

ABSTRACT

PHOTOVOLTAIC CELLS COMPRISING GROUP IV-VI SEMICONDUCTOR CORE-SHELL NANOCRYSTALS

The present invention relates to photovoltaic cells comprising IV-VI semiconductor nanocrystals as photoactive components. In particular, these nanocrystals are of core-shell or core-alloyed shell configuration, each comprising a core of a first group IV-VI semiconductor material having a selected band gap energy, and either a core-overcoating shell consisting of a second group IV-VI semiconductor material or a core-overcoating alloyed shell consisting of an alloy of said first group IV-VI semiconductor material and a second group IV-VI semiconductor material, respectively.

(No figure to accompany abstract)