Dario Di Cara

List of Publications by Year
in descending order

82 papers	1,452 citations	331670 21 h-index	395702 33 g-index
82 all docs	82 docs citations	82 times ranked	884 citing authors

#	Article	IF	Citations
1	Arc Fault Detection Method Based on CZT Low-Frequency Harmonic Current Analysis. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 888-896.	4.7	110
2	A Novel Approach to Current Transformer Characterization in the Presence of Harmonic Distortion. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 1446-1453.	4.7	73
3	Compensation of Nonlinearity of Voltage and Current Instrument Transformers. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 1322-1332.	4.7	64
4	Power-Line Communication in Medium-Voltage System: Simulation Model and Onfield Experimental Tests. IEEE Transactions on Power Delivery, 2012, 27, 62-69.	4.3	47
5	LV Measurement Device Placement for Load Flow Analysis in MV Smart Grids. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 999-1006.	4.7	45
6	Current Transformers Effects on the Measurement of Harmonic Active Power in LV and MV Networks. IEEE Transactions on Power Delivery, 2011, 26, 360-368.	4.3	44
7	An Innovative Measurement Approach for Load Flow Analysis in MV Smart Grids. IEEE Transactions on Smart Grid, 2016, 7, 889-896.	9.0	44
8	Oil-Filled MV/LV Power-Transformer Behavior in Narrow-Band Power-Line Communication Systems. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 2642-2652.	4.7	43
9	A New Low Cost Coupling System for Power Line Communication on Medium Voltage Smart Grids. IEEE Transactions on Smart Grid, 2018, 9, 3321-3329.	9.0	42
10	A New Solution for Low-Voltage Distributed Generation Interface Protection System. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2086-2095.	4.7	41
11	A new PLC-based smart metering architecture for medium/low voltage grids: Feasibility and experimental characterization. Measurement: Journal of the International Measurement Confederation, 2018, 129, 479-488.	5.0	39
12	Characterization of IP-Based Communication for Smart Grid Using Software-Defined Networking. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2410-2419.	4.7	37
13	Frequency response of Measurement Current Transformers. , 2008, , .		33
14	Measurement Issues for the Characterization of Medium Voltage Grids Communications. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 2185-2196.	4.7	33
15	Smart Interface Devices for Distributed Generation in Smart Grids: The Case of Islanding. IEEE Sensors Journal, 2017, 17, 7803-7811.	4.7	33
16	A new low cost power line communication solution for smart grid monitoring and management. IEEE Instrumentation and Measurement Magazine, 2018, 21, 29-33.	1.6	33
17	Simulation and Laboratory Experimental Tests of a Line to Shield Medium-Voltage Power-Line Communication System. IEEE Transactions on Power Delivery, 2011, 26, 2829-2836.	4.3	32
18	A PC-Based Wattmeter for Accurate Measurements in Sinusoidal and Distorted Conditions: Setup and Experimental Characterization. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1426-1434.	4.7	31

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19	Improvement of Hall Effect Current Transducer Metrological Performances in the Presence of Harmonic Distortion. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 1091-1097.	4.7	30
20	Characterization and Error Compensation of a Rogowski Coil in the Presence of Harmonics. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1175-1181.	4.7	30
21	Medium Voltage Smart Grid: Experimental Analysis of Secondary Substation Narrow Band Power Line Communication. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 2391-2398.	4.7	30
22	A set of indicators for arc faults detection based on low frequency harmonic analysis. , 2016, , .		25
23	A new method for forecasting energy output of a large-scale solar power plant based on long short-term memory networks a case study in Vietnam. Electric Power Systems Research, 2021, 199, 107427.	3.6	24
24	On the use of narrow band power line as communication technology for medium and low voltage smart grids. , 2012, , .		23
25	Characterization of Current Transformers in the Presence of Harmonic Distortion. , 2008, , .		22
26	Simulation of a power line communication system in medium and low voltage distribution networks. , 2011, , .		21
27	A Prototypal Architecture of a IEEE 21451 Network for Smart Grid Applications Based on Power Line Communications. IEEE Sensors Journal, 2015, 15, 2460-2467.	4.7	21
28	Model of line to shield power line communication system on a Medium Voltage network. , 2010, , .		20
29	Hybrid passive and communications-based methods for islanding detection in medium and low voltage smart grids. , 2013, , .		20
30	An Improved Load Flow Method for MV Networks Based on LV Load Measurements and Estimations. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 430-438.	4.7	20
31	Real-Time Power Flow Monitoring and Control System for Microgrids Integration in Islanded Scenarios. IEEE Transactions on Industry Applications, 2019, 55, 7186-7197.	4.9	20
32	Characterization of Clamp-On Current Transformers Under Nonsinusoidal Conditions. IEEE Transactions on Power Delivery, 2009, 24, 373-380.	4.3	19
33	High-Frequency Experimental Characterization and Modeling of Six Pack IGBTs Power Modules. IEEE Transactions on Industrial Electronics, 2016, 63, 6664-6673.	7.9	19
34	Metrological performances of voltage and current instrument transformers in harmonics measurements. , 2018, , .		19
35	A PC-based wattmeter for high accuracy power measurements. , 2010, , .		16
36	Rogowski coil current transducer compensation method for harmonic active power error. Measurement: Journal of the International Measurement Confederation, 2015, 63, 240-251.	5.0	16

