

# **Materials for Four Key Components of DSSC - Research Trend and Market Forecast (2011~2020F)**

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## **Abstracts**

Unlike existing reports, which had been limited to DSSC modules, this report expands its scope of analysis to four key parts and materials (Front Electrode, Dye, Electrolyte, Counter Electrode). The report is intended to provide up-to-date research trends and parts/materials market forecast to companies engaged in DSSC modules and related parts/materials businesses.

### **Feature contents:**

Analysis of research progress and direction for four key materials of DSSCs through analysis of approximately 200 recent papers

Analysis of the recent paper filing trend of key research institutes (papers listed after January 1, 2011)

Market forecast for DSSC modules and parts/materials (Front Electrode, Dye, Electrolyte, Counter Electrode, Metal Paste, Glass)

Although DSSCs have relatively lower efficiency than crystalline solar cells, there has been constant R&D on key materials as an attempt to improve efficiency, durability, and reliability.

In particular, front electrodes are most actively being studied among other key materials. This is because that the majority of researchers consider front electrodes as the most promising and applicable candidate to increase efficiency.

The parts and materials industry including four key materials, glass, and metal pastes is expected to increase from \$138 million in 2011 to \$239 million by 2015, when full-scale mass-production begins.

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