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(54) **SOLAR CELL AND MANUFACTURING METHOD THEREOF**

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ABSTRACT

A solar cell manufacturing method according to this embodiment includes: forming a second photoelectric conversion portion including a semiconductor substrate, a first semiconductor layer on one side of the semiconductor substrate, and a second semiconductor layer having a different conductivity type from the first semiconductor layer on the other side of the semiconductor substrate; forming a junction layer on the first semiconductor layer; changing a surface property of a front surface of the junction layer; forming a first photoelectric conversion portion including a photoelectric conversion layer including a perovskite compound on the front surface of the junction layer; and forming a first electrode electrically connected to the first photoelectric conversion portion on one side of the first photoelectric conversion portion and a second electrode electrically connected to the second photoelectric conversion portion on the other side of the second photoelectric conversion portion. Therefore, in a tandem structure provided with the first photoelectric conversion portion including the perovskite compound and the second photoelectric conversion portion including the semiconductor substrate, an adhesion property can be improved by changing the junction layer between the first photoelectric conversion portion and the second photoelectric conversion portion to hydrophilicity.

