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(54) **METHOD FOR THE PREPARATION OF GRAPHENE**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

A method for the preparation of graphene is provided, which includes: (a) oxidizing a graphite material to form graphite oxide; (b) dispersing graphite oxide into water to form an aqueous suspension of graphite oxide; (c) adding a dispersing agent to the aqueous suspension of graphite oxide; and (d) adding an acidic reducing agent to the aqueous suspension of graphite oxide, wherein graphite oxide is reduced to graphene by the acidic reducing agent, and graphene is further bonded with the dispersing agent to form a graphene dispersion containing a surface-modified graphene. The present invention provides a method for the preparation of graphene using an acidic reducing agent. The obtained graphene can be homogeneously dispersed in water, an acidic solution, a basic solution, or an organic solution.

4 Claims, 6 Drawing Sheets