

# This Week In PHOTONICS

PHOTONICS MEDIA



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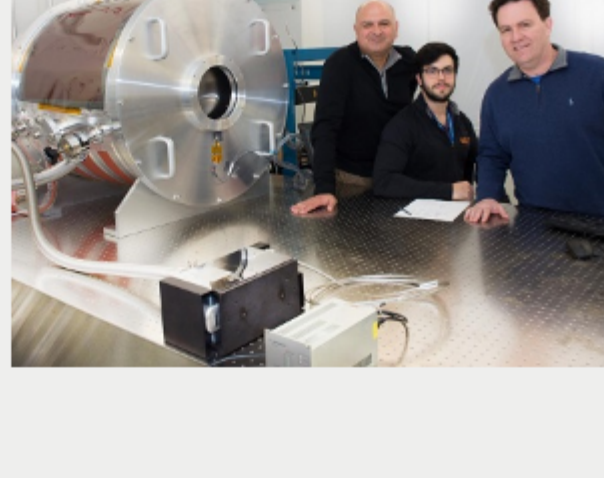
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## Top Stories

### NASA Moves Closer to Ultrastable Telescope

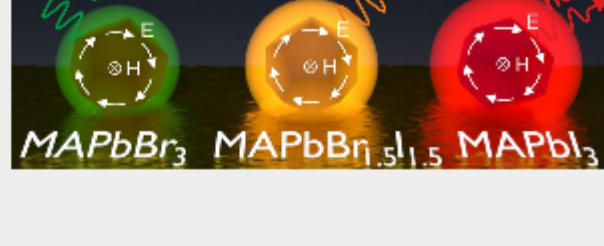
Researchers at NASA's Goddard Space Flight Center have shown that they can dynamically detect subatomic distortions across a 5-ft segmented telescope mirror in their mission of building an ultrastable telescope that locates and images dozens of Earth-like planets beyond the solar system and then scrutinizes their atmospheres for signs of life.



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### Researchers Create Light-Emitting Nanoantennas Using Perovskite

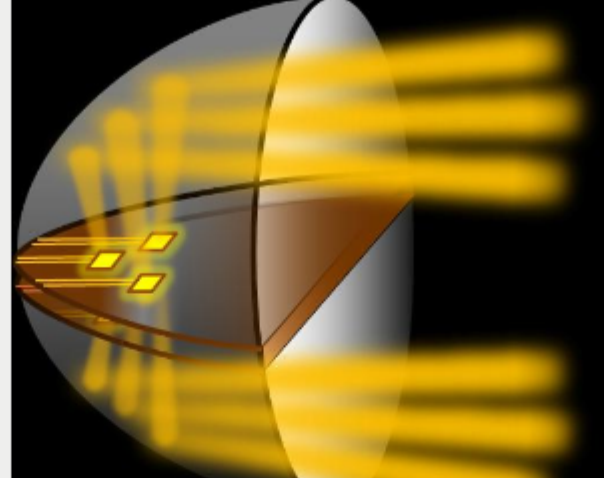
A research team has used hybrid perovskites to create light-emitting nanoantennas with enhanced photoluminescence. The nanoantenna and light source are combined in a single nanoparticle. The new nanoantenna can generate, enhance and direct emission wavelengths.



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### LED-Based Headlight Meets Safety Requirements, Saves Energy

Researchers have designed an LED-based train headlight that uses one-tenth of the energy required for headlights that use conventional light sources. If operated eight hours every day, the electricity savings of the new design could reduce emissions of the greenhouse gas carbon dioxide by about 152 kg per year.



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## Featured Products



### Pioneering sCMOS Back Illuminated!

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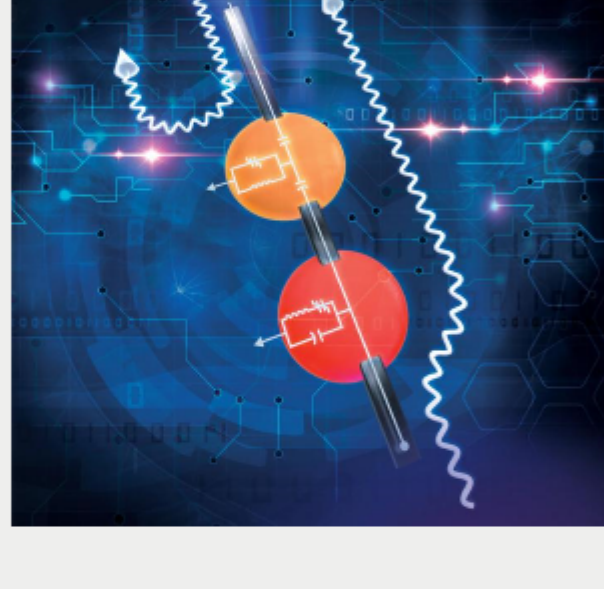
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## More News

