



PERSONAL INFORMATION Yassine Alaya



## EDUCATION AND TRAINING

2020–2024 PhD: Physics of Material and Nanomaterial  
Faculty of Science of Gabes, Gabes (Tunisia)

2018–2020 Master of Research in Physics of Materials and Nanomaterials  
Faculty of Sciences of Gabes, Gabes (Tunisia)

2014–2018 Bachelor's degree in Physics  
Faculty of Sciences, Gabes (Tunisia)

Jun 2014–Present Baccalaureate  
Ghannouch High School, Gabes (Tunisia)

## Conference

- Symposium on Energetic Systems and Materials (SESM) "Photoconductive application of sprayed TiO<sub>2</sub> thin films"
- Y. Alaya, R. Souissi, M. Toumi, M. Madani, N. Bouguila, L. El Mir, S. Alaya
- International Conference on Smart Materials and Spectroscopy (SMS'2022) "Influence of annealing temperature on the properties of TiO<sub>2</sub> films deposited by spray pyrolysis"
- Y. Alaya, N. Bouguila, L. El Mir, S. Alaya
- 3rd International Congress on Energetic and Environmental Systems (IEES-2023) "Photoconductive application of sprayed TiS<sub>2</sub> thin films"
- Y. Alaya, N. Bouguila, L. El Mir, S. Alaya

## Publications

**1/ Y. Alaya**, R. Souissi, M. Toumi, M. Madani, L. El Mir, N. Bouguila and S. Alaya, Annealing effect on the physical properties of TiO<sub>2</sub> thin films deposited by spray pyrolysis, RSC Adv.,2023,13,21852; "DOI:10.1039/D3RA02387G"

**2/ Y. Alaya**, B. Chouchene, G. Medjahdi, L. Balan, N. Bouguila, and R. Schneider, Heterostructured S-TiO<sub>2</sub>/g-C<sub>3</sub>N<sub>4</sub> Photocatalysts with High Visible Light Photocatalytic Activity, Catalysts 2024, 14, 226 "doi.org/10.3390/catal14040226".

**3/ •Alaya**, Y.; Madani, M.; Bouguila, N.; El Mir, L.; Fazio, E.; Corsaro, C.; Neri, G. Conductometric H<sub>2</sub>S Sensors Based on TiO<sub>2</sub> Nanoparticles. Materials 2024 "doi.org/10.3390/ma17133283".

### **Job-related skills**

- Physics education..
- Training: Writing an article, English.
- Elaboration of nanoporous by the sol-gel method.
- Elaboration of thin layers by spray pyrolysis, Dip-Coating and Spin-Coating...
- Use the Autoclave machine.
- Use the UV-Vis-NIR spectroscopy machine.
- Use the impedance spectroscopy machine.
- Use the gas sensor machine.

### **Internship 2 months in:**

- Laboratoire Réactions et Génie des Procédés (LRGP) (UMR 7274), Nancy, France
- Université de Messine, Département d'ingénierie, SensorLab, Italie

### **Digital skills**

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- Word
- Excel
- PowerPoint
- Origin
- Matlab
- HighScore
- FullProf.
- .....

### **Other skills**

- Creative writing (Arab), reading.
- Sport activity: Swimming, walking sport.
- Shopping.