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# Facile construction of 3D magnetic graphene oxide hydrogel via incorporating assembly and chemical bubble and its application in arsenic remediation

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## HIGHLIGHTS

- 3D GO hydrogel was constructed via incorporating assembly and chemical bubble.
- Chemical bubble ensured the retention of oxygenated moieties, and more functionalization.
- The efficient arsenic removal was realized within 2 min.

## Abstract

The normal preparation methods of 3D graphene materials such as the solvothermal process and annealing, will inevitably induce the collapse of oxygenated groups. While, the oxygenated moieties, acting as the binding sites for the contaminants and reaction sites of functionalization, are essential and necessary to guarantee the sorption performance of graphene oxide (GO) derivatives. In this study, incorporating assembly and chemical bubble provide a novel strategy to facilely fabricate macroporous 3D GO

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