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PHOTONICS MEDIA



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The HyperFine Spectrometer, Brillouin spectroscopy. Ready to go. Out of the box.

www.lightmachinery.com

Top Stories

Optically Rewritable LCD Could Enable Flexible Displays

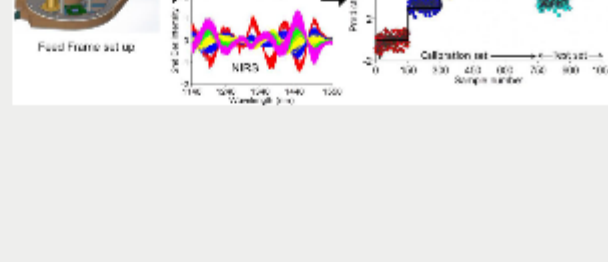
Engineers have manufactured a flexible, optically rewritable LCD (ORWLCD), about as thin as a piece of paper, that would allow information to be uploaded onto a flexible paperlike display, where it could be updated quickly.



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NIR Chemical Imaging Can Help Ensure Safety in Pharma Manufacturing

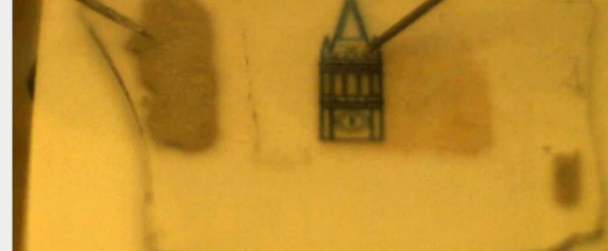
Researchers evaluated the ability of NIR chemical imaging (NIR CI) to monitor the concentration of pharmaceutical ingredients in tableting powder over a wide area. Results showed that NIR CI-based predictions of concentration could potentially be more representative than those achieved using NIR spectroscopy (NIRS).



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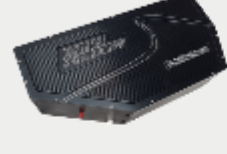
Atomically Thin Light-Emitting Device Could Advance 'Invisible' Displays

Engineers have built a bright light-emitting device that is millimeters wide and fully transparent when turned off. The light-emitting material in the device is a monolayer semiconductor that is just three atoms thick.



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Featured Products



The HyperFine Spectrometer

LightMachinery Inc.
Designed for measuring hyperfine spectra and subtle spectral shifts, the HyperFine spectrometer from LightMachinery is a compact, low cost spectrometer capable of sub-picometer resolution. It is ideal for pulsed laser characterization and for measuring the small spectral shifts from Brillouin scattering.

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Novel App-based Industrial Cameras

IDS Imaging Development Systems GmbH

Industrial cameras that are as versatile and easy to use as your smartphone? This has become reality. We introduce IDS NXT: the app-based approach of German camera manufacturer IDS transforms cameras and sensors into customized, smart vision sensors. You need your IDS NXT devices to solve a vision task that isn't covered by standard apps.

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AR/VR Lens: Measure Displays in Headset

Radiant Vision Systems, Test & Measurement

Displays viewed near to the eye, such as those in AR/VR devices, create immersive virtual experiences. However, as display images are magnified to fill a user's field of view, display defects are also magnified. Issues with uniformity of brightness and color, dead pixels, line defects, cloudiness, and image position become more evident to the user whose eyes are only centimeters away from display screens.

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Pioneering sCMOS Back Illuminated!

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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More News

MIR Spectroscopy Could Be Used to Detect Airborne Toxicants

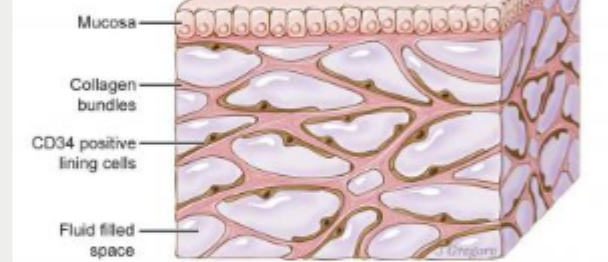
Scientists have discovered a way to detect trace amounts of chemicals in the air by using an IR laser to identify the unique frequency of individual molecules. The technique is sensitive enough to detect a molecule present in the air at concentrations as low as one part per billion.



