Weekly Discovery

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5 AUGUST 2019 - 9 AUGUST 2019

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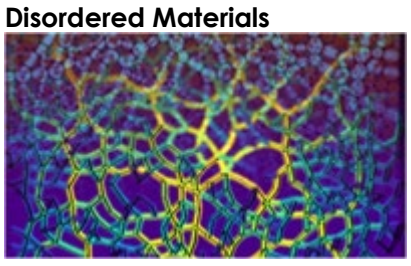
2D MATERIALS

Researchers Forecast Failure in Disordered Materials



"Researchers from North Carolina State University and the University of California Los Angeles were able to forecast likely points of failure in two-dimensional disordered laser-cut lattices without needing to study detailed states of the material."
Read more at PNAS.

Source: North Carolina State University (5 August 2019)

3D PRINTING

3D Printing the Human Heart

"Researchers have published a new 3D bioprinting method that brings the field of tissue engineering one step closer to being able to 3D print a full-sized, adult human heart ..."

Source: Science Daily (1 August 2019)

ARCHITECTURE

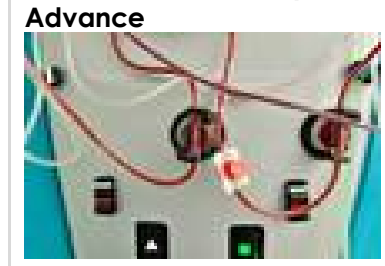
KPF's Robinson Tower Opens in Singapore

"The Robinson Tower, a 24 000 m² boutique retail and office tower, was inaugurated in Singapore. Designed by the international firm KPF or Kohn Pedersen Fox Associates, and executed in collaboration with Associate Architect A61, the building addresses the cultural and social aspects of the city, creating a singular and refined experience."

Source: Arch Daily (1 August 2019)

ARTIFICIAL INTELLIGENCE

AI Can Predict Kidney Failure Days in Advance



"DeepMind Health, a subsidiary of Google's artificial-intelligence company DeepMind designed an artificial-intelligence algorithm to identify factors that suggest someone is at risk of AKI - and to predict it 48 hours before it happens."

Source: Scientific American (31 July 2019)

ARTIFICIAL INTELLIGENCE

The Social Implications of Machine Learning

"AI Now Institute co-founder and New York University distinguished research professor Kate Crawford speaks with WSJ Digital Science Editor Daniela Hernandez about the implications that society must consider when placing AI in charge."

Source: Alexander Street Academic Video Online (2019)

BIO-ENGINEERING

Stanford Researchers Study Birds to Improve How Robots Land

"In order to better understand the versatile gripping abilities of birds, researchers at Stanford taught parrotlets – like this bird, Gary – to fly to perches made of different materials, including natural woods, foam and Teflon."

Source: Stanford University (6 August 2019)

DATA SCIENCE

Detecting Reports of Unsafe Foods in Consumer Product Reviews

"Here, we develop a machine learning approach for detecting reports of unsafe food products in consumer product reviews from Amazon.com."

Source: JAMIA Open (5 August 2019)

HEALTHCARE

Scientists Can Now Manipulate Brain Cells Using Smartphone

"Researchers have developed a soft neural implant capable of delivering multiple drugs and colour lights which neuroscientists believe can speed up efforts to uncover brain diseases such as Parkinson's, Alzheimer's, addiction, depression, and pain."

Source: EurekAlert! (5 August 2019)

INNOVATION

Taking a Bite Out of Food Waste

"Hyperspectral imaging could take the place of the time-consuming, costly and imperfect visual inspections currently used to sort food by ripeness and keep contaminants out of production lines."

Source: Physics World (2 August 2019)

INNOVATIVE COMPANIES

The 50 Best Workplaces for Innovators

"For Fast Company's inaugural Best Workplaces for Innovators list, we set out to find companies that empower all employees to create new products, improve operations, and take risks. We searched for businesses where innovation isn't just a buzzword but a part of the value system and culture."

Source: Fast Company (5 August 2019)

MACHINE LEARNING

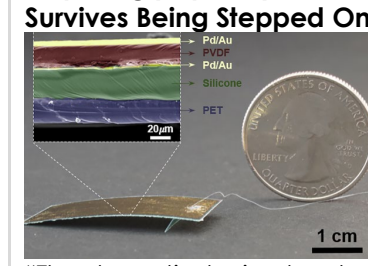
Bringing Machine Learning to the Masses

"A machine learning tool called Northstar lets users play with data visually. It includes a module that anticipates and counteracts typical rookie mistakes, such as assuming any pattern an algorithm finds is statistically significant."

Source: Science (2 August 2019)

ROBOTICS

Surprisingly Speedy Soft Robot Survives Being Stepped On



"The deceptively simple robot looks like a bent strip of paper, but it's able to move at 20 body lengths per second and survive being stomped on by a human wearing tennis shoes. Take that, cockroaches."

Source: IEEE Spectrum (31 July 2019)

SUSTAINABILITY

In the Future, This Electricity-Free Tech Could Help Cool Buildings in Metro Areas

"Engineers have designed a new system that can help cool buildings in crowded metropolitan areas without consuming electricity, an important innovation at a time when cities are working to adapt to climate change."
Also read at Nature Sustainability.

Source: University at Buffalo (5 August 2019)

TECHNOLOGY

10 Disruptive Technology Companies to Watch in 2019

"This list showcases 10 companies that are using technology to make their mark on the fields of investment, employment, transportation, construction, and more."

Source: Forbes (2 August 2019)

VIRTUAL REALITY

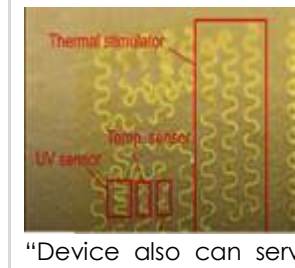
Natuzzi Launches Augmented Store for VR Furniture Shopping

"The Italian furniture brand Natuzzi has embarked on what it calls 'a new era of advanced, white-glove customer service' by launching a virtual-reality shopping experience … It enables customers to enter a digitally rendered version of their own home in virtual reality and decorate it with Natuzzi pieces."

Source: Dezeen (5 August 2019)

WEARABLES

A Wearable Device So Thin and Soft You Won't Even Notice It



"Device also can serve as robotic skin, relaying information back to the user."

Source: EurekAlert! (2 August 2019)

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