Antonio Moreno-Munoz

List of Publications by Year
in descending order

179 papers	2,041 citations	304602 22 h-index	360920 35 g-index
181 all docs	181 docs citations	181 times ranked	1942 citing authors

#	Article	IF	Citations
1	Electricity demand during pandemic times: The case of the COVID-19 in Spain. Energy Policy, 2021, 148, 111964.	4.2	160
2	Mobile social media for smart grids customer engagement: Emerging trends and challenges. Renewable and Sustainable Energy Reviews, 2016, 53, 1611-1616.	8.2	84
3	Analysis and modeling of active occupancy of the residential sector in Spain: An indicator of residential electricity consumption. Energy Policy, 2013, 62, 742-751.	4.2	82
4	Improvement of power quality using distributed generation. International Journal of Electrical Power and Energy Systems, 2010, 32, 1069-1076.	3.3	63
5	Building lighting automation through the integration of DALI with wireless sensor networks. IEEE Transactions on Consumer Electronics, 2012, 58, 47-52.	3.0	55
6	LED street lighting: A power quality comparison among street light technologies. Lighting Research and Technology, 2013, 45, 710-728.	1.2	53
7	Stochastic model for lighting's electricity consumption in the residential sector. Impact of energy saving actions. Energy and Buildings, 2015, 89, 245-259.	3.1	44
8	Higher-order cumulants and spectral kurtosis for early detection of subterranean termites. Mechanical Systems and Signal Processing, 2008, 22, 279-294.	4.4	43
9	Short term forecasting of solar radiation. , 2008, , .		43
10	Embedding Synchronized Measurement Technology for Smart Grid Development. IEEE Transactions on Industrial Informatics, 2013, 9, 52-61.	7.2	42
11	ARIMA vs. Neural networks for wind speed forecasting. , 2009, , .		41
12	Characterization of electrical sags and swells using higher-order statistical estimators. Measurement: Journal of the International Measurement Confederation, 2011, 44, 1453-1460.	2.5	40
13	A novel virtual instrument for power quality surveillance based in higher-order statistics and case-based reasoning. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1824-1835.	2.5	38
14	Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. IEEE Transactions on Smart Grid, 2021, 12, 182-191.	6.2	38
15	Supraharmonics from power electronics converters. , 2015, , .		32
16	Activities related with electricity consumption in the Spanish residential sector: Variations between days of the week, Autonomous Communities and size of towns. Energy and Buildings, 2014, 79, 84-97.	3.1	31
17	Study on harmonic emission of domestic equipment combined with different types of lighting. International Journal of Electrical Power and Energy Systems, 2014, 55, 116-127.	3.3	31
18	Using smart meters data for energy management operations and power quality monitoring in a microgrid. , 2017, , .		30

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19	Very short term forecasting of solar radiation. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	29
20	Power quality in high-tech campus: A case study. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2006, 220, 257-269.	0.8	27
21	Higher-order spectra measurement techniques of termite emissions. A characterization framework. Measurement: Journal of the International Measurement Confederation, 2008, 41, 105-118.	2.5	25
22	A novel neural network method for wind speed forecasting using exogenous measurements from agriculture stations. Measurement: Journal of the International Measurement Confederation, 2014, 55, 295-304.	2.5	25
23	Study of sag compensation with DVR. , 0, , .		24
24	Higher-order characterization of power quality transients and their classification using competitive layers. Measurement: Journal of the International Measurement Confederation, 2009, 42, 478-484.	2.5	24
25	A stochastic modelling and simulation approach to heating and cooling electricity consumption in the residential sector. Energy, 2018, 144, 1080-1091.	4.5	24
26	Energy consumption of audiovisual devices in the residential sector: Economic impact of harmonic losses. Energy, 2013, 60, 292-301.	4.5	23
27	Energy efficiency criteria in uninterruptible power supply selection. Applied Energy, 2011, 88, 1312-1321.	5.1	22
28	Wavelets and wavelet packets applied to detect and characterize transient alarm signals from termites. Measurement: Journal of the International Measurement Confederation, 2006, 39, 553-564.	2.5	20
29	PV Hosting Capacity Analysis and Enhancement Using High Resolution Stochastic Modeling. Energies, 2017, 10, 1488.	1.6	20
30	A web-based distributed measurement system for electrical power quality assessment. Measurement: Journal of the International Measurement Confederation, 2010, 43, 771-780.	2.5	19
31	An application of the spectral kurtosis to characterize power quality events. International Journal of Electrical Power and Energy Systems, 2013, 49, 386-398.	3.3	18
32	Smart Community Electric Energy Micro-Storage Systems With Active Functions. IEEE Transactions on Industry Applications, 2018, 54, 1975-1982.	3.3	18
33	Synthesis of new thiophene and benzo[b]thiophene hydrazide derivatives as human NPY Y5 antagonists. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 597-599.	1.0	17
34	Higher-order statistics: Discussion and interpretation. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2816-2827.	2.5	16
35	Integrating power quality to automated meter reading. IEEE Industrial Electronics Magazine, 2008, 2, 10-18.	2.3	15
36	Distributed DC-UPS for energy smart buildings. Energy and Buildings, 2011, 43, 93-100.	3.1	15

