

Title (en)

ORGANIC-INORGANIC PEROVSKITE BASED SOLAR CELL

Title (de)

SOLARZELLE AUF DER BASIS VON ORGANISCH-ANORGANISCHEM PEROWSKIT

Title (fr)

CELLULE SOLAIRE À BASE DE PÉROVSKITE ORGANIQUE-INORGANIQUE

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Application

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Abstract (en)

[origin: WO2014180780A1] The present invention provides a solid state solar cell comprising a transparent conducting support layer, on which a nanostructured, surface-increasing, mesoporous scaffold structure is provided, wherein an organic-inorganic perovskite layer is provided on said scaffold structure, and wherein a counter electrode is provided in electric contact with said perovskite layer. The mesoporous scaffold preferably comprises a doped semiconductor material, in particular doped TiO₂. Surprisingly, the use of doped TiO₂ compared to the non-doped counterpart results in increased power conversion efficiency.

IPC 8 full level

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