



Article

Magnetic-Assisted Cell Alignment within a Magnetic Nanoparticle-Decorated Reduced Graphene Oxide/ Collagen 3D Nanocomposite Hydrogel

Malles Shanthosh ^{1,†}, Jin-Ha Choi ^{2,†} and Jeong-Woo Choi ^{1,2,*}

¹ Center for Integrated Biotechnology, Sogang University, 35 Baekbeom-ro (Sinsu-dong), Mapo-gu, Seoul 121-742, Korea; santhosh@sogang.ac.kr

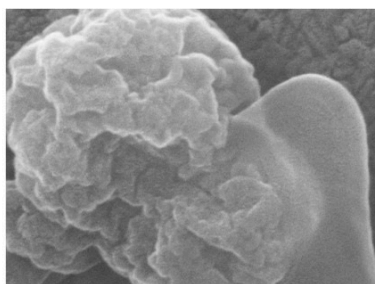
² Department of Chemical and Biomolecular Engineering, Sogang University, 35 Baekbeom-ro (Sinsu-dong), Mapo-gu, Seoul 121-742, Korea; jinhachoi@sogang.ac.kr

* Correspondence: jwchoi@sogang.ac.kr; Tel.: (+82) 2-705-8480; Fax: (+82) 2-718-1976

† These authors contributed equally to this work.

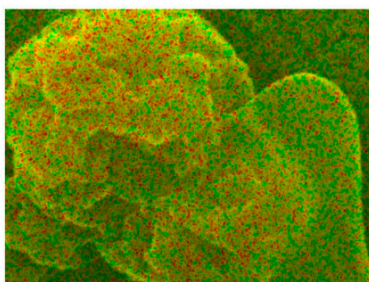
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A Electron Image 2



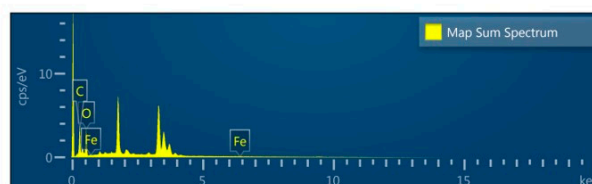
250nm

B EDS Layered Image 2



250nm

C



D

Element	Apparent Concentration	k Ratio	Wt%	Wt% Sigma	Atomic %
C	0.78	0.00783	47.75	0.70	54.90
O	1.49	0.00503	52.25	0.70	45.10
Fe	0.00	0.00000	0.00	0.37	0.00
Total:			100.00		100.00

Figure S1. FESEM and EDS analysis of GO.

