Supplementary Materials

Room-Temperature Reduction of Graphene Oxide in Water by Metal Chloride Hydrates: A Cleaner Approach for the Preparation of Graphene@Metal Hybrids

Patrick. P. Brisebois [1], Ricardo Izquierdo [2] and Mohamed Siaj [1,*]

[1] Department of Chemistry, Université du Québec à Montréal, NanoQAM/QCAM, Montreal, QC H3C 3P8, Canada; patb.office@gmail.com

[2] École de Technologie Supérieure, Université du Québec, Montreal, QC H3C 1K3, Canada; ricardo.izquierdo@etsmtl.ca

* Correspondence: siaj.mohamed@uqam.ca; Tel.: +1-514-987000 (ext. 1921)

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Equation S1:

$$\%\ \text{C-C} = \frac{100 \times \int_{134}^{134\ (\text{ppm})} \text{C=C}}{\int_{190}^{164} \text{C=O} + \int_{164}^{134} \text{O-C=O} + \int_{134}^{105} \text{C=C} + \int_{105}^{70} \text{lactols} + \int_{70}^{61\ (\text{ppm})} \text{C-OH} + \int \text{C-O-C}}$$

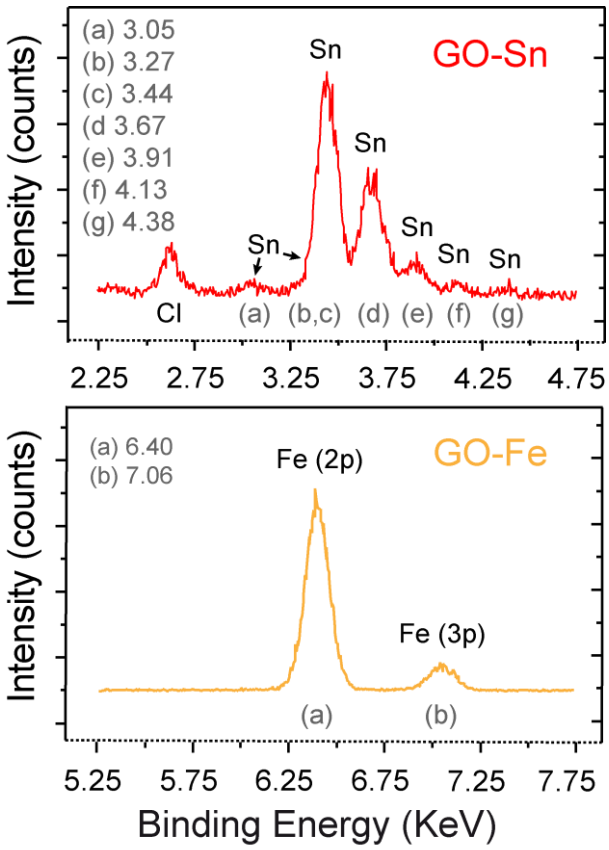

Figure S1. EDS spectra of GO-Sn (up) and GO-Fe (bottom) composites.

