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Linker-assisted structuration of tunable uranium-based hybrid lamellar nanomaterials

Elisa Re[1], Xavier Le Goff[1], Guillaume Toquer,[1] Jérôme Maynadie*[1], Daniel Meyer[1]

ICSM, Univ Montpellier, CEA, CNRS, ENSCM, Site de Marcoule, 30207 Bagnols/Cèze cedex, BP 17171, France

Corresponding author : jerome.maynadie@cea.fr

Electronic Supplementary Material

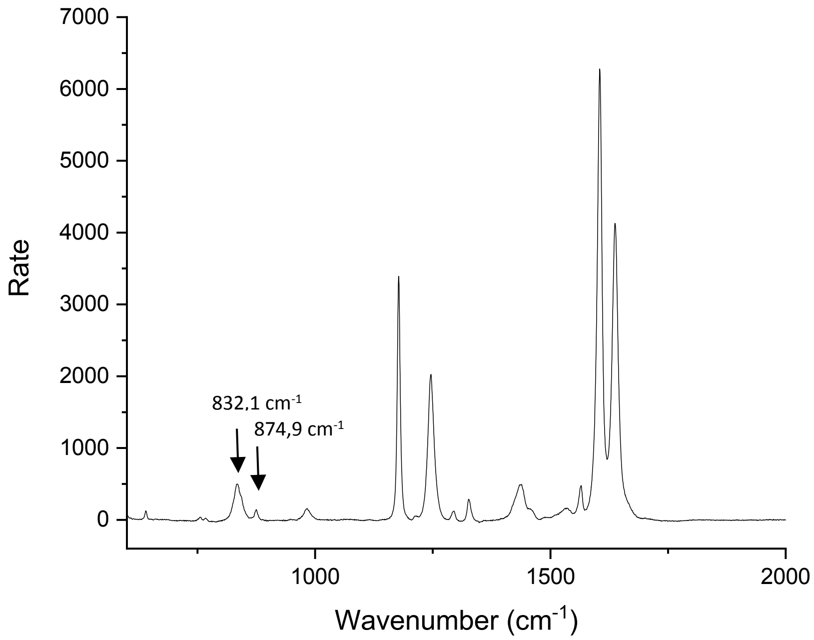

Fig. S1. Raman spectrum of uranium oxide nanohybrids obtained with 4,4'-stilbene dicarboxylic acid (633nm laser).

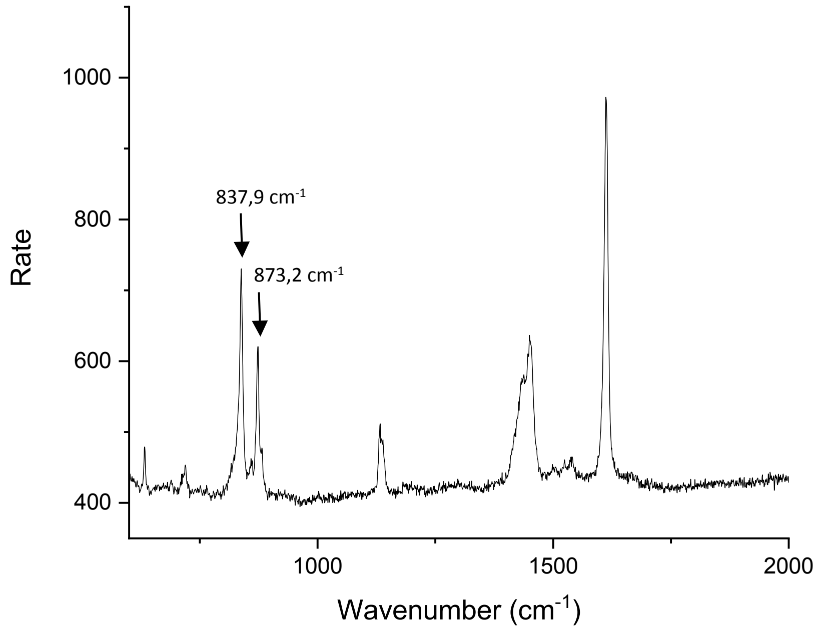

Fig. S2. Raman spectrum of uranium oxide nanohybrids obtained with 1,4-phenylene diacrylic acid (633nm laser)