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37	Novel Internet of Things Platform for In-Building Power Quality Submetering. Applied Sciences (Switzerland), 2018, 8, 1320.	1.3	15
38	A practical review on Higher-Order Statistics interpretation. Application to Electrical Transients Characterization. Proc Int Symp Image Signal Process Anal, 2007, , .	0.0	13
39	Power line conditioner based on CA PWM Chopper. , 2007, , .		13
40	On-site non-destructive measurement of termite activity using the spectral kurtosis and the discrete wavelet transform. Measurement: Journal of the International Measurement Confederation, 2010, 43, 1472-1488.	2.5	13
41	Lighting control system based on DALI and wireless sensor networks. , 2012, , .		13
42	Advanced smart metering infrastructure for future smart homes. , 2015, , .		13
43	Development and application of a smart grid test bench. Journal of Cleaner Production, 2017, 162, 45-60.	4.6	13
44	Supraharmonics emission from LED lamps: A reduction proposal based on random pulse-width modulation. Electric Power Systems Research, 2018, 164, 11-19.	2.1	13
45	Microgrids Power Quality Enhancement Using Model Predictive Control. Electronics (Switzerland), 2021, 10, 328.	1.8	13
46	An IoT Based Mobile Augmented Reality Application for Energy Visualization in Buildings Environments. Applied Sciences (Switzerland), 2020, 10, 600.	1.3	13
47	Synthesis and evaluation of new hydrazide derivatives as neuropeptide Y Y5 receptor antagonists for the treatment of obesity. Bioorganic and Medicinal Chemistry, 2004, 12, 4717-4723.	1.4	12
48	Grid interconnection of renewable energy sources: Spanish legislation. Energy for Sustainable Development, 2010, 14, 104-109.	2.0	12
49	Voltage regulator system based on a PWM AC chopper converter. , 2011, , .		12
50	Harmonics from a domestic customer with different lamp technologies. , 2012, , .		12
51	Harmonics from household equipment and different lamp technologies. , 2013, , .		12
52	Active functions implementation in smart inverters for distributed energy resources. , 2013, , .		12
53	Harmonic phase angles for a domestic customer with different types of lighting. International Transactions on Electrical Energy Systems, 2015, 25, 1281-1296.	1.2	12
54	Solar PV inverter supraharmonics reduction with random PWM. , 2017, , .		12

