

Weekly Discovery

We SHARE to inspire and ignite ideas!

11 July 2016 – 15 July 2016

ARCHITECTURE

It's hideous, but this 3D-printed villa in China can withstand a major quake

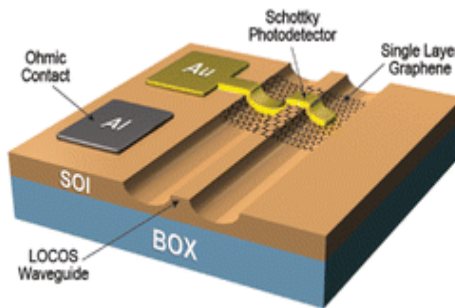


This low-cost home is 3D-printed and is earthquake-resistant. It could pave the way for technology in housing that can effectively protect occupants in the event of natural disasters.

Source: [Digital Trends](#) (10 July 2016)

COMMUNICATION TECHNOLOGY

A faster future: Graphene based optoelectronics



Researchers from [Graphene Flagship](#) have incorporated graphene with silicon on chip to make high responsivity photodetectors aimed at reducing power consumption and quicker data transmission speed in optical communication. Also read this [ACS paper](#)

Source: [Sciencedaily](#) (6 July 2016)

DIGITAL HEALTH

Digital Health Grows Up- Is Pharma Guiding the Way?



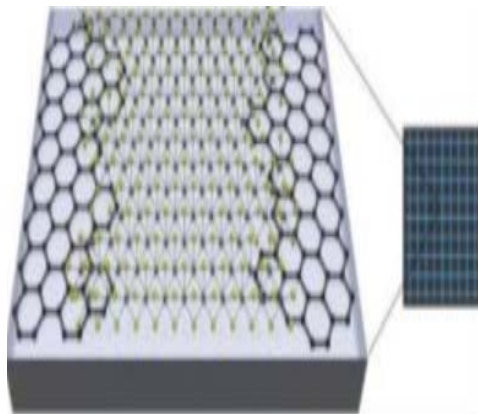
Source: [Kpcb.com](#)

This [report](#) presents insights on digital health. It covers the future of the healthcare sector, mental health technology, developments in wearable technology and more.

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

ELECTRONICS

Scientists Grow Atomically Thin Transistors and Circuits

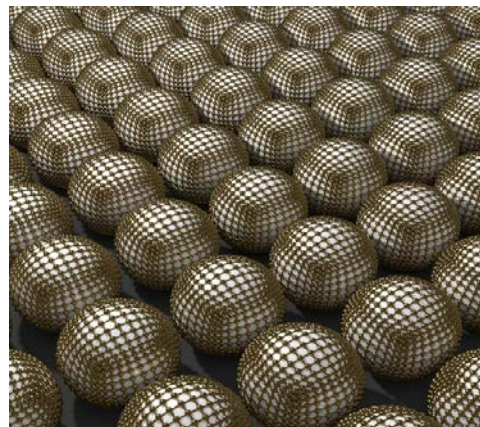


Scientists have explored a new approach to [chemically assemble transistors and circuits that are extremely thin](#). This discovery is believed to have practical applications as well as commercial benefits. Additionally read this [Nature paper](#).

Source: [Sciencedaily](#) (11 July 2016)

MATERIALS

Setting the Gold Standard

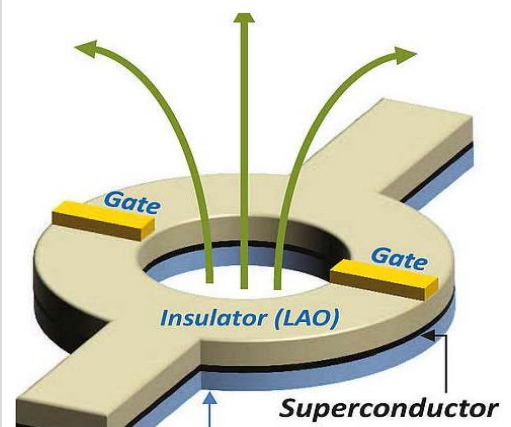


Researchers of the [University of Florida](#) discovered how gold can be utilized in crystals grown by light, to form nanoparticles. This has significant implications for industry and cancer treatment. It could even enhance the function of pharmaceuticals, medical equipment and solar panels. Find out more in this [Nature paper](#).

Source: [University of Florida News](#) (6 July 2016)

NANOTECHNOLOGY

Nano-switches for Superconductivity

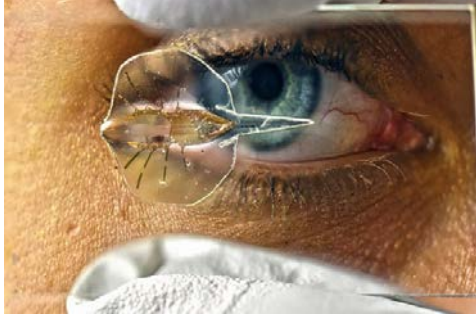


Presenting nano-electronic circuits with superconductivity that can be remotely switched on and off. It is considered a breakthrough in superconducting circuits at the nanoscale level. Learn more about this technology in this [Nature paper](#).

Source: [Phys.org](#) (12 July 2016)

ROBOTICS

Robotic stingray powered by light-activated muscle cells



Introducing the robotic stingray! The stingray's swimming is guided by light waves and powered by rat cardiac cells. This technology might eventually pave the way for designing a bioartificial heart and for the design of small underwater robots.

Source: [Science](#) (7 July 2016)

TECHNOLOGICAL TRENDS

Research and Development Initiatives in Injectable Nanoparticles, Nanoresins, 3D Printers, and Disease Predicting Algorithms



Discover research and development (R&D) initiatives in nanotechnology, 3D printing and disease detection algorithms [here](#). You will be able to know about the current state-of-the-art, why there is a need for R&D, what is innovative about it and future directions in the advancement of R&D.

Source: [Frost & Sullivan](#) (8 July 2016)

TRANSPORTATION

Development and test of the Perceived Accessibility Scale (PAC) in public transport



Learn about a Perceived Accessibility Scale (PAC) that evaluates the degree of user satisfaction with public transport. PAC can prove useful to urban planners in improving the quality and efficiency of public transport.

Source: [Journal of Transport Geography](#) (June 2016)

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