

## Supporting Information

### Enhanced stem cell osteogenic differentiation by bioactive glass functionalized graphene oxide substrates

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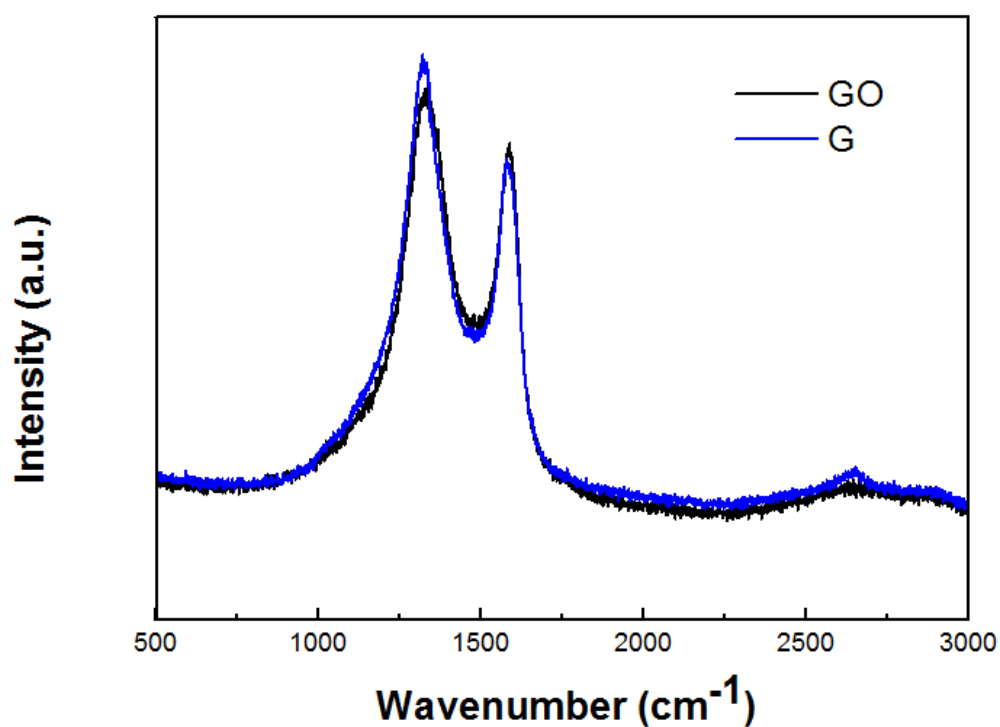
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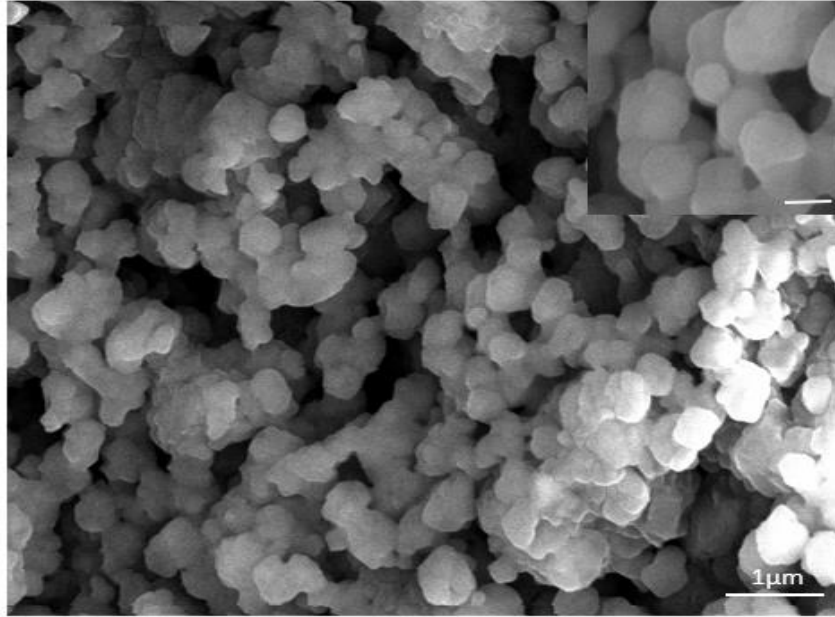
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**Figure S1: Raman spectra of the GO and G.** The G band peak is related to the first order scattering of the E<sub>2g</sub> mode, the D band peak due to a breathing mode of  $\kappa$ -point phonons of A<sub>1g</sub> symmetry, existing in defected graphene, and 2D band explained by the adopted double resonant model. The intensity ratio of the D and G peak has been used as a metric of disorder in graphene. The Raman spectrum of the GO contains G and D bands (at 1586 cm<sup>-1</sup> and 1336 cm<sup>-1</sup>) and a low 2D band. The Raman spectrum of the G also contains both G and D bands (at 1578 cm<sup>-1</sup> and 1321 cm<sup>-1</sup>, respectively), however, with an increased D/G intensity ratio compared to that in GO and a peak broadening along with a tail toward the higher wavenumbers in 2D band.



**Figure S2: SEM images of BG with 1000 °C reaction temperature.** BG particles showed a round shape with a homogeneous diameter. The insets is the magnified images showing the morphology of the bioactive glasses. Scale bars, 200 nm.