

Article

Hexacyano Ferrate (III) Reduction by Electron Transfer Induced by Plasmonic Catalysis on Gold Nanoparticles

Iyad Sarhid ¹ Isabelle Lampre ^{1,*} Diana Dragoie ² Patricia Beaunier ³ Bruno Palpant ⁴ and Hynd Remita ^{1,5,*}

¹ Laboratoire de Chimie Physique, Université Paris-Sud, UMR 8000 CNRS, Université Paris-Saclay, 91405 Orsay, France

² Institut de Chimie Moléculaire et des Matériaux, Université Paris-Sud, UMR 8182 CNRS, Université Paris-Saclay, 91405 Orsay, France

³ Sorbonne Université, CNRS, Laboratoire de Réactivité de Surface, UMR 7197, F-75005 Paris Cedex 05, France

⁴ Laboratoire de Photonique Quantique et Moléculaire, UMR 8537 CentraleSupélec/Ecole Normale Supérieure Paris-Saclay/CNRS, Université Paris Saclay, 91190 Gif-sur-Yvette, France

⁵ CNRS, Laboratoire de Chimie Physique, UMR 8000 Université Paris-Sud, Université Paris-Saclay, 91405 Orsay, France

* Correspondence: Isabelle.lampre@u-psud.fr (I.L.); hynd.remita@u-psud.fr (H.R.)

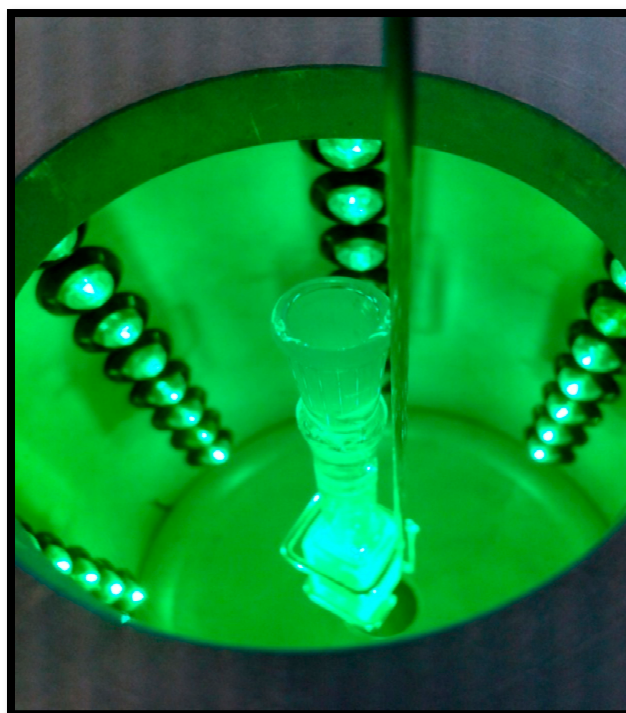


Figure S1. Photograph of the set-up used for light irradiation of the samples; homemade cylindrical photo-reactor equipped with 525 nm LEDs (Light Emitting Diodes).