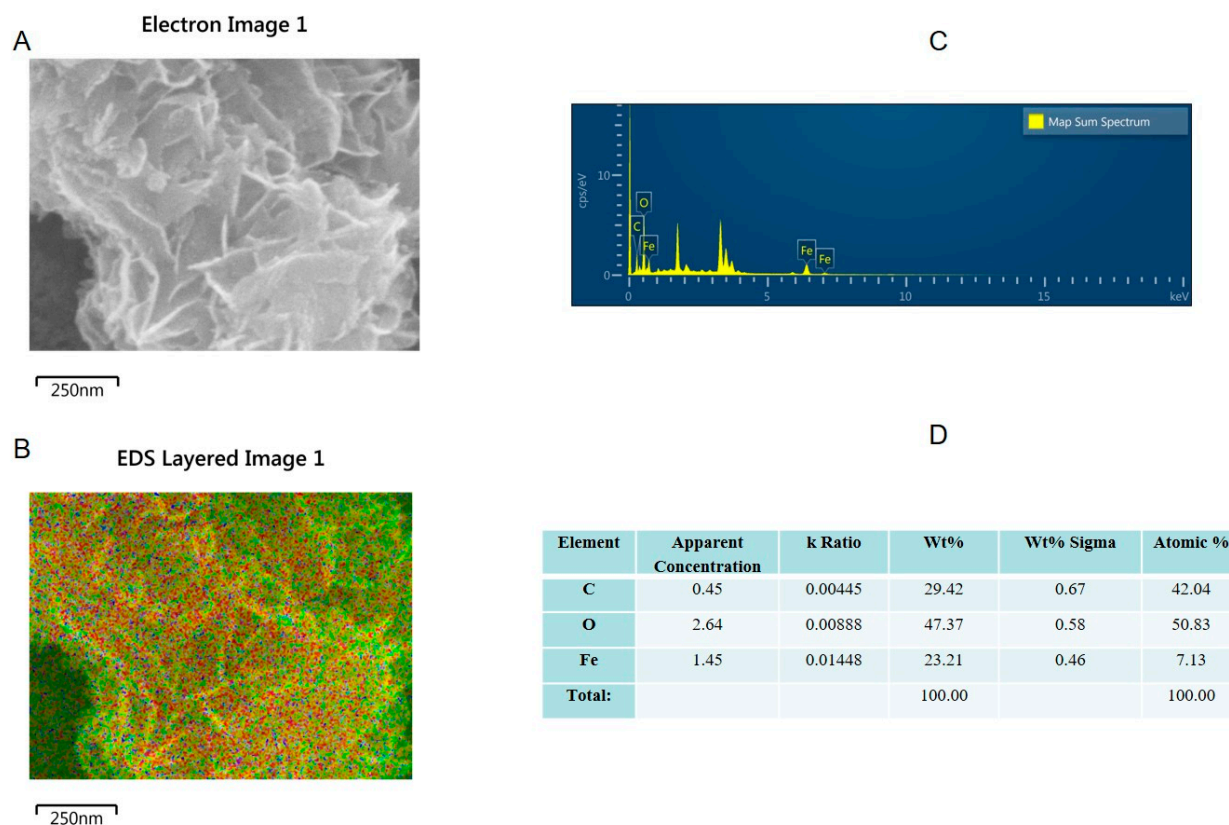


Figure S2. FESEM and EDS analysis of m-rGO nanocomposite.

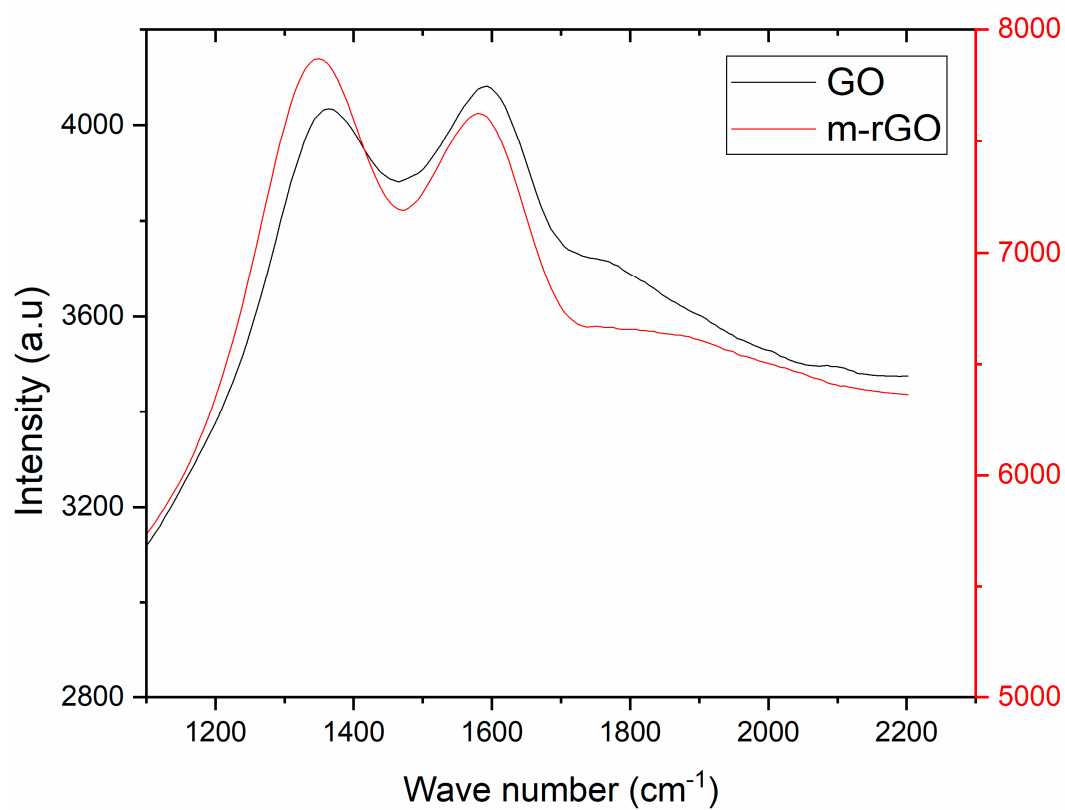


Figure S3. Raman spectra of GO and m-rGO.

