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# Recent Applications of Graphene in Dye-Sensitized Solar Cells

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## Abstract:

Graphene materials consisting of a single atomic layer of graphite have wide potential applications in electronic, optoelectronic, and energy storage devices due to their remarkable electrical, optical, and tunable band gap properties. Dye-sensitized solar cells (DSSCs) which offer high photo-to-electric conversion efficiencies at low production cost have attracted a great deal of interest. Application of graphene materials into each part DSSC component, including photoanode, electrolyte and cathode has been recently well developed. This review will focus on recent advances in graphenes and their application as materials to improve the photovoltaic performance of DSSCs.

**Key Words:** Graphene; DSSC; Photoanode; Electrolyte; Cathode

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