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Synthesis of Magnetic Graphene Oxide Grafted Polymaleicamide Dendrimer Nanohybrids for Adsorption of Pb(II) in Aqueous Solution

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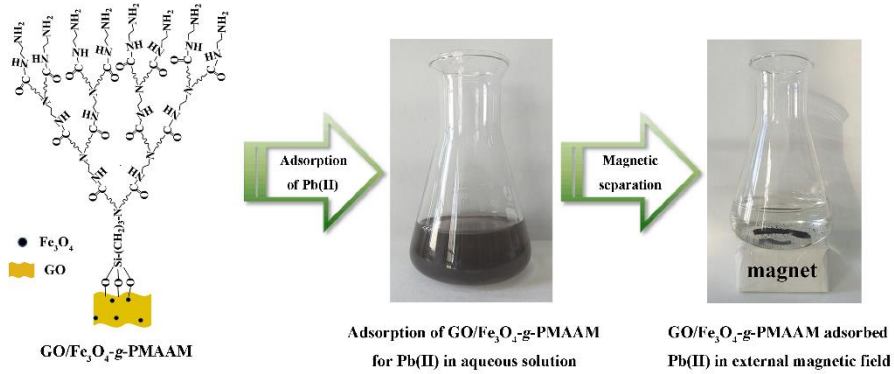
Graphical Abstract



Highlights:

- A novel GO/Fe_3O_4-*g*-PMAAM nanohybrid was prepared firstly
- The process fabricated and separation of nanohybrid was convenient operation
- GO prevented the agglomeration of pulverized Fe_3O_4
- PMAAM dendrimers grafted on GO/Fe_3O_4 prevented the oxidation of Fe_3O_4 nanoparticles
- By introducing PMAAM, the adsorption capacity of the nanohybrid was controlled

Abstract

In this paper, using maleic anhydride and ethylenediamine as functional monomers, graphene oxide (GO) loaded magnetic Fe_3O_4 nanoparticles modified by (3-Aminopropyl) triethoxysilane

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