### Multiple Resonators Can Improve Signal Transmission

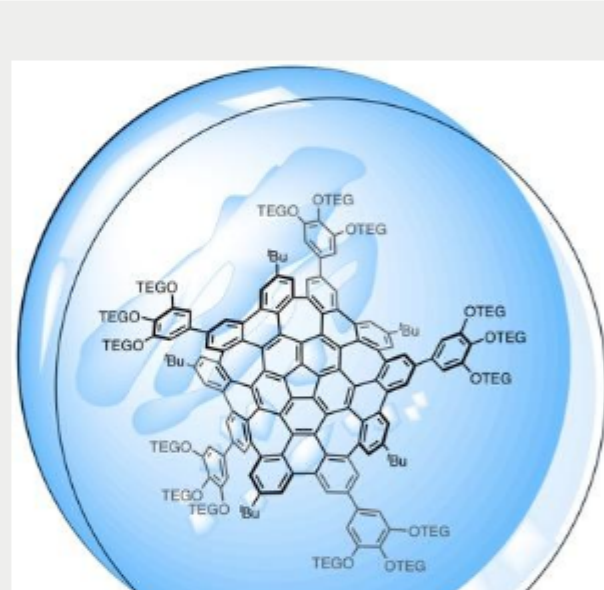
Scientists have developed a light wave isolation method for efficient signal transmission that is less costly and more versatile than using a single resonator to induce light waves to travel in just one direction. The new approach does not require an external magnetic field or any other form of external bias for reliable wave transmission, yet it provides highly efficient broad bandwidth isolation.



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### Nanocarbon Shows Promise for Fluorescent Bioimaging

Researchers have developed a flexible, water-soluble warped nanographene molecule that is biocompatible. The molecule was also found to induce cell death when exposed to light. The new molecule could expand the biological applications for nanocarbons, including cancer cell imaging and treatment.



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## More Headlines

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## Industry Events

### OFC 2018

March 11-15, 2018 - San Diego Convention Center - San Diego United States

The Optical Fiber Communication Conference and Exhibition (OFC) is the largest global gathering for optical communications and networking professionals. Last year's conference and exhibition attracted more than 14,000 attendees and more than 650 exhibitors from around the world. This year, OFC will offer networking and partnering opportunities, presentations, as well insights into the major trends and advances affecting the industry, from devices and fibers for high-speed data center links to enabling technologies for IoT and 5G.



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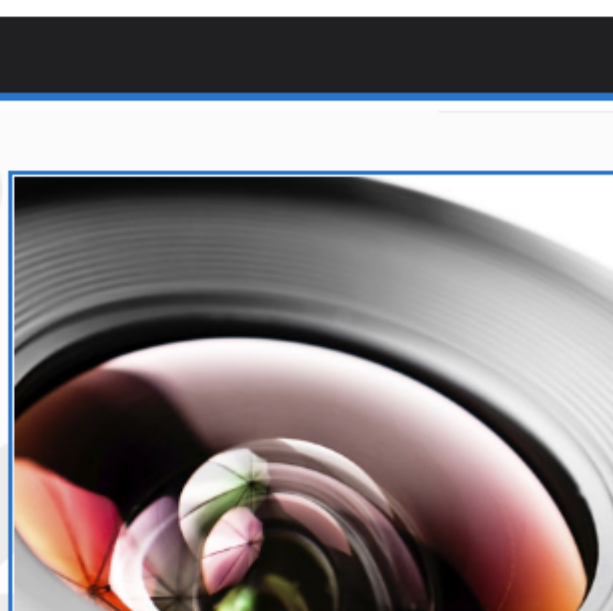
## Webinars

### Smart Cameras: Technology and Applications

Tue, Mar 13, 2018 1:00 PM - 2:00 PM EDT

The capabilities of smart cameras are expanding dramatically over the past few years. This webinar will explore the characteristics of today's smart cameras, typical applications, and how to ensure that you select the camera that best meets your needs. You will learn how smart cameras can be used to solve unique machine vision requirements and how they can reduce the overall cost of a machine vision application.

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