

# This Week In PHOTONICS

PHOTONICS MEDIA



sponsor



**A better excimer laser. The IPEX-700.**

[www.lightmachinery.com](http://www.lightmachinery.com)



## Top Stories

### Handheld Optoacoustics Device Sees Under Skin

A handheld scanner for analyzing the skin of psoriasis patients was shown to provide clinically relevant information without the need for contrast agents or radiation exposure. The device generates a weak laser pulse to excite the tissue, which then absorbs energy and heats up minimally. This causes momentary tissue expansion, which generates ultrasound waves.

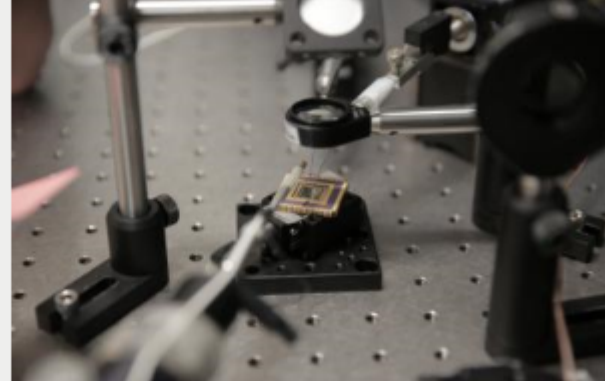


[Read Article](#)



### Nanoscale Photodetector Could Advance, Miniaturize Optoelectronics

Using a high-yield, high-throughput fabrication method, nanometer-thin photodetectors with enhanced light absorption have been demonstrated. The photodetectors, which are based on a nanocavity interference mechanism, could enable miniaturization of optoelectronic devices, leading to performance gain without adding bulk.

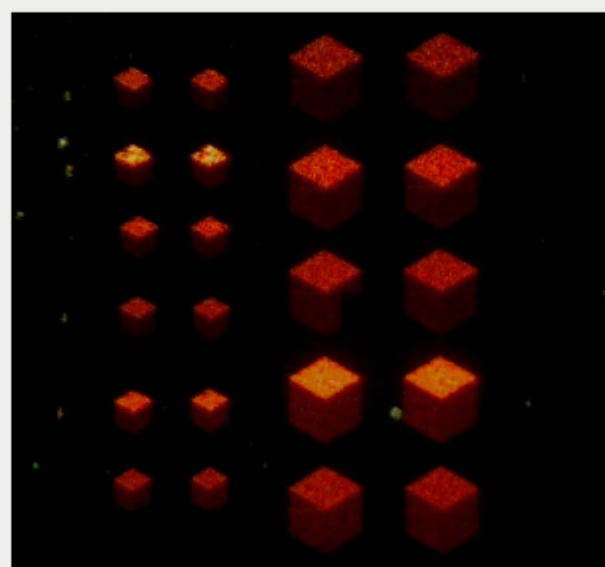


[Read Article](#)



### 3D Images Created on 2D Nanostructured Surface

A new 2D nanostructured surface has been created that can produce 3D images that are more realistic than holograms and 3D cinema. This could bring a new functionality to small camera lenses, as well as replace heavy optical lenses in applications such as satellites, where weight and size have an impact on efficiency.



[Read Article](#)



sponsors



Would **\$1,000,000** help your OPTICS, PHOTONICS, IMAGING ENABLED STARTUP?

**LUMINATE** ACCEPTING APPLICATIONS AT [www.luminate.org](http://www.luminate.org)

ROCHESTER, NY  
Optics, Photonics & Imaging Startup Accelerator

### Multicamera Technology Enables Multiperson-Pose Estimation Method

A method has been developed that enables computers to understand the body poses and movements of multiple people — including facial expressions and hand positions — using video in real time. The novel method was created using the Panoptic Studio, a multiview system for social motion capture.



[Read Article](#)



### AI-Powered Image Analysis Could Transform Dairy Farming

A technique for monitoring the health of dairy cattle with a high degree of accuracy uses a camera and artificial intelligence (AI) to achieve a "smart" cowhouse. Researchers established a method for early detection of lameness in cows with an accuracy of 99 percent or higher. Detailed observation by AI-powered image analysis could enable early detection of injuries and illnesses that could impact the quantity and quality of milk production.



[Read Article](#)



## More Headlines

[Novel Photocatalyst Speeds Conversion of Carbon Dioxide to Fuels](#) [Read Article](#)

[Ground-Based Signals Measured From Space Could Enable Quantum Encryption Network](#) [Read Article](#)

[Princeton Instruments Announces New Spectroscopy Grant Program](#) [Read Article](#)

[PerkinElmer to Acquire Euroimmun](#) [Read Article](#)

[Thorlabs, GreenTeg Enter Thermal Sensor Agreement](#) [Read Article](#)

## Featured Products



### 100G Multirate Module for MT1000A

Anritsu Co.

The new 100G multi-rate module for Anritsu's Network Master™ Pro MT1000A all-in-one tester supports interface rates from 10 Mbps to 100 Gbps, and technologies including Ethernet, Optical Transport Networks (OTN), SDH/SONET, Fibre Channel, and CPRI/OBSAI. Integrating the new 100G module, along with existing OTDR...

[Visit Website](#)

[Request Info](#)



### 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. Simple software allows the user to review spectra in real time and save or export for more analysis.

[Visit Website](#)

[Request Info](#)

sponsors



**FIO LS+** Register by 21 August and Save

OSA FRONTIERS IN OPTICS LASER SCIENCE APS/DLS

17 – 21 September 2017  
Washington, District of Columbia, USA

## Industry Events

### SPIE Optics + Photonics 2017

August 6-10, 2017 - San Diego Convention Center - San Diego United States  
Photonics Media Booth: 739

SPIE Optics + Photonics 2017 is the largest international, multidisciplinary optical sciences and technology exhibition in southern California. Featured Technologies this year include: Test and measurement equipment; optical components and lenses; detectors and sensors; cameras and imaging systems; lasers and laser systems; fiber optics; chemicals, optical coatings, thin films; nano-precision products; products for sustainable energy research; and LED and OLED technology.

[More Info](#)



## PHOTONICS buyers' guide®

Looking for Lasers and Laser Accessories products? Search [PhotonicsBuyersGuide.com](http://PhotonicsBuyersGuide.com), or browse these product categories:

[Laser Safety Eyewear](#)

[Beamsplitters](#)

[Femtosecond Lasers](#)

[Polarizing Beamsplitters](#)

[Ultrafast Pulsed Lasers](#)

[Laser Diode Arrays](#)



### CALL FOR ARTICLES!

PHOTONICS MEDIA is CURRENTLY seeking technical feature articles on a variety of topics for publication in 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](mailto:Michael.Wheeler@Photonics.com), or use our [online submission form](#).

Questions: [info@photonics.com](mailto:info@photonics.com)

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [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.