



Advances in OptoElectronics

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Review Article

Review of Recent Progress in Dye-Sensitized Solar Cells

Fan-Tai Kong, Song-Yuan Dai, and Kong-Jia Wang

Division of Solar Energy Materials and Engineering, Institute of Plasma Physics, Chinese Academy of Sciences, Hefei, Anhui 230031, China

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Abstract

We introduced the structure and the principle of dye-sensitized solar cell (DSC). The latest results about the critical technology and the industrialization research on dye-sensitized solar cells were reviewed. The development of key components, including nanoporous semiconductor films, dye sensitizers, redox electrolyte, counter electrode, and conducting substrate in dye-sensitized solar cells was reviewed in detail. The developing progress and prospect of dye-sensitized solar cells from small cells in the laboratory to industrialization large-scale production were reviewed. At last, the future development of DSC was prospective for the tendency of dye-sensitized solar cells.