

Europass Curriculum Vitae

Personal information

Name / Surname

Address

Telephone

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Nationality

Date of birth

Gender

Liccardo Annalisa

via Capitello 11, 84060, Montecorice (SA), Italy

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annalisa.liccardo@unina.it

Italian

29 ottobre 1977

Female

Current Position

She is Associate Professor of Measurement at the Department of Electrical Engineering and Information Technology of the University of Naples Federico II.

Work Experience

December 2016

She gets the transition to Associate Professor in Measurements following the positive evaluation received, according to art. 24 paragraph 3, lett. b) of the law n. 240/2010.

December 2013

She wins the comparative procedure for a tenure-track researcher contract, according to art. 24 paragraph 3, lett. b) of the law n. 240/2010, at the Department of Electrical Engineering and Information Technology of the University of Naples Federico II.

March 2013

She becomes Test Execution Manager of the PowerLab Laboratory, ISO 9001 certified, for the Power Quality tests in medium and low voltage plants, with reference to the standard test method IEC 61000-4-30: Test method for the evaluation and monitoring of the Quality of Electrical Energy (Power Quality).

July 2012 - December 2013

She receives a Research Grant at the Department of Electrical Engineering and Information Technology of the University of Naples Federico II, based on advanced measurement systems for the monitoring and control of the power quality in electrical smart grid.

July 2010 - June 2012

She receive a Research Grant at the Department of Electrical Engineering and Information Technology of the University of Naples Federico II, based on design and characterization of current transducers in distorted conditions.

January 2004 - December 2006

She participates with University "Mediterranea" of Reggio Calabria and University of Sannio of Benevento, to the project "Remote Didactical Laboratory distributed on geographical network" (PIs Proff. Claudio De Capua e Pasquale Daponte). As part of this project, in the period January 2006 - March 2006 she obtains a coordinated and continuous collaboration from the Department of Computer Science, Mathematics, Electronics and Transport of the University "Mediterranea" of Reggio Calabria entitled: "Collaboration in the Remote Didactical Laboratory distributed on geographical network through the implementation of techniques based on Web Services for the management of virtual instrumentation".

March 2004 – June 2004

She obtains a contract of collaboration for occasional work with the Department of Electrical Engineering (DIEL) of the University of Naples Federico II, which involved the design of experiments and data processing for the qualification of a measurement system of the effects of 50 Hz electromagnetic fields in an external environment.

Education and Training

December 2006

She receives the Ph.D. in Electrical Engineering at the University of Naples Federico II, with the Ph.D. thesis entitled "A remotely configurable and programmable measurement laboratory".

July 2003

She receives the degree (cum laude) in Electrical Engineering at the Faculty of Engineering of the University of Naples Federico II, with a thesis entitled "Automatic measurement station on a geographic network for the detection of electromagnetic disturbances conducted by an electronic power system", supervisor Prof. Claudio De Capua.

Mother tongue

Italian

Other languages

*Self-assessment
European level*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

Computer skills

Operative systems

Excellent knowledge of Windows 2000/XP/2003 Server/Vista/7/10 as administrator. Good knowledge of Linux.

Programming languages

Excellent knowledge of National Instruments LabVIEW, Matlab, Visual Basic.Net, HTML, Orcad PSPICE, C/C++.

IDE

Excellent knowledge of MPLAB for programming 8 and 16 bit Microchip microcontrollers and IAR Embedded Workbench for programming microprocessors based on architectures ARM STMicroelectronics.

Excellent knowledge of the suite Office and Latex.

Teaching Activity

Assigned courses

2021/22-Present

"Fundamentals of Measurements" for students of Bachelor Degree in Automation Engineering and Computer Science Engineering of the University of Naples Federico II.

2019/20-Present

"Fundamentals of Electrical Measurements" for students of Bachelor Degree in Electrical Engineering of the University of Naples Federico II.

2017/18-Present

"Measurements and Tests of Electrical Machines and Installations" for students of Master Degree in Electric Engineering of the University of Naples Federico II.

