

Supporting Information

Control of stoichiometry, size and morphology of inorganic polymers by template assisted coordination chemistry

*Pierrick Durand¹, Giulia Fornasieri¹, Cédric Baumier¹, Patricia Beaunier², Dominique Durand³, Eric
Rivière¹ and Anne Bleuzen^{1*}*

¹ Université Paris-Sud 11, UMR 8182 ICMMO - Equipe de Chimie Inorganique, 91405 Orsay (France)

² UPMC – Université Paris 6 and CNRS, UMR 7197 Laboratoire de Réactivité de Surface, 75252 Paris
(France)

³ Université Paris-Sud 11, UMR 8619 Institut Biochimie et Biophysique Moléculaire et Cellulaire,
91405 Orsay (France)

* e-mail : anne.bleuzen@u-psud.fr

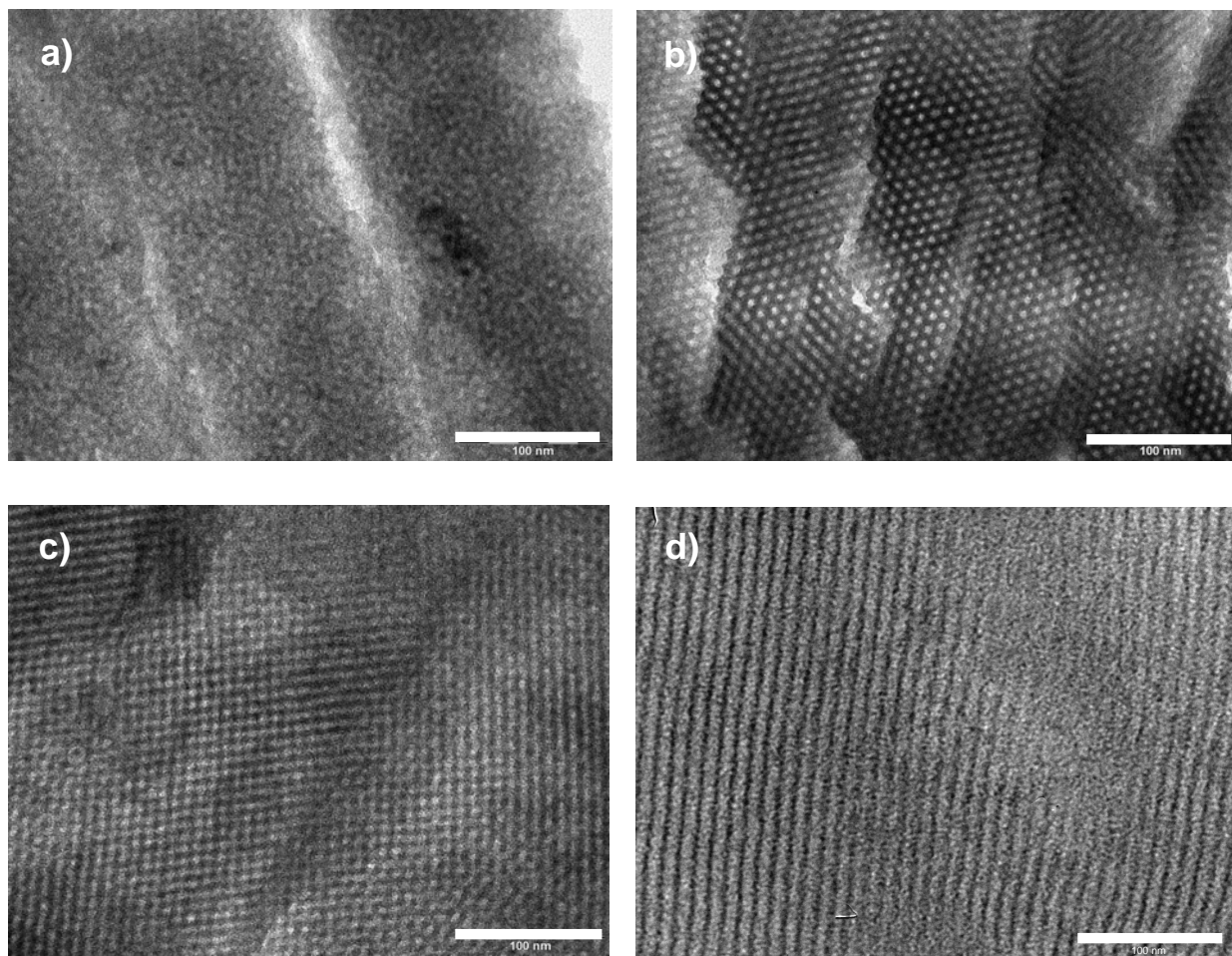


Figure S1. TEM micrographs of 2% wt Co²⁺-containing silica-copolymer monoliths (microtomed samples) with various dimensional structures; a) wormlike, b) 2D-hexagonal, c) 3D-cubic, and d) lamellar. Scale bar is 100 nm.

