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Functionalized graphene nanosheets with improved dispersion stability and superior paclitaxel loading capacity

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Highlights:

- Dispersibility of graphene oxide was improved through surface functionalization
- Functionalized nanosheets produced a stable dispersion up to 0.1 wt%
- The dispersion remained unaffected against salt- and protein-induced aggregation
- Hemolysis test showed an improvement in the biocompatibility upon functionalization
- Nanosheets exhibited a high loading efficiency for paclitaxel

Graphical abstract

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