

Electronic Supplementary Information

Nanoscale Coordination Polymers Exhibiting Luminescence Properties and NMR Relaxivity

Elena Chelebaeva,^{a,c} Joulia Larionova,^{*,a} Yannick Guari,^{*,a} Rute A. S. Ferreira,^b Luis D. Carlos,^{*,b} Alexander A. Trifonov,^c Thangavel Kalaivani,^d Alessandro Lascialfari,^{*,d,e,f} Christian Guérin,^a Karine Molvinger,^g Lucien Datas,^h Marie Maynadier,^{i,j,k,l} Magali Gary-Bobo,^{i,j,k,l} Marcel Garcia.^{i,j,k,l}

^a Institut Charles Gerhardt Montpellier, UMR5253, Chimie Moléculaire et Organisation du Solide, Université Montpellier II, Place E. Bataillon, 34095 Montpellier cedex 5, France

^b Department of Physics, CICECO, University of Aveiro, 3810-193 Aveiro, Portugal

^c G. A. Razuvayev Institute of Organometallic Chemistry of the Russian Academy of Science, Tropinina 49, GSP-44S, 603950, Nizhny Novgorod, Russia

^d Dipartimento di Scienze Molecolari Applicate ai Biosistemi, Università degli studi di Milano, I-20134 Milano, Italy.

^e CNR-INFM-S3 NRC, I-41100 Modena, Italy

^f INFM-CNR c/o Dipartimento di Fisica “A. Volta”, Università degli studi di Pavia, Via Bassi 6, I-27100 Pavia, Italy

^g Institut Charles Gerhardt Montpellier, UMR 5253, Matériaux Avancés pour la Catalyse et la Santé, Ecole Nationale Supérieure de Chimie de Montpellier, 8, rue de l'école normale, 34296 Montpellier cedex 5, France

^h Service commun de Microscopie Electronique TEMSCAN, Université Paul Sabatier, 118 route de Narbonne 31062, Toulouse cedex 4, France

ⁱ Institut de Recherche en Cancérologie de Montpellier, Montpellier F-34298, France

^j INSERM, U896, Montpellier F-34298, France

^k Université Montpellier 1, Montpellier F-34298, France

^l Centre Régional de Lutte contre le Cancer, Val d'Aurelle Paul Lamarque, Montpellier F-34298, France

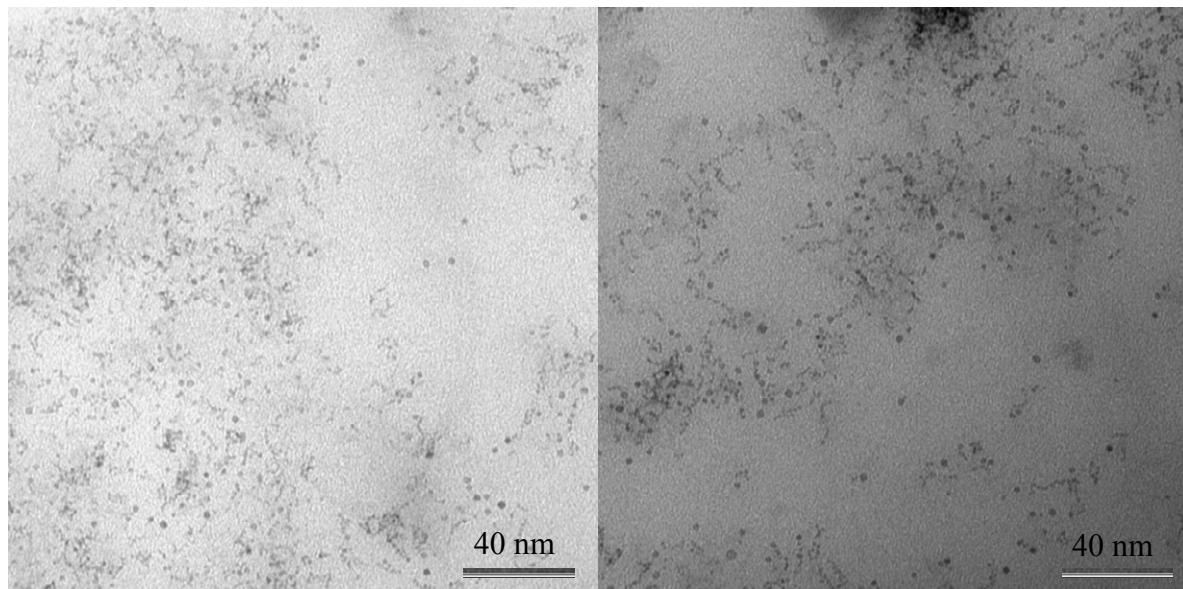


Figure 1S. TEM images of the nanoparticles **1b** dispersed into physiological media.

