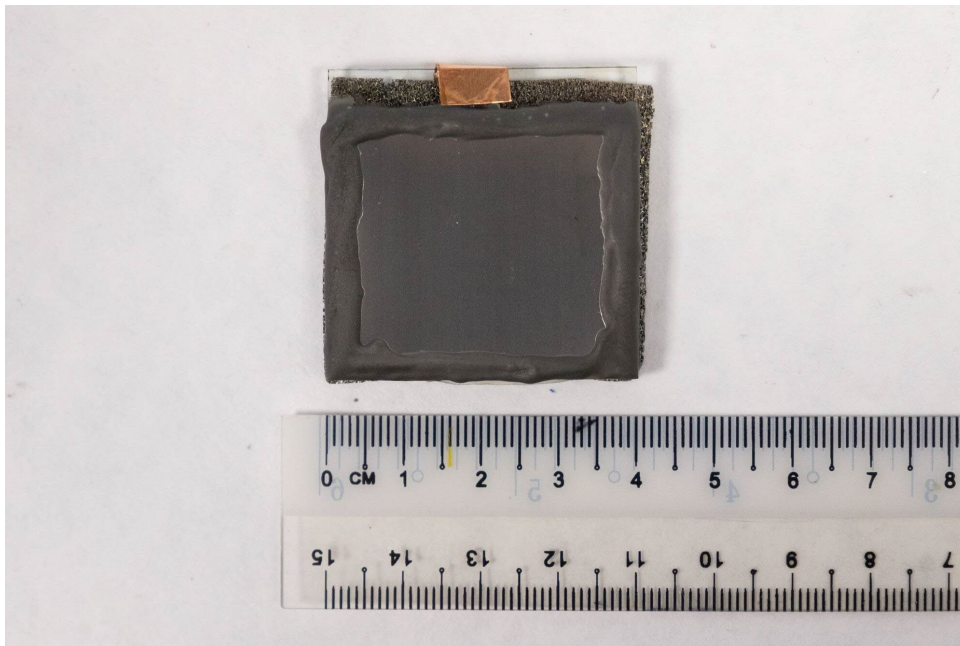




28 September 2026

'Artificial leaf' generates clean hydrogen from contaminated seawater



Scientists from Nanyang Technological University, Singapore, have designed a device that harvests sunlight to generate clean hydrogen from seawater and simultaneously degrades hydrazine, a highly toxic contaminant from industrial wastewater.

Inspired by leaves, the device directly captures sunlight and converts it into electricity to drive the reaction without the need for external power sources. The innovation is published in Nature Communications.

Two-in-one green solution To produce green hydrogen from water, an electric current is passed through water between two electrodes, splitting the water molecules into hydrogen and oxygen—a process known as electrolysis.

<https://lifeboat.com/blog/2026/09/artificial-leaf-generates-clean-hydrogen-from-contaminated-seawater>