JosÃ©-Luis Casteleiro-Roca

List of Publications by Year
in descending order

97 papers	**971** citations	394286 **19** h-index	501076 **28** g-index
105 all docs	**105** docs citations	**105** times ranked	**362** citing authors

#	Article	IF	Citations
1	A hybrid intelligent system for PID controller using in a steel rolling process. Expert Systems With Applications, 2013, 40, 5188-5196.	4.4	95
2	New approach for the QCM sensors characterization. Sensors and Actuators A: Physical, 2014, 207, 1-9.	2.0	37
3	Modelling the hypnotic patient response in general anaesthesia using intelligent models. Logic Journal of the IGPL, 2019, 27, 189-201.	1.3	36
4	Short-Term Energy Demand Forecast in Hotels Using Hybrid Intelligent Modeling. Sensors, 2019, 19, 2485.	2.1	35
5	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.	0.6	35
6	A fault detection system based on unsupervised techniques for industrial control loops. Expert Systems, 2019, 36, e12395.	2.9	34
7	Anomaly detection based on one-class intelligent techniques over a control level plant. Logic Journal of the IGPL, 2020, 28, 502-518.	1.3	33
8	Bio-inspired model of ground temperature behavior on the horizontal geothermal exchanger of an installation based on a heat pump. Neurocomputing, 2015, 150, 90-98.	3.5	32
9	Power Cell SOC Modelling for Intelligent Virtual Sensor Implementation. Journal of Sensors, 2017, 2017, 1-10.	0.6	32
10	Hybrid Intelligent System to Perform Fault Detection on BIS Sensor During Surgeries. Sensors, 2017, 17, 179.	2.1	32
11	An intelligent fault detection system for a heat pump installation based on a geothermal heat exchanger. Journal of Applied Logic, 2016, 17, 36-47.	1.1	31
12	A Fault Detection System for a Geothermal Heat Exchanger Sensor Based on Intelligent Techniques. Sensors, 2019, 19, 2740.	2.1	29
13	Fuel Cell Output Current Prediction with a Hybrid Intelligent System. Complexity, 2019, 2019, 1-10.	0.9	29
14	Sistema híbrido inteligente para la predicción de la tensión de una pila de combustible basada en hidrógeno. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2019, 16, 492.	0.6	29
15	Hybrid Intelligent Model to Predict the SOC of a LFP Power Cell Type. Lecture Notes in Computer Science, 2014, , 561-572.	1.0	28
16	A Novel Fuzzy Algorithm to Introduce New Variables in the Drug Supply Decision-Making Process in Medicine. Complexity, 2018, 2018, 1-15.	0.9	27
17	A new method for anomaly detection based on non-convex boundaries with random two-dimensional projections. Information Fusion, 2021, 65, 50-57.	11.7	25
18	Virtual Sensor for Fault Detection, Isolation and Data Recovery for Bicomponent Mixing Machine Monitoring. Informatica, 2019, 30, 671-687.	1.5	23

