

Pedro Ponce

List of Publications by Year in descending order

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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	Sensing, smart and sustainable technologies for Agri-Food 4.0. Computers in Industry, 2019, 108, 21-36.	5.7	177
2	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
3	End user perceptions toward smart grid technology: Acceptance, adoption, risks, and trust. Renewable and Sustainable Energy Reviews, 2016, 60, 587-598.	8.2	41
4	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
5	Adaptive noise filtering based on artificial hydrocarbon networks: An application to audio signals. Expert Systems With Applications, 2014, 41, 6512-6523.	4.4	35
6	Overview of Real-Time Simulation as a Supporting Effort to Smart-Grid Attainment. Energies, 2017, 10, 817.	1.6	34
7	Artificial Organic Networks. , 2011, , .		28
8	The development of an artificial organic networks toolkit for LabVIEW. Journal of Computational Chemistry, 2015, 36, 478-492.	1.5	25
9	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
10	Doubly fed induction generator (DFIG) wind turbine controlled by artificial organic networks. Soft Computing, 2018, 22, 2867-2879.	2.1	25
11	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
12	Artificial Hydrocarbon Networks Fuzzy Inference System. Mathematical Problems in Engineering, 2013, 2013, 1-13.	0.6	23
13	Automation Pyramid as Constructor for a Complete Digital Twin, Case Study: A Didactic Manufacturing System. Sensors, 2021, 21, 4656.	2.1	23
14	Artificial hydrocarbon networks fuzzy inference systems for CNC machines position controller. International Journal of Advanced Manufacturing Technology, 2014, 72, 1465-1479.	1.5	22
15	Framework for communicating with consumers using an expectation interface in smart thermostats. Energy and Buildings, 2017, 145, 44-56.	3.1	22
16	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
17	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
18	Multi-sensor System, Gamification, and Artificial Intelligence for Benefit Elderly People. Studies in Systems, Decision and Control, 2020, , 207-235.	0.8	19

#	ARTICLE	IF	CITATIONS
19	Energy Management System Based on a Gamified Application for Households. <i>Energies</i> , 2021, 14, 3445.	1.6	18
20	Using Deep Learning in Real-Time for Clothing Classification with Connected Thermostats. <i>Energies</i> , 2022, 15, 1811.	1.6	18
21	Improving education in developing countries using robotic platforms. <i>International Journal on Interactive Design and Manufacturing</i> , 2019, 13, 1401-1422.	1.3	16
22	Improved MPPT Algorithm for Photovoltaic Systems Based on the Earthquake Optimization Algorithm. <i>Energies</i> , 2020, 13, 3047.	1.6	16
23	Design based on fuzzy signal detection theory for a semi-autonomous assisting robot in children autism therapy. <i>Computers in Human Behavior</i> , 2016, 55, 28-42.	5.1	15
24	Empowering saving energy at home through serious games on thermostat interfaces. <i>Energy and Buildings</i> , 2022, 263, 112026.	3.1	15
25	Robotic platform for teaching maths in junior high school. <i>International Journal on Interactive Design and Manufacturing</i> , 2018, 12, 1349-1360.	1.3	13
26	Model and Control for Coupled Tanks Using Labview. , 2013, , .		12
27	Novel Design Methodology for DC-DC Converters Applying Metaheuristic Optimization for Inductance Selection. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4377.	1.3	12
28	Empower saving energy into smart homes using a gamification structure by social products. , 2020, , .		12
29	Hardware implementation of metaheuristics through LabVIEW FPGA. <i>Applied Soft Computing Journal</i> , 2021, 113, 107908.	4.1	12
30	Towards Sustainability of Protected Agriculture: Automatic Control and Structural Technologies Integration of an Intelligent Greenhouse. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 366-371.	0.4	11
31	Type-2 Fuzzy membership function design method through a piecewise-linear approach. <i>Expert Systems With Applications</i> , 2015, 42, 7530-7540.	4.4	11
32	Education 4.0: Teaching the Basics of KNN, LDA and Simple Perceptron Algorithms for Binary Classification Problems. <i>Future Internet</i> , 2021, 13, 193.	2.4	11
33	Smart Homes as Enablers for Depression Pre-Diagnosis Using PHQ-9 on HMI through Fuzzy Logic Decision System. <i>Sensors</i> , 2021, 21, 7864.	2.1	11
34	Mobile Phone Usage Detection by ANN Trained with a Metaheuristic Algorithm â€. <i>Sensors</i> , 2019, 19, 3110.	2.1	10
35	How to develop research skills among undergraduate engineering students to tackle current ongoing topics? A Smart-Grid case study. <i>International Journal of Electrical Engineering and Education</i> , 2021, 58, 113-141.	0.4	10
36	Role Assignment Analysis of an Assistive Robotic Platform in a High School Mathematics Class, Through a Gamification and Usability Evaluation. <i>International Journal of Social Robotics</i> , 2021, 13, 1063-1078.	3.1	10