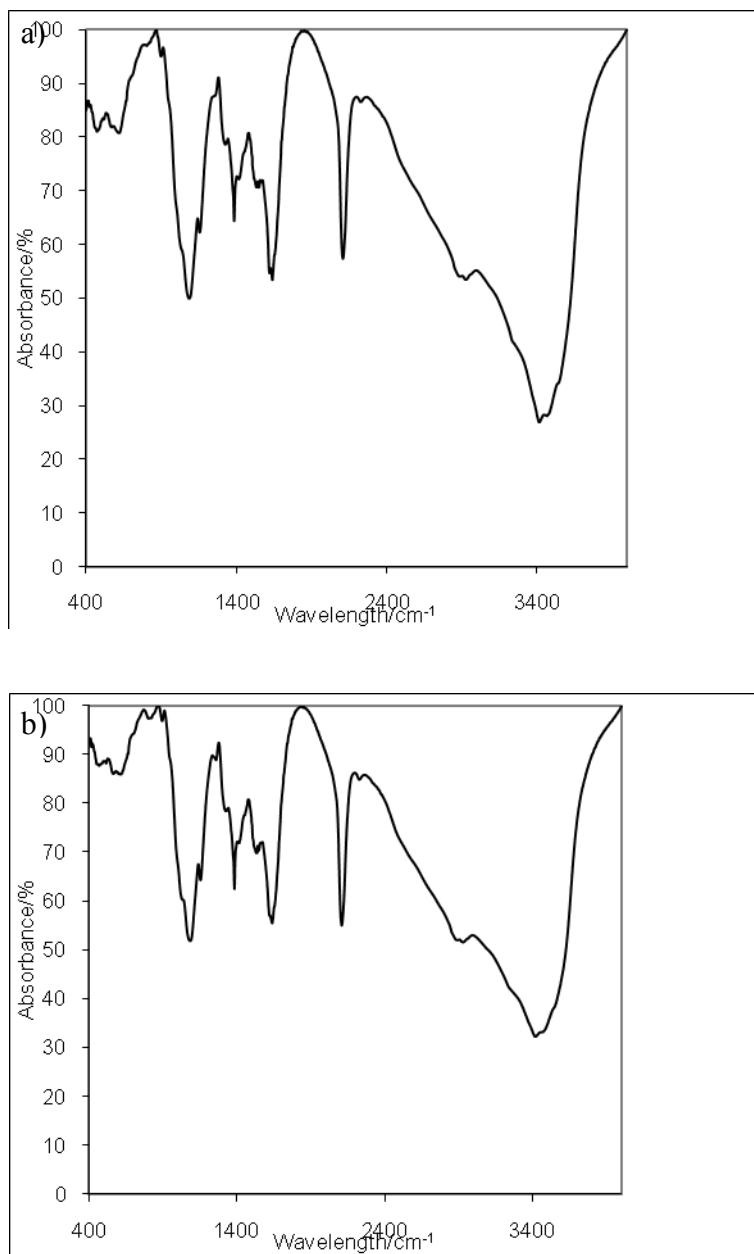


Figure 2S. Infrared spectra for nanocomposite beads a) 1a, b) 2a.