2016/17

"Measurement Sensors and Transducers" for students of Master Degree in Electronic Engineering of the University of Naples Federico II.

2014/15-2020/21

"Measurements for the Automation and Industrial Production" for students of Bachelor Degree in Computer Science Engineering of the University of Naples Federico II.

2015/16-Present

"Laboratory of Microcontroller-based Measurement" for students of Bachelor Degree in Computer Science Engineering of the University of Naples Federico II.

2014/15-2016/17

"Electronic Measurement Instrumentation" for students of Bachelor Degree in Materials Engineering of the University of Naples Federico II.

Contracts

2006/07-2009/10

"Measurement Sensors and Transducers" for students of Master Degree in Electronic Engineering of the University of Naples Federico II.

March 2014

Training course "Electronic Measurements in Industrial Applications", as part of the project "VEM Virtual Energy Management" (PON01_2754/F).

Other teaching activities

2013/14-2016/17

"Measurements and Tests of Electrical Machines and Installations" for students of Master Degree in Electric Engineering of the University of Naples Federico II, course holder Prof. Massimo D'Apuzzo.

2011/12-2016/17

"Fundamentals of Electrical Engineering" for students of Electric Engineering of the University of Naples Federico II, course holder Prof. Massimo D'Apuzzo.

2010/11-2015/16

"Measurement Sensors and Transducers" for students of Master Degree in Electronic Engineering of the University of Naples Federico II, course holder Prof. Aldo Baccigalupi.

2007/08

e-learning course "Measurement laboratory" for students of Electronic Engineering of the University of Naples Federico II, course holder Prof. Aldo Baccigalupi.

2003/04-2005/06

"Measurement Sensors and Transducers" for students of Master Degree in Electronic Engineering of the University of Naples Federico II, course holder Prof. Claudio De Capua.

Training Courses

September 2015

Course of "Automatic measurement systems" for training expert personnel as part of the project "Technology and innovative systems for radar applications" (TELEMACO).

July 2015

Course of "Automatic measurement systems" for technical personnel of MBDA Italia S.p.A - Sede Fusaro.

July 2015

Course of "Instrumentation and measurement methods for distorted signals" for graduated in Electronic Engineering as part of the project "Hybrid Microgrid in DC and AC current" (MICCA).

Other Activities

Since 2003/04

She has supervised more than 100 thesis in Electrical, Electronic and Computer Science Engineering.

2019/20-Present

She supervises as tutor the research activity of Salvatore Tessitore, Ph.D. student in Information Engineering at University of Naples Federico II.

2014/15-2017/18

She has supervised as tutor Giovanni Cavallo, Ph.D. student in Information Engineering at University of Naples Federico II.

2015/16-2017/18

She has supervised, as tutor in the co-tutorship agreement between University of Naples Federico II and University of Lisbon, the research activity of Alessandro Parrilla, that received the European Ph.D. in Information Technology and Electrical Engineering at University of Naples Federico II.

Collaborations, Affiliations and Projects Participation

2022-Present - Ensiel affiliation

She is affiliated to Ensiel, the Italian organization of public universities operating in the field of energy, electrical systems and electrical installations.

2020-Present - Coordination

Coordinator of a research group consisting of two researchers, a Ph.D. student and several students of the Master Degree in Electrical Engineering, of an activity in collaboration with Terna SpA. The activity consists in the study and the implementation of innovative algorithms for the analysis of inter-area oscillations on transmission networks. The results are reported in the publications [63],[62].