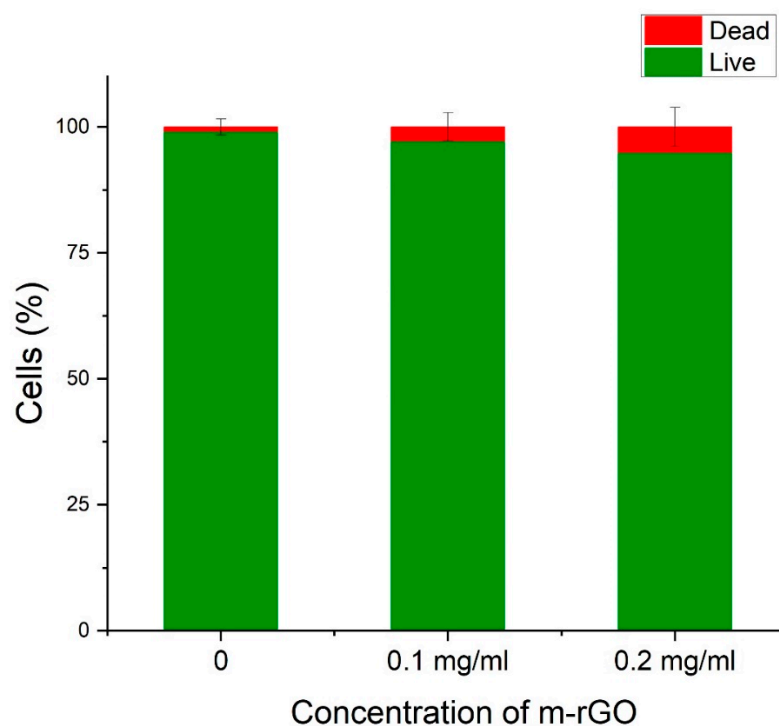


Figure S4. Quantification of Live/dead cell assay at different concentration of m-rGO.