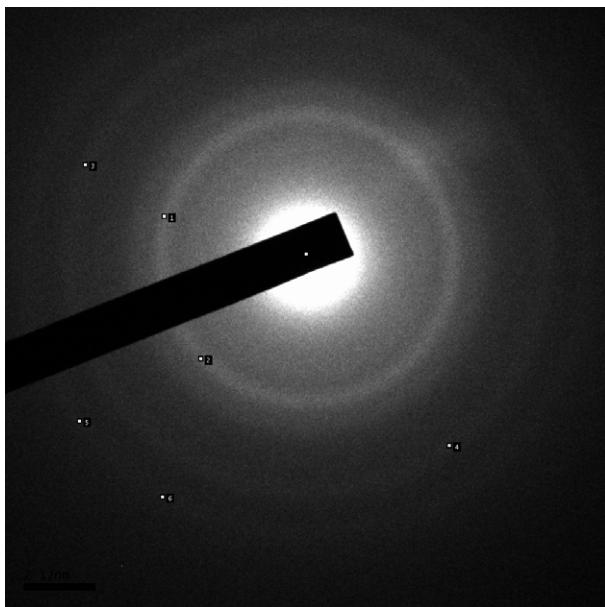


Figure 3S. Diffraction pattern obtained for an assembly of nanoparticles **1b**. Unfortunately, the quality of the obtained diffraction pattern didn't allow rigorous allocation of rings observed and related these to interatomic distances. This fact may be attributed to the poor crystallinity of the nanoparticles and/or small particle sizes.

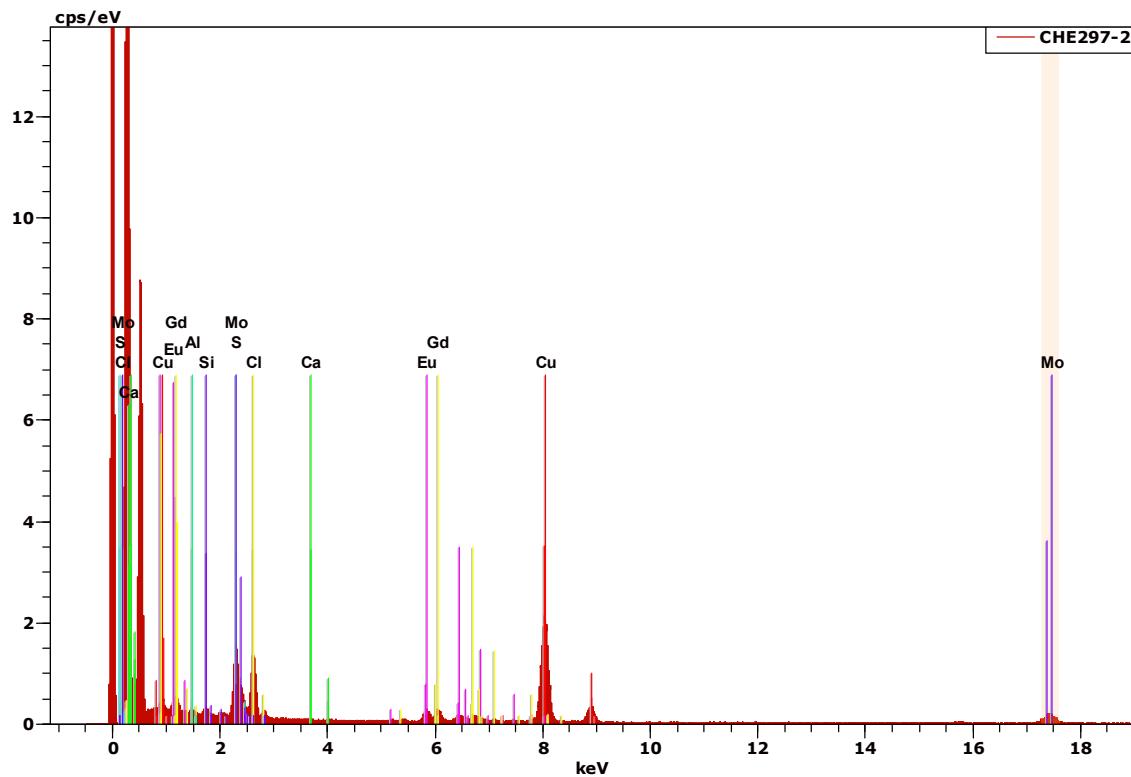


Figure 4S. HRTEM coupled EDS analysis of sample **1b** performed on isolated nanoparticles.