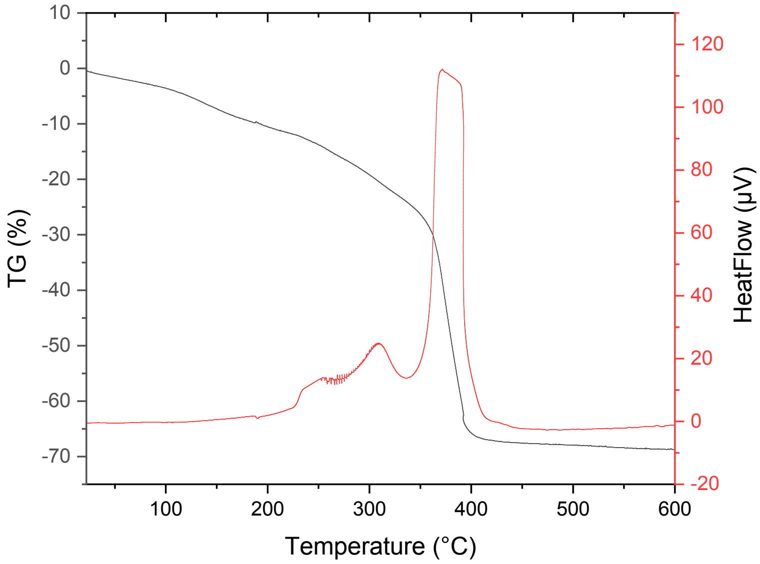

Fig. S3. Thermogravimetric (black) and heat flow (red) analyses at a heating rate of 2°C/min for uranium oxide nanohybrids obtained with 4,4'-stilbene dicarboxylic acid. Black line shows the temperature of decomposition of the material.

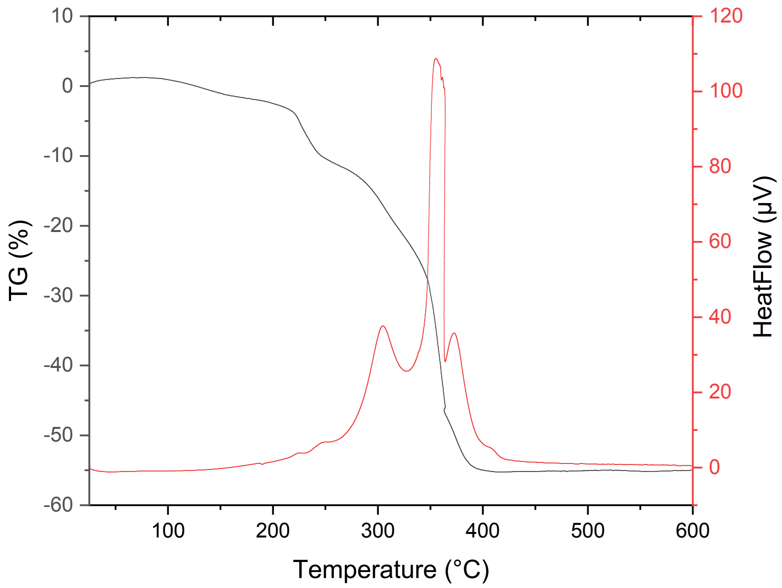

Fig. S4. Thermogravimetric (black) and heat flow (red) analyses at a heating rate of 2°C/min for uranium oxide nanohybrids obtained with 1,4-phenylene diacrylic acid. Black line shows the temperature of decomposition of the material.

