

## High Efficiency Architecture of the Platinized Stainless Steel Sheet Electrode for Ru(II) Dye-Sensitized Solar Cells

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Platinized stainless steel sheet (PSSS) was achieved 6.2% conversion efficiency introduced as an alternative of counter electrode in the dye sensitized solar cells (DSSCs). In comparison with the 3.8% of conversion efficiency of typical platinized fluorine-doped tin oxide (PFTO) counter electrode of DSSC, The result of DSSC with the PSSS highly enhanced 163%. This result was contributed by introducing PSSS as a counter electrode which decreased the resistance of charge transfer on tightly bonding between the interface of the Platinum particle and stainless steel sheet substrate of counter electrode. These results were analyzed by the binding energy with XPS and electrochemical impedance spectroscopy.