108	A novel neuro-fuzzy controller genetically enhanced using LabVIEW. , 2008, , .		3

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109	Neural Networks Based on TrigonometricSeries for the Control of a Robot. , 2006, , .		2