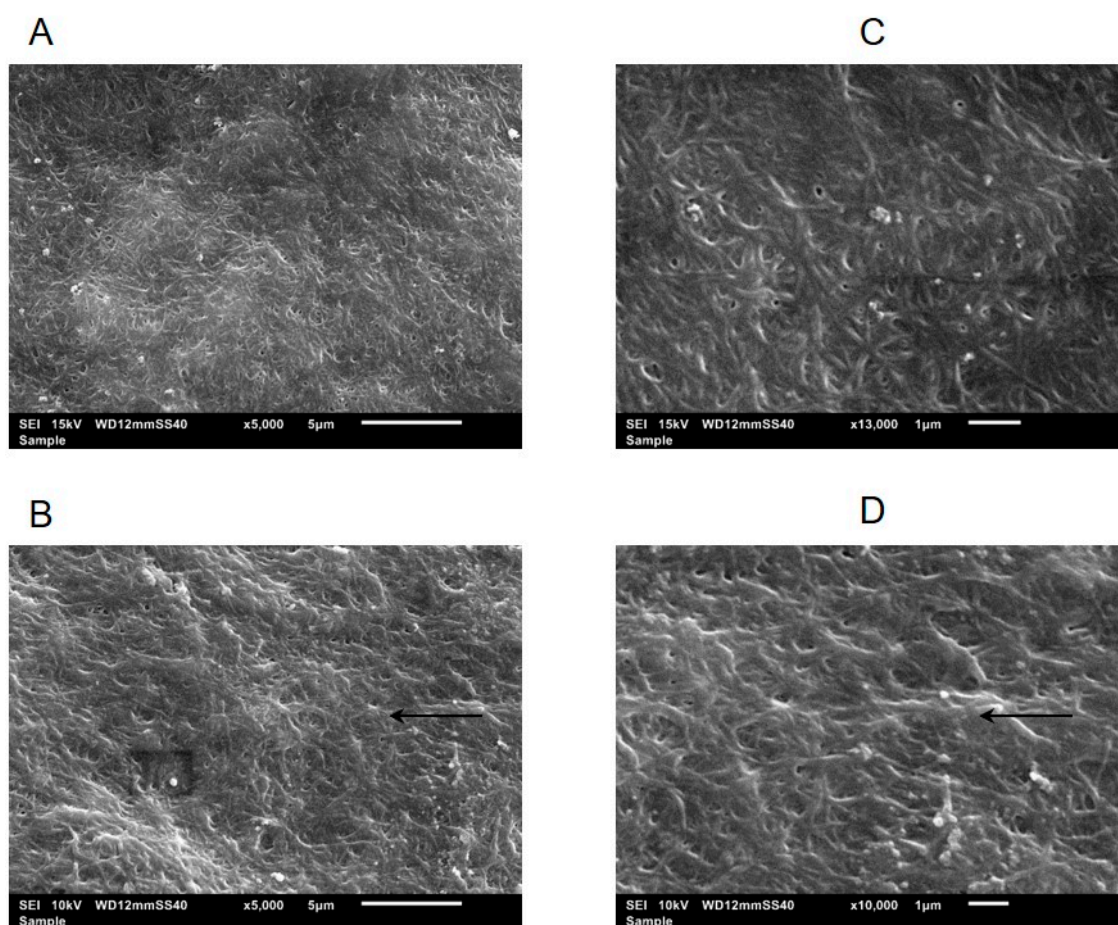


Figure S5. Scanning electron microscope images of randomly oriented (A and C) and aligned collagen fibers (B and D).

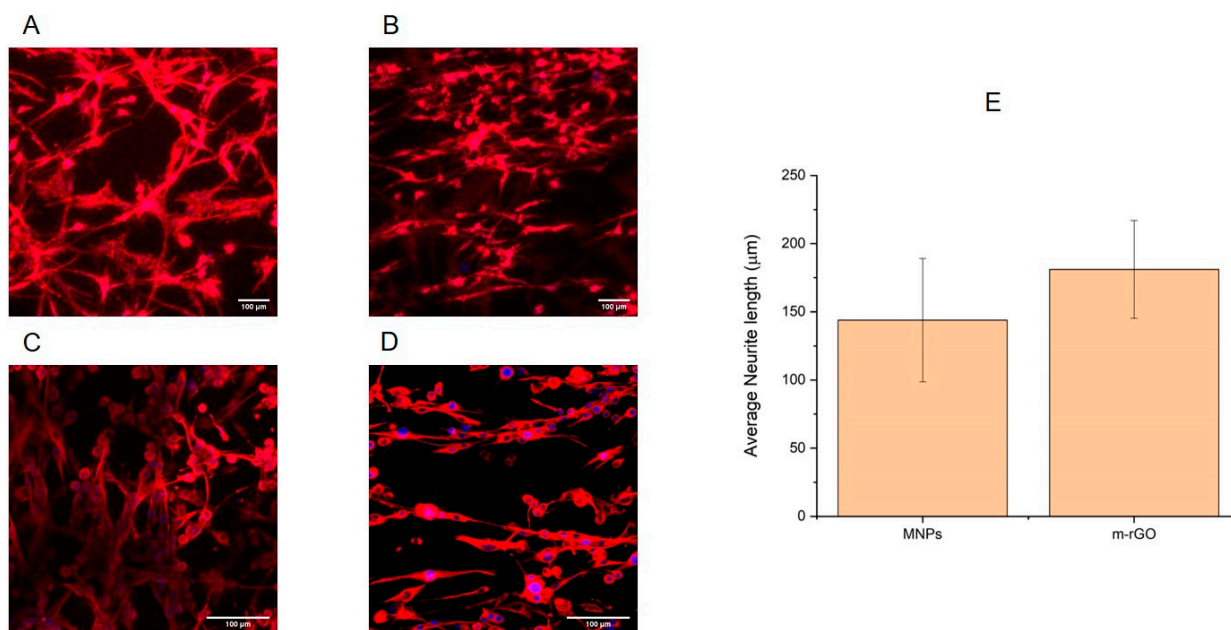


Figure S6. Cell morphology of SH-SY5Y cells within random (A and B) and aligned scaffold (C and D) of MNP-Collagen and m-rGO collagen scaffold respectively. E) Average neurite length of SH-SY5Y cells.



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