

Supplementary information: Graphene Oxide Nanoparticle Uptake and its Toxicity on Living Lung Epithelial Cells

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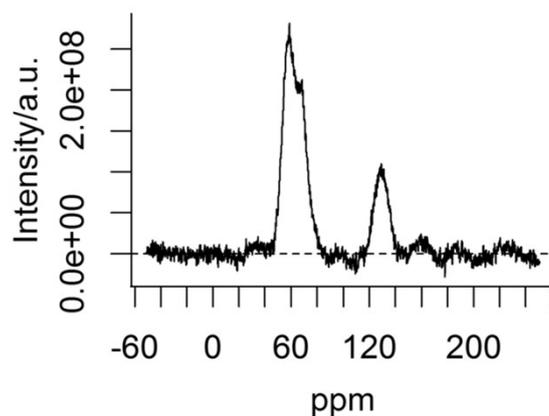


Figure S1. NMR spectrum of GONPs. Solid state ^{13}C NMR were performed on a Bruker Avance II 500 with two channels and equipped with solid-state MAS probe (3.2 mm MAS BB/1H) operated at room temperature. The chemical shifts at 58.749 and 68.257 ppm correspond to C-OH and C-O-C groups. The carbon atoms with sp^2 hybridization have chemical shift at 129.260 ppm. All observed results are in agreement with the data described by Casabianca. for uniformly ^{13}C -labeled graphene oxide. ¹The carboxyl and carbonyl groups are not clearly resolved in the NMR spectra.

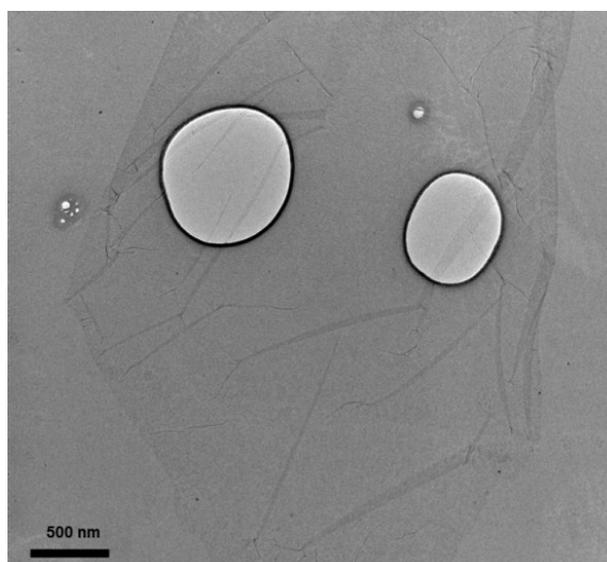


Figure S2. SEM image of GONPs deposited on Si-supported grid. The brighter circular regions are due to holes in the electron microscopy grid used to support the GONPs.

Table S1 Summary of confocal Raman spectroscopy measurements of cells

Group	Number of spectra	Number of wavenumbers
Control	150	985
Triton X-100 24 h	104	985
Triton X-100 48 h	101	985
GO 2 $\mu\text{g ml}^{-1}$	180	985
GO 10 $\mu\text{g ml}^{-1}$	68	985
GO 15 $\mu\text{g ml}^{-1}$	100	985

REFERENCES

- 1 L. B. Casabianca, M. A. Shaibat, W. W. Cai, S. Park, R. Piner, R. S. Ruoff and Y. Ishii, *J. Am. Chem. Soc.*, 2010, **132**, 5672–6.