

## Supporting information

# Exploring Reduced Graphene Oxide sheets stabilized by Cu(II) and Cu(I) cations and dispersed in ethanol

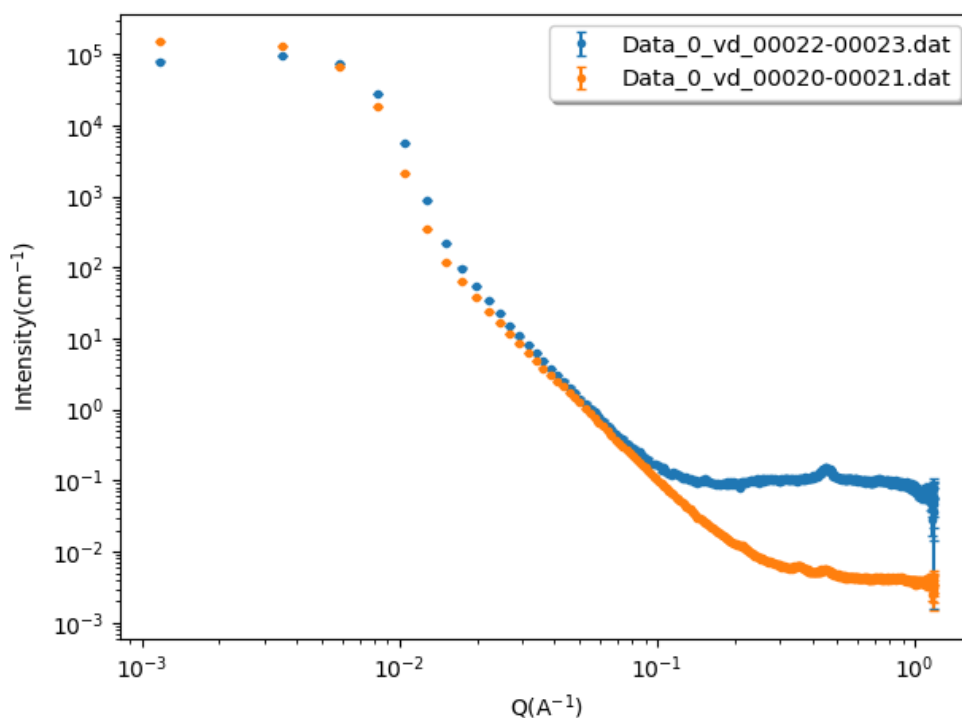
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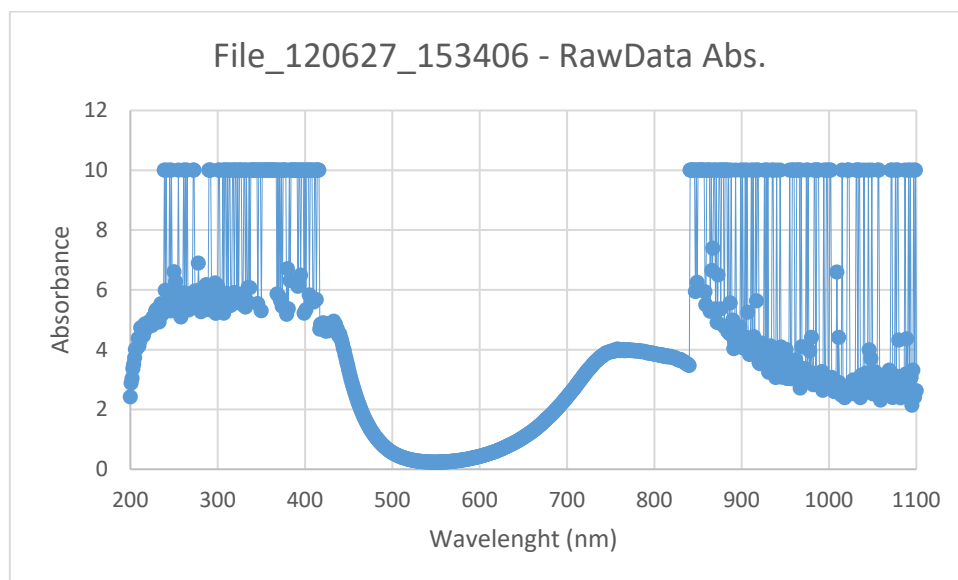


**Figure S1.** Used apparatus. SAXS measurements were made with a XENOCs apparatus, in the q range between 0.001 and 1.200 Å<sup>-1</sup>. The detector was a PILATUS3 300K, S/N 3-0372, Dectris (construtor). The distance between the sample and the detector begins at 30 cm. The

liquids were deposited using a syringe inside alumino-silicate capillaries of 1 mm external diameter and 8 cm of height.

Ech. 1. Sample 20-21: main 2D C-based particles.

Ech. 5. Sample 22-23: main graphite 3D C-based particles.



**Figure S2.** Evidence of intense plasmons in the visible and the NIR spectral range.

The used solution in ethanol was concentrated to evidence very intense plasmon vibrations of absorbance greater than 10. Only less concentrated solutions are introduced in the text. They have been selected to keep a contribution in the UV range and not in the NIR range.