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(54) **PEROVSKITE SOLAR CELL AND
FABRICATION METHOD THEREOF**

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ABSTRACT

A perovskite solar cell includes a transparent electrode, an electron transport layer, a perovskite layer, a hole transport layer, and a second electrode in sequence. The perovskite layer includes a main perovskite layer and a two-dimensional perovskite coating layer covering both surface and periphery of the main perovskite layer. The two-dimensional perovskite coating layer includes a first overlay layer disposed between the main perovskite layer and the electron transport layer, a second overlay layer disposed between the main perovskite layer and the hole transport layer, and a third overlay layer covering the periphery of the main perovskite layer.

Two-dimensional
perovskite coating layer