2018-2019 - Scientific Director

she has been scientific director for the research agreement between the Ce.S.M.A. and Areti S.p.A. (ex ACEA), lasting one year, having as its objective "Definition and development of a methodology for measuring losses in the low voltage electricity grid". In particular, the agreement is divided into two distinct and successive phases. In the first phase, lasting approximately 5 (five) months, a feasibility study was conducted starting from the documentation and measurement results made available by Areti. In this phase, the impact of the characteristics of the meters placed on the LV network was estimated on the uncertainty associated with the estimate of the losses on the network, taking into consideration different methods and algorithms for estimating the state of the network. The results of the first phase allowed to determine the networks in which Areti's measurement system is adequate in order to measure the losses in the network with the desired uncertainty level established. Also the improvement actions were identified, both in the specifications of the meters, both in the measurement methodology. In the second phase, lasting approximately 7 (seven) months, the measurement methodology was defined and preliminary tests were carried out on pilot grids agreed between Ce.S.M.A. and Areti.

2019-2020 - Project participation

Research Project "Intelligent Monitoring System for the Safety of Urban Infrastructures (INSIST)", funded under the PON "RESEARCH AND INNOVATION" 2014-2020 AND FSC, referred to in DD notice of 13 July 2017 n. 1735.

2019 - Project participation	Project "PROSIT - PROJECTING IN SUSTAINABILITY, qualification and digitization in construction" under the ERDF Campania 2014-2020 Operational Program, Axis 1-Specific Objective 1.2- Action 1.2.2 "Support for the realization of complex projects of research and development activities on a few important thematic areas and the application of technological solutions functional to the realization of RIS3 strategies".
2018-2019 - Project participation	Research Project "Augmented surgery. Mixed reality to support surgical activity" relating to the call called "Public notice for the support to Campania companies in the realization of feasibility studies and transfer projects technology consistent with RIS3".
2018-2019 - Project participation	Research Project entitled "AVATEA Advanced Virtual Adaptive Technology s e-hEAith, based on the Call called" Public notice for the support of Campania companies in the realization of feasibility studies (Phase 1) and technology transfer projects (Phase 2) consistent with RIS3".
2017-2018 - Scientific Director	She has been scientific director for the agreement for activities between Ce.S.M.A. and SPS Italia S.r.l. with the aim of verifying the performance of the MIO device, produced by SPS Italia. In particular, the activity concerned the design and construction of the measurement circuit and tests aimed at verifying the effectiveness of the MIO device in different conditions of: supply voltage, line impedance, type of load (linear and non-linear).
2015-2018 - INFN affiliation	She is affiliated to the National Institute of Nuclear Physics (INFN) Section of Naples for the collaboration aimed at the design and characterization of the beam diagnostics system in particle accelerators.
2016-2017 - Project participation	Project "METRICS - MEdologies and Technologies for the management and requalification of historic centers and prestigious buildings", based on the PON Research and competitiveness 2007-2013/Plan "PAC Plan Action Cohesion for the Regions of Convergence".
2016-2018 - INFN Collaboration	She has collaborated with the National Institute of Nuclear Physics (INFN) of Frascati and with the University of Rome La Sapienza on the international project ELI-NP (Extreme Light Infrastructure - Nuclear Physics), aimed at the realization of a linear particle accelerator for the generation of gamma rays. The activity concerned the characterization of the beam diagnostics systems. The results are reported in the publications [100],[101],[96],[99],[95], [97],[98].
2015-2019 - Coordination	She has coordinated an international research group, consisting of a Ph.D. student and several students of the Master Degree in Science in Electrical Engineering for an activity in collaboration with the Magnetic Measurement section of CERN of Geneva. The activities of the Ph.D. student were followed in co-tutorship with Prof. Pedro Ramos of the University of Lisbon. The aim of the research activities consisted in the design of methods and circuits for the magnetic characterization of both hard and soft magnetic materials. The results of the activity can be found in the publications [93],[6],[26],[23].
2015 - CRdC-CERN activity Responsible	She has been nominated by the Regional Competence Center CRdC Tecnologie Scarl Responsible for the activities that the CRdC had in place with CERN in Geneva, which have as their object the metrological characterization of FDI (Fast Digital Integrator) 5.
2013-2015 - Project participation	She has participated to the activities included in the Systems Technologies proposal for Territorial and Air Safety, for the realization of a Regional Program Contract within the production chain called "Work Into Shaping Campania's Home (WISCH), presented by the T2STAR consortium in response to the public notice of the Campania Region called" Regional Program Contract for the Innovative Development of the Strategic Manufacturing Sector in Campania "published on BURC n. 58 of 14 September 2012.
2014-2015 - CERN collaboration	She has collaborated with the Cryogenics section of CERN in Geneva, for the design, implementation and characterization of a measurement system, based on virtual sensors, for monitoring helium; the results of the research activity are reported in the publication [25],[24], also coordinating the activity related to measurement and diagnostics of a Ph.D. student and a student of the Master Degree in Electrical Engineering.