Table 1. TGA results of different uranium oxide nanohybrids

	Naphthalene-2,6-dicarboxylic acid	*1,4-Phenylene diacrylic acid*	*4,4'-Stilbene dicarboxylic acid*
Water loss %w exp	8%	10%	14%
Water loss %w theo	12%	12%	11%
Organic loss %w exp	43%	50%	43%
Organic loss %w theo	41%	49%	42%

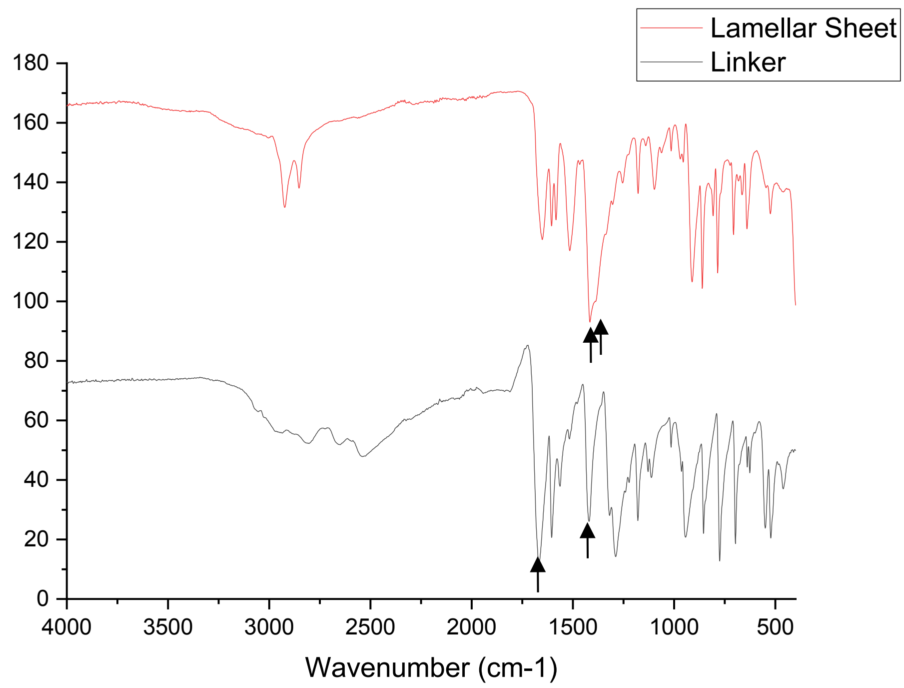

Fig.S5. FT-IR spectra of uranium oxide nanohybrids (red) and 4,4'-stilbene dicarboxylic acid (black)

