

PERSONAL INFORMATION

Pierluigi Siano



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🌐 <http://docenti.unisa.it/005629/en/curriculum>

Sex M | Date of birth 13/04/1973 | Nationality Italian

(from October 2023 –Present)

Full Professor of Electrical Energy Engineering, Electrical Power Systems

- Department of Management & Innovation Systems, University of Salerno, Via Giovanni Paolo II, 132, Fisciano (SA) - 84084 Italy, <http://docenti.unisa.it/005629/en/curriculum>
- ▪ Scientific Director of the Smart Grids and Smart Cities Laboratory with the Department of Management & Innovation Systems, University of Salerno
- ▪ Professor of Electrical Energy Engineering carrying out both teaching and research activities

(from 2021 – to 2026)

Distinguished Visiting Professor of Electrical Energy Engineering, Electrical Power Systems

Department of Electrical and Electronic Engineering Science, University of Johannesburg, Johannesburg 2006, South Africa

- Professor of Electrical Energy Engineering carrying out both teaching and research activities

Business or sector **Education and Research**

(from 2018 – September 2023)

Associate Professor of Electrical Energy Engineering, Electrical Power Systems

Department of Management & Innovation Systems, University of Salerno, Via Giovanni Paolo II, 132, Fisciano (SA) - 84084 Italy, <http://docenti.unisa.it/005629/en/curriculum>

- Scientific Director of the Smart Grids and Smart Cities Laboratory with the Department of Management & Innovation Systems, University of Salerno
- Professor of Electrical Energy Engineering carrying out both teaching and research activities

Business or sector **Education and Research**

(from 2015 – to 2018)

Associate Professor of Electrical Energy Engineering, Electrical Power Systems

Department of Industrial Engineering, University of Salerno, Via Giovanni Paolo II, 132, Fisciano (SA) - 84084 Italy, <http://docenti.unisa.it/005629/en/curriculum>

- Professor of Electrical Energy Engineering carrying out both teaching and research activities

Business or sector **Education and Research**

(from 2005 – to 2015)

Assistant Professor of Electrical Energy Engineering, Electrical Power Systems

Department of Information and Electrical Engineering (2005-2010) and Department of Industrial Engineering (2011-2015), University of Salerno, Via Giovanni Paolo II, 132, Fisciano (SA) - 84084 Italy, <http://docenti.unisa.it/005629/en/curriculum>

- Professor of Electrical Energy Engineering carrying out both teaching and research activities

Business or sector **Education and Research**

WORK EXPERIENCE
EDUCATION AND TRAINING

[Add separate entries for each course. Start from the most recent.]

(from 2001- to 2005) **Ph.D. degree in information and electrical engineering**
 Department of Information and Electrical Engineering, University of Salerno
 ▪ Power Systems operation and planning, Smart Grids

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2

Communication skills Replace with your communication skills. Specify in what context they were acquired. Example:
 ▪ Very good communication skills gained through my experience as professor

Organisational / managerial skills Replace with your organisational / managerial skills. Specify in what context they were acquired.
 Example:
 ▪ Leadership: currently responsible for a team of 6 people at the University of Salerno

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Driving licence Replace with driving licence category/-ies. Example:
 B

ADDITIONAL INFORMATION

Job-related skills His research activities mainly concern the management and planning of smart cities and smart grids, the development of advanced technologies and smart infrastructures for refuelling or recharging zero-carbon vehicles, the economy and energy management, smart houses, and smart buildings, distributed micro-generation, generation systems from renewable sources. Further research activities are related to safety and security in the field of smart cities and smart grids, artificial intelligence, sustainable urban transport, electric vehicles, and mobility infrastructures.
 In these research fields, he has co-authored more than 760 articles including more than 460 international journals that received in Scopus more than 20200 citations with an H-index equal to 68.