2014 - Participation to industrial project	Industrial Research Project ACME - Information architecture based on Cloud technology for the safe management and analysis of the archive of measurement data from large-scale electronic production processes.
2014 - Participation to PON Project	SIRENA Project "Development and Industrialization of Radio Frequency Systems and Electromagnetic Windows" funded by PON Research and Competitiveness 2007-2013.
2007 - Participation to PRIN project	Identification of new methodologies and creation of innovative instrumentation for the metrological qualification of electricity meters also operating under and not sinusoidal conditions. Duration: 24 months.
2004 - Participation in PRIN project	Distributed Measurement System for Environmental and Territorial Monitoring. Duration: 24 months.
2003 - Participation to PRIN project	Methodologies for quality and reliability in the measurement of environmental parameters. Duration: 24 months.
2003 - Participation to PON project	"Scientific Research, Technological Development, Higher Education" 2000-2006: Laboratory Remote Didactic Distributed on Geographic Network. Duration: 36 months.

Awards and Qualifications

May 2021	She receives the national scientific qualification as Full Professor of the scientific area 09/E4 Measurements
2019	The demonstrator "Lora-based logic selectivity for fault protection" received the Best Live Demonstration award at the conference IEEE Metrology for Industry 4.0 and IoT.
2018	The paper "Smart power meters in augmented reality environment for electricity consumption awareness" published on MDPI Energies, received the award for innovation "Nostalgia di Futuro" from the Observatory TuttiMedia.
December 2014	She receives the national scientific qualification as Associate Professor of the scientific area 09/E4 Measurements.
2006	The national project "Remote Didactical Laboratory Distributed on Geographical Network (PIs Proff. Claudio De Capua and Pasquale Daponte) received the "IEEE Award in the Session Multimedia Tools for Education in Instrumentation and Measurement".
2006	The paper "Remote Didactic Laboratory "G. Savastano": the Italian Experience for the E-learning at the Technical Universities in the Field of the Electrical and Electronic Measurements, Architecture and Delivered Services" received the Best Paper of the Special Session "Multimedia tools for education in instrumentation and measurement" at IEEE Instrumentation and Measurement Technology Conference, 2006

Participation to editorial boards of journals, editorial series, conference organization

Section Editor	Since august 2021 she has joined the Editorial Board of the section "A: Electrical Engineering" of the Journal MDPI Energies (ranking Q1), as Section Editor.
Topic Editor	Since July 2020 she has joined the Editorial Board of the Journal MDPI Future Internet (ranking Q2), as Topic Editor.
Guest Editor	In 2020 she is Guest Editor of the Special Issue "VR, AR, and 3-D User Interfaces for Measurement and Control" for the journal MDPI Future Internet (ranking Q3).
Chair Special Session	In 2019 she is organizer and Chairman of the Special Session "IoT for Smart Grids: Scientific Challenges and Perspectives" at the conference IEEE International Workshop on Metrology for Industry 4.0 and IoT.
Guest Editor	In 2019 she is Guest Editor of the Special Issue of the conference IEEE International Workshop on Metrology for Industry 4.0 and IoT, for the journal MDPI Sensors (ranking Q1).

Reviewer Since 2005 she is Reviewer for the following journals, that are the main journals of the measurement area: IEEE Transaction for Instrumentation and Measurements, IEEE Sensors Journal, Elsevier Measurement, MDPI Sensors, MDPI Energies, MDPI Applied Sciences.