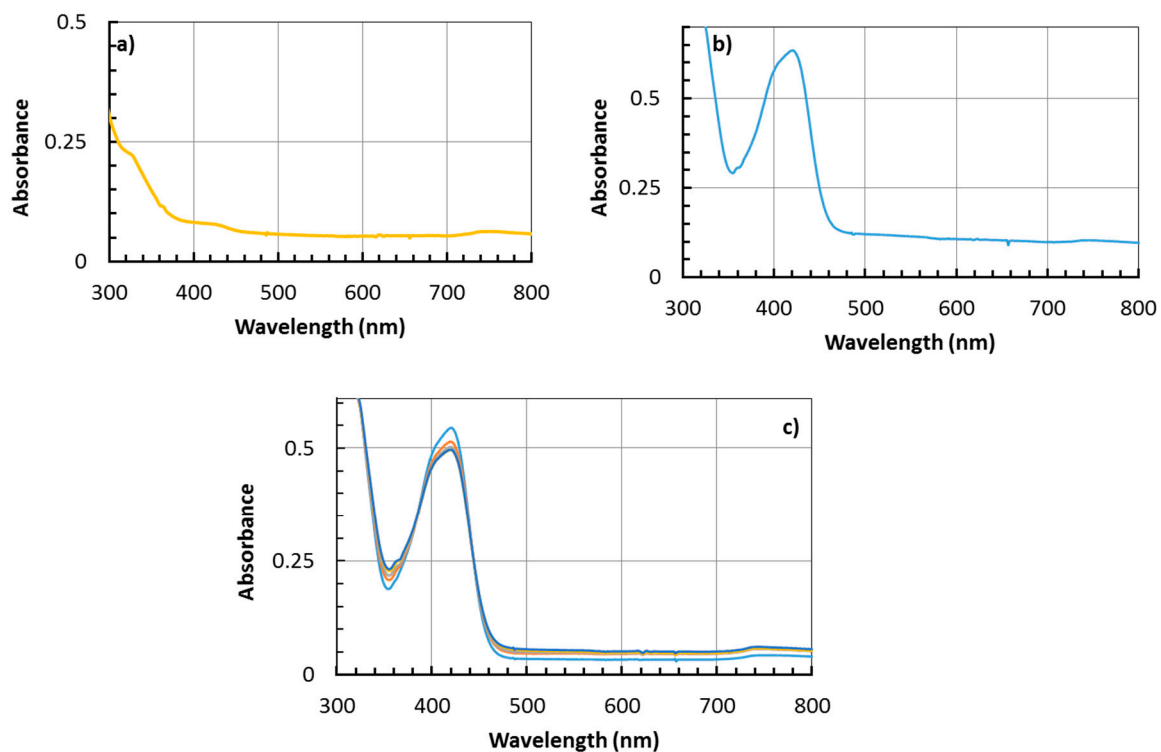


Figure S2. Absorbance spectra of (a) Sodium Thiosulfate 10^{-3} M; (b) Hexacyanoferrate 10^{-2} M (c) Mixture of both reagents under illumination: 20 mL of distilled water under visible irradiation for 120 min under N_2 (black spectrum before irradiation and blue spectrum after 120 min irradiation). The spectra were recorded using 2 mm quartz cell.

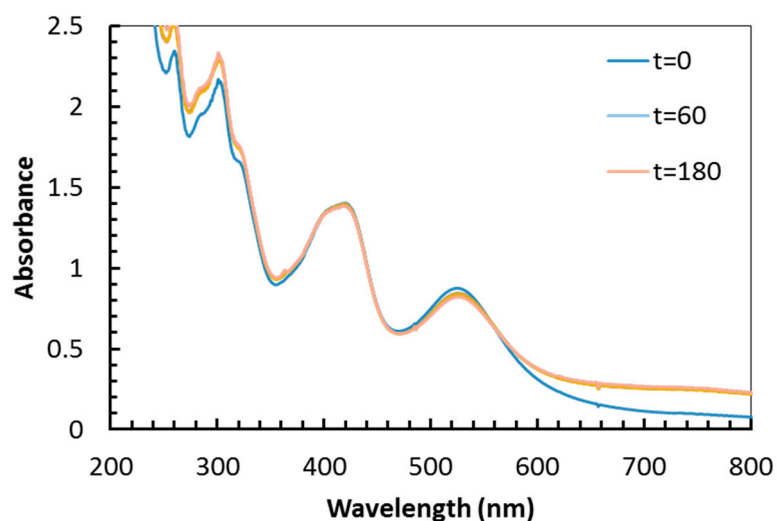


Figure S3. Temporal evolution of the absorption spectra of a solution containing 15 nm Au-NPs@citrate and 10^{-3} M potassium hexacyanoferrate III with no irradiation (in dark) for 180 min.

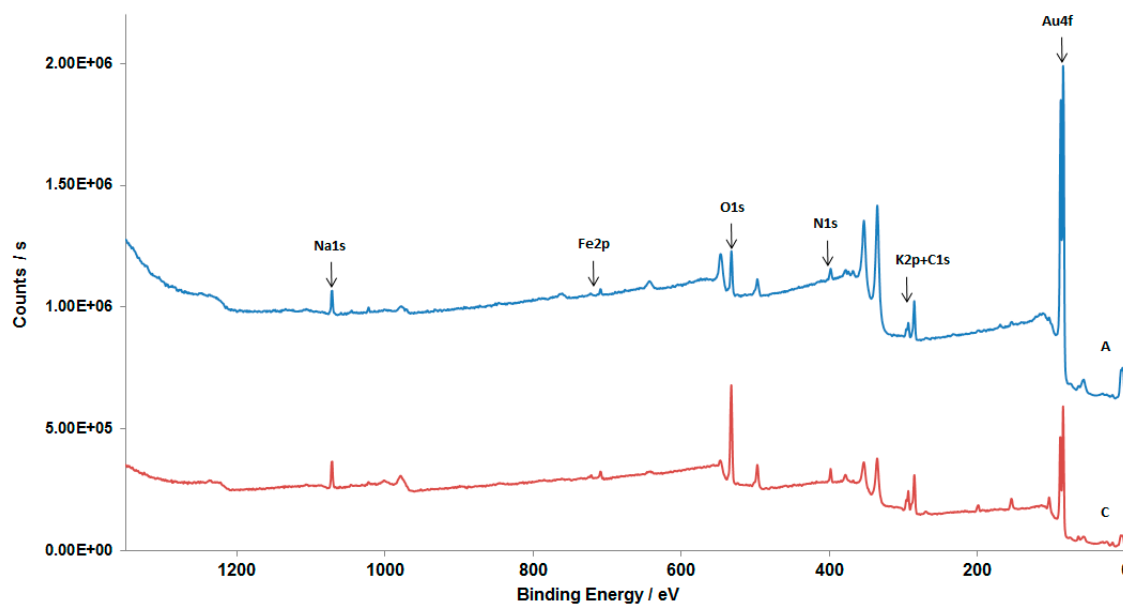


Figure S4. XPS wide-scan spectra of 30 nm Au-NPs@citrate after reaction under LEDs irradiation at 520 nm for deaerated solutions containing HC-FeIII with ST or without ST.



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