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Confocal Laser Endomicroscopy Uncovers Previously Unknown Organ

Using imaging technology called probe-based confocal laser endomicroscopy, researchers have identified a previously unknown feature of human anatomy that could have implications for the function of organs, tissues and diseases.



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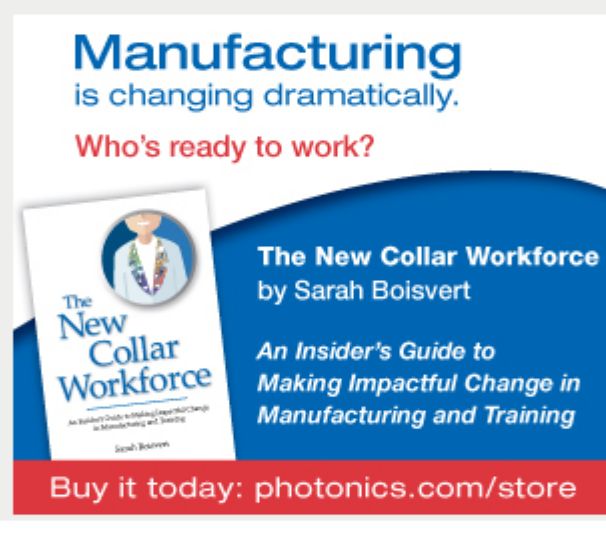
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Industry Events

SPIE Defense + Commercial Sensing 2018

April 15-19, 2018 - Gaylord Palms Resort & Convention Center - Orlando, United States

Photonics Media Booth: 1422

SPIE Defense + Commercial Sensing 2018 is the leading global sensing and imaging technologies event for the defense industry. Presentations from leading industry experts will cover sensors, IR technology, laser systems, spectral imaging, radar, lidar and more. Your registration will give you access to two programs, Defense + Security and Commercial + Scientific Sensing and Imaging. These programs complement each other with a wide range of photonics technologies for defense and commercial applications.

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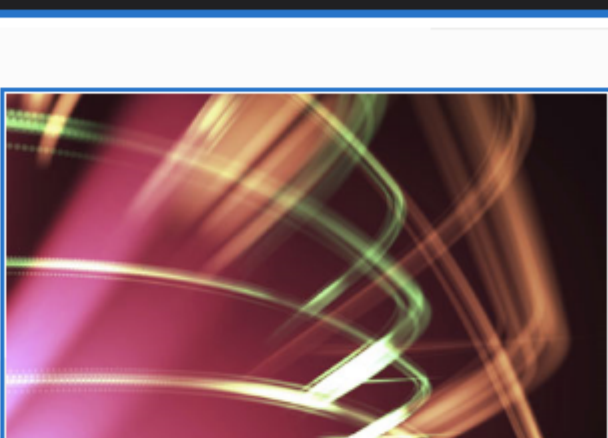
Webinars

Fundamentals of Helium Leak Detection

Tue, Apr 17, 2018 1:00 PM - 2:00 PM EDT

From LEDs to micro-devices to microelectronics to fiber optics — everything leaks! This 40-minute webinar, presented by Agilent Technologies, will describe the challenges of locating and measuring leaks, the importance of leak rate specification and various methods of leak detection. You will learn the different methods of locating leaks and determining leak rate, and which method to employ for your product or system.

[Register Now](#)



From Layout to Multiphysics: Integrating Thermal and Photonics Simulation into the PIC Design Flow

Thu, Apr 19, 2018 11:00 AM - 12:00 PM EDT

Presented by CST, this webinar will show you how to use CST STUDIO SUITE to simulate the design of Photonic Integrated Circuits (PICs). It will demonstrate the complete workflow to analyze thermally tuned PIC devices, starting from a component model in Luceida Photonics IPKISS. Simulating PIC devices can be challenging. This webinar will introduce you to CST STUDIO SUITE's unique platform for addressing these challenges.

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Holographix LLC is the industry leader in nano- and micro-replication. Our proprietary replication technology enables us to produce state-of-the-art structured surfaces and optical devices that are used in a wide array of industries including spectroscopy, life sciences, semiconductor, aerospace, defense, display, telecommunication, metrology, and precision measurement.

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