

EDUCATION - Double Degree Master Program

2020-2023 **Doctoral program in Physics,**

*Istituto Italiano di Tecnologia - Center for Nano Science and Technology
Politecnico di Milano,*

Development and characterization of the growth process of thin film perovskites through vapor deposition. Study of photophysical properties of perovskite semiconductors elucidated as a function of their chemical and structural characteristics. Investigation of charge carrier dynamics by time-resolved spectroscopy and photoemission electron microscopy.

Dec 2019 **MASTER'S DEGREE IN ENGINEERING PHYSICS - Nanophysics and nanotechnology,**

Politecnico di Milano, Grade: 110/110.

Feb 2020 **MASTER'S DEGREE IN NANO, OPTO-ELECTRONICS ,**

Joint Master of École polytechnique de Bruxelles (ULB) and the Faculty of Eng. Sciences(VUB), Grade: LPGD.

Oct 2016 **BACHELOR IN ENGINEERING PHYSICS,**

Politecnico di Milano, Grade: 105/110

WORK EXPERIENCE

- **TECHNICAL STUDENT AT CERN - 1 year**

- **Surface analysis and thin films for UHV group - Master Thesis project.**

- Characterization of composite materials for UHV. Correlation of degassing properties in UHV through mass spectroscopy and microstructural and crystallographic characterization. Realization and characterization of metallic coatings deposited through magnetron sputtering in DC and HiPIMS configurations. Development of models to simulate TDS desorption curves.

- **GOLD NANOPARTICLES CHARACTERIZATION BY MEANS OF OPTICAL MICROSCOPY AND SURFACE PROBE MICROSCOPY TECHNIQUES**

- **Bachelor Thesis at Politecnico di Milano.** Characterization of gold nanoparticles with AFM, SNOM and confocal microscopy.

PROGRAMMING LANGUAGES

- **Software:** Matlab, C/C++, LabView, R, Assembly, LateX.
- **Hardware:** VHDL.

LANGUAGES

- **Italian:** mother tongue.
- **English:** level C1
- **French:** level B2

EXTRA ACTIVITIES

- SMART-X OSA Student Chapter member.
- Tutor in Physics, Math and Chemistry to middle and high-school students.