

Nicolò Rossetti

I am a Material Scientist with expertise on novel catalysts for renewable energy applications, from laboratory synthesis, through chemical and physical characterization, to field application. I work on new Single Atom Catalysts (SACs) supported on different carbon materials, such as carbon nitride, organic polymers, COFs and carbon nanotubes. My expertise extends from the design of the new material, through the chemical synthesis to the physical-chemical characterizations (SEM, TEM, XRD, IR, Uv-Vis, XPS, XAS) and the electrochemical application. In-situ/operando and post-catalysis characterizations are critical to fully understanding the new material's ability to stabilize single metal atoms.

In 2019 I obtained the bachelor's degree in Material Science and in 2021 master's degree in Material Science at the University of Padua, with the thesis: *Development of sustainable electrocatalysts for green hydrogen production*. From 2022, I am PhD student in Material Science and Technology at the Department of Chemical Sciences, University of Padua, under the supervision of Prof. Laura Calvillo.