

Luigi Piegari

Dipartimento di Elettronica, Informazione e Bioingegneria
Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milano

Education and work experience

- ✓ From May 1st 2013 he is associate professor of electrical machines, converters and drives (ING-IND/32) at the Politecnico di Milano (Department of Electronics, Information and Bioengineering)
- ✓ In November 2010 he took the qualification of Associate professor in Electrical Machines, Converters and Drives
- ✓ In December 2008 he won the position of assistant researcher at the Politecnico di Milano
- ✓ From 2003 to 2008 he was research fellow at the Department of Electrical Engineering, University of Naples Federico II
- ✓ in February 2003 he took the PhD degree in Electrical Engineering at the University of Naples “Federico II” supporting the thesis on “*Operation of asynchronous machine as a generator*”
- ✓ in May 1999 he won a scholarship on the subject “Analyses techniques to build a database concerning the use of electrical and hybrid electrical systems for vehicles sponsored by Associazione Tecnica dell’Automobile
- ✓ in February 29th 1999, he took the master degree with laude in Electrical Engineering at the University of Naples “Federico II” (thesis on “*Control of asynchronous motors for cableway plants*”)
- ✓ in 1993 he took the high school diploma at the Scientific Liceum G. Mercalli of Naples with the score of 60/60

Publications

- ✓ he is, at present, author and/or co-author of 1 book, 2 book chapter, 2 international patent, more than 40 scientific papers published on international reviews and more than 100 scientific papers published on proceedings of international conferences.
- ✓ His bibliometric indicators are: Scopus: $h\text{-index} = 22 - citations = 2024$, WOS: $h\text{-index} = 15 - citations = 1175$, Google scholar: $h\text{-index} = 24 - citations = 2637$

Responsibility in research projects and contracts

- ✓ he is local **PI** for the unit of the Department of Electronics, Information and Bioengineering for the project *Heart* financed in the call H2020–EEB-2016-2017 (budget for the research unit ~120k€)
- ✓ he was **PI** for the unit of the Politecnico di Milano for the project *Autodrive* supported by the EU ECSEL-JU in the call ECSEL-2016 (budget for the research unit ~100k€)
- ✓ he is **responsible** for the research contract “Modular Multilevel Converters for Storage Integration” with NHOA Energy (budget ~110k€)
- ✓ he is **responsible** for the research contract “Dimensionamento, realizzazione, programmazione e test di inverter per la premagnetizzazione di trasformatori MT/BT” with TMC Transformers (budget for the research unit ~15k€)
- ✓ in 2021 he was **responsible** for the research contract “Modellazione dinamica di impianto di media tensione per connessione campo fotovoltaico alla rete” with Siemens (budget 15k€)

- ✓ in 2018-2020 he was **responsible** for the research contract “Studio e realizzazione prototipale di azionamento elettrico per applicazioni avioniche” with Fondazione Foresio (budget for the research unit ~45k€)
- ✓ in 2019-2020 he was **responsible** for 2 research contracts “Trasmissione wireless della potenza per l'alimentazione di macchine da bilanciamento” with Balance Systems srl (budget for the research unit ~18k€)
- ✓ in 2018 he was **responsible** for the research contract “ottimizzazione del prodotto Rotocord” with Fondazione Politecnico (budget for the research unit ~19k€)
- ✓ in 2018 he was **responsible** for the research contract “Analisi dell’integrazione di criteri di selettività logica con il componente d’interruzione ibrido” with RSE (budget for the research unit ~15k€)
- ✓ in 2018 he was **responsible** for the research contract “Apparecchi elettrici per applicazioni avanzate” with ABB SACE (budget for the research unit ~15k€)
- ✓ in 2017 he was **responsible** for the research contract “Sicurezza elettrica delle reti in corrente continua: sviluppo e realizzazione di un componente d’interruzione ibrido per reti di bassa tensione in corrente continua” with RSE (budget for the research unit ~20k€)
- ✓ in 2017 he was **responsible** for the research contract with Balance systems srl titled “Ring Balancer” (budget for the research unit ~70k€)
- ✓ in 2015 he was **responsible** for three research contracts with Fondazione Politecnico for the “optimal use of lead acid batteries” (budget for the research unit ~60k€)
- ✓ in 2014 he was **responsible** for the research contract with Balance systems srl titled “Trasmissione wireless della potenza per l'alimentazione di macchine da bilanciamento” (budget for the research unit ~8k€)
- ✓ in 2013 he was **responsible** for the research contract with ENEL Ingegneria e Ricerca SpA titled “Diagnosi guasto alternatore central Reftinsky per corto circuito barre di statore e valutazione di eventuali test di verifica integrità sulle stesse” (budget for the research unit ~2k€)
- ✓ in 2012-2013 he was **responsible** for a research contract with the Department of Electrical Engineering of the University of Naples in the framework of the national research project “PON 01_00595- Sistemi Ferroviari Ecosostenibilità e Risparmio Energetico” financed by the Italian Ministry of Economical Development (budget for the research unit ~65k€)

Activity for editorial boards and international conference organizations

- ✓ he is associate editor of the *IEEE Journal of Emerging and Selected Topics in Industrial Electronics* (JESTIE) since 2019
- ✓ he is in the Editorial Board of the Journal *Energies*, MDPI, since 2020
- ✓ he is in the Editorial Board of the *Journal of Electrical and Computer Engineering*, Hindawi, since 2018
- ✓ he is the general co-chair of the *IEEE-IES CPE-POWERENG 2022* conference.
- ✓ he was the general co-chair of the *IEEE-IES CPE-POWERENG 2021* conference.
- ✓ he was the Technical Program Chair of the 4th, 5th, 6th and 7th International Conference on Clean Electrical Power (ICCEP), co-sponsored by the *IEEE Industrial Electronics Society* in 2013, 2015, 2017 and 2019
- ✓ since 2006 he is in the Organizing Committee of the International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM), co-sponsored by the *IEEE Industrial Electronics Society*, the *IEEE Power and Energy Society*, the IEEE Power Electronics Society and the IEEE Industry Application Society
- ✓ he was Conference secretary of the 1st, 2nd and 3rd 7th International Conference on Clean Electrical Power (ICCEP), co-sponsored by the *IEEE Industrial Electronics Society*, in 2007, 2009 and 2011