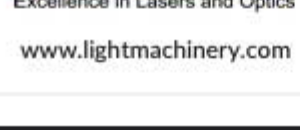


This Week In PHOTONICS

PHOTONICS MEDIA



sponsor



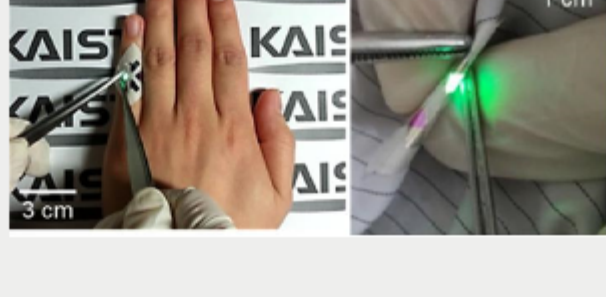
HORNET SPECTROMETER
Compact, Low Cost, <30pm Resolution in the Visible or NIR



Top Stories

Fabric-Based OLEDs Could Support Commercialization of Wearable Displays

Researchers have developed fabric-based organic LEDs that show high luminance and efficiency while maintaining the flexibility of the fabric. These fabrics could lead to soft wearable displays that bend and move with the wearer. Silicone-based LED jackets, shirts and stage costumes are already available, but the intrinsic stiffness of inorganic semiconductors makes it difficult to use LED-based devices for everyday, comfortable clothing.



[Read Article](#)

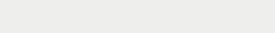


Researchers Pattern Laser-Induced Graphene on Wood

A team at Rice University has patterned a thin film of laser-induced graphene (LIG) on a block of pine using CO₂ laser scribing. Turning wood into graphene could open new avenues for the synthesis of LIG. Because of its high electrical conductivity, graphene patterned on wood surfaces could be fabricated into various high-performance devices, such as hydrogen and oxygen electrodes for water splitting and supercapacitors for energy storage.

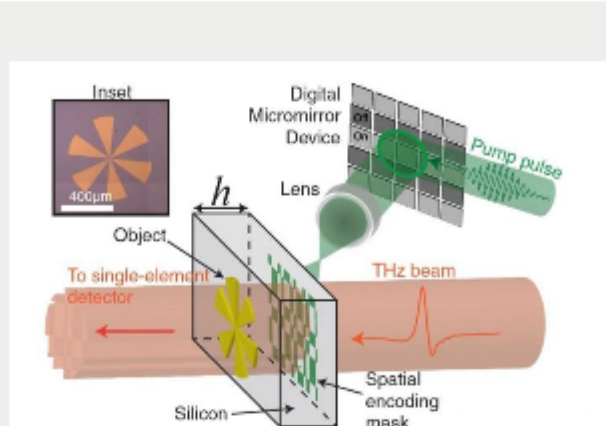


[Read Article](#)



Subwavelength THz Could Improve Image Resolution, Accelerate Imaging Speed

A terahertz (THz) imaging technique has been developed that is compatible with adaptive and compressive sensing algorithms. The technique was used to demonstrate image reconstruction at subwavelength dimensions, and could potentially allow three-times-faster image acquisition than conventional technologies.



[Read Article](#)

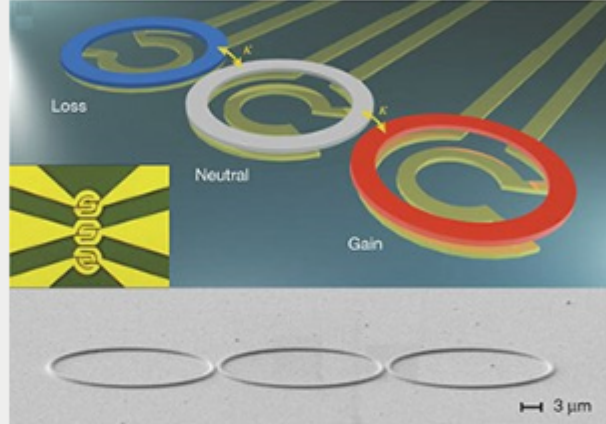


sponsors

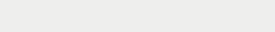


Enhancing Sensitivity at Higher-Order Exceptional Points

Active photonic molecule lasers that are non-uniformly pumped could provide a way to generate high sensitivity exceptional points in a systematic way. Researchers generated second order exceptional points using a coupled binary photonic molecule under parity-time symmetric conditions and extended this concept to higher-order exceptional points.

