



# Alessandro Liotta

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## Education

**High School Degree** Sep 2012 – Jul 2017

Liceo Scientifico "Archimede", Acireale

**Grade:** 99/100

**Bachelor's Degree in Electronic Engineering** Oct 2017 – Jul 2020

University of Catania, Catania

**Thesis Title:** "Second-Order Bandpass Filter Implemented Through Two-Integrator Biquad Tow-Thomas Circuit"

**Grade:** 110/110

**Master's Degree in Electronic Engineering** Oct 2019 – Oct 2021

University of Pavia, Pavia

**Thesis Title:** "Design of an LLC Resonant DC-DC Converter with MOSFET Active Rectifier"

**Grade:** 110/110 Summa Cum Laude

**Ph.D. in Microelectronics (XXXVII Cycle)** Oct 2021 – Present

University of Pavia, Pavia

**Topic:** Design of a Capacitive-Inductive Multi-Channel Simultaneous Wireless Information and Power Transfer (SWIPT) System.

## Teaching Activities

**Experience as Tutor** Present

47 hours for the "Elettronica I" course at University of Pavia (exercises at the blackboard, assistance during laboratory activities, assistance during exams)

**Experience as Tutor** Present

22 hours for the "Circuiti Elettrici Lineari" course at University of Pavia (exercises at the blackboard, assistance during laboratory activities, assistance during exams)

## Publications

A. Liotta, G. Frattini, P. Giannelli, E. Bonizzoni and P. Malcovati, "Design of an LLC Resonant DC-DC Converter with MOSFET-Based Active Rectifier", 2022 17th Conference on Ph.D Research in Microelectronics and Electronics (PRIME), Villasimius, SU, Italy, 2022, pp. 245-248.

A. Liotta, E. Moisélo, G. Frattini, P. Giannelli, P. Malcovati and E. Bonizzoni, "A Novel Capacitive-Inductive Channel for Wireless Power and Data Transmission", 2023 IEEE International Symposium on Circuits and Systems (ISCAS), Monterey, CA, USA, 2023, pp. 1-5.

## Personal details

Date of birth

June 5, 1997

Driver's license

Italian License Type B

Nationality

Italian

## Skills

Cadence Virtuoso



Matlab



KiCad



Ansys HFSS



Measurement Instrumentations



Microsoft Office Suite Programs



LaTeX



Windows and Linux Operative Systems



## Languages

Italian



English



E. Moisello, **A. Liotta**, P. Malcovati and E. Bonizzoni, "**Recent Trends and Challenges in Near-Field Wireless Power Transfer Systems**", in IEEE Open Journal of the Solid-State Circuits Society.

**A. Liotta**, E. Moisello, G. Frattini, P. Giannelli, P. Malcovati and E. Bonizzoni, "**An S-Matrix-Based Model of a Capacitive-Inductive Channel for Wireless Power and Data Transmission**", accepted in IEEE 30th International Conference on Electronics, Circuits and Systems (ICECS), Istanbul, Turkey, 2023.