Editorial Activities

Editor of IEEE Access PES Section since 2019
Associate Editor of the IEEE Transactions on Power Systems since 2020
Associate Editor of the IEEE Transactions on Industrial Informatics since 2011
Associate Editor of IEEE Transactions on Industrial Electronics since 2018
Associate Editor of IET Renewable Power Generation since 2018
Editor of the journal Smart Cities, MDPI Publisher since 2018
Editor of Intelligent Industrial Systems, Springer 2014-2017
Guest Editor of IEEE Transactions on Industrial Electronics or Informatics for the following Special Sections:
- IEEE Transactions on Industrial Electronics, SS on Methods and Systems for a Smart Energy City 2017
- IEEE Transactions on Industrial Informatics, SS on Industrial and Commercial Demand Response 2017
- IEEE Transactions on Industrial Informatics and Transactions on Industrial Electronics, SS on New Trends in Intelligent Energy Systems 2013
- IEEE Transactions on Industrial Informatics, SS on Modeling and Simulation of Cyber-Physical Energy Systems 2013
- IEEE Transactions on Industrial Informatics, SS on Information Technologies in Smart Grids 2011
- IEEE Transactions on Industrial Electronics, SS on Smart Devices for Renewable Energy Systems 2010
- IEEE Transactions on Industrial Electronics, SS on Methods and Systems for Smart Grids Optimization 2009
- Journal of Internet Technology – SS on Industrial Applications of Big Data and Internet of Things 2015

Invited speaker at the following conferences/workshops

Renewable Electrical Energy Systems Workshop 2011, Polytechnic University of Catalonia, keynote: Renewable Energy and the Smart Grid
IEEE International Conference on Consumer Electronics 2014, Berlin, keynote: Demand Side Management and Energy Management Systems from a Consumer Electronics perspective
IEEE International Conference on Smart Energy Grid Engineering, 2015, Oshawa, Canada, keynote: Demand Response and Smart Grids
2nd International Conference on Green Energy Technology, 2017, Rome, Italy, keynote: Active Demand Response for Residential Electrical Loads

Activities related to international conferences

Chair of the IEEE IES Technical Committee on Smart Grids since 2017 and a member of the Technical Committee on Renewable Energy Systems of the IEEE IES

Vice Chair of the IEEE IES Technical Committee on Smart Grids from 2013 to 2016 and secretary of the IEEE IES Technical Committee on Smart Grids from 2011 to 2012

Special Sessions Co-Chair of IEEE International Symposium on Industrial Electronics 2010

Special Sessions Co-Chair of IEEE 16th International Conference on Environment and Electrical Engineering, 2016, Florence, Italy

Chair of technical track Power Systems II Demand Side Management, IEEE Industrial Electronics Conference, 2016, Florence, Italy

Vice President of Organizing Committee of the 2016 IEEE Industrial Electronics Conference, Florence, Italy

Special Sessions Co-Chair of IEEE 17th International Conference on Environment and Electrical Engineering, 2017, Milan, Italy

Chair of technical track: Power Systems and Smart Grids, IEEE International Symposium on Industrial Electronics 2018, Cairns, Australia

Chair of technical track Power Systems and Smart Grids, IEEE International Conference on Industrial Technology, 2018, Lyon, France

Technical Chair of IEEE International Conference on Smart Energy Systems and Technologies, 2018, Sevilla, Spain

Special Sessions Chair of 5th International Symposium on Environment-Friendly Energies and Applications, 2018, Rome, Italy

Chair for the technical track Renewable energy and Microgrids, IEEE International Conference on Industrial Electronics for Sustainable Energy Systems, 2018, Hamilton, New Zealand

Chair of the technical track: Technologies and infrastructures for smart grids, buildings, and cities, 16th IEEE International Conference on Industrial Informatics 2018, Porto, Portugal

Guest Editor of the 7th International Conference on Environment and Industrial Innovation, 2017, Kuala Lumpur, Malaysia

Program Chair 2nd International Conference on Green Energy Technology, 2017, Rome, Italy

Co-Chair of the 2017 International Conference on Environmental Science and Sustainable Energy, 2017, Suzhou, China

Technical Programme Chair of the 2nd International conference on Power System Analysis control and Optimization, 2015 Andhra Pradesh, India

Co-chair of the Symposium Advances in Industrial Networks and Intelligent Systems

International Wireless Communications & Mobile Computing Conference, 2016, Cipro

Guest Editor of the 8th International Conference on Environment and Industrial Innovation Shanghai, China, 2018