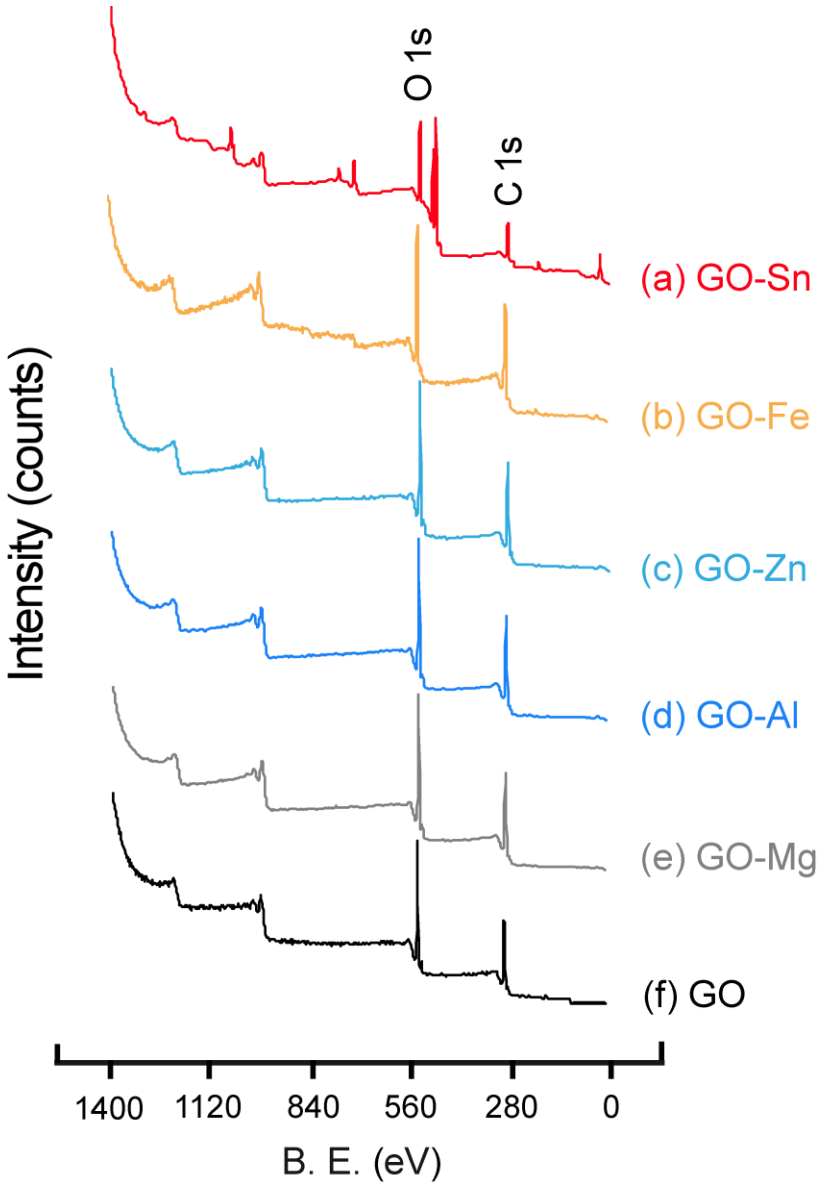

Figure S2. XPS spectra (Survey) of (**a**) GO-Sn, (**b**) GO-Fe, (**c**) GO-Zn, (**d**) GO-Al, (**e**) GO-Mg and (**f**) GO materials.

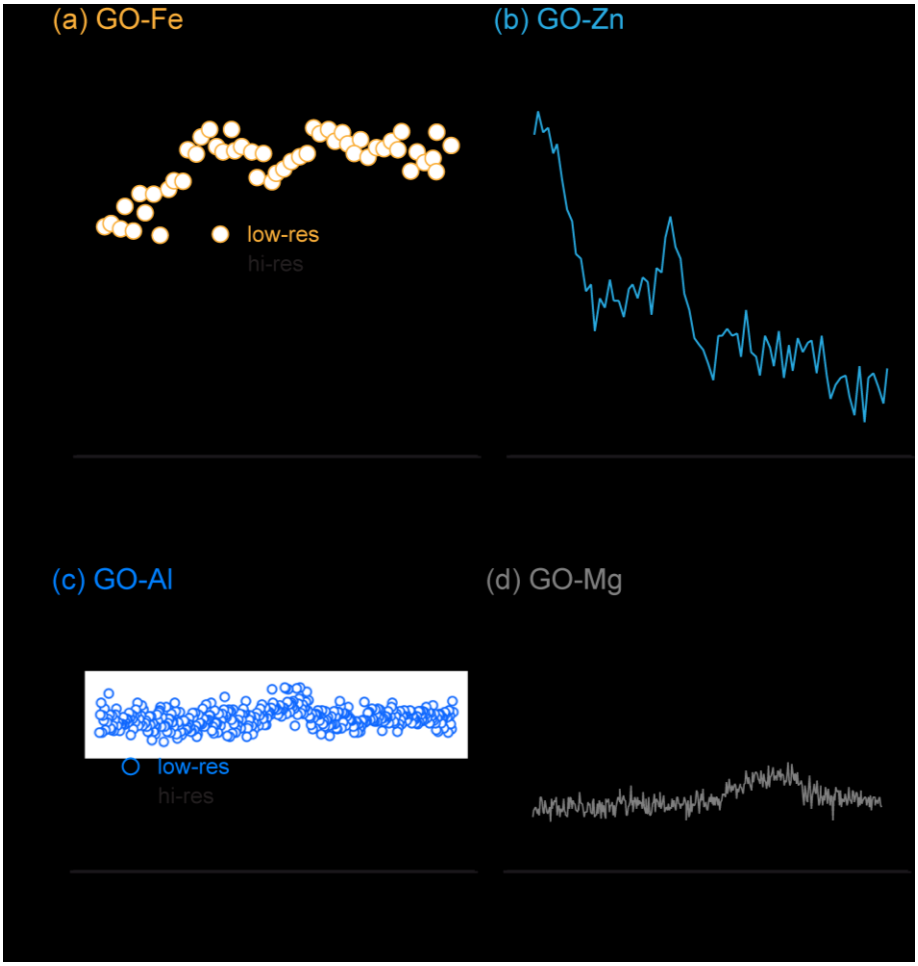

Figure S3. XPS spectra of (**a**) GO-Fe, (**b**) GO-Zn, (**c**) GO-Al and (**d**) GO-Mg composites.

