Characterization of Epitaxial Graphene Oxide  

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Graphite oxide is a layered semiconducting material that is produced from graphite or graphene by chemical oxidation. The material is characterized by various probes such as transport, Raman spectroscopy and optical absorption spectroscopy. Here we present the properties of graphene oxide, which is chemically converted from epitaxial graphene directly on silicon carbide chips. The absorption spectrum indicates a large band gap and the Raman spectrum shows a pronounced D line while the 2D line is absent.