

Weekly Discovery

We SHARE to inspire and ignite ideas!

23 January 2017 – 27 January 2017

ARTIFICIAL INTELLIGENCE

In 2017, China Is Doubling Down on AI



China will move increasingly towards artificial intelligence and augmented reality with the aid of domestic investment from Internet giants that are pouring in. Baidu is leading the way with a new augmented reality lab in Beijing developing on AR marketing tools.

Source: [MIT Technology Review](#) (17 January 2017)

ARCHITECTURE

Former Industrialized Area in Belgium Transformed Into Futuristic Eco-Village

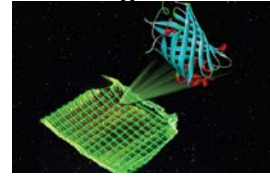


Be enchanted with Belgian ecological designer Vincent Callebaut's latest conceptual project that transforms a historic Tour & Taxis into an "environmentally sensitive fantasy land" based on biomimetic design.

Source: [My Modern Met](#) (17 January 2017)

ENGINEERING

Luminescent proteins provide colour to ecological and cheap Bio-displays



Researchers designed a new display screen made of luminescent proteins that is not only biodegradable but also has low production cost and produces high quality images. Read more at [Advanced Functional Materials](#).

Source: [Phys.org](#) (18 January 2017)

ENTREPRENEURSHIP

Buying your way into entrepreneurship

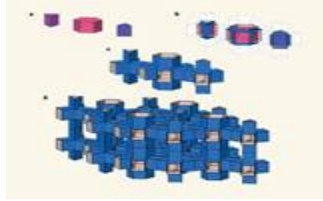


Authors from Harvard Business Review offer a systematic approach comprises of 4 key steps when embarking on acquisition entrepreneurship.

Source: [Harvard Business Review](#) (January/February 2017)

MATERIAL SCIENCE

Reconfigurable materials: Algorithm for architectural origami



Researchers developed an algorithm to design materials inspired by origami which can change their properties in response to the external environment. This algorithm can also be used to develop strategies for designing automated systems.

Source: [Nature](#) (18 January 2017)

NANOMATERIALS

Chemists cook up new nanomaterial and imaging method

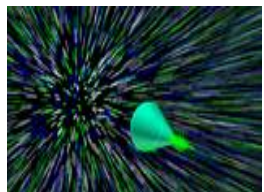


Chemists have designed a new material made out of nanoparticles to form a covalent organic framework (COF) colloid which is a jelly-like substance that can store various substances. A new way to observe how molecules combine to form COF colloids was developed. Read more at [ACS Central Science](#).

Source: [Northwestern Now](#) (19 January 2017)

OPTICS

Ultrafast Camera Captures 'Sonic Booms' of Light for First Time

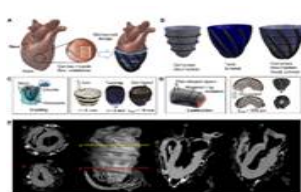


An ultrafast camera is now available to capture superfast events at 100 billion frames per second in a single exposure. This technique could one day be used to study how the brain works.

Source: [Livescience](#) (20 January 2017)

ROBOTICS

Soft robot helps the heart beat

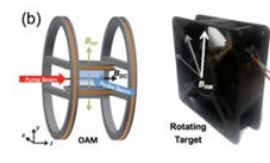


Researchers have developed a [soft robot](#) that wraps around the heart to keep it pumping. This could be a way to keep people with heart failure alive in the near future. You can read more at [Science Translational Medicine](#).

Source: [Harvard](#) (18 January 2017)

SECURITY

Military Program Produces Gadget That Detects Machinery from Behind a Concrete Wall



A gadget that can sense the changing magnetic fields caused by electric motors, combustion engines, and fans. This security and surveillance application can also be used in civil industrial processes and health tracking procedures. Read more at [Cornell University Library](#).

Source: [MIT Technology Review](#) (23 January 2017)

SENSORS

Gut feeling: the swallowable gut sensor that could replace a colonoscopy

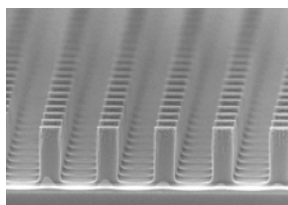


Discover a [sensor](#) that could make colonoscopies a thing of the past. It could also serve as a new diagnostic technique for diseases such as colon cancer and irritable bowel syndrome to doctors.

Source: [The Sydney Morning Herald](#) (22 January 2017)

SOLAR CELLS

A big nano boost for solar cells



Kyoto University has designed solar cells which are more energy-efficient and enabled the creation of smaller transducers that would be useful for various applications. Read more at [Science Advances](#).

Source: [Sciencedaily](#) (18 January 2017)

WIND POWER

Revolutionary flapping wind turbine mimics hummingbirds to produce clean energy



Using 3D kinematics and the concept of biomimicry, an inventor has developed a flapping wind turbine that initial test results yield better power efficiency, aerodynamic behavior and material resistance.

Source: [Inhabitat](#) (25 January 2017)

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