

STRETCHABLE SOLAR CELL CAN EVEN BE WASHED



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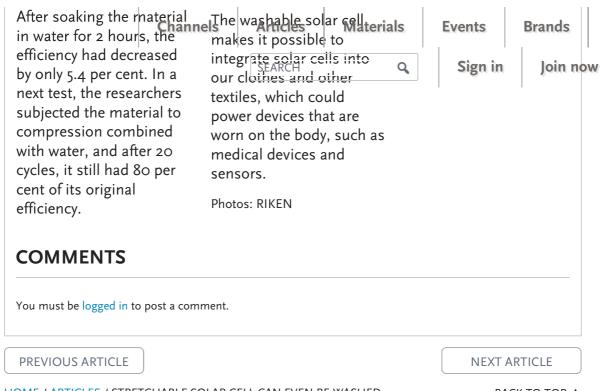
We have seen flexible solar cells, but the main thing preventing us from incorporating them into our clothes is that they couldn't be stretched or washed. Researchers from Japanese research centre RIKEN and the **University of Tokyo have** now developed a new type of ultra-thin solar cell that is coated on both sides with a stretchable and waterproof film. Thanks to these coatings, the device can generate electricity from sunlight even after being soaked in water or stretched.

The members of the research group developed

extremely thin and flexible organic photovoltaic cells, based on a material called PNTz4T. The ultra-thin device was then placed onto acrylic-based elastomer and the top side of the device was coated with an identical elastomer, giving it a coating on both sides to prevent water infiltration.. The elastomer, while allowing light to enter, prevented water and air from leaking into the cells.

The solar cell first had an energy efficiency of 7.9 per cent, producing a current of 7.86 milliwatts per square centimetre.





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