Technical Committee Since 2017 she is member of the Technical Program Committee of the conference IEEE Measurement and Networking (M and N).

Research Activity

Activity 1 Remote control of measurement instruments: in this context, various solutions have been defined, designed and developed, based on both proprietary and open source development environments, for the configuration and management of complex measurement stations distributed on geographic network.

Activity 2 Dynamic characterization of instruments for the acquisition and generation of signals: definition and development of innovative methodologies for the characterization of high resolution DAC and ADC.

Activity 3 Measurement methods based on compressive sampling: definition, implementation and development of innovative measurement methods that exploit the recent compressed acquisition paradigm that allows to obtain reliable measurements starting from a small number of samples of the signal of interest.

Activity 4 Distributed measurement systems for monitoring and protecting electrical networks: definition, implementation and development of innovative platforms based on enabling technologies of the Internet of Things for measuring electricity consumption and protecting distribution systems in the presence of fault conditions.

Scientific Publication

International journals

- 2020 Francesco Bonavolontà, Luigi Pio Di Noia, Davide Lauria, Annalisa Liccardo, and Salvatore Tessitore.
A PSO-MMA method for the parameters estimation of interarea oscillations in electrical grids.
IEEE Transactions on Instrumentation and Measurement, 2020
- 2020 M. Balato, A. Liccardo, and C. Petrarca.
Dynamic boost based DMPPT emulator.
Energies, 13(11), 2020
- 2020 L. Angrisani, F. Bonavolontà, M. D'Arco, and A. Liccardo.
A flexible remote laboratory with programmable device under test.
Measurement, 156:107584, 2020
- 2020 P. Arpaia, M. Buzio, S. I. Bermudez, A. Liccardo, A. Parrella, M. Pentella, P. M. Ramos, and E. Stubberud.
A superconducting permeameter for characterizing soft magnetic materials at high fields.
IEEE Transactions on Instrumentation and Measurement, 69(7):4200–4209, 2020
- 2019 F. Bonavolontà, M. D'Arco, A. Liccardo, and O. Tamburis.
Remote laboratory design and implementation as a measurement and automation experiential learning opportunity.
IEEE Instrumentation Measurement Magazine, 22(6):62–67, 2019
- 2019 Francesco Bonavolontà, Campoluongo Edoardo, Liccardo Annalisa, and Schiano Lo Moriello Rosario.
Performance enhancement of rogowski coils through an additive manufacturing approach.
International Review of Electrical Engineering, 14(3):148–158, 2019
- 2019 Francesco Bonavolontà, Luigi Pio Di Noia, Davide Lauria, Annalisa Liccardo, and Salvatore Tessitore.
An optimized ht-based method for the analysis of inter-area oscillations on electrical systems.
Energies, 12(15):2935, 2019