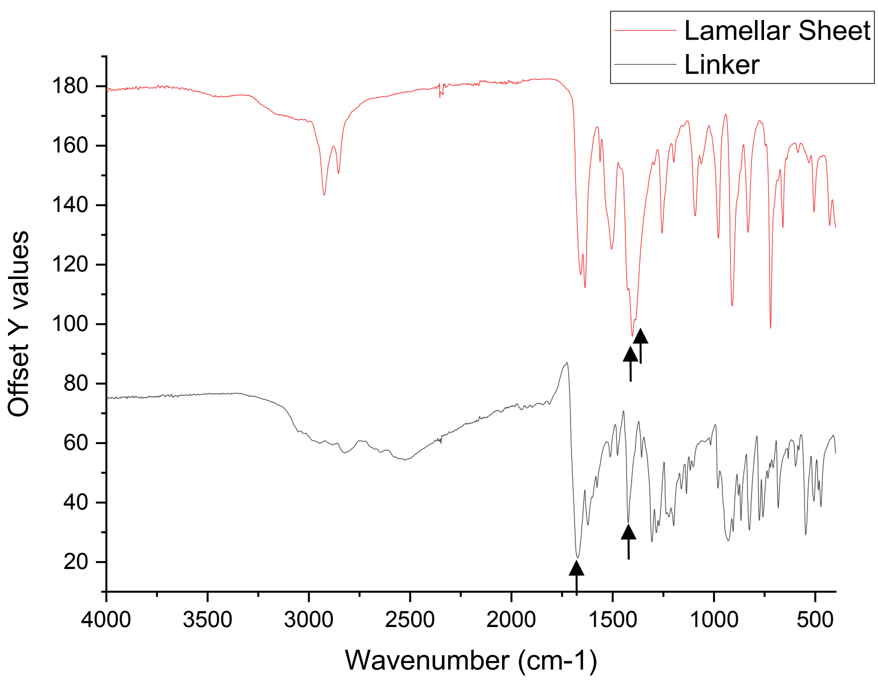

Fig.S6. FT-IR spectra of uranium oxide nanohybrids (red) and 1,4-phenylene diacrylic acid (black)

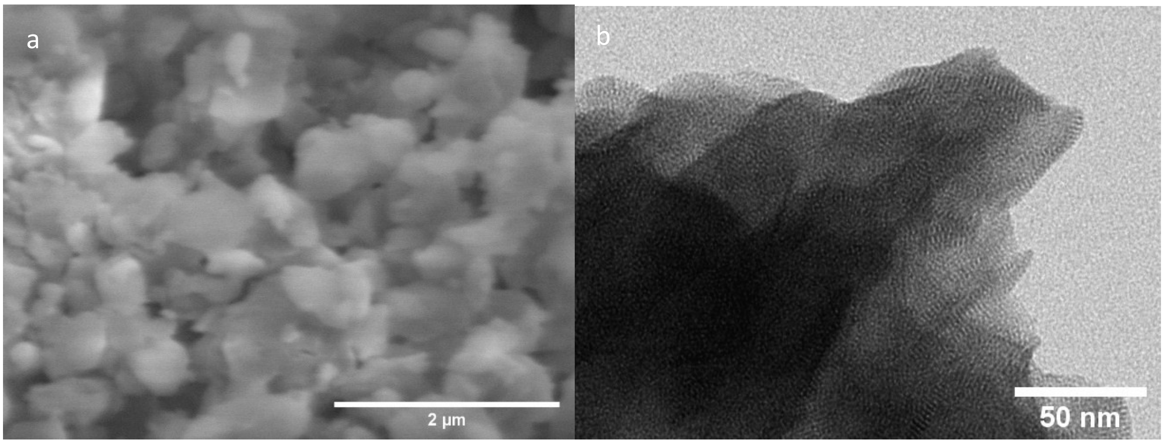

Fig S7. a) SEM image and b) TEM image of uranium based lamellar nanohybrids formed with 4,4’-stilbene dicarboxylic acid

