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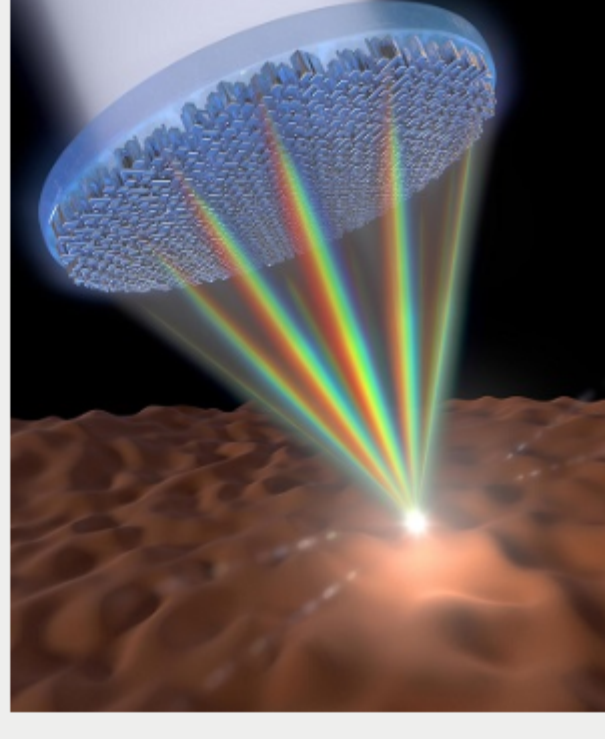
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Top Stories

Single Metalens Focuses all Colors of the Rainbow in one Point

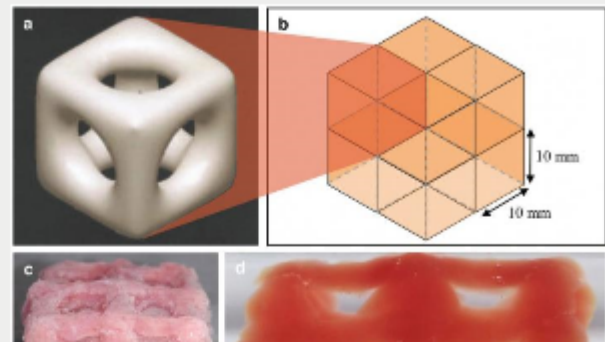
Researchers have developed a single lens that can focus the entire visible spectrum of light — including white light — in the same spot and in high resolution. This has only ever been achieved in conventional lenses by stacking multiple lenses.



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3D Printing Technique Replicates Biological Structures

A 3D printing technique that replicates biological structures could be used for tissue regeneration and replica organs. The technique creates structures that are soft enough to mimic the mechanical properties of organs such as the brain and lungs.



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Tiny Vision Processing Chip Could Reduce System Size for Use in IoT

Scientists have developed a microchip that can capture visual details from video frames using extremely low levels of power. According to the research team, the chip's video feature extractor uses 20 times less power than existing best-in-class chips. The new microchip could reduce the size of smart vision systems down to the millimeter range.



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Featured Products



Surface Mount InGaAs Pigtail Photodiodes

Fermionics Opto-Technology
Surface-mount InGaAs photodiode assemblies from Fermionics Opto-

Technology offer direct-coupled performance in a space saving ceramic package. Part number FD80S8-F8 is a solderable, surface-mountable assembly with a high-speed InGaAs photodiode chip coupled directly to a single-mode or multi-mode fiber.

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PCO-TECH Inc.

To see or not to see: If every single photon counts, PCO's back illuminated sCMOS camera system pco.panda 4.2 bi can lead you to the answer. Enabled by PCO's new back illuminated sensor and based on the latest innovations in sCMOS technology, the pco.panda 4.2 bi reaches a quantum efficiency of up to 95%.

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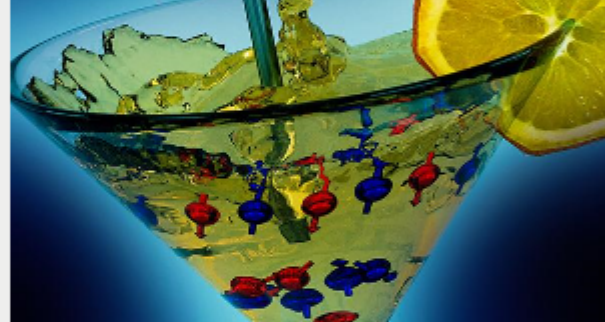
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More News

'Quantum Cocktail' Provides Insight Into Magnetic Storage

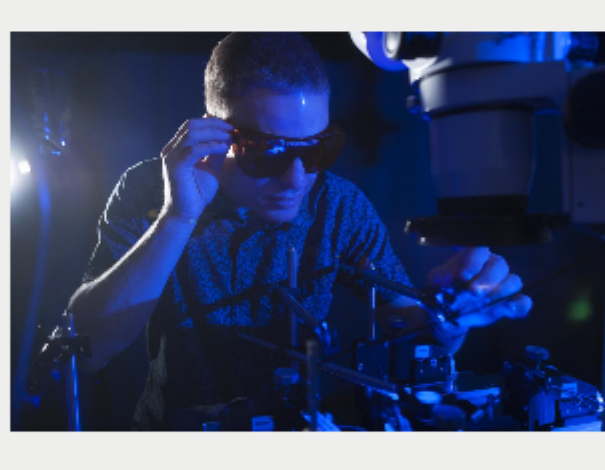
To speed up the writing and readout of magnetic information from storage devices, researchers are exploring the use of ultrashort laser pulses that can switch magnetic domains in solid-state materials. Although this route shows promise, the large number of magnetic materials interacting with one another has made this approach difficult to study.



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Optical Rectennas Get an Efficiency Boost

The research team that announced the first optical rectenna in 2015 reports that it has developed a new higher efficiency rectenna design. The early version of the rectenna produced power at microvolt levels. The new version produces power in the millivolt range.



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More Headlines

Manufacturing Is Changing Dramatically. Who's Ready to Work? [Read Article](#)

Optically Based T-Sensor Could Be Used in Manufacturing, Biomedicine [Read Article](#)

Silicon Nanoblock Arrays Create Vivid Colors With Subwavelength Resolution [Read Article](#)

Method Analyzes Encrypted FPV Data to Detect Unauthorized Drone Filming [Read Article](#)

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OPTICS & PHOTONICS International Exhibition

OPIE '18

25-27 April, 2018

Yokohama, Japan

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April 23-26, 2018 | Fort Worth, TX

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Industry Events

PITTCON 2018

February 26 - March 1, 2018
Orange County Convention Center-West - Orlando United States
Photonics Media Booth: 2313
PITTCON will cover analytical chemistry and spectroscopy and will highlight scientific developments made in the fields of food safety, the environmental sciences, bioterrorism and the pharmaceutical industry. The 2018 conference will feature more than 2,000 scientific and educational sessions, including short courses, plenary sessions, abstract sessions and technical sessions. The exposition will showcase the latest products, services and equipment for professional excellence in the laboratory sciences.



[More Info](#)

Webinars

Stray Light Absorption in Broadband Wavelengths

Tue, Feb 6, 2018 1:00 PM - 2:00 PM EST

This webinar will discuss the science behind broadband light absorption and introduce materials and techniques for applying optically black coatings that demonstrate ultralow reflectance across a broadband spectra. The presenter, who worked on the development of a number of coating processes for NASA, will provide examples of how low-reflectance technology is currently being used in the visible, NIR and IR wavelengths.

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Questions: info@photonics.com

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