- 2019 A. Parrella, P. Arpaia, M. Buzio, A. Liccardo, M. Pentella, R. Principe, and P.M. Ramos. Magnetic properties of pure iron for the upgrade of the Lhc superconducting dipole and quadrupole magnets. *IEEE Transactions on Magnetism*, 55(2), 2019
- 2018 L. Angrisani, F. Bonavolontá, A. Liccardo, and R. Schiano Lo Moriello. On the use of LORA technology for logic selectivity in MV distribution networks. *Energies*, 11(11), 2018
- 2018 A. Baccigalupi, M. D'Arco, and A. Liccardo. Evaluating the uncertainty of digitizing waveform recorders coherently with the gum. *IEEE Transactions on Instrumentation and Measurement*, 67(10):2294–2302, 2018
- 2018 L. Angrisani, F. Bonavolontá, A. Liccardo, and R. Schiano Lo Moriello. Identification and classification of transformers current transients through huang hilbert transform. *Measurement: Journal of the International Measurement Confederation*, 125:123–132, 2018
- 2018 L. Angrisani, F. Bonavolontá, A. Liccardo, R. Schiano Lo Moriello, and F. Serino. Smart power meters in augmented reality environment for electricity consumption awareness. *Energies*, 11(9), 2018
- 2018 L. Angrisani, F. Bonavolontá, G. Cavallo, A. Liccardo, and R. Schiano Lo Moriello. On the measurement uncertainties of THz imaging systems based on compressive sampling. *Measurement: Journal of the International Measurement Confederation*, 116:83–95, 2018
- 2018 L. Sabato, P. Arpaia, A. Cianchi, A. Liccardo, A. Mostacci, L. Palumbo, and A. Variola. Effects of correlations between particle longitudinal positions and transverse plane on bunch length measurement: A case study on GBS electron LINAC at ELI-NP. *Measurement Science and Technology*, 29(2), 2018
- 2017 A. Baccigalupi, M. D'Arco, and A. Liccardo. Parameters and methods for adcs testing compliant with the guide to the expression of uncertainty in measurements. *IEEE Transactions on Instrumentation and Measurement*, 66(3):424–431, 2017
- 2017 L. Sabato, P. Arpaia, A. Giribono, A. Liccardo, A. Mostacci, L. Palumbo, C. Vaccarezza, and A. Variola. Effects of energy chirp on bunch length measurement in linear accelerator beams. *Measurement Science and Technology*, 28(8), 2017
- 2016 A. Baccigalupi and A. Liccardo. The huang hilbert transform for evaluating the instantaneous frequency evolution of transient signals in non-linear systems. *Measurement: Journal of the International Measurement Confederation*, 86:1–13, 2016
- 2016 M. D'Apuzzo, M. D'Arco, A. Liccardo, and M. Vadursi. Method for measuring settling phenomena by means of frequency domain instrumentation. *Review of Scientific Instruments*, 87(5), 2016
- 2016 F. Bonavolontá, M. D'Apuzzo, A. Liccardo, and G. Miele. Harmonic and interharmonic measurements through a compressed sampling approach. *Measurement: Journal of the International Measurement Confederation*, 77:1–15, 2016
- 2015 P. Arpaia, M. Girone, A. Liccardo, M. Pezzetti, and F. Piccinelli. Metrological analysis of a virtual flowmeter-based transducer for cryogenic helium. *Review of Scientific Instruments*, 86(12), 2015
- 2015 Annalisa Liccardo, Andrea Mariscotti, Attilio Marrese, Nicola Pasquino, and Rosario Schiano Lo Moriello. Statistical characterization of the 2.45 ghz propagation channel aboard trains. *ACTA IMEKO*, 4(1):44–52, 2015

