

Roberto Tinarelli

List of Publications by Year in descending order

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110
papers

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110
docs citations

110
times ranked

571
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Proximity, Burden, and Position on the Power Quality Accuracy Performance of Rogowski Coils. <i>Sensors</i> , 2022, 22, 397.	2.1	4
2	Accuracy Type Test for Rogowski Coils Subjected to Distorted Signals, Temperature, Humidity, and Position Variations. <i>Sensors</i> , 2022, 22, 1397.	2.1	8
3	Simplified and Low-Cost Characterization of Medium-Voltage Low-Power Voltage Transformers in the Power Quality Frequency Range. <i>Sensors</i> , 2022, 22, 2274.	2.1	4
4	Combined Effect of Temperature and Humidity on Distorted Currents Measured by Rogowski Coils. , 2022, , .		1
5	Measurement Procedure to Investigate Ageing of Low-Power Voltage Transformers. , 2022, , .		0
6	Effects on the Accuracy Performance of Rogowski Coils Due to Temperature and Humidity. , 2022, , .		2
7	Effect of the Conductor Positioning on Low-Power Current Transformers: Inputs for the Next IEC 61869-10. <i>Electricity</i> , 2021, 2, 1-12.	1.4	1
8	Modeling Stray Capacitances of High-Voltage Capacitive Dividers for Conventional Measurement Setups. <i>Energies</i> , 2021, 14, 1262.	1.6	4
9	Modeling Capacitive Low-Power Voltage Transformer Behavior over Temperature and Frequency. <i>Sensors</i> , 2021, 21, 1719.	2.1	11
10	Characterization Procedure for Stand-Alone Merging Units Based on Hardware-in-the-Loop Technology. <i>Energies</i> , 2021, 14, 1993.	1.6	1
11	Closed-Form Expressions to Estimate the Mean and Variance of the Total Vector Error. <i>Energies</i> , 2021, 14, 4641.	1.6	1
12	Low-Impact Current-Based Distributed Monitoring System for Medium Voltage Networks. <i>Energies</i> , 2021, 14, 5308.	1.6	1
13	On the Importance of Characterizing Virtual PMUs for Hardware-in-the-Loop and Digital Twin Applications. <i>Sensors</i> , 2021, 21, 6133.	2.1	4
14	External Magnetic Fields Effect on Harmonics Measurements with Rogowski coils. , 2021, , .		2
15	Design, Development, and Characterization of a Low-Voltage Network Monitoring Unit. , 2021, , .		0
16	Effects of Thermal Cycles on Interfacial Pressure in MV Cable Joints. <i>Sensors</i> , 2020, 20, 169.	2.1	9
17	A Smart Frequency Domain-Based Modeling Procedure of Rogowski Coil for Power Systems Applications. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 6748-6755.	2.4	11
18	Toward the Standardization of Limits to Offset and Noise in Electronic Instrument Transformers. <i>Sensors</i> , 2020, 20, 4061.	2.1	1

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19	Measurement Methods and Procedures for Assessing Accuracy of Instrument Transformers for Power Quality Measurements. , 2020, , .		13
20	Low-Power Voltage Transformer Smart Frequency Modeling and Output Prediction up to 2.5 kHz, Using Sinc-Response Approach. Sensors, 2020, 20, 4889.	2.1	7
21	On the Long-Period Accuracy Behavior of Inductive and Low-Power Instrument Transformers. Sensors, 2020, 20, 5810.	2.1	16
22	Effects of Multiple Influence Quantities on Rogowski-Coil-Type Current Transformers. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4827-4834.	2.4	18
23	Smart Characterization of Rogowski Coils by Using a Synthetized Signal. Sensors, 2020, 20, 3359.	2.1	14
24	Calibration Procedure to Test the Effects of Multiple Influence Quantities on Low-Power Voltage Transformers. Sensors, 2020, 20, 1172.	2.1	4
25	Are Inductive Current Transformers Performance Really Affected by Actual Distorted Network Conditions? An Experimental Case Study. Sensors, 2020, 20, 927.	2.1	23
26	A General Easy-to-Use Expression for Uncertainty Evaluation in Residual Voltage Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1576-1584.	2.4	6
27	Testing of Electrical Energy Meters Subject to Realistic Distorted Voltages and Currents. Energies, 2020, 13, 2023.	1.6	11
28	A Closed-form Expression to Estimate the Uncertainty of THD Starting from the LPIT Accuracy Class. Sensors, 2020, 20, 1804.	2.1	1
29	Test Bed Characterization for the Interfacial Pressure vs. Temperature Measurements in MV Cable-Joints. , 2019, , .		2
30	Effects of Mechanical Pressure on the Tangent Delta of MV Cable Joints. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2656-2658.	2.4	14
31	Use of COMTRADE Fault Current Data to Test Inductive Current Transformers. , 2019, , .		5
32	Effects of Temperature on MV Cable Joints Tan Delta Measurements. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3892-3898.	2.4	19
33	A Simple Calibration Procedure for an LPIT plus PMU System Under Off-Nominal Conditions. Energies, 2019, 12, 4645.	1.6	10
34	Uncertainty Analysis of a Test Bed for Calibrating Voltage Transformers vs. Temperature. Sensors, 2019, 19, 4472.	2.1	4
35	Testing of Electrical Energy Meters in Off-Nominal Frequency Conditions. , 2019, , .		3
36	A Simple Modelling Procedure of Rogowski Coil for Power Systems Applications. , 2019, , .		6