#	Article	IF	Citations
19	Missing data imputation over academic records of electrical engineering students. Logic Journal of the IGPL, 2020, 28, 487-501.	1.3	20
20	Hybrid model for the ANI index prediction using Remifentanil drug and EMG signal. Neural Computing and Applications, 2020, 32, 1249-1258.	3.2	17
21	Lithium iron phosphate power cell fault detection system based on hybrid intelligent system. Logic Journal of the IGPL, 2020, 28, 71-82.	1.3	17
22	Modeling of Bicomponent Mixing System Used in the Manufacture of Wind Generator Blades. Lecture Notes in Computer Science, 2014, , 275-285.	1.0	17
23	Comparative Study of Imputation Algorithms Applied to the Prediction of Student Performance. Logic Journal of the IGPL, 2020, 28, 58-70.	1.3	16
24	Hybrid Intelligent Model to Predict the Remifentanil Infusion Rate in Patients Under General Anesthesia. Logic Journal of the IGPL, 2021, 29, 193-206.	1.3	15
25	Hybrid Intelligent Model for Fault Detection of a Lithium Iron Phosphate Power Cell Used in Electric Vehicles. Lecture Notes in Computer Science, 2016, , 751-762.	1.0	13
26	Attempts Prediction by Missing Data Imputation in Engineering Degree. Advances in Intelligent Systems and Computing, 2018, , 167-176.	0.5	12
27	An Intelligent Model to Predict ANI in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2018, , 492-501.	0.5	12
28	A One-class Classifier Based on a Hybrid Topology to Detect Faults in Power Cells. Logic Journal of the IGPL, 2022, 30, 679-694.	1.3	11
29	Intelligent One-Class Classifiers for the Development of an Intrusion Detection System: The MQTT Case Study. Electronics (Switzerland), 2022, 11, 422.	1.8	11
30	Comparative Study of One-Class Based Anomaly Detection Techniques for a Bicomponent Mixing Machine Monitoring. Cybernetics and Systems, 2020, 51, 649-667.	1.6	10
31	Intelligent model for active power prediction of a small wind turbine. Logic Journal of the IGPL, 0, , .	1.3	10
32	Prediction of the Energy Demand ofÂaÂHotel Using an Artificial Intelligence-Based Model. Lecture Notes in Computer Science, 2018, , 586-596.	1.0	8
33	Bioinspired Hybrid Model to Predict the Hydrogen Inlet Fuel Cell Flow Change of an Energy Storage System. Processes, 2019, 7, 825.	1.3	8
34	PID-ITS: An Intelligent Tutoring System for PID Tuning Learning Process. Advances in Intelligent Systems and Computing, 2018, , 726-735.	0.5	8
35	One-Class-Based Intelligent Classifier for Detecting Anomalous Situations During the Anesthetic Process. Logic Journal of the IGPL, 2022, 30, 326-341.	1.3	8
36	A novel method for anomaly detection using beta Hebbian learning and principal component analysis. Logic Journal of the IGPL, 2023, 31, 390-399.	1.3	8

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37	Fuel Cell Hybrid Model for Predicting Hydrogen Inflow through Energy Demand. Electronics (Switzerland), 2019, 8, 1325.	1.8	6
38	Solar Thermal Collector Output Temperature Prediction by Hybrid Intelligent Model for Smartgrid and Smartbuildings Applications and Optimization. Applied Sciences (Switzerland), 2020, 10, 4644.	1.3	6
39	Intrusion Detection with Unsupervised Techniques for Network Management Protocols over Smart Grids. Applied Sciences (Switzerland), 2020, 10, 2276.	1.3	6
40	An intelligent system for harmonic distortions detection in wind generator power electronic devices. Neurocomputing, 2021, 456, 609-621.	3.5	6
41	A Machine Learning Based System for Analgesic Drug Delivery. Advances in Intelligent Systems and Computing, 2018, , 461-470.	0.5	6
42	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.	0.5	6
43	Clustering Techniques Selection for a Hybrid Regression Model: A Case Study Based on a Solar Thermal System. Cybernetics and Systems, 2023, 54, 286-305.	1.6	6
44	A hybrid intelligent model to predict the hydrogen concentration in the producer gas from a downdraft gasifier. International Journal of Hydrogen Energy, 2022, 47, 20755-20770.	3.8	6
45	Electromyogram prediction during anesthesia by using a hybrid intelligent model. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 4467-4476.	3.3	4
46	Hybrid Intelligent Modelling in Renewable Energy Sources-Based Microgrid. A Variable Estimation of the Hydrogen Subsystem Oriented to the Energy Management Strategy. Sustainability, 2020, 12, 10566.	1.6	4
47	A hybrid intelligent classifier for anomaly detection. Neurocomputing, 2021, 452, 498-507.	3.5	4
48	Outlier Generation and Anomaly Detection Based on Intelligent One-Class Techniques over a Bicomponent Mixing System. Advances in Intelligent Systems and Computing, 2020, , 399-410.	0.5	3
49	Hidrógeno y su almacenamiento: el futuro de la energía eléctrica. , 0, , .		3
50	Autoencoder Latent Space Influence on IoT MQTT Attack Classification. Lecture Notes in Computer Science, 2020, , 279-286.	1.0	3
51	Advanced Visualization of Intrusions in Flows by Means of Beta-Hebbian Learning. Logic Journal of the IGPL, 2022, 30, 1056-1073.	1.3	3
52	A hybrid one‐class approach for detecting anomalies in industrial systems. Expert Systems, 0, , .	2.9	3
53	Remifentanil Dose Prediction for Patients During General Anesthesia. Lecture Notes in Computer Science, 2018, , 537-546.	1.0	2
54	Anomaly Detection on Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2020, , 141-152.	0.5	2

