

Weekly Discovery

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26 - 30 July 2021

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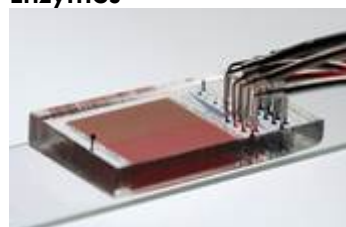
ARCHITECTURE
Dezeen's Guide To The Architecture Of The Tokyo 2020 Olympic Games



"As the Tokyo 2020 Olympic Games kicks off, we round up the most architecturally significant venues including buildings by Japanese architects Kengo Kuma, Kenzo Tange and Fumihiko Maki."

Source: [Dezeen](#) (22 July 2021)

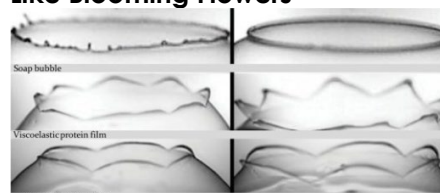
BIOTECH
Stanford Researchers Develop Tool To Drastically Speed Up The Study Of Enzymes



"A new tool that enables thousands of tiny experiments to run simultaneously on a single polymer chip will let scientists study enzymes faster and more comprehensively than ever before."

Source: [Stanford University](#) (22 July 2021)

CHEMISTRY
Stanford Researchers Use High-Speed Cameras To Reveal Bubbles Popping Like Blooming Flowers



"Researchers at Stanford and the University of Naples studying how bubbles form and eventually burst use high-speed cameras and analytical modeling to reveal a new popping process."

Source: [Stanford](#) (19 July 2021)

DRONES
New Algorithm Flies Drones Faster than Human Racing Pilots



"For the first time an autonomously flying quadrotor has outperformed two human pilots in a drone race. The success is based on a novel algorithm that was developed by researchers of the University of Zurich. It calculates time-optimal trajectories that fully consider the drones' limitations."

Source: [University of Zurich](#) (21 July 2021)

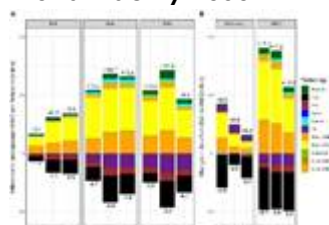
ENERGY
Making Clean Hydrogen Is Hard, But Researchers Just Solved a Major Hurdle



"Now, researchers from The University of Texas at Austin have found a low-cost way to solve one half of the equation, using sunlight to efficiently split off oxygen molecules from water. The finding, published recently in Nature Communications, represents a step forward toward greater adoption of hydrogen as a key part of our energy infrastructure."

Source: [Uni Texas AT Austin](#) (15 July 2021)

JOBS
Meeting Global Climate Targets Will Lead To 8 Million More Energy Jobs Worldwide By 2050



"Researchers created a global dataset of job footprints in 50 countries and used a model to investigate how trying to meet the Paris Agreement global climate target of staying well below 2°C would affect energy sector jobs. They found that action to reach said target would increase net jobs by about 8 million by 2050, primarily due to gains in the solar and wind industries."

Source: [EurekAlert](#) (23x July 2021)

MATERIAL
A Material Difference



"A passion for biomaterials inspires PhD candidate Eesha Khare to tackle climate change."

Source: [MIT](#) (25 July 2021)

MATERIAL SCIENCE
Eco-Friendly Plastic From Cellulose And Water



"researchers at the University of Göttingen have now found a sustainable method - "hydrosetting", which uses water at normal conditions - to process and reshape a new type of hydroplastic polymer called cellulose cinnamate (CCI)."

Source: [EurekAlert](#) (22 July 2021)

MATERIALS
These Gorgeous Wall Tiles Are Made From Eggshells



"Nature Squared, an ethical design studio founded in 2001, has developed a beautiful wall tile made from discarded eggshells collected from bakeries and kitchens on the island of Cebu in the Philippines."

Source: [Fast Company](#) (26 July 2021)

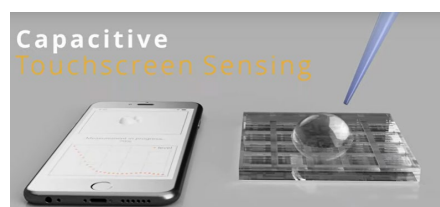
SUSTAINABILITY
The Environmental Toll Of Disposable Masks



"All of those masks carry both financial and environmental costs. The Covid-19 pandemic is estimated to generate up to 7,200 tons of medical waste every day, much of which is disposable masks."

Source: [MIT](#) (20 July 2021)

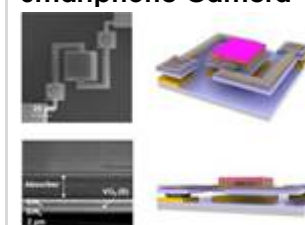
TECHNOLOGY
Smartphone Screens Effective Sensors For Soil Or Water Contamination



"Researchers from the University of Cambridge have demonstrated how a typical touchscreen could be used to identify common ionic contaminants in soil or drinking water by dropping liquid samples on the screen, the first time this has been achieved."

Source: [University of Cambridge](#) (22 July 2021)

THERMAL IMAGING
Development Of A Novel Technology To Check Body Temperature With Smartphone Camera



"Technology for low-cost, thermal-imaging sensors that operate well at temperatures as high as 100 °C has been developed. Expected to be actively used in thermal-imaging applications in smartphones and autonomous vehicles."

Source: [eurekAlert](#) (26 July 2021)

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