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 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
2	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
3	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
4	Intrusion Detection System for MQTT Protocol Based on Intelligent One-Class Classifiers. Lecture Notes in Networks and Systems, 2022, , 249-260.	0.5	1
5	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
6	Beta Hebbian Learning for Intrusion Detection in Networks of IoT Devices. Advances in Intelligent Systems and Computing, 2022, , 23-32.	0.5	0
7	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
8	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
9	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
10	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
11	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
12	Advanced Visualization of Intrusions in Flows by Means of Beta-Hebbian Learning. Logic Journal of the IGPL, 2022, 30, 1056-1073.	1.3	3
13	Intelligent One-Class Classifiers for the Development of an Intrusion Detection System: The MQTT Case Study. Electronics (Switzerland), 2022, 11, 422.	1.8	11
14	A distributed topology for identifying anomalies in an industrial environment. Neural Computing and Applications, 2022, 34, 20463-20476.	3.2	2
15	CreaciÃ³n de laboratorios virtuales para asignaturas de control con Factory I/OÂ® y SimulinkÂ®. , 2022, , .		0
16	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
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	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

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19	Hybrid Model to Calculate the State of Charge of a Battery. Lecture Notes in Computer Science, 2021, , 379-390.	1.0	1
20	USING COVID-19 FOR A TEACHING EXPERIENCE IN DESIGN THINKING IN ENGINEERING DEGREES. INTED Proceedings, 2021, , .	0.0	0
21	An intelligent system for harmonic distortions detection in wind generator power electronic devices. Neurocomputing, 2021, 456, 609-621.	3.5	6
22	ImplementaciÃ³n virtual de prÃ¡cticas de asignaturas de control como alternativa a las prÃ¡cticas de laboratorio presenciales. , 2021, , 259-268.		0
23	A hybrid intelligent classifier for anomaly detection. Neurocomputing, 2021, 452, 498-507.	3.5	4
24	Hybrid Intelligent Model for Switching Modes Classification in a Half-Bridge Buck Converter. Lecture Notes in Computer Science, 2021, , 367-378.	1.0	0
25	Beta-Hebbian Learning for Visualizing Intrusions in Flows. Advances in Intelligent Systems and Computing, 2021, , 446-459.	0.5	2
26	A Comparative Study to Detect Flowmeter Deviations Using One-Class Classifiers. Advances in Intelligent Systems and Computing, 2021, , 66-75.	0.5	1
27	Comparative of Clustering Techniques for Academic Advice and Performance Measurement. Advances in Intelligent Systems and Computing, 2021, , 215-226.	0.5	0
28	Data Collection Description for Evaluation and Analysis of Engineering Students Academic Performance. Advances in Intelligent Systems and Computing, 2021, , 317-328.	0.5	1
29	Comparative Analysis of Clustering Techniques for a Hybrid Model Implementation. Advances in Intelligent Systems and Computing, 2021, , 355-365.	0.5	0
30	Hybrid Approximate Convex Hull One-Class Classifier for an Industrial Plant. Advances in Intelligent Systems and Computing, 2021, , 282-292.	0.5	0
31	Sistema de prÃ¡cticas virtuales como alternativa al laboratorio presencial en asignaturas de IngenierÃa de Contro. , 2021, , .		0
32	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
33	Anomaly Detection on Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2020, , 141-152.	0.5	2
34	Hybrid model for the ANI index prediction using Remifentanil drug and EMG signal. Neural Computing and Applications, 2020, 32, 1249-1258.	3.2	17
35	Electromyogram prediction during anesthesia by using a hybrid intelligent model. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 4467-4476.	3.3	4
36	Missing data imputation over academic records of electrical engineering students. Logic Journal of the IGPL, 2020, 28, 487-501.	1.3	20

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37	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
38	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
39	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
40	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
41	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
42	Intrusion Detection with Unsupervised Techniques for Network Management Protocols over Smart Grids. Applied Sciences (Switzerland), 2020, 10, 2276.	1.3	6
43	Autoencoder Latent Space Influence on IoT MQTT Attack Classification. Lecture Notes in Computer Science, 2020, , 279-286.	1.0	3
44	Comparative Study of Imputation Algorithms Applied to the Prediction of Student Performance. Logic Journal of the IGPL, 2020, 28, 58-70.	1.3	16
45	DetecciÃ³n de anomalÃas basada en tÃ©cnicas inteligentes de una planta de obtenciÃ³n de material bicomponente empleado en la fabricaciÃ³n de palas de aerogenerador. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2020, 17, 84.	0.6	35
46	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
47	An Energy Storage System. Advances in Environmental Engineering and Green Technologies Book Series, 2020, , 337-356.	0.3	0
48	A Hybrid One-Class Topology for Non-convex Sets. Lecture Notes in Computer Science, 2020, , 341-349.	1.0	0
49	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
50	Clustering Techniques Performance Analysis for a Solar Thermal Collector Hybrid Model Implementation. Lecture Notes in Computer Science, 2020, , 329-340.	1.0	0
51	Short-Term Energy Demand Forecast in Hotels Using Hybrid Intelligent Modeling. Sensors, 2019, 19, 2485.	2.1	35
52	A Fault Detection System for a Geothermal Heat Exchanger Sensor Based on Intelligent Techniques. Sensors, 2019, 19, 2740.	2.1	29
53	Modelling the hypnotic patient response in general anaesthesia using intelligent models. Logic Journal of the IGPL, 2019, 27, 189-201.	1.3	36
54	A fault detection system based on unsupervised techniques for industrial control loops. Expert Systems, 2019, 36, e12395.	2.9	34

