

This Week In PHOTONICS

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CORNING | Advanced Optics
Solving the world's toughest optical problems... Materials, Systems and Design

Top Stories

Optical Fiber Used to Direct, Stabilize Random Laser

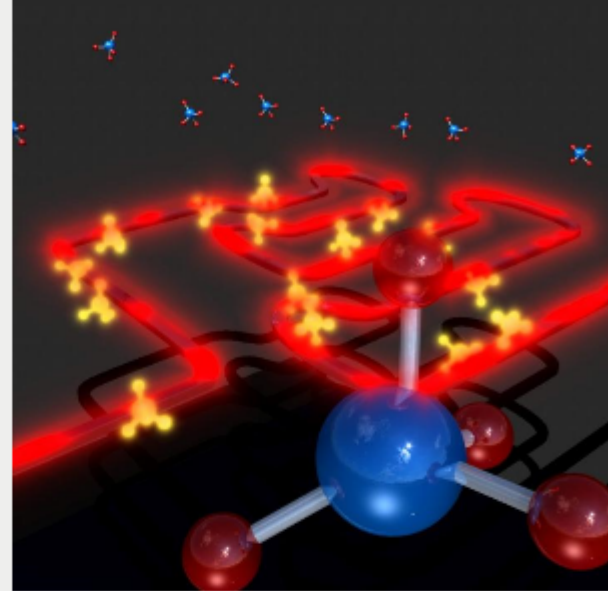
An advance in laser technology combines the broad spectral features of a random laser with the spectral stability and high directionality of a traditional laser. Such an advance could enable greater use of random lasers in applications where a broad spectrum illumination source would be of benefit.



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Spectrometer Uses Silicon Photonics to Monitor Gas Leaks More Efficiently

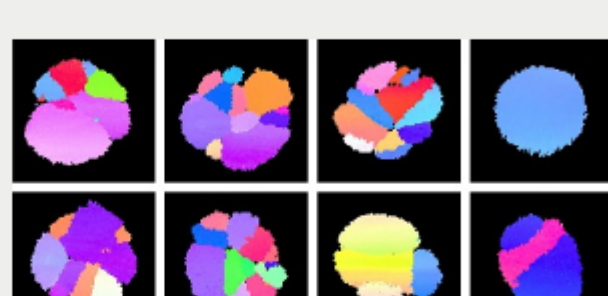
A chip-based spectrometer that is smaller than a dime has demonstrated the ability to detect methane in concentrations as low as 100 parts-per-million. The spectrometer leverages silicon photonics technology to realize a compact, cost-effective design that provides IR tunable diode-laser absorption spectroscopy (IR-TDLAS) on a CMOS-compatible platform. It uses an approach similar to absorption spectroscopy; but instead of a free-space setup, the laser travels through a narrow silicon waveguide.



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Single Nanoparticle Maps Pave the Way for Better Nanotechnology

A method that combines electron microscopy and optical microscopy to map individual nanoparticle responses in different situations and contexts could pave the way for better nanomaterials and safer nanotechnology.



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Featured Products

Corning Hyperspectral Imaging



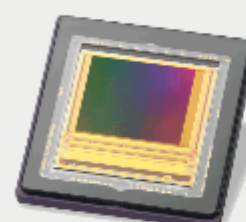
Corning Advanced Optics, Specialty Materials

Corning provides hyperspectral sensors and full hyperspectral systems for all applications

including precision agriculture, industrial, environmental monitoring, mining, and mineralogy. Our microHSI(TM) family of hyperspectral sensors and systems combine the lowest size, weight, and power in the industry.

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BORA 1.3M Time of Flight Sensor



Teledyne e2v (UK) Ltd.

The 3D Time of Flight (ToF) BORA sensor is a 1.3 million pixel CMOS image sensor, designed with

Teledyne e2v's proprietary CMOS imaging technology. It is ideal for systems operating at short or mid distances and ranges. It features an optimized multi-integration mode together with an electronic global shutter.

