

Cu-Metalated Porphyrin-Based MOFs Coupled with Anatase as Photocatalysts for CO₂ Reduction: The Effect of Metalation Proportion

Maria Anagnostopoulou ¹, Valérie Keller ¹ and Konstantinos C. Christoforidis ^{1,2,3,*}

¹ Institut de Chimie et Procédés Pour l'Energie, l'Environnement et la Santé, (ICPEES)
UMR7515 CNRS, ECPM, University of Strasbourg, 25 Rue Becquerel, Cedex 2, 67084
Strasbourg, France;
managnostopoulou@unistra.fr (M.A.); vkeller@unistra.fr (V.K.)

² Department of Environmental Engineering, Democritus University of Thrace, Vas. Sofias 12,
67132 Xanthi, Greece

³ Chemical Process & Energy Resources Institute, Centre for Research & Technology Hellas,
57001 Thessaloniki, Greece

* Correspondence: kochristo@env.duth.gr

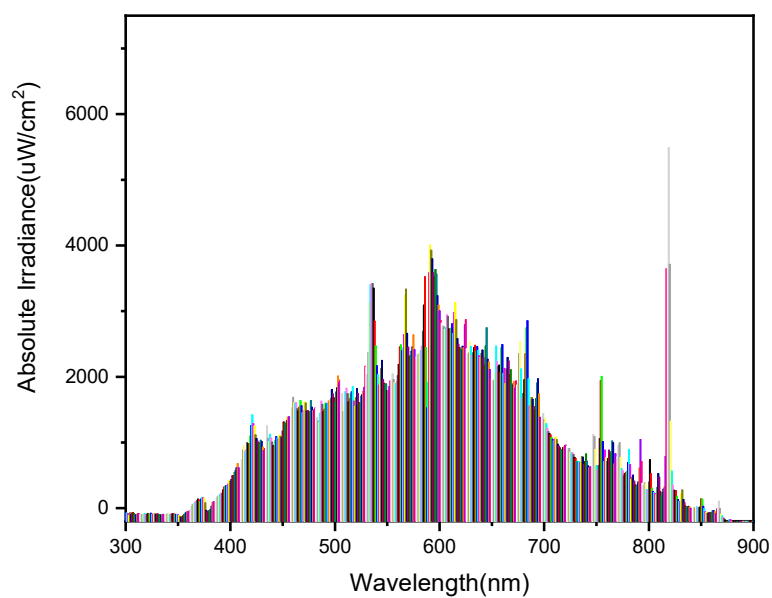


Figure S1. Irradiance spectra of the lamp used for the catalytic reactions.

Supplementary Material

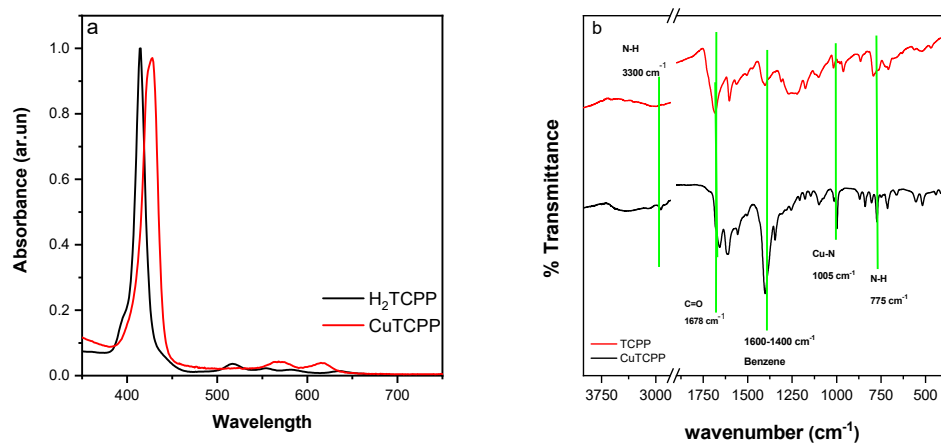


Figure S2. UV-Vis (a) and ATR (b) spectra of the of the free-base H₂TCPP and the metalated CuTCPP complex.

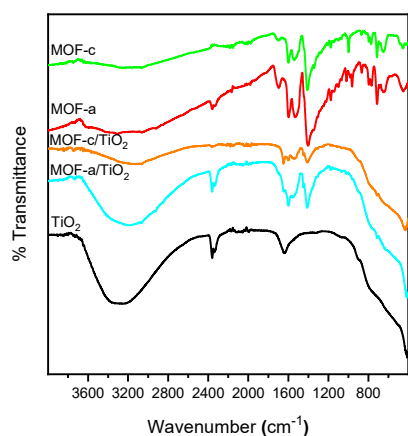


Figure S3. ATR spectra of TiO₂, pure MOFs and composite nanomaterials.

