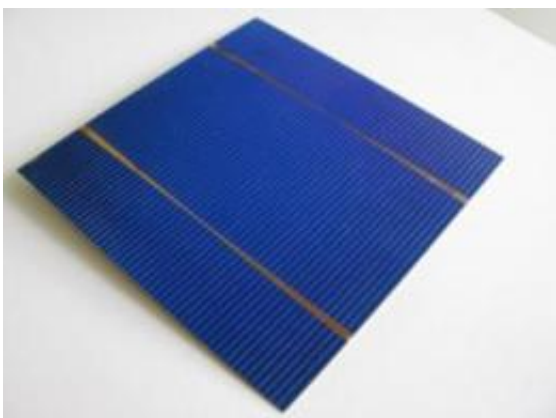


Imec reports record efficiencies for large-area epitaxial thin-film silicon solar cells

July 13 2010



Imec large-area (70cm²) epitaxial solar cell with an efficiency of up to 16.3% on high-quality substrate.

Imec scientists realized large-area (70cm²) epitaxial solar cells with efficiencies of up to 16.3% on high-quality substrates. And efficiencies of up to 14.7% were achieved on large-area low-quality substrates, showing the potential of thin-film epitaxial solar cells for industrial manufacturing. The results were achieved within imec's silicon solar cell industrial affiliation program (IIAP) that explores and develops advanced process technologies aiming a sharp reduction in silicon use, whilst increasing cell efficiency and hence further lowering substantially the cost per Watt peak.

Besides wafer-based bulk [silicon solar cells](#) imec aims at developing

epitaxial thin-film (

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