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55	Beta-Hebbian Learning for Visualizing Intrusions in Flows. Advances in Intelligent Systems and Computing, 2021, , 446-459.	0.5	2
56	Intelligent Model for Fault Detection on Geothermal Exchanger of a Heat Pump. Advances in Intelligent Systems and Computing, 2014, , 237-247.	0.5	2
57	Sensor Fault Detection and Recovery Methodology for a Geothermal Heat Exchanger. Lecture Notes in Computer Science, 2018, , 171-184.	1.0	2
58	DESARROLLO DE UN SISTEMA EXPERTO PARA AYUDAR A LA VERIFICACIÓN DEL SISTEMA "TACAN". Dyna (Spain), 2014, 89, 112-121.	0.1	2
59	A distributed topology for identifying anomalies in an industrial environment. Neural Computing and Applications, 2022, 34, 20463-20476.	3.2	2
60	Study of the effect of a geothermal heat exchanger over the ground. , 2013, , .		1
61	Hybrid Model to Calculate the State of Charge of a Battery. Lecture Notes in Computer Science, 2021, , 379-390.	1.0	1
62	Intrusion Detection System for MQTT Protocol Based on Intelligent One-Class Classifiers. Lecture Notes in Networks and Systems, 2022, , 249-260.	0.5	1
63	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
64	GESTIÓN DE ALMACENAMIENTO ENERGÉTICO PARA INSTALACIONES DE GENERACIÓN-DISTRIBUCIÓN. Dyna (Spain), 2017, 92, 140-141.	0.1	1
65	EVOLUCIÓN DEL SECTOR ELÉCTRICO TRAS LA SEGUNDA GUERRA MUNDIAL. Dyna (Spain), 2017, 92, 280-284.	0.1	1
66	Prediction of Student Performance Through an Intelligent Hybrid Model. Lecture Notes in Computer Science, 2019, , 710-721.	1.0	1
67	A Comparative Study to Detect Flowmeter Deviations Using One-Class Classifiers. Advances in Intelligent Systems and Computing, 2021, , 66-75.	0.5	1
68	Data Collection Description for Evaluation and Analysis of Engineering Students Academic Performance. Advances in Intelligent Systems and Computing, 2021, , 317-328.	0.5	1
69	Student Performance Prediction Applying Missing Data Imputation in Electrical Engineering Studies Degree. Lecture Notes in Computer Science, 2016, , 126-135.	1.0	0
70	USING COVID-19 FOR A TEACHING EXPERIENCE IN DESIGN THINKING IN ENGINEERING DEGREES. INTED Proceedings, 2021, , .	0.0	0
71	Intelligent System for Switching Modes Detection and Classification of a Half-Bridge Buck Converter. Lecture Notes in Networks and Systems, 2022, , 229-239.	0.5	0
72	Implementación virtual de prácticas de asignaturas de control como alternativa a las prácticas de laboratorio presenciales. , 2021, , 259-268.		0