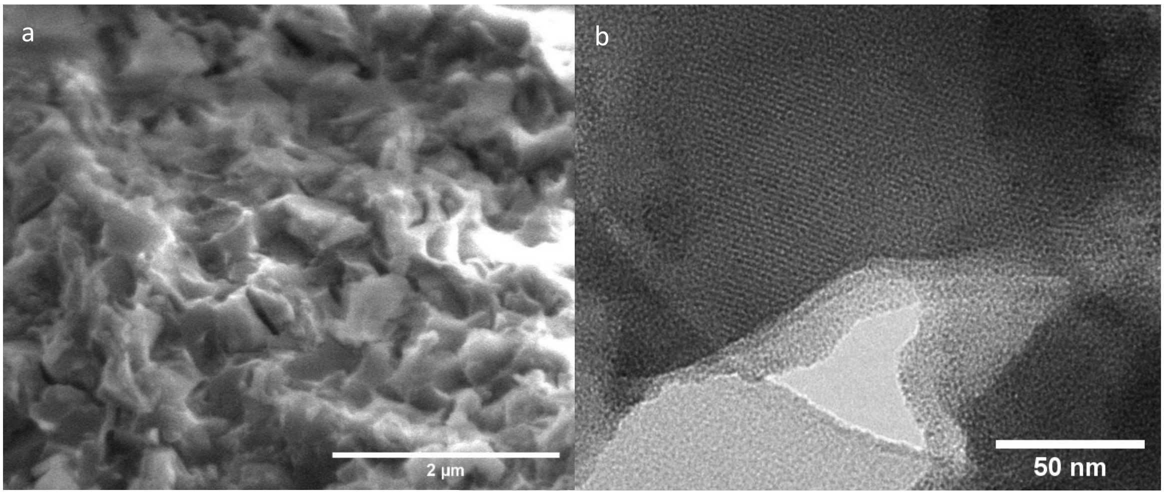

Fig S8. a) SEM image and b) TEM image of uranium based lamellar nanohybrids formed with 1,4-phenylene diacrylic acid

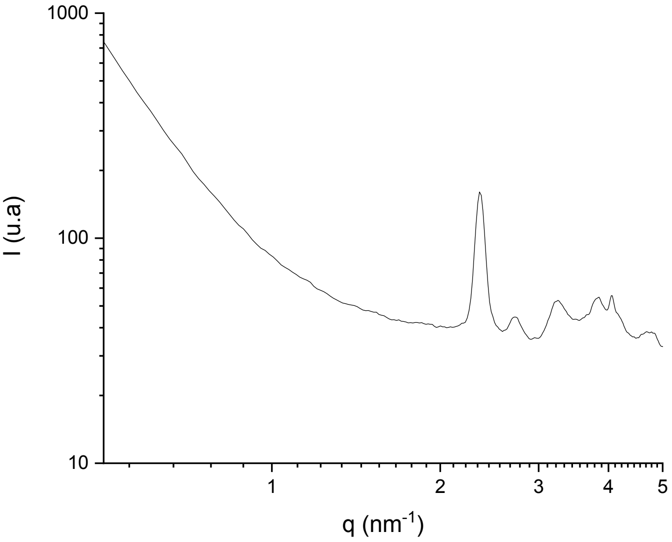

Fig.S9. SAXS spectrum of uranium oxide nanohybrids formed with 4,4'-stilbene dicarboxylic acid

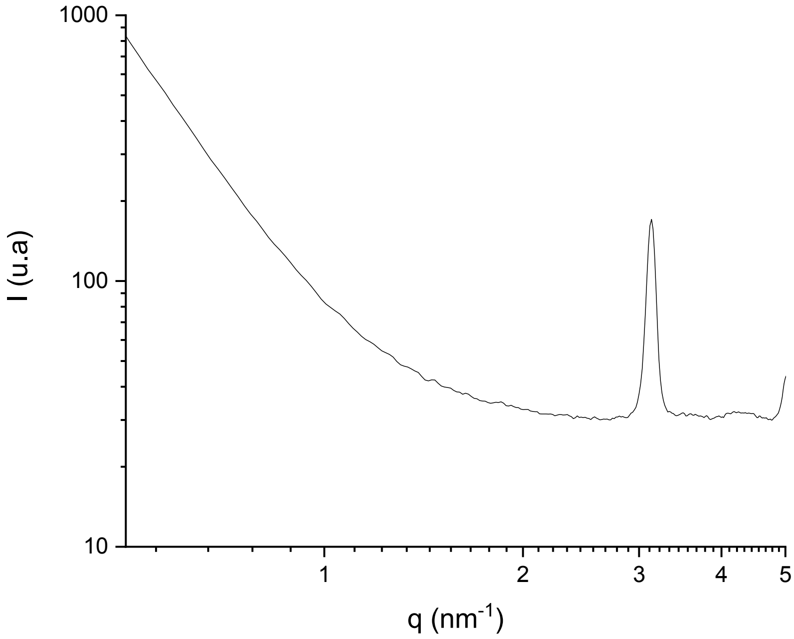

Fig.S10. SAXS spectrum of uranium oxide nanohybrids formed with 1,4-phenylene diacrylic acid