#	ARTICLE	IF	CITATIONS
37	Usability perceptions and beliefs about smart thermostats by chi-square test, signal detection theory, and fuzzy detection theory in regions of Mexico. <i>Frontiers in Energy</i> , 2019, 13, 522-538.	1.2	9
38	Enabling Systems for Intelligent Manufacturing in Industry 4.0. , 2021, , .		9
39	S4 Product Design Framework: A Gamification Strategy Based on Type 1 and 2 Fuzzy Logic. <i>Lecture Notes in Computer Science</i> , 2020, , 509-524.	1.0	9
40	Experimental Fuzzy Logic Controller Type 2 for a Quadrotor Optimized by ANFIS. <i>IFAC-PapersOnLine</i> , 2015, 48, 2435-2441.	0.5	8
41	Robust control for buck voltage converter under resistive and inductive varying load. , 2016, , .		8
42	ANFIS and MPC controllers for a reconfigurable lower limb exoskeleton. <i>Soft Computing</i> , 2017, 21, 571-584.	2.1	8
43	Framework for promoting social interaction and physical activity in elderly people using gamification and fuzzy logic strategy. , 2019, , .		8
44	Social creation networks for designing low income interfaces in programmable thermostats. <i>Technology in Society</i> , 2020, 62, 101299.	4.8	8
45	A Gamified HMI as a Response for Implementing a Smart-Sustainable University Campus. <i>IFIP Advances in Information and Communication Technology</i> , 2021, , 683-691.	0.5	8
46	S4 Features and Artificial Intelligence for Designing a Robot against COVID-19â€™Robocov. <i>Future Internet</i> , 2022, 14, 22.	2.4	8
47	Alternative Classification Techniques for Brain-Computer Interfaces for Smart Sensor Manufacturing Environments. <i>IFAC-PapersOnLine</i> , 2015, 48, 680-685.	0.5	7
48	Interval Type 2 Fuzzy Logic Controller for Rotor Voltage of a Doubly-Fed Induction Generator and Pitch Angle of Wind Turbine Blades. <i>IFAC-PapersOnLine</i> , 2015, 48, 2195-2202.	0.5	7
49	Experiences in interactive collaborative learning using an open innovation laboratory: The design methodologies course as case study. , 2017, , .		7
50	YouTube Videos in the Virtual Flipped Classroom Model Using Brain Signals and Facial Expressions. <i>Future Internet</i> , 2021, 13, 224.	2.4	7
51	A Supervised Adaptive Neuro-Fuzzy Inference System controller for a Hybrid Electric Vehicle's power train system. , 2011, , .		6
52	Integrated Intelligent Control and Fault System for Wind Generators. <i>Intelligent Automation and Soft Computing</i> , 2013, 19, 373-389.	1.6	6
53	Simulation to Implementation as Good Practices for Teaching Power Electronics to Undergraduate Students: Fuzzy Sliding Mode Control for DC Motors. <i>Advances in Power Electronics</i> , 2014, 2014, 1-9.	0.8	6
54	Experimental study for FPGA PID position controller in CNC micro-machines. <i>IFAC-PapersOnLine</i> , 2015, 48, 2203-2207.	0.5	6

