

Supplementary materials

Study of 1D and 2D Carbon Nanomaterial in Alginate Films

Beatriz Salesa¹, Mar Llorens-Gómez², Ángel Serrano-Aroca^{1,*}

¹Biomaterials and Bioengineering Lab, Centro de Investigación Traslacional San Alberto Magno, Universidad Católica de Valencia San Vicente Mártir, c/Guillem de Castro 94, 46001 Valencia, Spain; beatriz.salesa@ucv.es

²Institute for Research and Innovation in Bioengineering, Universitat Politècnica de València, Camí de Vera s/n, 46022 Valencia, Spain; malloga1@arq.upv.es

* Correspondence: angel.serrano@ucv.es; Tel.: +34-963637412 (Ext:5256)

Supplementary Materials

1. Alginate characterization.

The percentages of guluronic acid, guluronic acid in blocks of dimers and guluronic acid in blocks of trimmers were 43%, 27% and 23% respectively. The measured ¹H-NMR spectrum of the sodium alginate utilized in this study is shown in Figure S1.

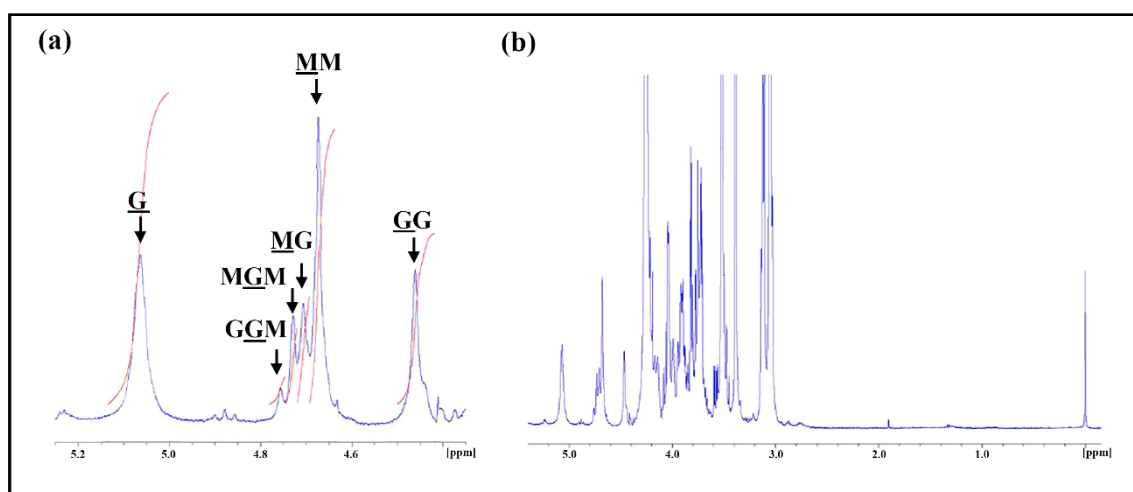


Figure S1. ¹H-NMR spectrum of the partly hydrolyzed sodium alginate: anomeric area (a) and full ¹H-NMR spectrum (b).

2. Characterization of the carbon nanomaterials.

The Raman spectra of the two carbon nanomaterials used in this study, one-dimensional carbon nanofibers and two-dimensional graphene oxide nanosheets, are shown in Figure S2.

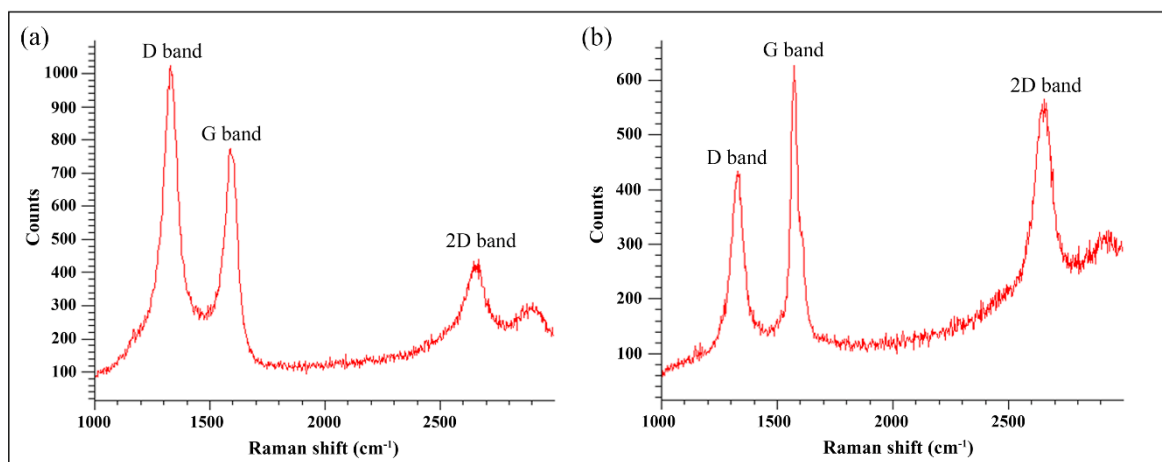


Figure S2. Raman continuous scans of one-dimensional carbon nanofibers (a) and two-dimensional graphene oxide nanosheets (b)

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Conflicts of Interest: The authors declare no conflict of interest.



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