Scientific coordinator of the unit of the University of Salerno and principal investigator of the following International and National research projects selected for funding based on calls that involved competitive peer review

System for the Residential Energy Savings with Integration of Air Conditioning, funded by the Italian Ministry of Economic Development, 2010-2013, the project activities have taken three years and about 2.2 millions of euro of total cost

Distributed management logics and Devices for electricity savings in active users installations- DEMAND- funded by the Italian Ministry of Economic Development, 2017-2020, twenty months and about 1.4 millions of euro of total cost

Development of mathematical models for hybrid electric vehicles modeling, funded by the Italian Ministry of Universities and Scientific, Technological Research under the Research Initiatives for Young Researchers (2002- 2003)

Integration of New and Renewable Energy into Urban Electrical Networks in collaboration with the Institute for Energy Systems, University of Edinburgh and under the British-Italian partnership programme for young Researchers (2005-2007), funded by the Italian Ministry of Education, University and Research and the British Council, about 14000 euro

"Optimizing and control of smart power grids" 111 project - Higher Education Discipline Innovation Project, funded by the Ministry of Education of China and by the State Administration of Foreign Experts Affairs of China. 2017-2021, five years and about 1.1 millions of euro of total cost

Applied Energy Uni-LAB Smart Grid Market Mechanism (SGMM) in collaboration with Prof. Yi Ding, of College of Electrical Engineering, Zhejiang University, Hangzhou, Zhejiang, China, Prof. Taiyou Yong, China Electric Power Research Institute (CEPRI), China, Prof. Christoph Meinrenken, Columbia University, United States of America. 2016-2020, 48 months

"Re-Energize Governance of Disaster Risk Reduction and Resilience for Sustainable Development" Belmont Forum Collaborative Research Action (CRA) on Disaster Risk, Reduction and Resilience, Full Call Title: DR32019 – Disaster Risk, Reduction, and Resilience (DR3)

Responsibility for DISA MIS for ORs 1.5 and 7.3 / 7.4 in the Borgo project: regional project for the development of the "Sustainable and Safe Mobility" Platform (Borgo 4.0 Project)

Participation to research projects

Scientific Research Program of Relevant National Interest (PRIN) 2002, funded by the Italian Ministry of Education, University and Research and entitled "Information and Communication Technology (ICT) for electric infrastructure operations", with the sub-project "Applying ICT to distribution networks: from the role of "transport provider" to "facilitator of competition". 2003-2004

Scientific Research Program of Relevant National Interest (PRIN) 2005, funded by the Italian Ministry of Education, University and Research and entitled "Tools and methods for evolution of subtransmission and distribution networks in liberalized electricity markets", with the sub-project "Electrical distribution networks: management of both critical operating conditions and Distributed Generation". 2006-2007

Scientific Research Program of Relevant National Interest (PRIN) 2008, funded by the Italian Ministry of Education, University and Research and entitled: "Integration of DG in smart microgrid based on ICT" with the sub-project "Methodologies for innovative management of microgrids in presence of distributed generation from renewable sources based on fourth generation telematic infrastructures". 2010-2012

Research project funded by the UE 7th Framework Programme and entitled: Concerted coordination for the promotion of efficient multimodal interfaces (DELTA)", 2009-2010. 2009-2010

Global Access NETworked Systems Hub (GANESH) – "Development of a hw and sw platform for advanced mobile information services for users of local public transport based on distributed architecture", funded by Regione Campania, "Bando Misura 3.17 del POR Campania 2000/2006". 2008-2010

Railway Systems: Eco-sustainability and Energy Saving under the National Operational Programme (PON) Research and Competitiveness 2007-2013, co-financed by European resources of the European Fund for Regional Development (FESR). 2010-2013

Smart grids with distributed polygeneration systems POR Campania 2007/13- funded by Regione Campania. 2012-2014

Programma di Ricerca Scientifica e Formazione Nazionale dal titolo: "Sistema integrato di comando, controllo, protezione e supervisione di processi di produzione, trasmissione e distribuzione (SCADA integrato Col AdMin) dell'energia elettrica da fonti rinnovabili e non, con interfaccia-periferiche verso campo dei processi, atto all'utilizzo razionale dell'energia elettrica", PON 2007-2013