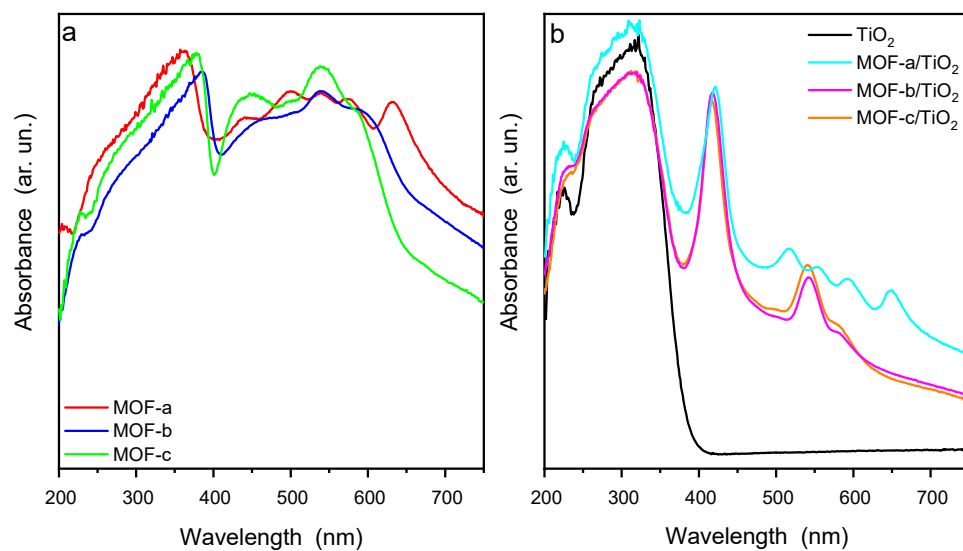


Figure S4. DR-UV-Vis spectra of the pure MOFs (a) and the TiO₂ and composite materials (b).

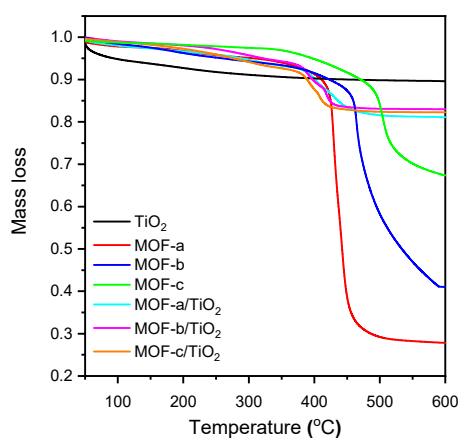


Figure S5. TGA profile of TiO₂, synthesized MOFs and composite materials.

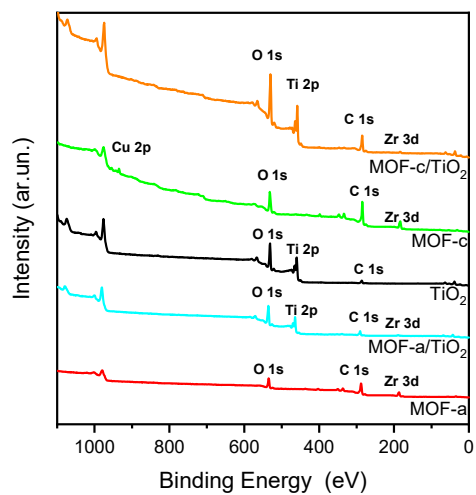


Figure S6. Survey spectra of TiO₂, MOFs and composite materials.

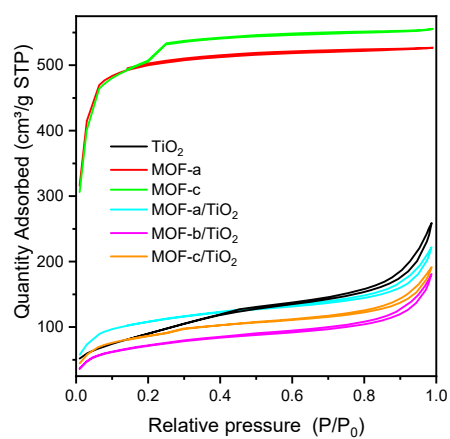


Figure S7. Nitrogen sorption/desorption isotherms of the prepared materials

Supplementary Material

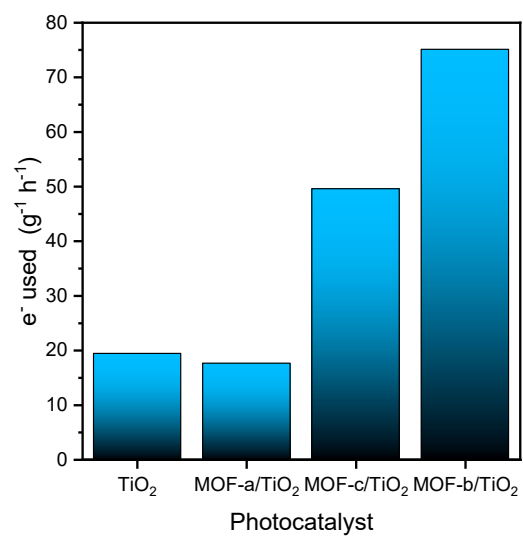


Figure S8. Number of e⁻ utilized by the catalysts