Carbon Dot Modified Graphene Oxide with Tunable Fluorescence for Selective Cell Labeling

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Abstract:

Assembly of positively charged carbon dots (CD) over negatively charged graphene oxide (GO) was achieved by non-covalent approach. These hybrids are highly fluorescent and energy transfer occurs from QCD's to GO. The fluorescence of the hybrids can be tuned by suitable modification of GO, i.e. by changing the surface chemistry of GO. These hybrids act as selective cellular labels towards Mouse fibroblasts NIH3T3 cells.