

Weekly Discovery

We SHARE to inspire and ignite ideas!

4 April 2016 – 8 April 2016

ENGINEERING

MIT creates solar cells that are as light as a soap bubble



This is probably so far the most light-weight and tiny solar cell ever existed, so small and flexible that it can stay on top of a soap bubble without popping it. This ground-breaking idea came about when researchers realized that they can use a single process to produce the solar cell, the protective substrate and the overcoating. You can also check-out the [original research paper](#) published in Organic Electronics.

Source: [Inhabitat.com](#) (March 2016)

INNOVATION

Smart shoes help the elderly and disabled walk

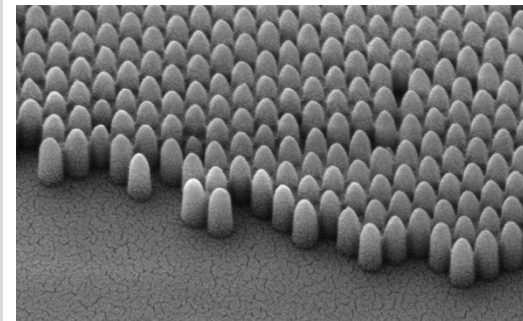


Smart shoes which can help the elderly and disabled with peripheral neuropathy were unveiled at the recent Wearable Technology Show in London. Pressure sensors in the Path Feel insoles provide feedback to make the wearer's foot vibrate and tell them when it is touching the ground. There is also a [video](#) about this meaningful and cool product, just check it out!

Source: [Newsweek](#) (March 2016)

NANOTECHNOLOGY

Nanostructures might clean your windows

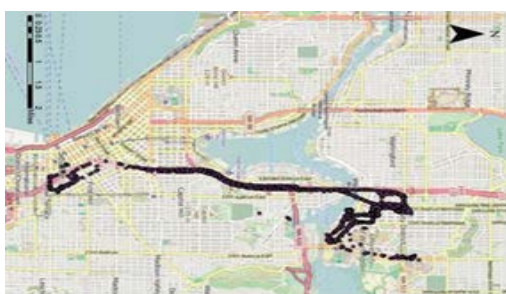


Imagine not having to clean your windows anymore! Researchers at the University College London developed a prototype window sample that is self-cleaning, energy-conserving and can minimize glare. With a 5-10 nm coating of vanadium dioxide on the surface, it prevents raindrops from leaving marks on the window, keeps heat from escaping when the weather gets cold and reduces light reflected internally to keep glare to a minimum.

Source: [Industrial Engineer](#) (March/April 2016)

SENSORS

Sensing the way to better public transit



In the near future, signals from your smart phone can help to achieve better public transit, without you even noticing about it. Engineers from University of Washington have developed a cost-effective system, which can sense signals from passenger's mobile devices. It is able to generate accurate and complete real-time travel data as it knows whenever a passenger boards and leaves the bus.

Do you know that our library is also equipped with a similar technology to track human traffic flow? Check out the ongoing project by Prof. Tony Quek near the exhibition area at level 1!

Source: [Industrial Engineer](#) (April 2016)

SUSTAINABILITY

Edible utensils to replace plastic ones

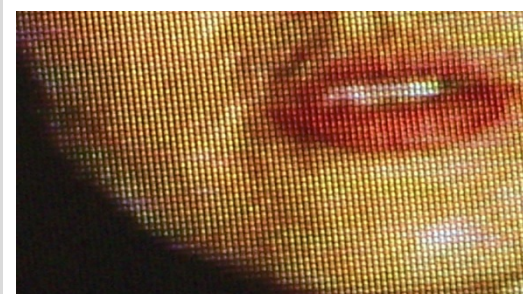


An Indian entrepreneur came up with Bakeys, which is a product line of edible utensils. The utensils consist of rice, millet and wheat. They help to protect our environment by minimizing waste generated from plastic utensils in packed food. You may wonder whether an edible spoon will melt in hot soup, just read the article to find out the answer!

Source: [Telegraph.co.uk](#) (March 2016)

TECHNOLOGY

Read my lips: New technology spells out what's said when audio fails



The University of East Anglia (UEA) has recently developed a new lip reading technology, as described in this [article](#). The machine lip-reading classification technology can differentiate between various speech sounds for a more accurate translation to those with hearing and/or speech difficulties.

Source: [ScienceDaily](#) (March 2016)

