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Facile Fabrication of TiO₂ Photoelectrodes Using Intense Pulsed Light for Dye-Sensitized Solar Cells

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Dye-Sensitized Solar Cells (DSSCs) have attracted great interests as they offer high energy-conversion efficiencies at low cost. For the conventional fabrication of DSSCs, high temperature sintering is required for the construction of interconnect TiO₂. However, more simplified process which can be applicable to large-sized solar cells module, is strongly necessary for the commercialization of DSSCs. In this work, we developed novel sintering method using Intense Pulsed Light (IPL), which can replace the conventional high temperature sintering methods. The photovoltaic properties of DSSCs utilizing IPL methods will be reported.

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