Programma di Ricerca Scientifica e Formazione Nazionale ammesso ai finanziamenti previsti dal Programma Operativo Nazionale Ricerca e Competitività 2007-2013 dal titolo: "Strumenti e soluzioni innovative a supporto della gestione della manutenzione di reti elettriche in presenza di forte penetrazione di generatori di energia rinnovabile", PON 2007-2013, 2011-2014

Programma di Ricerca Scientifica Nazionale dal titolo "METrologia per l'Energia e le Reti - METER"; BANDO: PON R&C 2007-2013, 2014-2016

Programma di Ricerca Scientifica Nazionale dal titolo "Dispositivi, tecniche e tecnologie abilitanti per le Fonti Energetiche Rinnovabili verso la Green Economy - FERGE"; BANDO: PON R&C 2007-2013, 2013-2016

Programma di Ricerca Scientifica Nazionale dal titolo "CERVIA - Metodi di CERTificazione e Verifica Innovativi ed Avanzati, progetto a valere sullo strumento di finanziamento Bando MIUR "Programma Operativo Nazionale – Ricerca e Competitività (PON "R&C") 2007-2013, 2014–2017.

Member of the International Advisor Program Committee of IEEE International Conference on Consumer Electronics 2014, 2015, 2016 and 2017, Berlin

Member of the editorial board of many international journals. Invited member of more than 50 Technical Program Committees of International Conferences

Reviewers for many national and international research projects

Since 2015 titular professor of full semester courses belonging to the scientific discipline ING-IND/33 - electric systems for energy, subject area 09/E2 - electrical energy engineering

Awards received at national
and/or international level

Since 2019 included among the Highly Cited Researchers list from the ISI Web of Science Group for the Engineering category.

According to a new study by researchers at Stanford University in the US: in year 2017, 2019, 2020 and 2021 he has been ranked among most cited scientists in the world.

As highlighted by the "Essential Science Indicators" of the Web of Science Core Collection of WoS, author of many highly cited papers that have received enough citations to be placed in the top 1% articles of the academic sector of Engineering.

He has been added to the prestigious ranking of Top Scientists (Computer Science & Electronics) at the following URL:

<http://www.guide2research.com/u/pierluigi-siano>

Among Top Italian Scientists of Virtual Italian Academy:

<http://www.topitalianscientists.org/top-italian-scientists/Pierluigi%20Siano>

Since 2014 IEEE Senior Member

In 2010 achievement of award for the superlative job as Special Sessions Co-Chair of IEEE International Symposium on Industrial Electronics 2010

In 2011, 2012 and 2014 achievement of an award for the outstanding contributions to the IEEE Transactions on Industrial Informatics (TII) as Associate Editor received by the Editor-in-Chief of IEEE TII

In 2015 achievement of an award received by the Editor-in-Chief of IEEE Transactions on Industrial Electronics (TIE) in recognition and appreciation for his services as Guest Editor of the IEEE Transactions on Industrial Electronics, and for his timely contributions to its positive impacts on the scientific

Since 2017 elected member of IES Administrative Committee

The article: P. Siano, D. Sarno Assessing the benefits of residential demand response in a real time distribution energy market, 2016 Applied Energy, vol. 161, p. 533-551 received from the editors of Applied Energy the Award of Highly Cited and ESI-Hot Paper in the May/June 2017 Clarivate Analytics Citation Report, Web of Science

The article: P. Siano, Demand response and smart grids - A survey, 2014 Renewable & Sustainable Energy Reviews, vol. 30, pp. 461-478: is the most cited article published since 2012 in the journal articles according to Scopus

As highlighted by the "Essential Science Indicators" of the Web of Science Core Collection of WoS, author of 8 highly cited papers that have received enough citations to be placed in the top 1% articles of the academic sector of Engineering.

The articles have been selected by the editor as "Feature Paper--high-quality paper and greatly recommended":

- P. Siano et alii, A Decentralized Multi-Agent-Based Approach for Low Voltage Microgrid Restoration, Energies 2017, 10(10), 1491

- P. Siano et alii, Constant Power Loads (CPL) with Microgrids: Problem Definition, Stability Analysis and Compensation Techniques, Energies 2017, 10(10), 1656