

The effect of particle size and conductivity of CuI layer on the performance of solid-state dye-sensitized photovoltaic cells

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Abstract

The conductivity of CuI film was greatly increased by the addition of the thiocyanate salts and the photoenergy conversion efficiency of DSSSCs made with this CuI film as a hole transporting material was greatly improved. The optimum amount of SCN salt for the cell performance was 4–5% to CuI, and an excessive addition declined cell performance in spite of conductivity increasing.

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