

CURRICULUM VITAE

Antonia Kagkoura

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EDUCATION

- Ph.D. in Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, Greece (2019)
- M.Res. in Materials Science, School of Engineering, University of Edinburgh, Scotland (2015)
- B.Sc. in Materials Science, Department of Materials Science, University of Patras, Greece (2013)

PROFESSIONAL EXPERIENCE AND APPOINTMENTS

11/2019 – present: Post-Doctoral Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

MAIN RESEARCH INTERESTS

- Synthesis of hybrid materials based on 2D materials (graphene, transition metal dichalcogenides)
- Materials characterization via spectroscopic means (UV-Vis, photoluminescence, time-correlated single photon counting, ATR-IR, Raman)
- Evaluation of electrocatalytic performance of novel electrode materials via advanced electrochemical tools

EXTERNAL FUNDING

- EPAnEK, Title: "Innovative Industrial Materials with Advanced Multifunctionality, Prolonged Lifetime and Improved Performance Against Environmental

Conditions for Versatile Protective Equipment,” Acronym: PROTECT, co-financed by Greece and the European Union, Funding Organization: NSRF 2014-2020.

- Post-doc scholarship from Greek State Scholarships Foundation (IKY). Title: “Hybrid materials based on carbon nanohorns and transition metal dichalcogenides as electrocatalysts for hydrogen evolution reaction”, Funding Organization: IKY.
- Marie-Curie PhD fellowship, Enabling Excellence ITN, 2015-2018, Funding Organization: Horizon 2020.

CONFERENCES & PUBLICATIONS

5 international and 1 national conference, 12 peer-reviewed publications.

SELECTED PUBLICATIONS

1. “Controlled chemical functionalization toward 3D-2D carbon nanohorn-MoS₂ heterostructures with enhanced electrocatalytic activity for protons reduction”, A. Kagkoura, R. Arenal. N. Tagmatarchis, *Adv. Funct. Mater.* **31**, 2105287 (2021). DOI: [10.1002/adfm.202105287](https://doi.org/10.1002/adfm.202105287)
2. “Sulfur-Doped Carbon Nanohorn Bifunctional Electrocatalyst for Water Splitting”, A. Kagkoura, R. Arenal. N. Tagmatarchis, *Nanomaterials* **10**, 2416 (2020). DOI: [10.3390/nano10122416](https://doi.org/10.3390/nano10122416)
3. “Carbon Nanohorn-Based Electrocatalysts for Energy Conversion”, A. Kagkoura, N. Tagmatarchis, *Nanomaterials* **10**, 1407, (2020). DOI: [10.3390/nano10071407](https://doi.org/10.3390/nano10071407)
4. “Bottom-Up Synthesized MoS₂ Interfacing Polymer Carbon Nanodots with Electrocatalytic Activity for Hydrogen Evolution”, A. Kagkoura, R. Canton-Vitoria, L. Vallan, J. Hernandez-Ferrer, A. M. Benito, W. K. Maser, R. Arenal and N. Tagmatarchis, *Chem. Eur. J* **26**, 6635, (2020). DOI: [10.1002/chem.202000125](https://doi.org/10.1002/chem.202000125)
5. “Sulfur-Doped Graphene/Transition Metal Dichalcogenide Heterostructured Hybrids with Electrocatalytic Activity Toward the Hydrogen Evolution Reaction”, A. Kagkoura, M. Pelaez-Fernandez, R. Arenal and N. Tagmatarchis, *Nanoscale Adv.* **1**, 1489, (2019). DOI: [10.1039/C8NA00130H](https://doi.org/10.1039/C8NA00130H)
6. “Template Synthesis of Defect-Rich MoS₂-Based Assemblies as Electrocatalytic Platforms for Hydrogen Evolution Reaction”, A. Kagkoura, I. Tzanidis, V. Dracopoulos, N. Tagmatarchis and D. Tasis, *Chem. Commun.* **55**, 2078 (2019). DOI: [10.1039/C9CC00051H](https://doi.org/10.1039/C9CC00051H)
7. “Self-Assembled Core-Shell CdTe/Poly(3-hexylthiophene) Nanoensembles as Novel Donor-Acceptor Light-Harvesting Systems”, E. Istif, A. Kagkoura, J. Hernandez-Ferrer, A. Stergiou, T. Skaltsas, R. Arenal, A. M. Benito, W. K. Maser and N. Tagmatarchis,

ACS Appl. Mater. Interfaces 9, 44695 (2017). DOI: [10.1021/acsami.7b13506](https://doi.org/10.1021/acsami.7b13506)