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55	Automated Meter Reading Systems in Outage Management. , 2007, , .		11
56	Voltage Sag in Highly Automated Factories. , 2008, , .		11
57	Supraharmonics (2 to 150 kHz) and multi-level converters. , 2015, , .		11
58	Influence of data-related factors on the use of IEC 61850 for power utility automation. Electric Power Systems Research, 2016, 133, 269-280.	2.1	11
59	Basic meteorological stations as wind data source: A mesoscalar test. Journal of Wind Engineering and Industrial Aerodynamics, 2012, 107-108, 48-56.	1.7	10
60	Power Quality Sensor for Smart Applianceâ€™s Self-Diagnosing Functionality. IEEE Sensors Journal, 2019, 19, 9486-9495.	2.4	10
61	Synthesis and evaluation of new arylsulfonamidomethylcyclohexyl derivatives as human neuropeptide Y Y5 receptor antagonists for the treatment of obesity. European Journal of Medicinal Chemistry, 2004, 39, 49-58.	2.6	9
62	A novel inference method for local wind conditions using genetic fuzzy systems. Renewable Energy, 2011, 36, 1747-1753.	4.3	9
63	Exogenous Measurements from Basic Meteorological Stations for Wind Speed Forecasting. Energies, 2013, 6, 5807-5825.	1.6	9
64	Smart metering system for microgrids. , 2015, , .		9
65	Characterizing the harmonic attenuation effect of high-pressure sodium lamps. , 2010, , .		8
66	Spatial persistence in wind analysis. Journal of Wind Engineering and Industrial Aerodynamics, 2013, 119, 48-52.	1.7	8
67	An Embedded System in Smart Inverters for Power Quality and Safety Functionality. Energies, 2016, 9, 219.	1.6	8
68	Active, Reactive and Harmonic Control for Distributed Energy Micro-Storage Systems in Smart Communities Homes. Energies, 2017, 10, 448.	1.6	8
69	A Novel Direct Load Control Testbed for Smart Appliances. Energies, 2019, 12, 3336.	1.6	8
70	Large Scale Grid Integration of Renewable Energy Sources. , 2017, , .		8
71	IoT Cloud-Based Power Quality Extended Functionality for Grid-Interactive Appliance Controllers. IEEE Transactions on Industry Applications, 2022, 58, 3909-3921.	3.3	8
72	Quality standards for â€œcleanâ€•electrical supplies. Facilities, 2007, 25, 61-77.	0.8	7

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73	Power quality immunity in factory automation. , 2009, , .		7
74	FPGA-based embedded system architecture for power quality measurements. , 2012, , .		7
75	Novel Segmentation Technique for Measured Three-Phase Voltage Dips. Energies, 2015, 8, 8319-8338.	1.6	7
76	Modeling human activity in Spain for different economic sectors: The potential link between occupancy and energy usage. Journal of Cleaner Production, 2018, 183, 1093-1109.	4.6	7
77	Secondary Control for Storage Power Converters in Isolated Nanogrids to Allow Peer-to-Peer Power Sharing. Electronics (Switzerland), 2020, 9, 140.	1.8	7
78	Power Quality in a University Campus: The UserÂ´s Perspective. Renewable Energy and Power Quality Journal, 2004, 1, 19-24.	0.2	7
79	Power quality in high-tech plants: a case study. , 0, , .		6
80	Study of voltage sag in a highly automated plant. , 0, , .		6
81	DSP algorithm for the real-time detection of power quality surge transients. , 2009, , .		6
82	Power quality for energy efficient buildings. , 2009, , .		6
83	A web-based distributed measurement system for electrical Power Quality monitoring. , 2010, , .		6
84	Design of an Intelligent Electronic Device to control a private microgrid. , 2012, , .		6
85	A fast RMS meter for detecting sag events in household environments. , 2014, , .		6
86	A Memory-Efficient True-RMS Estimator in a Limited-Resources Hardware. Energies, 2019, 12, 1699.	1.6	6
87	Demand and Storage Management in a Prosumer Nanogrid Based on Energy Forecasting. Electronics (Switzerland), 2020, 9, 363.	1.8	6
88	Analysis of voltage dips in PWM AC-DC converters. , 0, , .		5
89	Application of smart sensors to the measurement of power quality. , 2008, , .		5
90	DSP algorithm for the real time detection of power quality surge transients. , 2009, , .		5

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91	Grid interconnection of distributed generation: The Spanish normative. , 2009, , .		5
92	Embedding measurement in Distribution Automation Systems. , 2010, , .		5
93	Synchrophasor integration in IEC 61850 standard for SmartGrid and synchronism with PTP-base system. , 2011, , .		5
94	Low-rate wireless personal area networks applied to street lighting. Lighting Research and Technology, 2013, 45, 90-101.	1.2	5
95	Hypermedia Design Methodology in World Wide Web Applications. International Journal of Human-Computer Interaction, 2002, 14, 251-270.	3.3	4
96	Analysis of sag compensation with dynamic voltage restorer. , 2006, , .		4
97	Characterisation of frequency instability and frequency offset using instruments with incomplete data sheets. Measurement: Journal of the International Measurement Confederation, 2006, 39, 664-673.	2.5	4
98	DSP for the real time detection of power quality surge transients. , 2009, , .		4
99	Active learning in power electronics: From classroom to laboratory. , 2010, , .		4
100	Deterministic Ethernet synchronism with PTP-base system for synchrophasor in Smart Grid. , 2011, , .		4
101	Study of harmonic generated by electromagnetic and electronic ballast used in street lighting. , 2011, , .		4
102	Intelligent electronic device for Smart Grid: Statistical approach applied to event detection. , 2012, , .		4
103	Street lamps aggregation analysis through IEC 61000-3-6 approach. , 2013, , .		4
104	IEC 61850 GOOSE transfer time measurement in development stage. , 2013, , .		4
105	Analysis of variations in PV production, focussing on storage and dispatchability decisions. , 2015, , .		4
106	Performance monitoring of a solar photovoltaic power plant using an advanced real-time system. , 2016, , .		4
107	Educational platform for communications using the MQTT protocol. , 2018, , .		4
108	Educational platform for reliability assessment of power quality. , 2018, , .		4