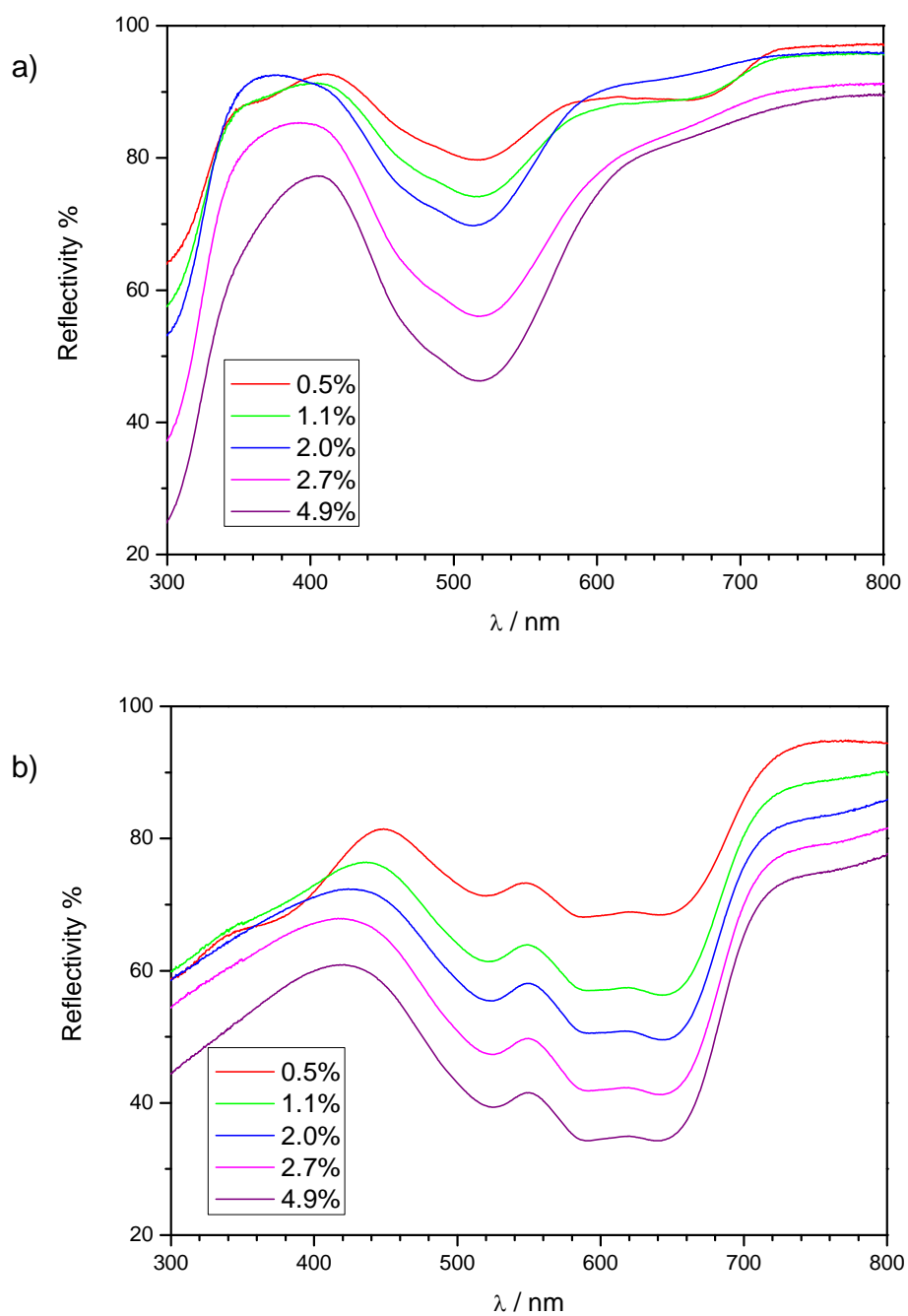


Figure S2. UV-visible spectra of the Co²⁺-containing (0.5-4.9% wt) silica monoliths a) as-synthesized, b) after thermal treatment at 500°C.

