Juan Albino Mendez-Perez

List of Publications by Year
in descending order

62 papers	**1,075** citations	331670 **21** h-index
65 all docs	**65** docs citations	**65** times ranked

434195 **31** g-index
718 citing authors

#	Article	IF	Citations
1	Ping-Pong player prototype - A pc-based, low-cost, ping-pong robot. IEEE Robotics and Automation Magazine, 2003, 10, 44-52.	2.0	96
2	An intelligent decision support system for production planning based on machine learning. Journal of Intelligent Manufacturing, 2020, 31, 1257-1273.	7.3	72
3	Obstacle avoidance for a mobile robot: A neuro-fuzzy approach. Fuzzy Sets and Systems, 2001, 124, 171-179.	2.7	66
4	Improving the anesthetic process by a fuzzy rule based medical decision system. Artificial Intelligence in Medicine, 2018, 84, 159-170.	6.5	51
5	A web-based tool for control engineering teaching. Computer Applications in Engineering Education, 2006, 14, 178-187.	3.4	41
6	Adaptive fuzzy predictive controller for anesthesia delivery. Control Engineering Practice, 2016, 46, 1-9.	5.5	39
7	Short-Term Energy Demand Forecast in Hotels Using Hybrid Intelligent Modeling. Sensors, 2019, 19, 2485.	3.8	35
8	Detección de anomalías basada en técnicas inteligentes de una planta de obtención de material bicomponente empleado en la fabricación de palas de aerogenerador. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2020, 17, 84.	1.0	35
9	A fault detection system based on unsupervised techniques for industrial control loops. Expert Systems, 2019, 36, e12395.	4.5	34
10	Adaptive computer control of anesthesia in humans. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 727-734.	1.6	33
11	Adaptive fuzzy modeling of the hypnotic process in anesthesia. Journal of Clinical Monitoring and Computing, 2017, 31, 319-330.	1.6	32
12	Power Cell SOC Modelling for Intelligent Virtual Sensor Implementation. Journal of Sensors, 2017, 2017, 1-10.	1.1	32
13	Hybrid Intelligent System to Perform Fault Detection on BIS Sensor During Surgeries. Sensors, 2017, 17, 179.	3.8	32
14	A reactive blended learning proposal for an introductory control engineering course. Computers and Education, 2010, 54, 856-865.	8.3	31
15	Implementing Motivational Features in Reactive Blended Learning: Application to an Introductory Control Engineering Course. IEEE Transactions on Education, 2011, 54, 619-627.	2.4	29
16	A self-tuning neuromorphic controller: application to the crane problem. Control Engineering Practice, 1998, 6, 1475-1483.	5.5	27
17	A Novel Fuzzy Algorithm to Introduce New Variables in the Drug Supply Decision-Making Process in Medicine. Complexity, 2018, 2018, 1-15.	1.6	27
18	Modelling propofol pharmacodynamics using BIS-guided anaesthesia. Anaesthesia, 2013, 68, 1132-1140.	3.8	26

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19	An Application of a Neural Self-Tuning Controller to an Overhead Crane. Neural Computing and Applications, 1999, 8, 143-150.	5.6	25
20	Design and implementation of a closedâ€loop control system for infusion of propofol guided by bispectral index (<scp>BIS</scp>). Acta Anaesthesiologica Scandinavica, 2012, 56, 1032-1041.	1.6	25
21	A robotic system based on neural network controllers. Advanced Engineering Informatics, 1999, 13, 393-398.	0.5	18
22	Network and Systems Medicine: Position Paper of the European Collaboration on Science and Technology Action on Open Multiscale Systems Medicine. Network and Systems Medicine, 2020, 3, 67-90.	2.5	18
23	Adaptive pharmacokinetic and pharmacodynamic modelling to predict propofol effect using BIS-guided anesthesia. Computers in Biology and Medicine, 2016, 75, 173-180.	7.0	17
24	Hybrid model for the ANI index prediction using Remifentanil drug and EMG signal. Neural Computing and Applications, 2020, 32, 1249-1258.	5.6	17
25	Machine learning techniques for computer-based decision systems in the operating theatre: application to analgesia delivery. Logic Journal of the IGPL, 2021, 29, 236-250.	1.5	15
26	Hybrid Intelligent Model to Predict the Remifentanil Infusion Rate in Patients Under General Anesthesia. Logic Journal of the IGPL, 2021, 29, 193-206.	1.5	15
27	On improving the performance in robust controllers for robot manipulators with parametric disturbances. Control Engineering Practice, 2007, 15, 557-566.	5.5	13
28	An Intelligent Model to Predict ANI in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2018, , 492-501.	0.6	12
29	Obstacle Avoidance Using the Human Operator Experience for a Mobile Robot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2000, 27, 305-319.	3.4	11
30	Machine learning based method for the evaluation of the Analgesia Nociception Index in the assessment of general anesthesia. Computers in Biology and Medicine, 2020, 118, 103645.	7.0	11
31	Comparative Study of One-Class Based Anomaly Detection Techniques for a Bicomponent Mixing Machine Monitoring. Cybernetics and Systems, 2020, 51, 649-667.	2.5	10
32	On the Design and Implementation of a Neuromorphic Self-Tuning Controller. Neural Processing Letters, 1999, 9, 229-242.	3.2	8
33	Prediction of the Energy Demand ofÂaÂHotel Using an Artificial Intelligence-Based Model. Lecture Notes in Computer Science, 2018, , 586-596.	1.3	8
34	A control system proposal for engineering education. Computers and Education, 2013, 68, 266-274.	8.3	7
35	Adaptive drug interaction model to predict depth of anesthesia in the operating room. Biomedical Signal Processing and Control, 2020, 59, 101931.	5.7	7
36	An intelligent system for harmonic distortions detection in wind generator power electronic devices. Neurocomputing, 2021, 456, 609-621.	5.9	6