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109	Platform for Embedded Systems Design in the Smart Grid Framework. Advances in Intelligent and Soft Computing, 2012, , 593-600.	0.2	4
110	Two Aplications for Power Quality Analysis using the Matlab Wavelet Toolbox. Renewable Energy and Power Quality Journal, 2005, 1, 35-39.	0.2	4
111	Power quality in high-tech campus: an exemplary case study. , 2005, , .		3
112	Voltage sag in a highly automated plants. , 0, , .		3
113	Power Quality in Clinical Facilities. Journal of Medical Systems, 2006, 30, 71-81.	2.2	3
114	An easy and direct method for the synthesis of 1,2,4-triazole derivatives through carboxylic acids and hydrazinophthalazine. Quimica Nova, 2008, 31, 536-538.	0.3	3
115	Higher-order characterization of power quality transients and their classification using competitive layers. , 2009, , .		3
116	Distributed energy resources interconnection: The Spanish normative. , 2009, , .		3
117	Transformerless power line voltage conditioner and regulator based on CA PWM Chopper. , 2010, , .		3
118	HOS-based virtual instrument for power quality assessment. , 2011, , .		3
119	Synchronism with Software-Based IEEE 1588–2008 for Smart Grid. , 2011, , .		3
120	Active occupation profiles in the residential sector in Spain as an indicator of energy consumption. , 2012, , .		3
121	Intelligent electronic device for the control of distributed generation. , 2014, , .		3
122	Causal and Anti-Causal Segmentation of Voltage Dips in Power Distribution Networks. IEEE Latin America Transactions, 2016, 14, 3080-3086.	1.2	3
123	Smart community load matching using stochastic demand modeling and historical production data. , 2016, , .		3
124	Supraharmonics reduction in NPC inverter with random PWM. , 2017, , .		3
125	Supraharmonics reduction in LED drivers via random pulse-position modulation. International Journal of Electronics, 2018, 105, 2128-2143.	0.9	3
126	Load Scheduling Approach for Energy Management and Power Quality enhancement in Glass Melting Furnaces. , 2019, , .		3

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127	Load Scheduling Strategy to Improve Power Quality in Electric-Boosted Glass Furnaces. IEEE Transactions on Industry Applications, 2021, 57, 953-963.	3.3	3
128	Energy Management Expert Assistant, a New Concept. Sensors, 2021, 21, 5915.	2.1	3
129	Electronic Loads and Power-quality. Power Systems, 2007, , 325-352.	0.3	2
130	Wireless technology applied to stimulation systems for auditory deficit children. , 2008, , .		2
131	Distributed resources standards: The case of Spain. , 2009, , .		2
132	Automatic classification of Power Quality disturbances via higher-order cumulants and self-organizing networks. , 2010, , .		2
133	A IEEE1588-based system for synchronized PMUs and protective relaying functions. , 2010, , .		2
134	Energy supply for sustainable regional development in Cordoba. , 2010, , .		2
135	A experimental IEEE1588-BASED system for synchronized phasor measurement in electric subestation. , 2010, , .		2
136	Harmonic effect in street lighting. , 2011, , .		2
137	Smart Grid Inverter Interface: Statistical approach applied to event detection. , 2012, , .		2
138	In-building lighting management system with wireless communications. , 2012, , .		2
139	Local energy micro-storage systems in smart communities with active, reactive and harmonic control. , 2016, , .		2
140	Intelligent Electronic Device for Distributed Energy Resources. IEEE Latin America Transactions, 2016, 14, 3270-3277.	1.2	2
141	Flatness-based Adaptive Control of Synchronous Reluctance Machines with Output Feedback. , 2018, , .		2
142	Implementation of an Educational Platform on Power Quality. , 2018, , .		2
143	Special Issue â€œNanogrids, Microgrids, and the Internet of Things (IoT): Towards the Digital Energy Networkâ€• Energies, 2019, 12, 3878.	1.6	2
144	Implementation of a Smart Grid Inverter through Embedded Systems. Elektronika Ir Elektrotechnika, 2013, 19, .	0.4	2

