

# A nanoporous solid-state photovoltaic cell sensitized with copper chlorophyllin

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## Abstract

A fully solid-state dye-sensitized photovoltaic nanoporous n-TiO<sub>2</sub>/copper chlorophyllin/p-CuI cell was constructed by depositing p-CuI onto a nanoporous film of n-TiO<sub>2</sub> coated with copper chlorophyllin. The photo-excited pigment is found to inject electrons into n-TiO<sub>2</sub> and holes into p-CuI, generating a photocurrent and photovoltage that are significant for a solid-state dye-sensitized cell. © 1997 Elsevier Science S.A.

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