

## Consorzio Interuniversitario Nazionale per Energia e Sistemi Elettrici Sezione di Torino

## Curriculum vitae February 2023

## **GABRIELE MALGAROLI**

Politecnico di Torino, Dipartimento Energia "Galileo Ferraris" Corso Duca degli Abruzzi 24, 10129 Torino, (Italy) gabriele.malgaroli@polito.it

He graduated in Energy Engineering (bachelor degree) in 2015 at Politecnico di Torino.

He graduated in Energy and Nuclear Engineering (Master degree) in 2017 at Politecnico di Torino.

He obtained the Ph. D. in Electrical, Electronics and Communications Engineering, at Politecnico di Torino in 2022 (thesis title: "Innovative Model based on the Irradiance-Temperature Fitting of Equivalent Circuit Parameters for Commercial Photovoltaic Modules towards Accurate Power and Energy Prediction").

He is currently a Research Fellow in Energy Department (Politecnico di Torino). His research activities include the development of an energy model for accurate energy and power prediction using equivalent circuit's parameters, the integration of such a model into DC/AC converters to realize a real-time detection of defects or failures in photovoltaic systems, and the performance analysis of photovoltaic generators with innovative technology by means of long-term experimental campaigns.

Currently, he collaborates for conducting laboratories with the teachers of the courses "Generazione fotovoltaica ed eolica di energia elettrica", and "Solar Photovoltaic Systems", held at Politecnico di Torino.

He is co-author of 24 articles published in international journals and in national and international conference proceedings. He is also co-author of one book chapter.

He is IEEE member.

Participates in the European project 'Training Hub for Renewable Energy Technologies in Sri Lanka-THREE LANKA'.

WEB Site: https://www.swas.polito.it/rubrica/scheda\_pers.asp?matricola=050218