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55	Technology transfer motivation analysis based on fuzzy type 2 signal detection theory. <i>AI and Society</i> , 2016, 31, 245-257.	3.1	6
56	Open Innovation Laboratory for Rapid Realisation of Sensing, Smart and Sustainable Products: Motives, Concepts and Uses in Higher Education. <i>IFIP Advances in Information and Communication Technology</i> , 2018, , 156-163.	0.5	6
57	Real-Time Power Electronics Laboratory to Strengthen Distance Learning Engineering Education on Smart Grids and Microgrids. <i>Future Internet</i> , 2021, 13, 237.	2.4	6
58	A Model Using Artificial Neural Networks and Fuzzy Logic for Knowing the Consumer on Smart Thermostats as a S3 Product. <i>Lecture Notes in Computer Science</i> , 2019, , 430-439.	1.0	6
59	Use of Robotic Platforms as a Tool to Support STEM and Physical Education in Developed Countries: A Descriptive Analysis. <i>Sensors</i> , 2022, 22, 1037.	2.1	6
60	A Novel Speed Control for DC Motors: Sliding Mode Control, Fuzzy Inference System, Neural Networks and Genetic Algorithms. , 2012, , .		5
61	Robust QFT-based control of DTC-speed loop of an induction motor under different load conditions. <i>IFAC-PapersOnLine</i> , 2015, 48, 2429-2434.	0.5	5
62	Sensing, Smart and Sustainable Products to Support Health and Well-Being in Communities. , 2018, , .		5
63	Open innovation laboratory in electrical energy education based on the knowledge economy. <i>International Journal of Electrical Engineering and Education</i> , 2019, , 002072091982971.	0.4	5
64	Designing a Robust Controller Using SMC and Fuzzy Artificial Organic Networks for Brushed DC Motors. <i>Energies</i> , 2020, 13, 3091.	1.6	5
65	Designing a Consumer Framework for Social Products Within a Gamified Smart Home Context. <i>Lecture Notes in Computer Science</i> , 2021, , 429-443.	1.0	5
66	Improving the attention span of elementary school children for physical education through an NAO robotics platform in developed countries. <i>International Journal on Interactive Design and Manufacturing</i> , 2022, 16, 657-675.	1.3	5
67	Intelligent Wheelchair and Virtual Training by LabVIEW. <i>Lecture Notes in Computer Science</i> , 2010, , 422-435.	1.0	4
68	Fuzzy C-Means Clustering Technique Applied for Modeling Parameters of an Intelligent Greenhouse Open Control System. , 2011, , .		4
69	RoboTICs: Implementation of a Robotic Assistive Platform in a Mathematics High School Class. , 2019, , .		4
70	A Novel Design of Virtual Laboratory. , 2019, , .		4
71	Adaptive SMC based on the dynamic containment of the sliding variable. <i>Journal of the Franklin Institute</i> , 2021, 358, 1422-1447.	1.9	4
72	S3 manufacturing process taxonomy. <i>Journal of Manufacturing Processes</i> , 2021, 67, 579-610.	2.8	4

