

# Gaia De Maria

#### **WORK EXPERIENCE**

## ☑ Sapienza-University of Rome – Rome, Italy

City: Rome | Country: Italy

#### **INTERNSHIP**

[01/05/2024 - 26/03/2025]

- Performed spectroscopy experiments using femtosecond lasers for Stimulated Raman Scattering (SRS) measurements.
- Carried out low-temperature measurements using liquid nitrogen cryogenic setups.
- Synthesized organic samples.
- Analyzed and interpreted experimental data to extract physical insights and validate theoretical models
- Simulated nonlinear optical responses using MATLAB for comparison with experimental results

## International Conference on Raman Spectroscopy-ICORS 2024 - Rome, Italy

City: Rome | Country: Italy

#### **VOLUNTEER**

[ 28/07/2024 - 02/08/2024 ]

- Welcoming and registering participants at the entrance.
- Assisting speakers and guests with logistics and setup.
- · Helping with technical support.

## **EDUCATION AND TRAINING**

#### Master's degree

**Sapienza University of Rome** [ 15/01/2019 – 26/03/2025 ]

City: Rome | Country: Italy | Website: <a href="https://www.phys.uniroma1.it/en">https://www.phys.uniroma1.it/en</a> | Field(s) of study: Condensed Matter Physics | Final grade: 110 with honors/110 | Type of credits: ECTS | Number of credits: 120 | Thesis: Temperature dependence of Stimulated Resonant Raman Scattering: Theory and Experiment.

#### List of developed skills:

In-depth knowledge of modern condensed matter physics.

Skills in modern instrumentation and experimental techniques, in the data collection and analysis procedures as well as in model building.

Knowledge of specific scientific and technical terminology.

Analysis and production of scientific content.

Clearly and effectively convey information, ideas, problems, and solutions, both orally and in writing.

## **List of Completed Exams:**

PHYSICS LABORATORY I (FIS/01) 30 with honors/30

PHYSICS LABORATORY II (FIS/01) 30/30

CONDENSED MATTER PHYSICS (FIS/03) 29/30

ATOMISTIC SIMULATIONS (INF/01) 30 with honors/30

MATHEMATICAL PHYSICS (MAT/07) 30/30

PHOTONICS (FIS/03) 30 with honors/30

RELATIVISTIC QUANTUM MECHANICS (FIS/02) 30/30

SURFACE PHYSICS AND NANOSTRUCTURES (FIS/03) 28/30

SPECTROSCOPY METHODS AND NANOPHOTONICS (FIS/03) 30 with honors/30

STATISTICAL MECHANICS AND CRITICAL PHENOMENA (FIS/02) 30 with honors/30

SOLID STATE PHYSICS (FIS/03) 29/30

PHYSICS OF MANY BODIES SYSTEMS (FIS/03) 30 with honors/30

**ENGLISH LANGUAGE qualified** 

## **Bachelor's degree**

**Sapienza University of Rome** [ 09/2013 – 14/01/2019 ]

City: Rome | Country: Italy | Field(s) of study: Physics | Final grade: 108/110 | Level in EQF: EQF level 6 | Type of credits: ECTS | Number of credits: 180 | Thesis: Spettroscopia Raman Surface-Enhanced di dimeri plasmonici assemblati tramite DNA origami.

# **HIGH SCHOOL DIPLOMA**

Liceo Scientifico G. Checcia Rispoli-Tondi [ 2008 – 2013 ]

City: San Severo | Country: Italy | Final grade: 98/100 | Level in EQF: EQF level 4

### **LANGUAGE SKILLS**

Mother tongue(s): Italian

Other language(s):

**English** 

LISTENING C1 READING C1 WRITING B2

**SPOKEN PRODUCTION B2 SPOKEN INTERACTION C1** 

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

### **SKILLS**

Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access / programming languages: C, Phyton / MATLAB / Statistical programming R programming language

## **DRIVING LICENCE**

**Driving Licence:** B