

## **Curriculum di Pierluigi Siano (versione breve)**

**Pierluigi Siano** è professore associato di Sistemi Elettrici per l'Energia presso l'Università degli Studi di Salerno. Nel 2013 e nel 2018 ha conseguito l'abilitazione scientifica nazionale alle funzioni di professore di prima fascia. Le sue attività di ricerca riguardano principalmente la gestione e la pianificazione delle smart city e delle smart grid, l'economia e la gestione dell'energia, le smart house e gli smart building, la microgenerazione distribuita, i sistemi di generazione da fonti rinnovabili. Ulteriori attività di ricerca sono relative alla safety e alla security nell'ambito delle smart cities e delle smart grid, all'intelligenza artificiale, al trasporto urbano sostenibile, ai veicoli elettrici e alle infrastrutture per la mobilità.

In tali ambiti di ricerca è stato coordinatore di progetti di ricerca internazionali e nazionali tra cui "Sistema per la Razionalizzazione energetica Residenziale con integrazione del Condizionamento Estivo (SIRRCE)" e "Distributed management logics and Devices for electricity savings in active users installations (DEMAND)", finanziati dal Ministero dello Sviluppo Economico (MISE). È autore di più di 400 lavori scientifici su rivista internazionale, volumi e convegni internazionali che hanno ricevuto oltre 8500 citazioni con un H-index pari a 45. È stato Chair della IEEE IES Technical Committee sulle Smart Grids, è stato Chair di numerose Conferenze Internazionali.

Editor della rivista internazionale Smart Cities, associate editor delle riviste internazionali IEEE Transactions on Industrial Informatics, IEEE Transactions on Industrial Electronics e IET Renewable Power Generation.

### Citazioni

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

Italian national financial support from Fund for the financing of basic research activities (FFARB) 2017 received due to the competitive evaluation of authored journals in the period 2012-2016

### **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
- IEEE International Conference on Consumer Electronics – Berlin ("ICCE-Berlin"), 2-5 September, 2018, Berlin, Germany keynote "Demand response and transactive energy exchanges"

- ICRERA 2018, 7th International Conference on Renewable Energy Research and Applications, October 14-17, 2018, Paris/France keynote “A transactive energy approach for energy management in smart buildings”

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

In 2011 and 2016 acknowledgment by the Council of Canadian Academies as an author of one of the top 1% most highly cited papers in the field of power systems worldwide and evaluator of the geographical distribution of research strengths in the field of power systems in Canada

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

Professor of short courses related to Demand Response e le Smart Grid at the University of Beira Interior, University College London, Imperial College, Polytechnic University of Catalonia, Zhejiang University, China

**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, 2017-2019, two years 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

#### **Awards received at national and/or international level**

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

Among Top Italian Scientists of Virtual Italian Academy

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

Certificate of appreciation for the keynote "Demand response and transactive energy exchanges", IEEE International Conference on Consumer Electronics – Berlin ("ICCE-Berlin"), 2-5 September, 2018, Berlin, Germany.

Appreciation Certificate for the keynote "A transactive energy approach for energy management in smart buildings" ICRERA 2018, 7th International Conference on Renewable Energy Research and Applications, October 14-17, 2018, Paris/France.

He has been Professor at University of Salerno of the following courses:

- Smart Grids and Smart Cities (2019-Present)
- Electrical Systems I (2005)
- Technology and economics of energy (2005-2017)
- Electrical Systems II (2006)
- Automation for Power Systems and Power Plants (2007-2009)
- Energy Management (2011-2018)
- Laboratory of Technology and economics of energy (2011-2012)