Silvia COLELLA - CV

Silvia Colella graduated in Industrial Chemistry at the University of Bologna, she received her PhD in "Nanoscience" at National Nanotechnology Laboratory –NNL (Lecce), in 2010. She has worked in various academic and industrial environment, at the Westfälische Wilhelms-Universität of Münster (Germany), at the Institut de science et ingénierie supramoléculaires (ISIS) in Strasbourg, France, at BASF – The Chemical Company (Strasbourg). In 2012 she moved to Lecce at the Nanotechnology institute of CNR, where she started from scratch a new line of investigation on the rationalization, design and device integration of metal halide perovskite-based materials. She is recognized for a few seminal works contributing to the understanding of fundamental device working mechanism and of the material formation equilibria, for the fundamental study of the perovskite inks solution chemistry, for the additive engineering of perovskite inks for large area deposition. In 2020 she moved to the Nanotechnology Institute of CNR (NANOTEC) in Bari, where she expanded her activity to perovskite-based solar conversion into fuels, designing novel metal halide perovskite materials for photocatalyzing hydrogen evolution from aqueous solutions and organic reactions in unconventional solvents.

SC is author of 2 patents and >80 peer-reviewed publications in renowned international journals (including Energy and Environmental Science, Chem, Advanced Materials, ACS Energy Letters) with 4500 citations.

Winner of 2023 ENI Awards for innovation, she was invited as speaker in international conferences (MRS-Brazil Rio de Janeiro 2015, Materials Catania 2016, Innovative Materials for Energy, Messina 2021), Indian institute of Rorkee (India), MRS Spring meeting in Seattle (2024), MATSUS 2024 in Barcelona, as lecturer in various universities and research centers.