



## Antonio Pepiciello

✉ Email address:

☎ Phone number:

Gender: Male Nationality: Italian

### EDUCATION AND TRAINING

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[ 03/12/2018 – Current ] **PhD in Energy Engineering**

*University of Sannio*

Address: Benevento, Italy

Field(s) of study: Power Systems

Thesis: Flexibility solutions for the integration of variable renewable energy sources in power systems

[ 02/01/2016 – 22/02/2018 ] **Master Degree in Energy Engineering**

*University of Sannio*

Address: Benevento, Italy

Field(s) of study: Energy Engineering

Final grade: 110 cum laude

Thesis: Magnetocaloric materials and active magnetic regeneration for cooling applications

[ 15/09/2012 – 17/12/2015 ] **Bachelor Degree in Energy Engineering**

*University of Sannio*

Address: Benevento, Italy

Final grade: 110 cum laude

Thesis: Earnshaw's Theorem: preliminary study of a diamagnetically stabilized levitating system

[ 05/09/2014 – 28/02/2015 ] **Erasmus Study Exchange**

*Universidad de Huelva*

Address: Huelva, Spain

### WORK EXPERIENCE

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[ 15/09/2021 – 15/12/2021 ] **Visiting researcher**

*Fundació Institut de Recerca en Energia de Catalunya (IREC)*

City: Barcelona

Country: Spain

Main activities and responsibilities:

Research on the impact of wind energy integration in power systems.

[ 2020 ]

**An Interval Mathematic-Based Methodology for Reliable Resilience Analysis of Power Systems in the Presence of Data Uncertainties**

<https://doi.org/10.3390/en13246632>

Reference: Energies-MDPI

Authors: A. Pepiciello, A. Vaccaro, L. L. Lai

[ 2020 ]

**The role of learning techniques in synchrophasor-based Dynamic Thermal Rating**

<https://doi.org/10.1016/j.ijepes.2019.105435>

Reference: Int. J. of Electrical Power and Energy Systems

Authors: A. Pepiciello, G. Coletta, A. Vaccaro, D. Villacci

[ 2019 ]

**Robust Optimization of Energy Hubs Operation Based on Extended Affine Arithmetic**

<https://doi.org/10.3390/en12122420>

Reference: Energies - MDPI

Authors: A. Pepiciello, A. Vaccaro

**CONFERENCES AND SEMINARS**

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**Experimental Assessment of Cooperative Sensors Network-based Dynamical Thermal Rating: the first evidences from the H2020 OSMOSE Projec**

AEIT 2021, Milan (Virtual Conference)

Authors: D. Villacci, L. Orrù, F. Gasparotto, A. Vaccaro, G. Albimonti, A. Pepiciello

[10.23919/AEIT53387.2021.9626901](https://doi.org/10.23919/AEIT53387.2021.9626901)

**Artificial Neural Network-based Small Signal Stability Analysis of Power Systems**

PowerTech 2021, Madrid (Virtual Conference)

Authors: A. Pepiciello, A. Vaccaro

[10.1109/PowerTech46648.2021.9494952](https://doi.org/10.1109/PowerTech46648.2021.9494952)

**Experimental Assessment of a PTP-based System for Large Scale Time Synchronization of Smart Grids**

UPEC 2020, Turin (Virtual Conference)

Authors: A. Pepiciello, A. Vaccaro, T. Pietropaoli

[10.1109/UPEC49904.2020.9209872](https://doi.org/10.1109/UPEC49904.2020.9209872)

**A reliable architecture based on Precision Time Protocol for WAMPAC synchronization**

AEIT International Conference 2018, Bari

**Authors:** A. Pepiciello, A. Vaccaro

[10.23919/AEIT.2018.8577414](https://doi.org/10.23919/AEIT.2018.8577414)

**PATENTS**

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**Sistema di rilevamento di interferenze di segnali di sincronizzazione temporale in ingresso a dispositivi di misura di sincrofasori in sistemi elettrici di potenza**

**Authors:** A. Pepiciello, A. Vaccaro, D. Villacci

N. 102021000023765

Deposited in September 2021

**BOOKS**

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**Affine Arithmetic-Based Methods for Uncertain Power System Analysis**

**Authors:** Alfredo Vaccaro, Antonio Pepiciello

**Publisher:** Elsevier

**Paperback ISBN:** 9780323905022

**CHAPTERS**

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**Introductory Chapter: Open Problems and Enabling Methodologies for Smart Grids**

**Book:** Research Trends and Challenges in Smart Grids - IntechOpen

**Authors:** A. Vaccaro, A. Pepiciello, A. Faheem Zobaa

[10.5772/intechopen.86496](https://doi.org/10.5772/intechopen.86496)

**NETWORKS AND MEMBERSHIPS**

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Croce Rossa Italiana

IEEE Power and Energy Society

Associazione dottorandi e dottori di ricerca in Italia

**HONOURS AND AWARDS**

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**Third Best Presentation Awarding institution:** Universities Power Eng. Conference (UPEC 2020), Torino, Italia

## **Thesis co-supervision**

Master (M) and Bachelor (B) theses:

- Methods for the resolution of Unit Commitment in microgrids (B). (October 2018)

Author: Stefano Palmieri

- Participation of renewable energy sources in Italian dispatch market (B). (October 2018)

Author: Alessio Coccia

- Optimal design of autonomous microgrids (B). (October 2018)

Author: Gianmarco Castiello

- The role of virtual power plants in modern power systems (B). (December 2018)

Author: Giovanna Bernardo

- Optimal management of a microgrid: methodology and experimental validation (B). (October 2019)

Author: Emanuele D'Argenzio

- Enabling methodologies for the Unit Commitment in microgrids (B). (October 2019)

Author: Francesca Rosa

- Markovian models for characterizing power system resilience (M). (December 2020)

Author: Valentina Caprariello

- Optimal design of behind the meter energy storage (M). (December 2020)

Author: Gianmarco Castiello

- Techno-economical analysis of energy storage participating to electricity markets (M). (December 2020)

Author: Giuseppe Falco

- Experimental analysis of PMU open data from transmission networks (M). (December 2020)

Author: Ernesto Casciano

## **SUMMER SCHOOLS**

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### **PhD schools**

- The path towards grid modernization. (University of Salerno, July 2019)
- Advanced game-theoretic models: Analysis, computation and applications to power markets (Denmark Technical University, May 2019)
- Load forecasting and control. (Politecnico di Torino, September 2018)

### **Others**

- Summer school on energy efficiency (ENEA, Rome, July 2018)