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73	Education 4.0: Teaching the Basis of Motor Imagery Classification Algorithms for Brain-Computer Interfaces. <i>Future Internet</i> , 2021, 13, 202.	2.4	4
74	A Decentralized Passive Islanding Detection Method Based on the Variations of Estimated Droop Characteristics. <i>Energies</i> , 2021, 14, 7759.	1.6	4
75	A novel neuro-fuzzy controller genetically enhanced using LabVIEW. , 2008, , .		3
76	A new approach to uncertainty description through accomplishment membership functions. <i>Expert Systems With Applications</i> , 2015, 42, 7895-7904.	4.4	3
77	Swarm-Based Nature-Inspired Algorithm and Genetic Algorithms for Optimizing a Sun Tracker Trajectory. <i>Applied Artificial Intelligence</i> , 2016, 30, 97-124.	2.0	3
78	Fuzzy Logic Type 1 and 2 for Social Robots and Apps for Children with Autism. , 2017, , .		3
79	A Non-Adaptive Single-Phase PLL Based on Discrete Half-Band Filtering to Suppress Severe Frequency Disturbances. <i>Energies</i> , 2020, 13, 1730.	1.6	3
80	Smart City Concept Based on Cyber-Physical Social Systems with Hierarchical Ethical Agents Approach. <i>Lecture Notes in Computer Science</i> , 2021, , 424-437.	1.0	3
81	Simulation Framework for Load Management and Behavioral Energy Efficiency Analysis in Smart Homes. <i>Lecture Notes in Computer Science</i> , 2020, , 497-508.	1.0	3
82	Neural Networks Based on TrigonometricSeries for the Control of a Robot. , 2006, , .		2
83	Real Time Simulation for DC and AC Motors Based on LabVIEW FPGAs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 1777-1784.	0.4	2
84	Neural network and fuzzy logic in a speed close loop for DTC induction motors. , 2014, , .		2
85	Towards a Reconfigurable Inferior Limbs Exoskeleton for Assistive, Rehabilitation, and Empowering Application. <i>IFAC-PapersOnLine</i> , 2015, 48, 1496-1501.	0.5	2
86	Research Skills Enhancement through a Research-Based Wit-Learning Methodology. , 2019, , .		2
87	A Robust Control Scheme for Renewable-Based Distributed Generators Using Artificial Hydrocarbon Networks. <i>Energies</i> , 2019, 12, 1896.	1.6	2
88	Learning perceptions of Smart Grid class with laboratory for undergraduate students. <i>International Journal on Interactive Design and Manufacturing</i> , 2019, 13, 1423-1439.	1.3	2
89	Smart Cities Using Social Cyber-Physical Systems Driven by Education. , 2021, , .		2
90	Electric Vehicle Powertrain Control with Fuzzy Indirect Vector Control. , 2012, , .		1

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91	Real time systems for teaching induction motor drives. , 2012, , .		1
92	Grid-side inverter thermal cycling analysis of 1.6 MW Doubly-Fed Induction Generation wind turbine and life-time estimation. , 2016, , .		1
93	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
94	Sensing, Smart and Sustainable Systems Theory. , 2021, , 1-27.		1
95	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
96	Micro-grid an Integral Approach to Long-Term Sustainability. Strategies for Sustainability, 2022, , 181-212.	0.2	1
97	Implementing Robotic Platforms for Therapies Using Qualitative Factors in Mexico. Lecture Notes in Computer Science, 2020, , 123-131.	1.0	1
98	DFT-based Phasor Estimator using a MAF with a Phase-Lead Compensator. , 2021, , .		1
99	Applications of Fuzzy Ensemble Approaches in Modeling, Forecasting, and Control. Mathematical Problems in Engineering, 2013, 2013, 1-2.	0.6	0
100	Soft Computing Based On LabVIEW. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 975-981.	0.4	0
101	Control Systems Spectrum For Sustainability. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 270-276.	0.4	0
102	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
103	Power Electronics in the Engineering Field: A Perception Comparison between Undergraduate and Graduate Students Using Fuzzy Logic Type 2 Signal Detection Theory. , 2019, , .		0
104	Bounded Region Optimization of PID Gains for Grid Forming Inverters with Genetic Algorithms. Lecture Notes in Computer Science, 2019, , 277-289.	1.0	0
105	Designing Fuzzy Artificial Organic Networks Using Sliding-Mode Control. Lecture Notes in Computer Science, 2019, , 546-556.	1.0	0
106	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
107	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
108	Driverâ€™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

#	ARTICLE	IF	CITATIONS
109	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