Guglielmo Frigo

List of Publications by Year
in descending order

66 papers	843 citations	840776 11 h-index	580821 25 g-index
66 all docs	66 docs citations	66 times ranked	591 citing authors

#	Article	IF	Citations
1	Compressive Sensing of a Taylor-Fourier Multifrequency Model for Synchrophasor Estimation. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 3274-3283.	4.7	119
2	3D reconstruction of the crural and thoracolumbar fasciae. Surgical and Radiologic Anatomy, 2011, 33, 855-862.	1.2	92
3	PMU-Based ROCOF Measurements: Uncertainty Limits and Metrological Significance in Power System Applications. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3810-3822.	4.7	68
4	Resolution Enhancement by Compressive Sensing in Power Quality and Phasor Measurement. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2358-2367.	4.7	64
5	<italic>Fast</italic>-TFM—Multifrequency Phasor Measurement for Distribution Networks. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1825-1835.	4.7	55
6	Definition of Accurate Reference Synchrophasors for Static and Dynamic Characterization of PMUs. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2233-2246.	4.7	47
7	Impact of Synchrophasor Estimation Algorithms in ROCOF-Based Under-Frequency Load-Shedding. IEEE Transactions on Power Systems, 2020, 35, 1305-1316.	6.5	33
8	Reduced Leakage Synchrophasor Estimation: Hilbert Transform Plus Interpolated DFT. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3468-3483.	4.7	32
9	Harmonic Phasor Measurements in Real-World PMU-Based Acquisitions. , 2019, , .		24
10	Beyond Phasors: Modeling of Power System Signals Using the Hilbert Transform. IEEE Transactions on Power Systems, 2020, 35, 2971-2980.	6.5	24
11	Taylor-Fourier PMU on a Real-Time Simulator: Design, Implementation and Characterization. , 2019, , .		19
12	Under Frequency Load Shedding based on PMU Estimates of Frequency and ROCOF. , 2018, , .		15
13	Characterization of uncertainty contributions in a high-accuracy PMU validation system. Measurement: Journal of the International Measurement Confederation, 2019, 146, 72-86.	5.0	15
14	Measuring Cerebral Activation From fNIRS Signals: An Approach Based on Compressive Sensing and Taylor—Fourier Model. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1310-1318.	4.7	12
15	Robust estimation and tracking of heart rate by PPG signal analysis. , 2017, , .		11
16	Denoising ECG Signal by CSTFM Algorithm: Monitoring During Motorbike and Car Races. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2433-2441.	4.7	11
17	Frequency tracking for efficient phasor measurement based on a CSTFM model. , 2015, , .		10
18	Statistical Model of Measurement Noise in Real-World PMU-based Acquisitions. , 2019, , .		10

#	Article	IF	Citations
19	OPF-based under frequency load shedding predicting the dynamic frequency trajectory. Electric Power Systems Research, 2020, 189, 106748.	3.6	10
20	Leverage Point Identification Method for LAV-Based State Estimation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	9
21	Characterization of Non-Stationary Signals in Electric Grids: A Functional Dictionary Approach. IEEE Transactions on Power Systems, 2022, 37, 1126-1138.	6.5	9
22	Phasor Measurement Unit With Digital Inputs: Synchronization and Interoperability Issues. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	9
23	Multifunction phasor analysis for distribution networks. , 2016, , .		8
24	Efficient tracking of heart rate under physical exercise from photoplethysmographic signals. , 2015, , .		7
25	A smartphone-based indoor localization system for visually impaired people. , 2015, , .		7
26	Characterization of a Compressive Sensing Preprocessor for Vector Signal Analysis. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1319-1330.	4.7	7
27	Dead Reckoning in Structured Environments for Human Indoor Navigation. IEEE Sensors Journal, 2017, 17, 7794-7802.	4.7	7
28	EEG gradient artifact removal by compressive sensing and Taylor-Fourier transform. , 2014, , .		6
29	Definition and assessment of reference values for PMU calibration in static and transient conditions. , 2016, , .		6
30	Characterization of DAC Phase Offset in IEC 61850-9-2 Calibration Systems. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	6
31	Calibration of a Digital Current Transformer Measuring Bridge: Metrological Challenges and Uncertainty Contributions. Metrology, 2021, 1, 93-106.	1.5	6
32	Phasor Measurement Unit and Sampled Values: Measurement and Implementation Challenges. , 2021, , .		6
33	Compressive sensing plus Taylor-Fourier Transform for synchrophasor estimation. , 2014, , .		5
34	Efficient detection for multifrequency dynamic phasor analysis. , 2016, , .		5
35	IEEE 802.15.6 compliant WBSN: A case study. , 2017, , .		5
36	Low-Latency, Three-Phase PMU Algorithms: Review and Performance Comparison. Applied Sciences (Switzerland), 2021, 11, 2261.	2.5	5