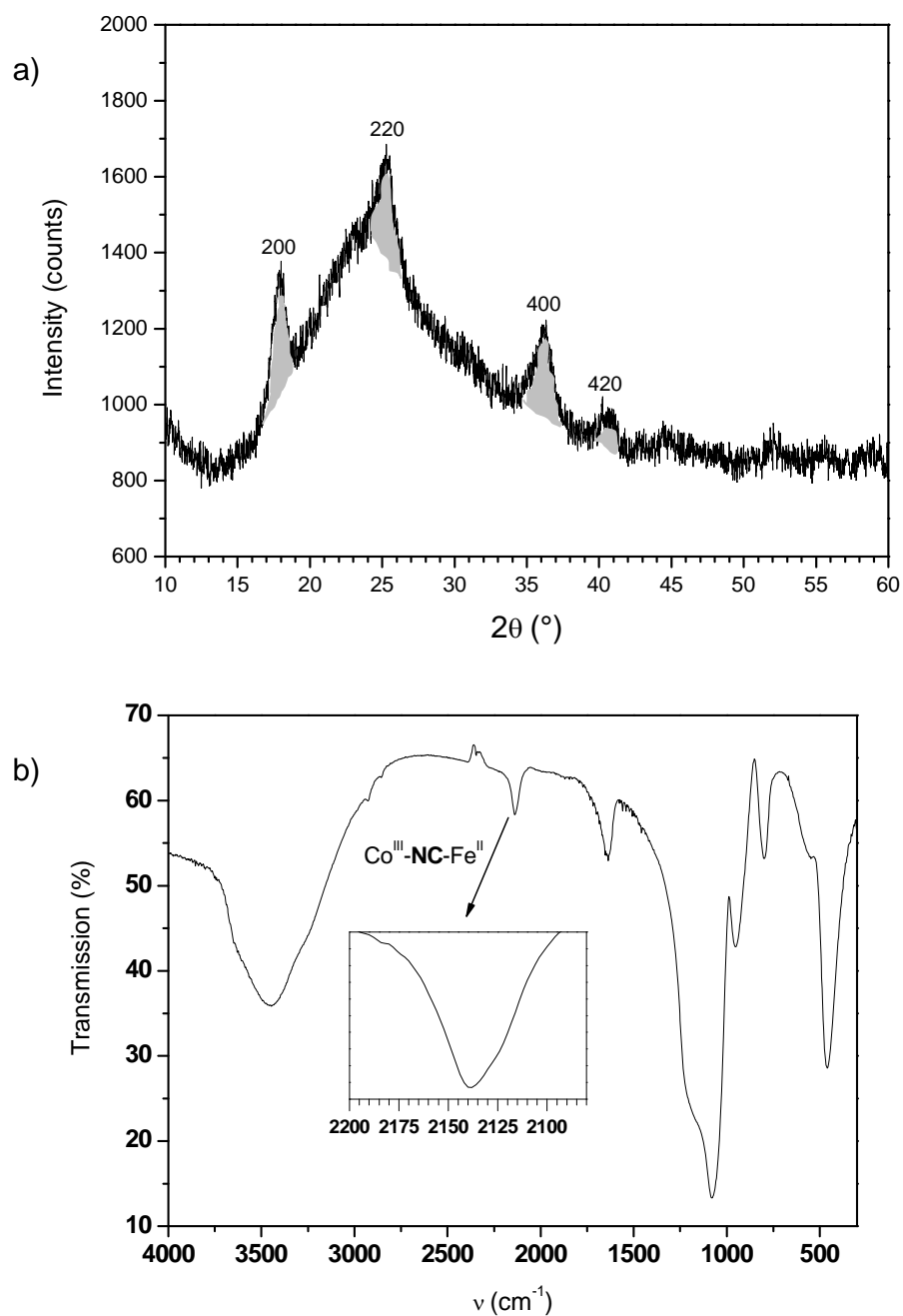


Figure S3. a) X-ray diffraction pattern ($\text{Cu K}\alpha$) of CoFe PBA – silica nanocomposite.

CoFe PBA reflections: (200)= 17.9° , (220)= 25.2° , (400)= 36.3° , (420)= 40.7° .

b) FTIR spectrum of CoFe PBA – silica nanocomposite.

Table S1.

Elemental analysis and proposed composition for CoFe PBA – silica nanocomposite.

	Si	Co	Fe	K	C	N	H	O
% exptl	36.5	0.75	0.55	0.11	0.90	0.70	1.66	58.83
(calcd)	36.3	0.74	0.54	0.11	0.70	0.80	2.17	58.61
proposed composition $\text{K}_{0.9}\text{Co}_4[\text{Fe}(\text{CN})_6]_{3.1}(\text{SiO}_2)_{412}(\text{H}_2\text{O})_{1156}$								