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(54) Title: METHOD FOR CONTROLLING AND ACCELERATING DIFFERENTIATION OF STEM CELLS USING GRAPHENE SUBSTRATES

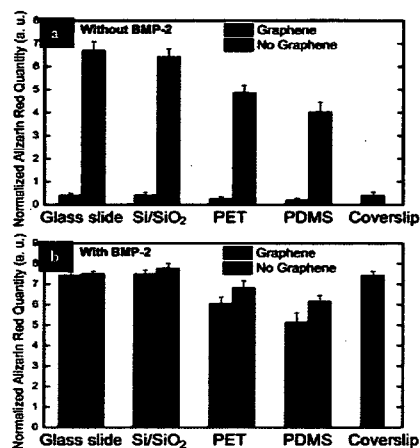
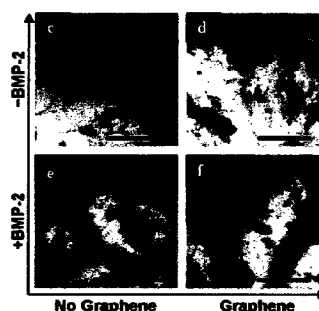


FIG. 5:



(57) Abstract: The invention relates to methods for directing differentiation of stem cells comprising graphene. In additional embodiments, the invention relates to methods for repairing and improving bone tissue functions comprising accelerating differentiation in stem cell growth by exposing stem cells to graphene and transplanting the graphene with the exposed stem cells in the tissue at the site of repair.