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37	Measurement Setup for a DC Power Reference for Electricity Meter Calibration. , 2022, , .		5
38	Resolution enhancement in harmonic analysis by compressive sensing. , 2013, , .		4
39	Robust ECG Denoising for eHealth Applications. , 2018, , .		4
40	Supraharmonic Dynamic Phasors: Estimation of Time-Varying Emissions. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	4
41	Step Change Detection for Improved ROCOF Evaluation of Power System Waveforms. , 2022, , .		4
42	High-accuracy frequency estimation in compressive sensing-plus-DFT spectral analysis. , 2015, , .		3
43	Comparative evaluation of on-line missing data regression techniques in intrapartum FHR measurements. , 2017, , .		3
44	Synchrophasor-Based ROCOF Measurements: Feasibility in Real-World Scenarios. , 2018, , .		3
45	On-line performance assessment for improved sensor data aggregation in power system metrology. Measurement: Sensors, 2021, 18, 100186.	1.7	3
46	Enhanced Support Recovery for PMU Measurements Based on Taylor–Fourier Compressive Sensing Approach. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	3
47	Spectrum sensing and vector signal analysis preprocessing based on compressed sampling. , 2011, , .		2
48	A compressive sensing spectral model for fNIRS haemodynamic response de-noising. , 2015, , .		2
49	Metrological characterization of a PMU calibrator in the 25 Hz to 3 kHz range. , 2017, , .		2
50	Impact of Fundamental Frequency Definition in IpDFT-based PMU Estimates in Fault Conditions. , 2019, , .		2
51	Characterization of Real-World Power System Signals in Non-Stationary Conditions using a Dictionary Approach. , 2021, , .		2
52	Taylor-Fourier Multifrequency Model for Supra-Harmonic Identification and Estimation. , 2021, , .		2
53	Compressive Sensing Taylor-Fourier and Windowing Approach for Synchronized Phasor, Frequency and ROCOF Measurements. , 2021, , .		2
54	Measurement of Conducted Supraharmonic Emissions: Quasi-Peak Detection and Filter Bandwidth. Metrology, 2022, 2, 161-179.	1.5	2

#	Article	IF	Citations
55	A modulation detector based on compressive sensing for vector measurement in cognitive radio. , 2013, , .		1
56	A collaborative approach for future ICT based healthcare services. , 2014, , .		1
57	Data processing algorithm for direction tracking in indoor localization. , 2015, , .		1
58	A software-based platform for multichannel electrophysiological data acquisition. , 2015, , .		1
59	Characterization of electrical rotary distributors for real-time data communication. , 2018, , .		1
60	Characterization of a Low Power Instrument Transformer with Digital Output in Low-Inertia Power Systems. , 2022, , .		1
61	Metrological Significance and Reliability of On-Line Performance Metrics in PMU-based WLS State Estimation. , 2022, , .		1
62	A model to measure the characterizing parameters of the deep fascia. , 2009, , .		0
63	Cross-correlation methods for enhanced monitoring and health assessment of wooden poles. , 2015, , .		0
64	Teaching Measurement Fundamentals. , 2018, , .		0
65	Design of a High-Accuracy and Traceable Reference Instrument for Flickermeter Certification. , 2021, , .		0
66	Characterization of Sampled Value Streams in Non Real-Time Calibration Systems. Energies, 2022, 15, 3245.	3.1	0