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37	PQ and Harmonic Assessment Issues on Low-Cost Smart Metering Platforms: A Case Study. Sensors, 2020, 20, 6361.	3.8	16
38	Measurement of Simplified Single- and Three-Phase Parameters for Harmonic Emission Assessment Based on IEEE 1459-2010. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	15
39	New measurement procedure for load flow evaluation in medium voltage smart grids. , 2013, , .		14
40	Experimental evaluation of an hybrid communication system architecture for smart grid applications. , 2015, , .		14
41	Li-ion Battery Modeling and State of Charge Estimation Method Including the Hysteresis Effect. Electronics (Switzerland), 2019, 8, 1324.	3.1	11
42	Experimental investigation on PLC signal crossing of power transformers. , 2014, , .		11
43	Secondary substation power line communications for medium voltage smart grids. , 2012, , .		10
44	Narrowband power line communications for medium voltage Smart Grids. , 2014, , .		10
45	Measurement and communication interfaces for distributed generation in smart grids. , 2013, , .		9
46	PQ Metrics Implementation on Low Cost Smart Metering Platforms. A Case Study Analysis. , 2018, , .		9
47	An interface protection system with power line communication for distributed generators remote control. , 2014, , .		8
48	A DAQ-based sampling wattmeter for IEEE Std. 1459-2010 powers measurements. Uncertainty evaluation in nonsinusoidal conditions. Measurement: Journal of the International Measurement Confederation, 2015, 61, 27-38.	5.0	7
49	Design of a Time Dissemination System Using Chirp Modulation for Medium Voltage Smart Grid Applications. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6686-6695.	4.7	7
50	A Virtual Tool for Load Flow Analysis in a Micro-Grid. Energies, 2020, 13, 3173.	3.1	7
51	Characterization of DC series arc faults in PV systems based on current low frequency spectral analysis. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109770.	5.0	7
52	Electromagnetic immunity analysis of a new interface device with power line communication for smart grid and energy storage applications. , 2013, , .		6
53	Uncertainty evaluation of a Backward/Forward Load Flow algorithm for a MV smart grid. , 2015, , .		6
54	A Line Impedance Calculator Based on a G3 PLC Modem Platform. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	5

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55	Development of a high-accuracy PC-based wattmeter with commercial data acquisition boards. , 2011, , .		4
56	Critical issues and future prospects of the secondary substation in smart grid context. , 2014, , .		4
57	Experimental EMF characterization of a secondary substation. , 2015, , .		4
58	High frequency modeling technique for three phase power electronics module. , 2015, , .		4
59	Electric and magnetic emission in near field region and thermal behaviour of power module for photovoltaic application. , 2015, , .		4
60	Development of a coupling system for medium voltage power line communication in the CENELEC A frequency band. , 2016, , .		4
61	A simplified approach for load flow analysis in MV smart grids based on LV power measurements. , 2017, , .		4
62	IEEE Std. 1459 power quantities ratio approaches for simplified harmonic emissions assessment. , 2018, , .		4
63	Measurement uncertainty impact on simplified load flow analysis in MV smart grids. , 2018, , .		4
64	A New Coupling Solution for G3-PLC Employment in MV Smart Grids. Energies, 2019, 12, 2474.	3.1	4
65	Incremental Heuristic Approach for Meter Placement in Radial Distribution Systems. Energies, 2019, 12, 3917.	3.1	3
66	Implementation of a PLC Field Analyzer on a G3 Modem Platform. , 2021, , .		3
67	Hall effect current transducer characterization under nonsinusoidal conditions. , 2009, , .		2
68	NB PLC and Software Defined Networking for Smart Grid Applications. , 2017, , .		2
69	A Monitoring and Management System for Energy Storage Integration in Smart Grids. , 2019, , .		2
70	An interface protection system based on an embedded metrology system platform. Measurement: Sensors, 2021, 18, 100237.	1.7	2
71	A PLC based monitoring and remote control architecture for Distributed Generation and Storage systems in LV smart grids. , 2021, , .		2
72	A back to back method for the temperature rise test of prefabricated substations: A case study. , 2015, , .		1

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73	Design and Characterization of a New MV PLC Coupler for Smart Electric Energy Systems. , 2018, , .		1
74	An Experimental Characterization of Time of Arrival Accuracy for Time Synchronization of Medium Voltage Smart Grid Solutions. , 2019, , .		1
75	A Resilient Distributed Measurement System for Smart Grid Application. Communications in Computer and Information Science, 2020, , 139-153.	0.5	1
76	Enhanced islanding detection in smart interface protection systems of distributed generation. , 2021, , .		1
77	Measurements methodology for the reliability evaluation of intelligent power modules. , 2014, , .		0
78	An Innovative Coupling Solution for Power Line Communication in MV Electrical Networks. , 2019, , .		0
79	Implementation and Experimental Tests of a Management System for MV/LV Distribution Grids. , 2019, , .		0
80	Implementation of a Management System for Prosumer Energy Storage Scheduling in Smart Grids. , 2020, , .		0
81	Comparison of two different approaches for harmonic distortion sources assessment. , 2021, , .		0
82	A single-point approach based on nonactive power factor for the assessment of harmonic distortion sources in power systems. , 2022, , .		0