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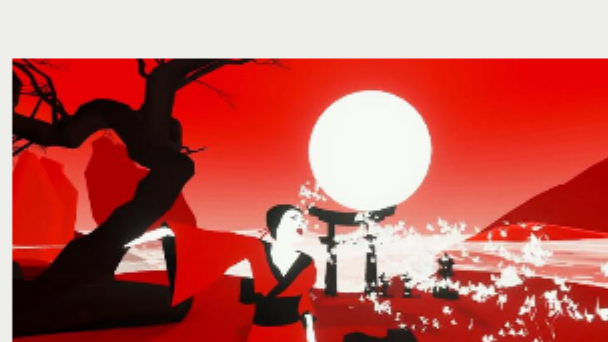
CLEO
Laser Science to Photonic Applications
Technical Conference: 13 - 18 May 2018
Paper Submission Deadline: 13 December 2017
San Jose, California, USA [VISIT SITE >>](#)

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More News

VR Opera Hits All the Right Notes

"Magic Butterfly" is an immersive VR experience that reimagines scenes from "Madame Butterfly" and "The Magic Flute," featuring original recordings from the Welsh National Opera (WNO). It was created by VR/AR content production agency REWIND and the WNO, in collaboration with CAMERA, the University of Bath's motion capture research center. The production combines the emotion and beauty of WNO soprano Karah Son's voice with high-quality avatar imagery to envelope viewers in an interactive 3D performance.



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EV Group, SwissLitho Create 3D Production Solution

Wafer bonding and lithography equipment supplier EV Group and novel nanolithography tools manufacturer SwissLitho AG have announced a joint solution to enable the production of 3D structures down to the single-nanometer scale.



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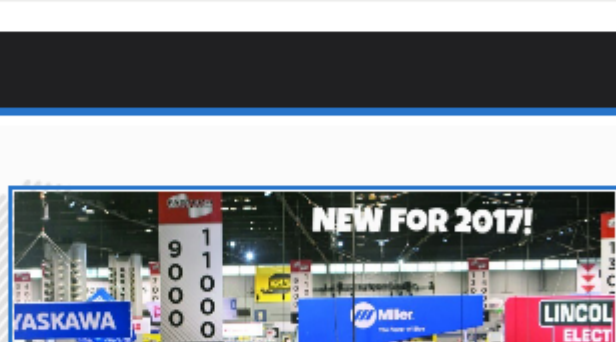
Oxford Instruments Installs Plasma Etch Equipment at ITRI [Read Article](#)

UK's CPI to Establish Healthcare Photonics Center [Read Article](#)

Industry Events

FABTECH 2017

November 6-9, 2017 - McCormick Place - Chicago United States
FABTECH provides a a wealth of information and ideas in a convenient venue where you can meet with world-class suppliers, see the latest industry products and developments, and find tools to improve productivity, increase profits and meet your metal forming, fabricating, welding, and finishing needs. More than 50,000 attendees and over 1,700 exhibiting companies are expected at this year's event. FABTECH also provides educational sessions and expert-led presentations covering the latest trends and technology in the metal forming, fabricating, welding and finishing industries. New in 2017 - a 3D/Additive Manufacturing Pavilion and an expanded Tube & Pipe Pavilion.



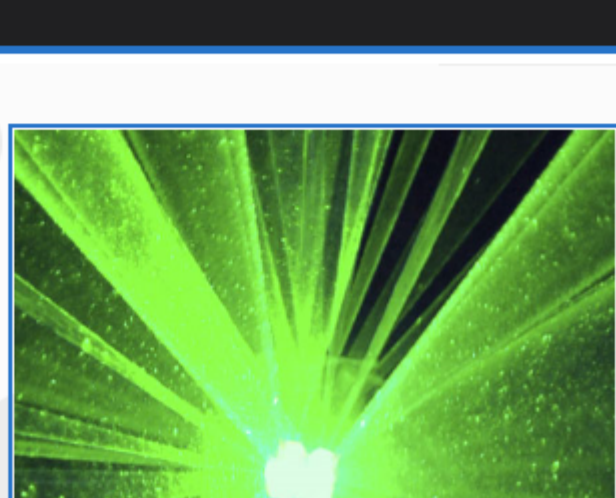
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Webinars

Practical Solutions for Laser Safety

Tue, Nov 14, 2017 12:00 PM - 1:00 PM EST

This webinar will explain the most important elements of laser safety and provide practical advice on how to implement a laser safety program in a research, academic and/or product development laboratory setting. Presenter Ken Barat, a laser safety consultant and long-standing expert in the field, will present a number of lessons he has learned on lab design for a safe environment and laser accident prevention. He will also address common misconceptions about laser safety, before opening the floor to questions from attendees. This webinar is sponsored by Kentek.



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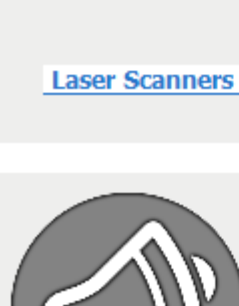
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