

Weekly Discovery

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2 MARCH 2020 - 6 MARCH 2020

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Artificial Intelligence & Data Science	Aviation	Cities
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Cybersecurity	Digital Design & Fabrication	Advanced Manufacturing

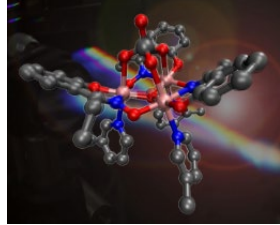
ARCHITECTURE
How Morphosis Is Creating Virtual Architecture and Immersive Experiences



"The rapid growth of virtual and augmented reality technology has the potential to transform architectural visualization at multiple scales, from the production workflow for visual assets to the way VR integrates with the overall design process."

Source: [designboom](#) (1 March 2020)

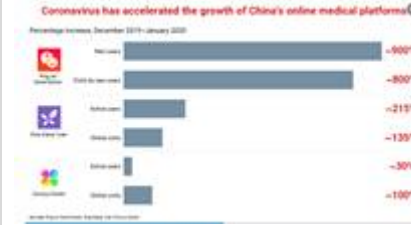
CLOUD
Cloud Data Speeds Set to Soar with Aid of Laser Mini-Magnets



"Tiny, laser-activated magnets could enable cloud computing systems to process data up to 100 times faster than current technologies, a study suggests. Chemists have studied a new magnetic material that could boost the storage capacity and processing speed of hard drives used in cloud-based servers."

Source: [FurekAlert!](#) (2 March 2020)

COVID-19
As the Coronavirus Spreads, Healthcare Goes Digital



"As the coronavirus rages on, China's online healthcare platforms are growing explosively. Trapped at home due to government quarantines and travel restrictions, many patients are turning to Internet-based options for diagnosis and treatment."

Source: [Bain & Company](#) (26 February 2020)

COVID-19
The Week in Tech: Coronavirus Disrupts the Industry



"The biggest story of the moment is the rapid spread of the coronavirus ... The virus — and the global attempts to contain it — has rocked the business world, sending financial markets [into correction territory, down more than 10 percent.](#)"

Source: [The New York Times](#) (28 February 2020)

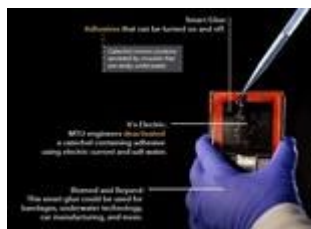
DESIGN
SF-SO Brings Back the Tactility of Analogue with 'Tamed' Digital Devices



"Departing from touch screens and electronic sensors, SF-SO has created intuitive physical interfaces derived from analogue products, with the aim of reducing the user's overall time and effort."

Source: [designboom](#) (1 March 2020)

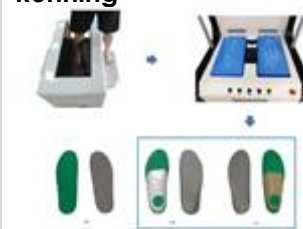
MATERIALS SCIENCE
Engineers Zap and Unstick Underwater Smart Glue



"With a small zap of electricity, biomedical engineers at Michigan Technological University take an underwater smart glue prototype from sticky to not in seven seconds."

Source: [Science Daily](#) (2 March 2020)

MATERIALS SCIENCE
The Effectiveness of Personalized Custom Insoles on Foot Loading Redistribution during Walking and Running



"In this study, we tested the effectiveness of different hardness custom insoles for redistributing plantar pressure during walking and running in health young man. Three types of insoles were compared the effect of hardness on plantar pressure redistribution. The result exhibited that the custom insoles (CSI and CHI) could significantly increase the plantar pressure on midfoot of both medial and lateral sides (MM and LM). However, the CHI significantly increased the forefoot (MFand CF) pressure, this may potentially raise the risk of forefoot pain."

Source: [Scientific.net](#) (February 2020)

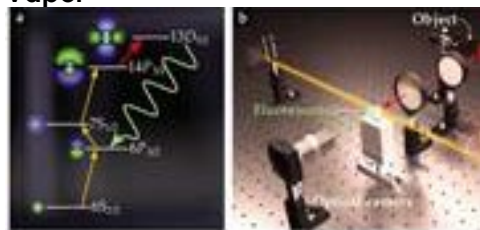
OPERATIONS MANAGEMENT
How Coronavirus Could Impact the Global Supply Chain by Mid-March



"We predict that the peak of the impact of Covid-19 on global supply chains will occur in mid-March, forcing thousands of companies to throttle down or temporarily shut assembly and manufacturing plants in the U.S. and Europe."

Source: [Harvard Business Review](#) (28 February 2020)

PHYSICS
Terahertz Imaging Using Atomic Vapor

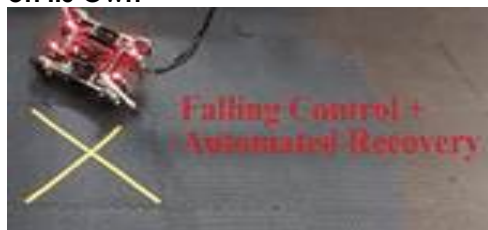


"One promising approach to circumvent those limitations is to use an atomic gas that converts terahertz-frequency photons into easily detectable optical-frequency ones. Rydberg atoms—atoms excited to a high principal quantum number n—turn out to be excellent sensors for the job."

Read more on [Physics Review X](#).

Source: [Physics Today](#) (28 February 2020)

ROBOTICS
This Robot Taught Itself to Walk Entirely on its Own



"Google is teaching robots to navigate without human intervention - a prerequisite to being useful in the real world."

Source: [MIT Technology Review](#) (2 March 2020)

TECH OUTLOOK
10 Breakthrough Technologies 2020



"Here is our annual list of technological advances that we believe will make a real difference in solving important problems. How do we pick? We avoid the one-off tricks, the overhyped new gadgets. Instead we look for those breakthroughs that will truly change how we live and work."

Source: [MIT Technology Review](#) (26 February 2020)

TECH OUTLOOK
2020 Technology Industry Outlook



"According to Paul Sallomi ... the time is right for companies to seriously consider exploring the advantages including reduced latency and lower bandwidth costs of processing data locally, at the edge of their networks. In terms of strategy, partnerships will likely become even more essential for technology companies looking to deliver solutions that drive true business outcomes for customers."

Source: [Deloitte](#) (2020)

TECHNOLOGY
How to Lead Employees Through Technology Changes



"To help lead employees through changes to the technology they use for work every day — and to empower each team member to succeed — consider these five steps."

Source: [Forbes](#) (2 March 2020)

URBAN PLANNING
MVRDV and Airbus Integrate Air Mobility into Urban Environments



"MVRDV and Airbus are exploring the possibility of reconnecting territories through an accessible-for-all system. Avoiding the negative impact that comes with the introduction of new transportation modes into cities, the study imagines both short-term and long-term scenarios, in order to dodge any detrimental impacts from this disruptive technology."

Source: [ArchDaily](#) (27 February 2020)

WATER MANAGEMENT
Stanford Researchers Develop a Better Way to Detect Underground Water Leaks



"Stanford researchers propose a new way to locate water leaks within the tangle of aging pipes found beneath many cities. The improvement could save time, money and billions of gallons of water."

Source: [Stanford News](#) (27 February 2020)

WOMEN INNOVATORS
4 Female Leaders Driving Game-Changing Innovations



"Celebrating women making waves in STEM is one way to move the needle toward a more equitable future — and inspire younger generations. Here are four women and their stories about working at game-changing companies."

Source: [Dell Technologies](#) (1 March 2020)