- 2014 Francesco Bonavolontà, Massimo D'Apuzzo, Annalisa Liccardo, and Michele Vadursi. New approach based on compressive sampling for sample rate enhancement in DASS for low-cost sensing nodes. *Sensors*, 14(10):18915–18940, 2014
- 2014 A. Baccigalupi, M. D'Arco, A. Liccardo, and R. Schiano Lo Moriello. Compressive sampling-based strategy for enhancing adcs resolution. *Measurement: Journal of the International Measurement Confederation*, 56:95–103, 2014
- 2014 Leopoldo Angrisani, Francesco Bonavolontà, Annalisa Liccardo, Rosario Schiano Lo Moriello, Luigi Ferrigno, Marco Laracca, and Gianfranco Miele. Multi-channel simultaneous data acquisition through a compressive sampling-based approach. *Measurement*, 52:156–172, 2014
- 2013 M. Polisiero, P. Bifulco, A. Liccardo, M. Cesarelli, M. Romano, G.D. Gargiulo, A.L. McEwan, and M. D'Apuzzo. Design and assessment of a low-cost, electromyographically controlled, prosthetic hand. *Medical Devices: Evidence and Research*, 6(1):97–104, 2013
- 2013 A. Mariscotti, A. Marrese, N. Pasquino, P. Bifulco, A. Liccardo, and R. Schiano Lo Moriello. Wide-band and narrow-band characterization of the propagation channel in trains. *International Review of Electrical Engineering*, 8(5):1467–1472, 2013
- 2013 L. Angrisani, A. Liccardo, N. Pasquino, R. S. Lo Moriello, P. Bifulco, M. Laracca, and A. M. Lanzolla. On the suitability of dekf for improving gps location in car accidents. *International Review on Modelling and Simulations*, 6(5):1600–1606, 2013
- 2013 P. Bifulco, M. Cesarelli, M. D'Apuzzo, G. D. Gargiulo, A. Liccardo, N. Pasquino, M. Romano, and R. Schiano Lo Moriello. A low-cost device for contactless detection of pacemaker pulses. *International Review of Electrical Engineering*, 8(5):1461–1466, 2013
- 2012 A Baccigalupi, DL Carnì, D Grimaldi, and A Liccardo. Characterization of arbitrary waveform generator by low resolution and oversampling signal acquisition. *Measurement*, 45(10):2498–2510, 2012
- 2012 Mauro D'Arco, Annalisa Liccardo, and Nicola Pasquino. Anova-based approach for dac diagnostics. *Instrumentation and Measurement, IEEE Transactions on*, 61(7):1874–1882, 2012
- 2011 Aldo Baccigalupi, Annalisa Liccardo, and Nicola Pasquino. A methodology for testing immunity of field programmable analog arrays to radiated electromagnetic field. *Measurement*, 44(10):2165–2174, 2011
- 2011 Aldo Baccigalupi, Mauro D'Arco, Annalisa Liccardo, and Michele Vadursi. Testing high resolution dacs: a contribution to draft standard ieee p1658. *Measurement*, 44(6):1044–1052, 2011
- 2010 Massimo D'Apuzzo, Mauro D'Arco, Annalisa Liccardo, and Michele Vadursi. Modeling dac output waveforms. *Instrumentation and Measurement, IEEE Transactions on*, 59(11):2854–2862, 2010
- 2010 Aldo Baccigalupi, Mauro D'Arco, Annalisa Liccardo, and Michele Vadursi. Test equipment for dac's performance assessment: Design and characterization. *Instrumentation and Measurement, IEEE Transactions on*, 59(5):1027–1034, 2010
- 2009 Aldo Baccigalupi and Annalisa Liccardo. Low-cost prototype for the electronically compensation of current transformers. *Sensors Journal, IEEE*, 9(6):641–647, 2009
- 2007 Aldo Baccigalupi and Annalisa Liccardo. Field programmable analog arrays for conditioning ultrasonic sensors. *Sensors Journal, IEEE*, 7(8):1176–1182, 2007

2007 G. Andria, A. Baccigalupi, M. Borsic, P. Carbone, P. Daponte, C. De Capua, A. Ferrero, D. Grimaldi, A. Liccardo, N. Locci, A. M. L. Lanzolla, D. Macii, C. Muscas, L. Peretto, D. Petri, S. Rapuano, M. Riccio, S. Salicone, and F. Stefani.
Remote didactic laboratory "g. savastano,"the italian experience for e-learning at the technical universities in the field of electrical and electronic measurement: Architecture and optimization of the communication performance based on thin client technology.

IEEE Transactions on Instrumentation and Measurement, 56(4):1124–1134, 2007

2007 G. Andria, A. Baccigalupi, M. Borsic, P. Carbone, P. Daponte, C. De Capua, A. Ferrero, D. Grimaldi, A. Liccardo, N. Locci, A. M. L. Lanzolla, D. Macii, C. Muscas, L. Peretto, D. Petri, S. Rapuano, M. Riccio, S. Salicone, and F. Stefani.
Remote didactic laboratory "g. savastano,"the italian experience for e-learning at the technical universities in the field of electrical and electronic measurements: Overview on didactic experiments.

