

Born-again solar cells are more efficient

New Scientist

FOR better solar cells, look no further than the regeneration skills of plants.

Plants counteract the damaging effects of the sun by constantly rebuilding their [photosynthetic parts](#) [1]. To mimic this, a team led by [Michael Strano](#) [2] at the Massachusetts Institute of Technology created a [solar cell](#) [3] using light-harvesting proteins, lipids and carbon nanotubes. These stick together and the nanotubes channel electrons generated by the proteins to an external circuit.

When a surfactant is added, these components break apart, reassembling only once it is removed. By repeating this process every 32 hours, the team found that after a week, the solar cell was 300 per cent more efficient than one that wasn't regenerated (*Nature Chemistry*, [DOI: 10.1038/nchem.822](https://doi.org/10.1038/nchem.822) [4]).



[5]

[SOURCE](#) [6]

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<http://www.chem.info/news/2010/09/born-again-solar-cells-are-more-efficient>

Links:

[1] <http://www.newscientist.com/article/mg20327235.000-photosynthetic-viruses-keep-worlds-oxygen-levels-up.html>

[2] <http://web.mit.edu/stranogroup/>

[3] <http://www.newscientist.com/article/dn16018-solar-cells-need-to-be-more-dull-to-power-up.html>

[4] <http://dx.doi.org/10.1038/nchem.822>

[5] <http://www.newscientist.com/issue/2777>

[6] <http://feeds.newscientist.com/c/749/f/10899/s/da5459e/l/0L0Snewscientist0N0Ca rticle0Cmg20A7277750B70A0A0Ebornagain0Esolar0Ecells0Eare0Emore0Eefficient0>

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Published on Chem.Info (<http://www.chem.info>)

Bhtml0DDCMP0FOTC0Erss0Gnsref0Ftech/story01.htm