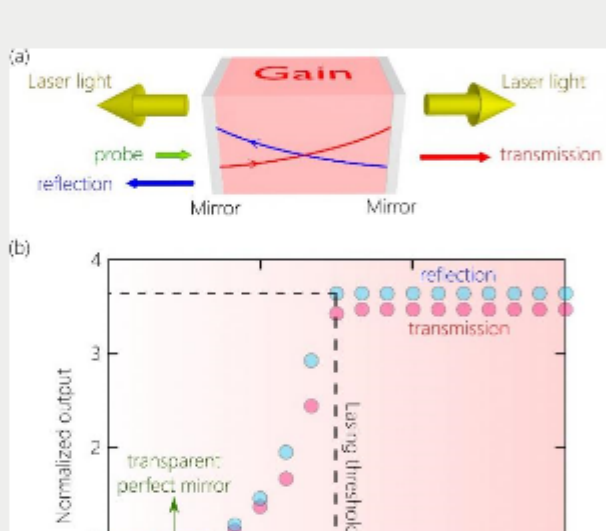


[Read Article](#)

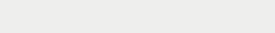


Laser Cavity Reveals Fundamental Physics Driving Its Optical Responses

The optical response of an externally probed laser cavity was monitored before and after gain clamping to reveal the underlying mechanisms of the cavity's response. For the experiments, researchers used a fiber optic cavity in which they separated the forward and backward traveling light. When they closely investigated the dynamics of directional energy flow in the cavity as gain was increased, what they found related to fundamental physical principles and offered direct insight into the role of causality.



[Read Article](#)



More Headlines

[Kentek Goes Mobile with Cross-Country Van Store](#)

[Vision Engineering Opens New Headquarters in Surrey](#)

[ThermalTracker Software Identifies Offshore Animals in Thermal Video](#)

[Boston Micromachines Awarded Two NASA Contracts for Deformable Mirror Technology](#)

[Excelfore, Wipro Partner for Automotive Connectivity Solutions](#)

Featured Products

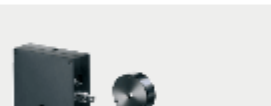


Compact, Low Cost <30pm Resolution in the VIS and NIR

LightMachinery Inc.

The Hornet Spectrometer achieves the resolution of large grating spectrometers at a fraction of their cost and size while covering a larger wavelength range. Simple PC based software allows the user to review spectra in real time and save or export for more analysis.

[Visit Website](#) [Request Info](#)



LIAD Lock-in Amplifier Detectors

Newport Corporation

Ideal for calibrated power measurement of very low level light sources, the LIAD detectors are used in conjunction with chopped (at 18 Hz) CW or quasi CW radiation. Wavelengths range from 0.15 to 12 μm, power measurement down to 300 fW, and capable of a pulsed source with a 200 Hz or higher frequency.

[Visit Website](#) [Request Info](#)



sponsors

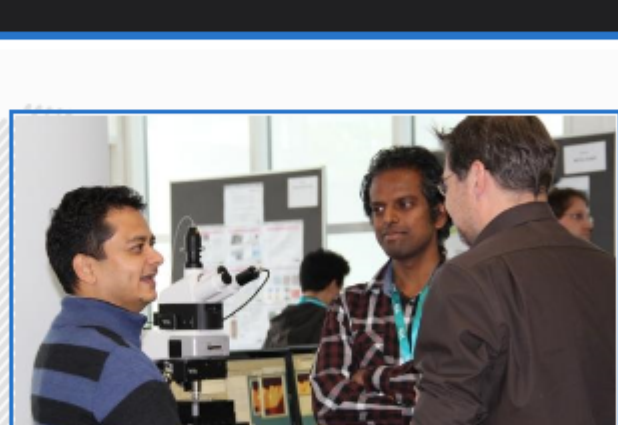


Industry Events

14th Confocal Raman Imaging Symposium

September 25-27, 2017 - Stadthaus Ulm - Ulm Germany

At the 14th Confocal Raman Imaging Symposium, speakers from academia and industry will present their scientific achievements and talk about several aspects of modern Raman imaging. The poster session will provide an opportunity to learn more about recent scientific results in Raman imaging from various fields of applications, while the equipment demonstration will offer a detailed introduction to the operational principles and instrumental configurations relevant to confocal Raman microscopy. The three-day conference will give participants plenty of time for in-depth discussions and close interaction with leading scientists and users of WITec microscope systems.