IEEE Transactions on Instrumentation and Measurement, 56(4):1135–1147, 2007

International conferences

2019 Angrisani Leopoldo, Bonavolontà Francesco, D'Arco Mauro, Liccardo Annalisa, and Tamburis Oscar.

Internet-oriented measurement and automation project for industry 4.0 educational program.

In *2019 IEEE International Symposium on Measurements Networking (M N)*, pages 1–5, July 2019

2019 F Lamonaca, D.L. Carnì, V. Spagnuolo, G. Grimaldi, F. Bonavolontà, A. Liccardo, R. Schiano Lo Moriello, and A. Colaprico.

A new measurement system to boost the IoMT for the blood pressure monitoring.

In *2019 IEEE International Symposium on Measurements Networking (M N)*, pages 1–5, July 2019

2019 F. Bonavolontà, C. Caputi, A. Liccardo, and A. Teotino.

Protection of mv smart grid based on iot technology.

In *2019 II Workshop on Metrology for Industry 4.0 and IoT (MetroInd4.0 IoT)*, pages 112–116, June 2019

2018 L. Angrisani, M. D'Arco, C. Dassi, and A. Liccardo.

Lora signals classification through a CS-based method.

In *IEEE 4th International Forum on Research and Technologies for Society and Industry, RTSI 2018 - Proceedings*, 2018

2018 J.R. Anglada, P. Arpaia, M. Buzio, A. Liccardo, A. Parrella, M. Pentella, and P.M. Ramos.

On the importance of magnetic material characterization for the design of particle accelerator magnets.

In *Journal of Physics: Conference Series*, volume 1065, 2018

2017 L. Angrisani, P. Arpaia, F. Bonavolontà, A. Liccardo, and R. Schiano Lo Moriello.

First step towards a cost-effective lot platform for customers power consumption awareness.

In *Proceedings of 2017 IEEE International Workshop on Measurement and Networking, M and N 2017*, 2017

2017 L. Angrisani, P. Arpaia, F. Bonavolontà, M. Conti, and A. Liccardo.

Lora protocol performance assessment in critical noise conditions.

In *RTSI 2017 - IEEE 3rd International Forum on Research and Technologies for Society and Industry, Conference Proceedings*, 2017

2017 A. Baccigalupi, M. D'Arco, and A. Liccardo.

Evaluating the uncertainty of dynamic signals sampled by adcs.

In *I2MTC 2017 - 2017 IEEE International Instrumentation and Measurement Technology Conference, Proceedings*, 2017

2017 P. Arpaia, A. Liccardo, M. Buzio, and A. Parrella.

On the use of fluxmetric methods for characterizing feebly magnetic materials.

In *I2MTC 2017 - 2017 IEEE International Instrumentation and Measurement Technology Conference, Proceedings*, 2017

- 2017 L. Sabato, P. Arpaia, A. Liccardo, A. Cianchi, A. Giribono, A. Mostacci, Palumbo L., C. Vaccarezza, and Variola A.
RF deflector based measurements of the correlations between vertical and longitudinal planes at ELI-NP-GBS electron LINAC.
In *6th International Beam Instrumentation Conference*, 2017
- 2017 L. Sabato, P. Arpaia, A. Liccardo, A. Mostacci, L. Palumbo, and A. Variola.
Energy chirp measurements by means of an RF deflector: a case study the gamma beam source LINAC at ELI-NP.
In *Proc. of International Particle Accelerator Conference (IPAC'17), Copenhagen, Denmark, May, 2017*, number 8 in International Particle Accelerator Conference, pages 242–245, Geneva, Switzerland, May 2017. JACoW
- 2017 P. Arpaia, M. Buzio, A. Liccardo, A. Parrella, and P. Ramos.
Inverse problem-based magnetic characterization of weakly magnetic alloys.
In *Proc. of International Particle Accelerator Conference (IPAC'17), Copenhagen, Denmark, May, 2017*, number 8 in International Particle Accelerator Conference, pages 4722–4725, Geneva, Switzerland, May 2017. JACoW
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