



The cells are made using thermal evaporation

NTU Singapore scientists develop transparent, super-thin solar cells for glass

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Scientists at NTU Singapore have made super-thin, see-through solar cells that can turn regular glass into a power source without blocking your view.

Imagine windows in buildings, cars, or even smart glasses quietly making electricity just from sunlight.

This new tech could help tackle big energy challenges by using surfaces we already have.

Thermal evaporation creates transparent perovskite cells

Led by Associate Professor Annalisa Bruno, the NTU team used a high-precision method called thermal evaporation to layer perovskite materials onto glass.

The result? Solar cells that are slimmer and more efficient than usual and totally transparent.

Since buildings use about 40% of global energy, covering their glass with these cells could seriously cut down on power bills and even charge devices on the go.