

## Imec reports record efficiencies for largearea 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 (70cm<sup>2</sup>) 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 (

Citation: Imec reports record efficiencies for large-area epitaxial thin-film silicon solar cells (2010, July 13) retrieved 1 May 2024 from <u>https://phys.org/news/2010-07-imec-efficiencies-large-area-epitaxial-thin-film.html</u>

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