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55	Fuel Cell Output Current Prediction with a Hybrid Intelligent System. Complexity, 2019, 2019, 1-10.	0.9	29
56	Bioinspired Hybrid Model to Predict the Hydrogen Inlet Fuel Cell Flow Change of an Energy Storage System. Processes, 2019, 7, 825.	1.3	8
57	Fuel Cell Hybrid Model for Predicting Hydrogen Inflow through Energy Demand. Electronics (Switzerland), 2019, 8, 1325.	1.8	6
58	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
59	Virtual Sensor for Fault Detection, Isolation and Data Recovery for Bicomponent Mixing Machine Monitoring. Informatica, 2019, 30, 671-687.	1.5	23
60	Sistema hÃbrido inteligente para la prediccIÃ³n de la tensiÃ³n de una pila de combustible basada en hidrÃ³geno. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2019, 16, 492.	0.6	29
61	Prediction of Student Performance Through an Intelligent Hybrid Model. Lecture Notes in Computer Science, 2019, , 710-721.	1.0	1
62	Anomaly Detection Over an Ultrasonic Sensor in an Industrial Plant. Lecture Notes in Computer Science, 2019, , 492-503.	1.0	0
63	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
64	Remifentanil Dose Prediction for Patients During General Anesthesia. Lecture Notes in Computer Science, 2018, , 537-546.	1.0	2
65	Prediction of the Energy Demand ofÂaÂHotel Using an Artificial Intelligence-Based Model. Lecture Notes in Computer Science, 2018, , 586-596.	1.0	8
66	Attempts Prediction by Missing Data Imputation in Engineering Degree. Advances in Intelligent Systems and Computing, 2018, , 167-176.	0.5	12
67	A Machine Learning Based System for Analgesic Drug Delivery. Advances in Intelligent Systems and Computing, 2018, , 461-470.	0.5	6
68	An Intelligent Model to Predict ANI in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2018, , 492-501.	0.5	12
69	PID-ITS: An Intelligent Tutoring System for PID Tuning Learning Process. Advances in Intelligent Systems and Computing, 2018, , 726-735.	0.5	8
70	Sensor Fault Detection and Recovery Methodology for a Geothermal Heat Exchanger. Lecture Notes in Computer Science, 2018, , 171-184.	1.0	2
71	Power Cell SOC Modelling for Intelligent Virtual Sensor Implementation. Journal of Sensors, 2017, 2017, 1-10.	0.6	32
72	Hybrid Intelligent System to Perform Fault Detection on BIS Sensor During Surgeries. Sensors, 2017, 17, 179.	2.1	32

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73	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
74	GESTIÃ“N DE ALMACENAMIENTO ENERGÃ‰TICO PARA INSTALACIONES DE GENERACIÃ“N-DISTRIBUCIÃ“N. Dyna (Spain), 2017, 92, 140-141.	0.1	1
75	An Intelligent Model for Bispectral Index (BIS) in Patients Undergoing General Anesthesia. Advances in Intelligent Systems and Computing, 2017, , 290-300.	0.5	0
76	Energy Management Strategies to Improve Electrical Networks Using Storage Systems. , 2017, , 1500-1514.		0
77	EVOLUCIÃ“N DEL SECTOR ELÃ‰CTRICO TRAS LA SEGUNDA GUERRA MUNDIAL. Dyna (Spain), 2017, 92, 280-284.	0.1	1
78	Student Performance Prediction Applying Missing Data Imputation in Electrical Engineering Studies Degree. Lecture Notes in Computer Science, 2016, , 126-135.	1.0	0
79	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
80	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
81	Energy Management Strategies to Improve Electrical Networks Using Storage Systems. Advances in Computer and Electrical Engineering Book Series, 2016, , 63-75.	0.2	0
82	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
83	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
84	New approach for the QCM sensors characterization. Sensors and Actuators A: Physical, 2014, 207, 1-9.	2.0	37
85	Intelligent Model for Fault Detection on Geothermal Exchanger of a Heat Pump. Advances in Intelligent Systems and Computing, 2014, , 237-247.	0.5	2
86	Hybrid Intelligent Model to Predict the SOC of a LFP Power Cell Type. Lecture Notes in Computer Science, 2014, , 561-572.	1.0	28
87	Modeling of Bicomponent Mixing System Used in the Manufacture of Wind Generator Blades. Lecture Notes in Computer Science, 2014, , 275-285.	1.0	17
88	DESARROLLO DE UN SISTEMA EXPERTO PARA AYUDAR A LA VERIFICACIÃ“N DEL SISTEMA "TACAN". Dyna (Spain), 2014, 89, 112-121.	0.1	2
89	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
90	Study of the effect of a geothermal heat exchanger over the ground. , 2013, , .		1

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91	A hybrid intelligent system for PID controller using in a steel rolling process. Expert Systems With Applications, 2013, 40, 5188-5196.	4.4	95
92	HidrÃ³geno y su almacenamiento: el futuro de la energÃa elÃ©ctrica. , 0, , .		3
93	Sistema hÃbrido para la prediccIÃ³n del funcionamiento de una celda de combustible basada en hidrÃ³geno, empleada en el almacenamiento de energÃa. , 0, , .		0
94	Aprendizaje de sensorizado de entornos IoT mediante BeagleBone. , 0, , .		0
95	Experiencia de docencia basada en proyectos usando la mÃºsica como elemento principal para la asignatura de Fundamentos de ElectrÃ³nica. , 0, , 191-206.		0
96	A hybrid oneâ€class approach for detecting anomalies in industrial systems. Expert Systems, 0, , .	2.9	3
97	Intelligent model for active power prediction of a small wind turbine. Logic Journal of the IGPL, 0, , .	1.3	10