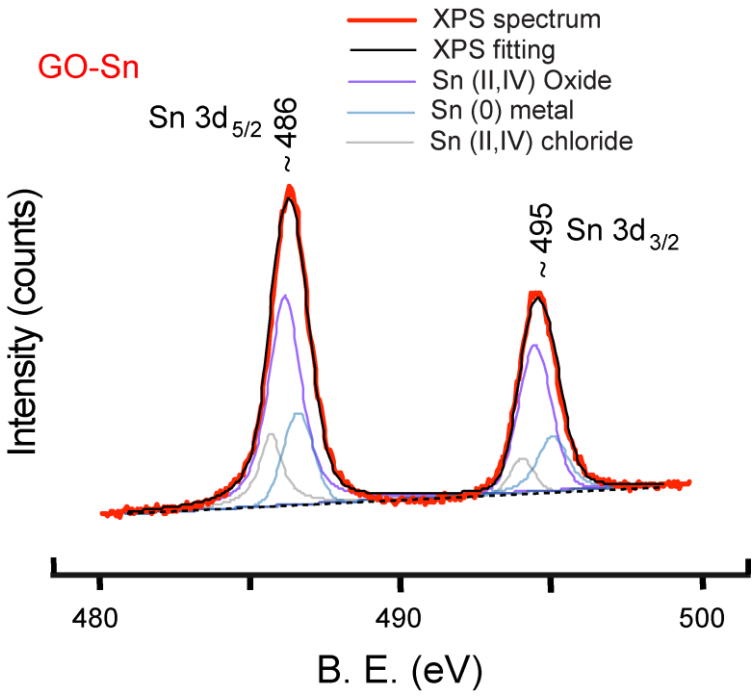

Figure S4. XPS spectrum and deconvolution of GO-Sn composite.

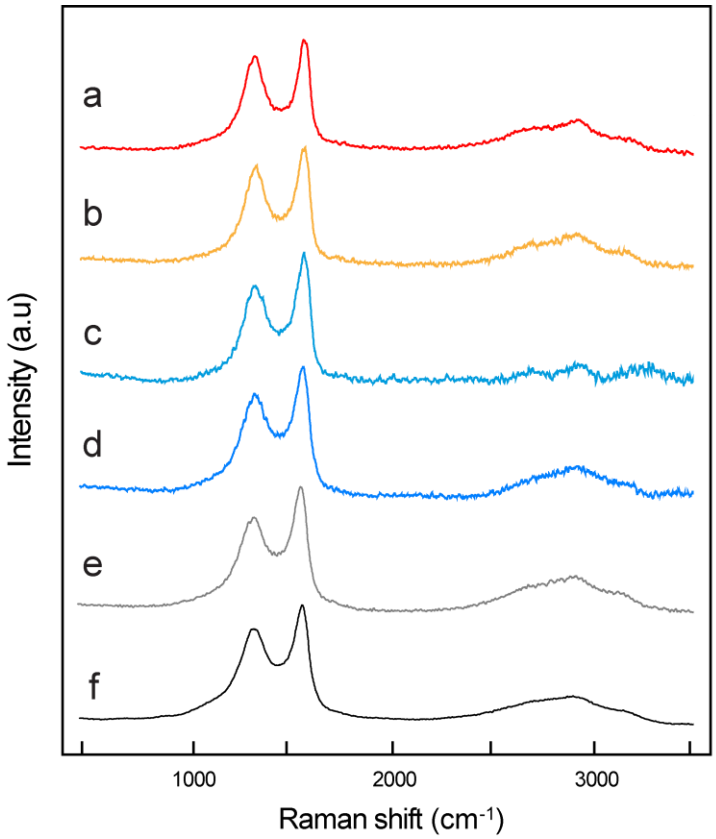

Figure S5. Raman spectrum of (**a**) GO-Sn, (**b**) GO-Fe, (**c**) GO-Zn, (**d**) GO-Al (**e**) GO-Mg and (**f**) GO.