

Crystalline-Silicon solar cells: State-of-the-art and future challenges

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Summary:

In this presentation, an overview will be given of the state-of-the-art of crystalline silicon (c-Si) photovoltaics (PV). Technology trends as well as market trends will be described for c-Si solar cells and modules. The concept of silicon-based tandem devices will be introduced as the way forward for the c-Si PV industry in the mid-term future. Finally, it will be shown that for sustainable Terawatt production of PV in the coming decades, a lot of R&D is still needed.