

Weekly Discovery

We SHARE to inspire and ignite ideas!

12 September 2016 – 16 September 2016

ARTIFICIAL INTELLIGENCE

Five Surprising Ways AI Could Be a Part of Our Lives by 2030



This [article](#) provides insights on how AI would be engaged into different facets of our lives in the next decade or so. You may also check out the whole [report](#) from Stanford University

Source: [Science](#) (12 September 2016)

ENERGY HARVESTING

New fabric uses sun and wind to power devices



Discover a [revolutionary fabric](#) that is able to power mobile devices merely by harvesting solar and wind energy, so it paves the way for battery-less mobile devices. Find out more in this [NATURE Article](#). Also read [Wearable thermoelectric generators for human body heat harvesting](#).

Source: [Sciencedaily](#) (13 September 2016)

ENTREPRENEURSHIP

Scaling Your Startup By Partnering With Giants: How To Make The Love Last



An investor and an entrepreneur offer valuable tips on how young start-ups should partner with big companies to help them to thrive in the early stages of development.

Source: [Forbes.com](#) (8 September 2016)

INDUSTRIAL PROCESSING

Innovations in Biocement-Industrial Bioprocessing



This [report](#) features new discoveries in the biocement industry and discuss industrial applications of biocement. The new discoveries include bacteria-based biocement and biocemented brick units.

Source: [Frost & Sullivan](#) (9 September 2016)

MATERIAL SCIENCE

Breakthrough in materials science: Scientists bond metals with nearly all surfaces

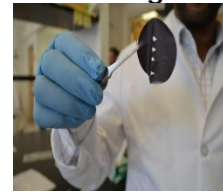


German researchers have discovered a process that helps metals to bond with almost all surfaces. There is a wide range of potential applications that include ship-building, aviation and medical implants. Also read this [RCS Article](#).

Source: [Phys.org](#) (7 September 2016)

MOBILE TECHNOLOGY

Containing our 'electromagnetic pollution': MXene can protect mobile devices from electromagnetic interference



MXene a coating designed to shield mobile devices from electromagnetic (EM) interference. This is essential as EM interference can cause mobile devices to fail to function as they should. Find out more in this [SCIENCE Article](#).

Source: [Phys.org](#) (8 September 2016)

QUANTUM SECURITY

Your Next Phone Could Have Quantum Security



A new generation of random number generators using quantum technologies are small enough to fit into a phone, promisingly offering new levels of mobile banking safety. Learn more in this [OSA Article](#). Also read [Cyber Attack Survival](#).

Source: [Popular Mechanics](#) (8 September 2016)

RADIATION TECHNOLOGY

MIT's New Toy Can Read Closed Books Using Terahertz Radiation



Researchers at MIT have successfully designed a device that sees through closed books. It uses terahertz radiation to work. More details on this new device can be found in this [Journal Article](#) at SUTD library.

Source: [Popular Mechanics](#) (9 September 2016)

RENEWABLE ENERGY

New Catalyst Could Split Water Cheaply



A new oxygen evolution catalyst that can work smoothly in acid, make efficient use of power in production and consequently assist in producing fuels from water in a low-cost way. Read this [SCIENCE Article](#) for more details on this new catalyst.

Source: [Scientific American](#) (7 September 2016)

RESEARCH ON LEARNING

Yale Study Shows Video Games Can Have Lasting Impact on Learning



A study revealed that video games can [enhance students' performance](#) in reading and in mathematics. Also Read this [Nature Article](#).

Source: [Scitechdaily.com](#) (12 September 2016)

SLEEP

A Sleepless Nation: What Does the Lack of Sleep Really Cost Us?



Source: [everydayloveart.com](#)

Discover the repercussions of having a [lack of sleep](#). They include accidents at the workplace and while driving, health issues and having a poor quality of life.

Source: [Frost & Sullivan](#) (12 September 2016)

SMART HOME

Social networks enable smart household appliances to make better recommendations



Source: [www.livescience.com](#)

A thesis by a PhD student at UPV/EHU-University of the Basque Country discusses ways to improve the relationship that users of [smart domestic appliances](#) have through the social networks.

Source: [Sciencedaily](#) (8 September 2016)