Tin and copper-based catalysts for CO₂ reduction

Angelica Chiodoni, Center for Sustainable Future Technologies @ PoliTo, Istituto Italiano di Tecnologia, C.so Trento 21, 10129 Torino (Italy)

The concerns caused by the increasing CO₂ concentration in the atmosphere has addressed the research towards the tailoring of physical, chemical or chemical/physical properties through nanostructuration of materials. In this framework, nanostructured photo-electro catalysts are here proposed to exploit the CO₂ as raw material to obtain added-value products. In particular, nanostructured Sn and Cu based-oxides are proposed as electrocatalysts for the CO₂ reduction reaction to obtain formic acid and CO, respectively.