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37	A Machine Learning Based System for Analgesic Drug Delivery. Advances in Intelligent Systems and Computing, 2018, , 461-470.	0.6	6
38	A New Approach for System Malfunctioning over an Industrial System Control Loop Based on Unsupervised Techniques. Advances in Intelligent Systems and Computing, 2019, , 415-425.	0.6	6
39	Dynamic programming approach for nonlinear systems. IET Control Theory and Applications, 1994, 141, 409-417.	1.7	4
40	Experiments on A D.C. Motor Based System for a Digital Control Course. International Journal of Electrical Engineering and Education, 1995, 32, 163-178.	0.8	4
41	Stochastic optimal controllers for a DC servo motor: Applicability and performance. Control Engineering Practice, 1996, 4, 757-764.	5.5	4
42	Model-based controller for anesthesia automation. , 2009, , .		4
43	Electromyogram prediction during anesthesia by using a hybrid intelligent model. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 4467-4476.	4.9	4
44	A hybrid intelligent classifier for anomaly detection. Neurocomputing, 2021, 452, 498-507.	5.9	4
45	A Set of Control Experiments on an Overhead Crane Prototype. International Journal of Electrical Engineering and Education, 1999, 36, 204-221.	0.8	3
46	ACLAC: An approach for adaptive closed-loop anesthesia control. , 2013, , .		3
47	Remifentanil Dose Prediction for Patients During General Anesthesia. Lecture Notes in Computer Science, 2018, , 537-546.	1.3	2
48	Anomaly Detection on Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2020, , 141-152.	0.6	2
49	A distributed topology for identifying anomalies in an industrial environment. Neural Computing and Applications, 2022, 34, 20463-20476.	5.6	2
50	Intelligent Agents and Apache Cocoon for a CV Generation System. , 2007, , .		1
51	Special issue SOCO 2017: AI and ML applied to Health Sciences (MLHS). Neural Computing and Applications, 2020, 32, 1217-1218.	5.6	1
52	Inferring Knowledge from Clinical Data for Anesthesia Automation. Lecture Notes in Computer Science, 2019, , 480-491.	1.3	1
53	Intelligent Expert System to Optimize the Quartz Crystal Microbalance (QCM) Characterization Test. Advances in Computational Intelligence and Robotics Book Series, 2017, , 469-488.	0.4	1
54	A Comparative Study to Detect Flowmeter Deviations Using One-Class Classifiers. Advances in Intelligent Systems and Computing, 2021, , 66-75.	0.6	1

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55	Design And Implementation of a Navigation System for a Low-Cost Electric Vehicle. , 2006, , .		0
56	A Guidance System for an Electric Vehicle in Non-Structured Roads. , 2006, , .		0
57	Dead-time compensation in intravenous anesthesia control. , 2008, , .		0
58	Predictive algorithm for intravenous anesthesia control. , 2010, , .		0
59	Las Universidades y la implementaciÃ³n de la Agenda 2030. Aportaciones desde La Universidad de La Laguna. , 0, , .		0
60	An Intelligent Model for Bispectral Index (BIS) in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2017, , 290-300.	0.6	0
61	Anomaly Detection Over an Ultrasonic Sensor in an Industrial Plant. Lecture Notes in Computer Science, 2019, , 492-503.	1.3	0
62	A Hybrid One-Class Topology for Non-convex Sets. Lecture Notes in Computer Science, 2020, , 341-349.	1.3	0