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145	Voltage sag in a highly automated plants. , 2006, , .		1
146	Higher-order spectral characterization of termite emissions using acoustic emission probes. , 2007, , .		1
147	Subterranean Termite Detection Using the Spectral Kurtosis. , 2007, , .		1
148	A Practical Approach To Higher-Order Statistics. An Application to Electrical Transients Characterization. , 2007, , .		1
149	Integration of Power Quality into distribution automation through the use of AMR. , 2008, , .		1
150	Categorization of minimum error forecasting zones using a geostatistic wind model. , 2009, , .		1
151	Spectral Kurtosis based system for transients' detection: Application to termite targeting. , 2009, , .		1
152	Power quality and energy efficiency in e-offices. , 2009, , .		1
153	Categorization of minimum error forecasting zones using a geostatistic wind speed model. , 2009, , .		1
154	Hypermedia user-interface integration in distribution power systems SCADA. , 2009, , .		1
155	Hypermedia graphic user interface integration in distribution management systems. , 2009, , .		1
156	Simul-EMI II: An Application to Simulate Electric and Magnetic Phenomena in PCB Designs. Lecture Notes in Computer Science, 2010, , 489-498.	1.0	1
157	HOS and CBR measurement system for PQ assessment. , 2011, , .		1
158	HOS-Based Virtual Instrument for Power Quality Assessment. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 1-9.	0.2	1
159	Power quality events detection using fourth-order spectra. , 2013, , .		1
160	Validation of a embeddable voltage phasor magnitude meter for household and commercial environments. , 2015, , .		1
161	Influence of photovoltaic installation angles and geographical dispersion in the smoothing of photovoltaic fleet power fluctuations. , 2016, , .		1
162	Home Lighting controller based on BLE. , 2017, , .		1

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163	An IoT Low-Cost Voltage Sag Detector. , 2018, , .		1
164	A Novel Microgrid Responsive Appliance Controller. , 2020, , .		1
165	Inequality built into the grid. Nature Energy, 2021, 6, 852-853.	19.8	1
166	Power Quality Analysis Using Higher-Order Statistical Estimators: Characterization of Electrical Sags and Swells. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 22-29.	0.2	1
167	Low-Rate Wireless Personal Area Networks and DALI Protocol Applied to Street Lighting. Lecture Notes in Electrical Engineering, 2011, , 465-472.	0.3	1
168	Detection and Compensation of Current Harmonics in a Microgrid Using an Active Power Filter Supported by an IoT Sensor Network. , 2021, , .		1
169	Characterization and classification of electrical transients using higher-order statistics and neural networks. , 2007, , .		0
170	Power Quality monitoring integration into distribution automation through the use of AMR. , 2008, , .		0
171	Hypermedia user interface integration in distribution management systems. , 2009, , .		0
172	Amplitude-frequency classification of Power Quality transients using higher-order cumulants and Self-Organizing Maps. , 2010, , .		0
173	Electromagnetic compatibility test system. , 2011, , .		0
174	Tracks of power quality transients in high order statistics spaces. , 2011, , .		0
175	Appliances in the residential sector: Economic impact of harmonic losses. , 2017, , .		0
176	Low cost deâ”€energizing warning meter algorithm for sensitive loads. , 2017, , .		0
177	MCH-R1 Antagonists as Potential Anti-obesity Drugs. Design Strategies and Structure-activity Relationship. Revista Virtual De Quimica, 2013, 5, .	0.1	0
178	Emission on the low voltage grid: measurements in an urban area. Renewable Energy and Power Quality Journal, 0, , 745-749.	0.2	0
179	Interactive visualization of IoT power quality data on mobile devices. , 2021, , .		0