

Supporting Information

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

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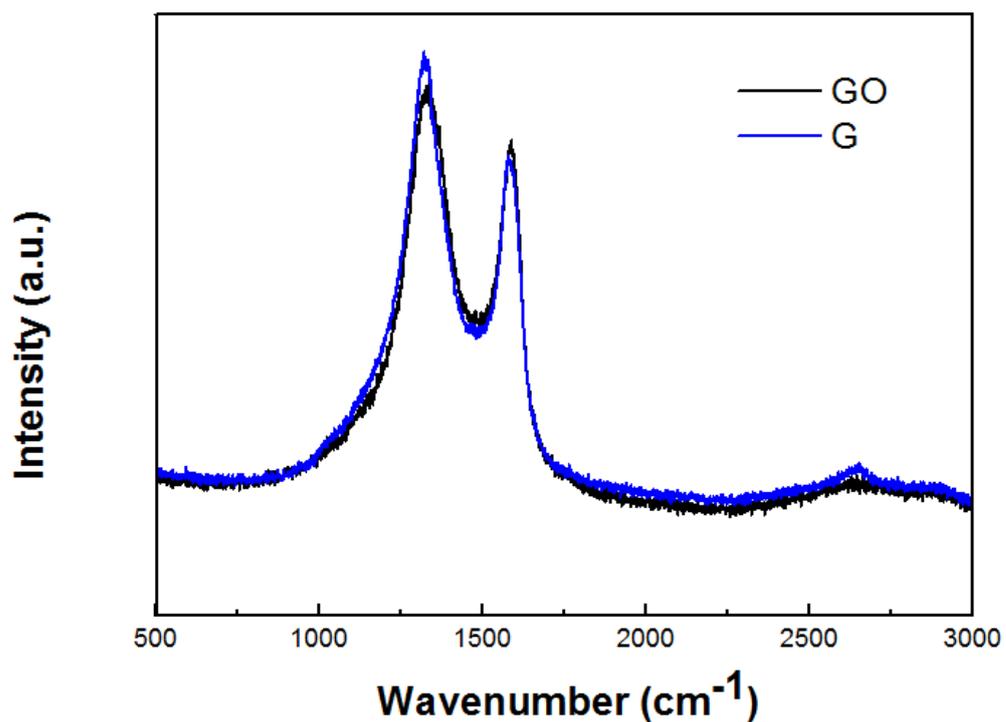


Figure S1: Raman spectra of the GO and G. The G band peak is related to the first order scattering of the E_{2g} mode, the D band peak due to a breathing mode of κ -point phonons of A_{1g} symmetry, existing in defected graphene, and 2D band explained by the adopted double resonant model. The intensity 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⁻¹ and 1336 cm⁻¹) and a low 2D band. The Raman spectrum of the G also contains both G and D bands (at 1578 cm⁻¹ and 1321 cm⁻¹, 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.

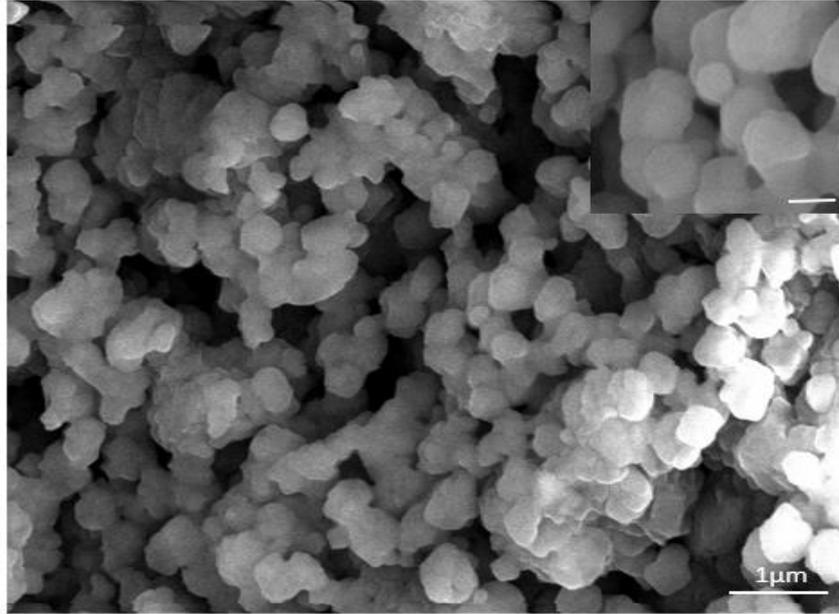


Figure S2: SEM images of BG with 1000 °C reaction temperature. BG particles showed a round shape with a homogeneous diameter. The insets is the magnified images showing the morphology of the bioactive glasses. Scale bars, 200 nm.