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73	Beta Hebbian Learning for Intrusion Detection in Networks of IoT Devices. Advances in Intelligent Systems and Computing, 2022, , 23-32.	0.5	0
74	Detection of Denial of Service Attacks in an MQTT Environment Using a One-Class Approach. Advances in Intelligent Systems and Computing, 2022, , 84-93.	0.5	0
75	Longitudinal Study of Grades for the Industrial Electronics and Automation Engineering Degree Programme. Advances in Intelligent Systems and Computing, 2022, , 295-304.	0.5	0
76	Low Cost Three-Phase Motor Speed Control System Design for Educational Laboratory Practices. Advances in Intelligent Systems and Computing, 2022, , 315-324.	0.5	0
77	Hybrid Intelligent Model for Switching Modes Classification in a Half-Bridge Buck Converter. Lecture Notes in Computer Science, 2021, , 367-378.	1.0	0
78	Intelligent Model to Obtain Initial and Final Conduction Angle of a Diode in a Half Wave Rectifier with a Capacitor Filter. Advances in Intelligent Systems and Computing, 2014, , 121-130.	0.5	0
79	Energy Management Strategies to Improve Electrical Networks Using Storage Systems. Advances in Computer and Electrical Engineering Book Series, 2016, , 63-75.	0.2	0
80	POSIBILIDADES PARA LA GESTIÃ"N DE ALMACENAMIENTO ENERGÃ‰TICO PARA INSTALACIONES DE GENERACIÃ"N-DISTRIBUCIÃ"N. Dyna Energia Y Sostenibilidad, 2016, 5, [12 p.]-[12 p.].	0.1	0
81	An Intelligent Model for Bispectral Index (BIS) in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2017, , 290-300.	0.5	0
82	Energy Management Strategies to Improve Electrical Networks Using Storage Systems. , 2017, , 1500-1514.		0
83	Anomaly Detection Over an Ultrasonic Sensor in an Industrial Plant. Lecture Notes in Computer Science, 2019, , 492-503.	1.0	0
84	A Global Classifier Implementation for Detecting Anomalies by Using One-Class Techniques over a Laboratory Plant. Advances in Intelligent Systems and Computing, 2020, , 149-160.	0.5	0
85	An Energy Storage System. Advances in Environmental Engineering and Green Technologies Book Series, 2020, , 337-356.	0.3	0
86	Sistema hÃbrido para la predicciÃ³n del funcionamiento de una celda de combustible basada en hidrÃ³geno, empleada en el almacenamiento de energÃa. , 0, , .		0
87	Aprendizaje de sensorizado de entornos IoT mediante BeagleBone. , 0, , .		0
88	Comparative of Clustering Techniques for Academic Advice and Performance Measurement. Advances in Intelligent Systems and Computing, 2021, , 215-226.	0.5	0
89	Comparative Analysis of Clustering Techniques for a Hybrid Model Implementation. Advances in Intelligent Systems and Computing, 2021, , 355-365.	0.5	0
90	Hybrid Approximate Convex Hull One-Class Classifier for an Industrial Plant. Advances in Intelligent Systems and Computing, 2021, , 282-292.	0.5	0

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91	A Hybrid One-Class Topology for Non-convex Sets. Lecture Notes in Computer Science, 2020, , 341-349.	1.0	0
92	A Solar Thermal System Temperature Prediction of a Smart Building for Data Recovery and Security Purposes. Lecture Notes in Computer Science, 2020, , 468-476.	1.0	0
93	Clustering Techniques Performance Analysis for a Solar Thermal Collector Hybrid Model Implementation. Lecture Notes in Computer Science, 2020, , 329-340.	1.0	0
94	Sistema de prácticas virtuales como alternativa al laboratorio presencial en asignaturas de Ingeniería de Contro. , 2021, , .		0
95	Experiencia de docencia basada en proyectos usando la música como elemento principal para la asignatura de Fundamentos de Electrónica. , 0, , 191-206.		0
96	Correction to: Intrusion Detection System for MQTT Protocol Based on Intelligent One-Class Classifiers. Lecture Notes in Networks and Systems, 2022, , C1-C1.	0.5	0
97	Creación de laboratorios virtuales para asignaturas de control con Factory I/O® y Simulink®. , 2022, , .		0