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37	Uncertainty Analysis of an Equivalent Synchronization Method for Phasor Measurements. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2444-2452.	2.4	10
38	Accuracy Evaluation of an Equivalent Synchronization Method for Assessing the Time Reference in Power Networks. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 600-606.	2.4	12
39	Uncertainty sources analysis of a calibration system for the accuracy vs. temperature verification of voltage transformers. Journal of Physics: Conference Series, 2018, 1065, 052041.	0.3	13
40	Monitoring Cable current and Laying Environment Parameters for Assessing the Aging Rate of MV Cable Joint Insulation. , 2018, , .		6
41	Performance evaluation of an energy meter for low-voltage system monitoring. Journal of Physics: Conference Series, 2018, 1065, 052032.	0.3	8
42	Low-Cost Monitoring Unit for MV Cable Joints Diagnostics. , 2018, , .		6
43	Test Setup Design, and Calibration for Tan Delta Measurements on MV Cable Joints. , 2018, , .		6
44	Accuracy Verification of PLL-Based Acquisition System for Low-Cost Applications. , 2018, , .		3
45	Calibration of Synchronized Measurement System: from the Instrument Transformer to the PMU. , 2018, , .		16
46	Low power voltage transformer accuracy class effects on the residual voltage measurement. , 2018, , .		6
47	Effect of temperature on the accuracy of inductive current transformers. , 2018, , .		13
48	Simplified Approach to Evaluate the Combined Uncertainty in Measurement Instruments for Power Systems. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2258-2265.	2.4	17
49	On the behavior of LED lamps under non-sinusoidal voltage conditions. , 2017, , .		0
50	A novel equivalent power network impedance approach for assessing the time reference in asynchronous measurements. , 2017, , .		4
51	Assessment of Metrological Characteristics of Calibration Systems for Accuracy vs. Temperature Verification of Voltage Transformer. , 2017, , .		9
52	An Equivalent Synchronization for Phasor Measurements in Power Networks. , 2017, , .		3
53	Sensors for PMUs. , 2016, , 53-62.		1
54	Uncertainty evaluation in measurement equipments for power systems. , 2016, , .		5

#	ARTICLE	IF	CITATIONS
55	Effects of radiated electromagnetic fields on measurements performed by air-core passive LPCTs. , 2015, , .		2
56	Uncertainty: Words on the loose [Future Trends in I&M]. IEEE Instrumentation and Measurement Magazine, 2015, 18, 39-40.	1.2	2
57	Measurement of the pupil responses induced by RGB flickering stimuli. , 2015, , .		0
58	Study for assessing the conformity of a commercial measurement system for smart grid application. , 2015, , .		1
59	Thermal stress analysis of colored LEDs. , 2015, , .		2
60	A simple handheld pupillometer for chromatic Flicker studies. Proceedings of SPIE, 2014, , .	0.8	1
61	Procedure for the assessment of metrological characteristics of window-type current transformers in three-phase power systems. , 2014, , .		2
62	Development of a Life Model for Light Emitting Diodes Stressed by Forward Current. IEEE Transactions on Reliability, 2014, 63, 523-533.	3.5	9
63	Traceability of Low-Power Voltage Transformer for Medium Voltage Application. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2804-2812.	2.4	18
64	A simple portable polychromatic pupillometer for human eye annoyance measurement. , 2014, , .		3
65	Study of the Accuracy Requirements of the Instrumentation for Efficiency Measurements in Power Conversion Systems. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 2154-2160.	2.4	7
66	Parasitic effect - Independent approach for dissipation factor measurement in power transformers. , 2013, , .		0
67	Design and Performance Analysis of a Differential Current Sensor for Power System Applications. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 3207-3215.	2.4	18
68	On the frequency response of semiconductive shields for power systems applications. , 2012, , .		0
69	Metrological characterization of a current sensor for smart grids. , 2012, , .		0
70	A self-shielded current transducer for power system application. , 2011, , .		2
71	Toward a BITE for Real-Time Life Estimation of Capacitors Subjected to Thermal Stress. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1674-1681.	2.4	17
72	Assessment of human annoyance under flicker condition. , 2011, , .		2