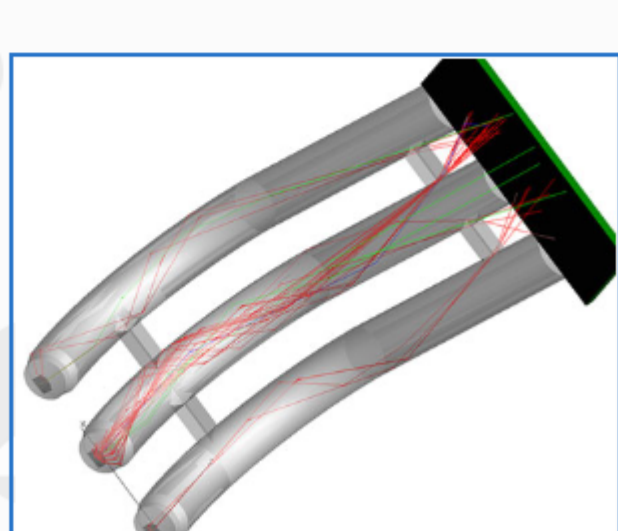
[More Info](#)

Webinars

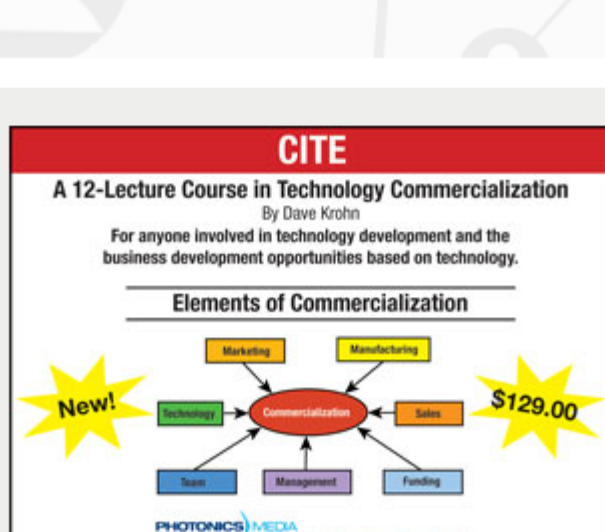
Learn Efficient Light Pipe Design Using Virtual Prototyping

Tue, Sep 19, 2017 1:00 PM - 2:00 PM EDT

Attendees will learn how to design better, more efficient light pipes using Lambda Research's TracePro software - a 3D CAD virtual prototyping program with the power and tools to simulate and design light pipes. The presenter will demonstrate effective methods and detailed procedures for simulating lighter propagation in a light pipe model, analyzing cross-talk effects, producing desired output objectives, and optimizing models for efficiency and output. This webinar is for anyone designing light pipes, especially for automotive and avionic displays, industrial manufacturing, consumer electronics applications and medical devices. It's presented by Lambda Research Corporation.



[Register Now](#)



sponsors



PHOTONICS buyers' guide®

Looking for Imaging and Sensing products? Search [PhotonicsBuyersGuide.com](#), or browse these product categories:

[Detector/Filter Combinations](#)

[CMOS Cameras](#)

[Infrared Detectors](#)

[High-Speed Motion Cameras](#)

[Laser Power Meters](#)

[Imaging Fiber Optic Bundles](#)



CALL FOR ARTICLES!

PHOTONICS MEDIA is currently seeking technical feature articles on a variety of topics for our magazines (*Photonics Spectra*, *Industrial Photonics*, *BioPhotonics* and *EuroPhotonics*). Please submit an informal 100-word abstract to Managing Editor Michael Wheeler at Michael.Wheeler@Photonics.com, or use our online submission form.

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Questions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
© 1996 - 2017 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office.
Reproduction in whole or in part without permission is prohibited.