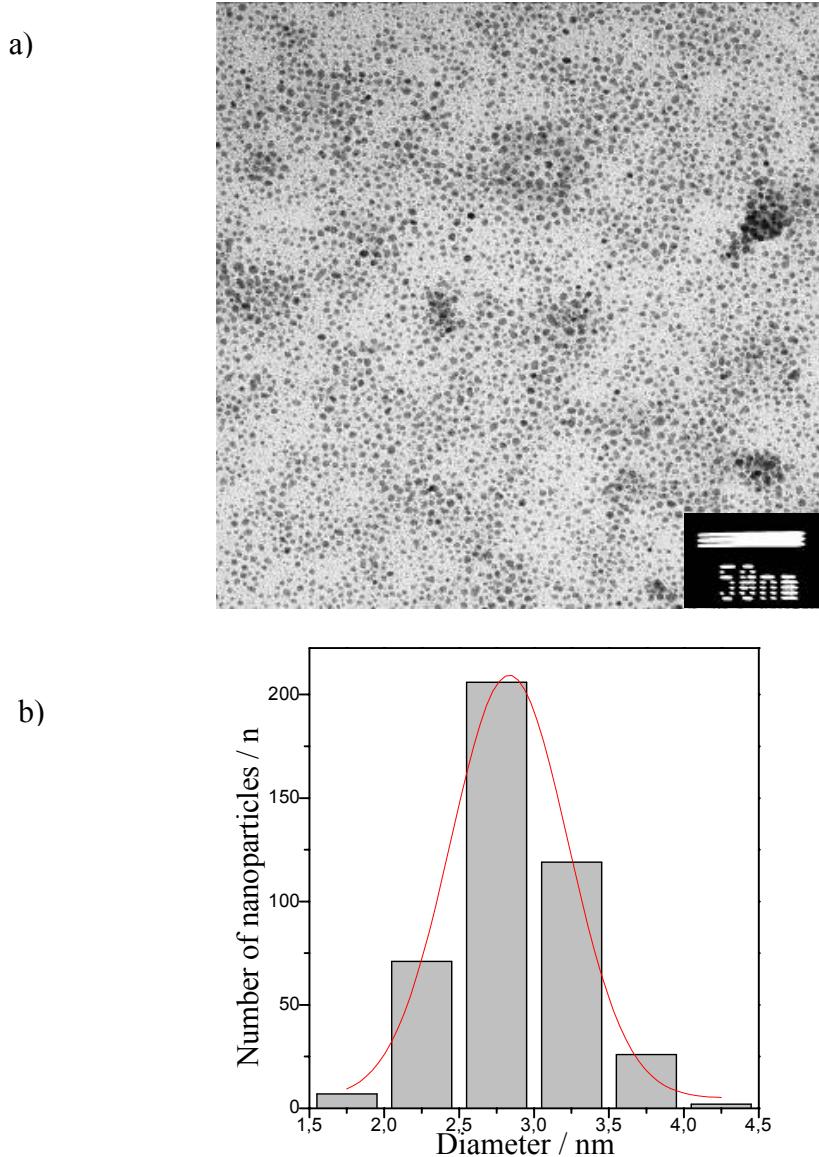


Figure 5S. a)TEM image of sample **2b**, and b) its respective size distribution histograms .

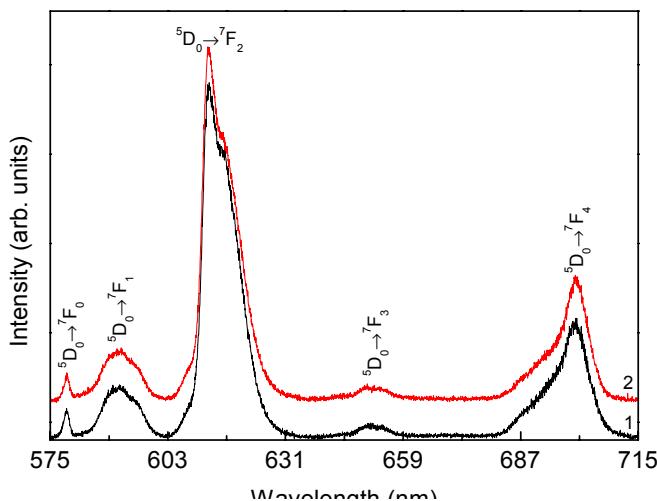


Figure 6S. Room-temperature emission spectra of **1b** excited at (1, black line) 280 and (2, red line) 395 nm.