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73	Flicker Effect Analysis in Human Subjects: New Noninvasive Method for Next-Generation Flickermeter. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 3018-3025.	2.4	4
74	Fault location in underground power networks: A case study. , 2011, , .		9
75	Experimental analysis of LEDs' reliability under combined stress conditions. , 2011, , .		2
76	A test set for LEDs life model estimation. , 2010, , .		10
77	New Basis for the Development of the next-generation Flickermeters. , 2010, , .		2
78	Toward a BITE for real time MTTF estimation of capacitors. , 2010, , .		3
79	Towards real-time life estimation of capacitors subjected to time-varying temperature. , 2010, , .		1
80	Dynamic stress-strength approach for reliability prediction. , 2009, , .		1
81	Performance Characterization of a Measurement System for Locating Transient Voltage Sources in Power Distribution Networks. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 450-456.	2.4	10
82	Analysis of the Effects of Flicker on the Blood-Flow Variation in the Human Eye. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2916-2922.	2.4	12
83	Measurement of the pupil diameter under different light stimula. , 2009, , .		6
84	Modeling of the physiological behavior of human vision system under flicker condition. , 2008, , .		7
85	Design and Characterization of an Electric Field Based Medium Voltage Transducer. , 2008, , .		3
86	A distributed system for the synchronized acquisition of fast voltage transients. , 2008, , .		2
87	Metrological Characterization of a Distributed Measurement System to Locate Faults in Power Networks. , 2008, , .		1
88	A Novel Approach for Laboratory Activities in E-Learning Courses. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	7
89	Performance Characterization of a Method for Locating Faults in Power Distribution Networks. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	2
90	Uncertainty Contribution of the Analog Conditioning Block in DSP-Based Instruments. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1000-1005.	2.4	3

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91	Implementation and Characterization of a System for the Evaluation of the Starting Instant of Lightning-Induced Transients. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1955-1960.	2.4	7
92	An Equipment for Voltage-Transducers Calibration Oriented to the Uncertainty Estimate in DSP-Based Measurements. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2577-2583.	2.4	2
93	A Measurement System for the Analysis of the Response of the Human Eye to the Light Flicker. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1384-1390.	2.4	30
94	Experimental Evaluation of Flicker Effects on Human Subjects. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	3
95	Theoretical Analysis of the Physiologic Mechanism of Luminous Variation in Eye-Brain System. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 164-170.	2.4	34
96	On the use of continuous-wavelet transform for fault location in distribution power systems. International Journal of Electrical Power and Energy Systems, 2006, 28, 608-617.	3.3	108
97	An Experimental Comparison in the Uncertainty Estimation Affecting Wavelet-Based Signal Analysis by Means of the IEC-ISO Guide and the Random-Fuzzy Approaches. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 691-699.	2.4	13
98	Investigation on Multipoint Measurement Techniques for PQ Monitoring. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 1684-1690.	2.4	48
99	On Uncertainty in Wavelet-Based Signal Analysis. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 1593-1599.	2.4	23
100	Uncertainty Propagation in the Discrete-Time Wavelet Transform. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 2474-2480.	2.4	9
101	On the Use of Data From Distributed Measurement Systems for Correlating Voltage Transients to Lightning. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 1202-1208.	2.4	11
102	Spectral analysis of bi-tone waveforms: study of the uncertainty contributions arising from the virtual time-domain approach. Measurement: Journal of the International Measurement Confederation, 2004, 35, 343-351.	2.5	1
103	A statistical model for estimating the trend of electrical quantities in power systems. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 1143-1147.	2.4	11
104	The impact of internet transmission on the uncertainty in the electric power quality estimation by means of a distributed measurement system. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 1073-1078.	2.4	29
105	Measurements on electrical power systems under bi-tone conditions by using the virtual time-domain approach. European Transactions on Electrical Power, 2002, 12, 1-9.	1.0	2
106	On the characterization of voltage and current transducers in steady-state distorted conditions. European Transactions on Electrical Power, 2001, 11, 365-370.	1.0	3
107	A system for the measurement of the starting instant of impulsive transients [power systems]. , 0, , .		2
108	A VI for estimating electrical quantities in power systems over long time intervals. , 0, , .		0

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109	Uncertainty propagation in the discrete-time wavelet transform. , 0, , .		5
110	Implementation of multi-point measurement techniques for PQ monitoring. , 0, , .		16