

This Week In PHOTONICS

PHOTONICS MEDIA



sponsor



A better excimer laser. The IPEX-700.

www.lightmachinery.com



Top Stories

Smartphone Microscope Images and Detects Next-Generation DNA Sequencing Reactions

A novel smartphone-based microscope could make DNA sequence analysis much easier, faster and more readily accessible in remote locations. The device, developed by researchers at the California NanoSystems Institute (CNSI) at UCLA and at Sweden's Stockholm University and Uppsala University, can image and analyze specific DNA sequences and genetic mutations in tumor cells without having to first extract DNA from them.



[Read Article](#)

Self-Assembling Particles Could Produce Lower Cost LEDs

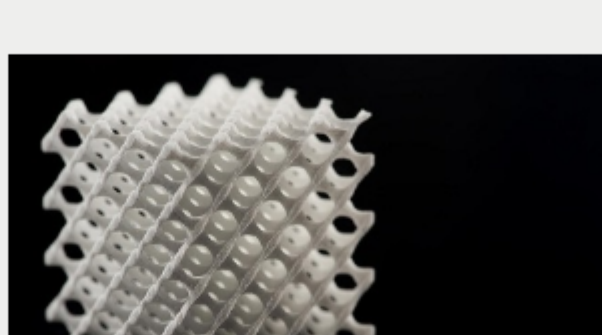
Self-assembling nanoscale perovskite — crystalline substances — particles could be a more efficient and lower-cost alternative material for LEDs. Princeton engineering researchers have developed a novel self-assembling technique, where in the past the inability to create uniform and bright nanoparticle perovskite films limited their potential.



[Read Article](#)

Selective Laser Melting Produces Safer Automotive Components

Using selective laser melting (SLM), engineers are creating lightweight automotive components that boost vehicle fuel efficiency, cut noise and lessen CO₂ emissions. Engineers at The University of Nottingham in England have developed the new additive manufacturing process as part of the Functional Lattices for Automotive Components (FLAC) project; the aim is to achieve significant weight reductions in new vehicle components.



[Read Article](#)

APRIL 3-6, 2017 | CHICAGO
AUTOMATE • 2017

Connect with leading suppliers and experts in vision!

REGISTER TODAY!

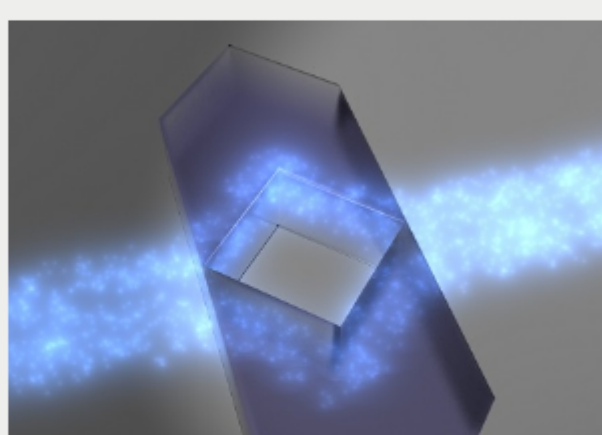
sponsors

World's Largest Online Fiber Optic Catalog
Most Products are in Stock

OZ Optics online
shop.ozoptics.com
www.ozoptics.com

Transformation Optics Conceals Objects in Diffusive Environments

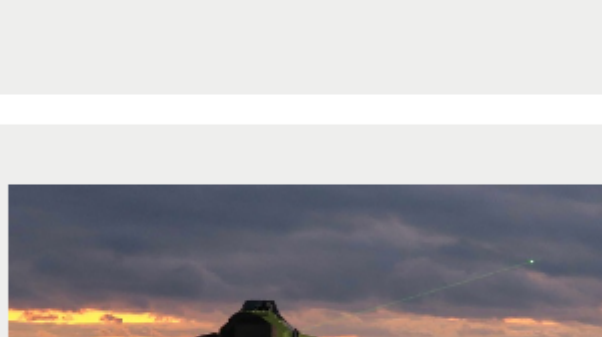
Researchers have devised a new cloaking device that could conceal aircraft in fog or a submarine in the sea. Both the fog and the sea serve as diffusive environments in which light is not propagated in a straight line, which makes this cloaking technology possible.



[Read Article](#)

UK Defense Ministry Awards £30M Weapons Contract to Dragonfire

The UK Ministry of Defence (MoD) has awarded a £30 million (\$36 million) contract to British industrial consortium Dragonfire for a laser-directed energy weapon (LDEW). The project will assess innovative LDEW technologies and approaches, culminating in a demonstration of a point defense system from incoming fire in 2019.

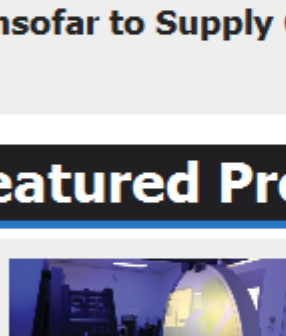


[Read Article](#)

More Headlines

- [McDonnell Appointed Chair of Photon Control Board](#) [Read Article](#)
- [Sener to Provide Mirrors for European Extremely Large Telescope](#) [Read Article](#)
- [Luxendo Raises \\$8M in Series A Funding](#) [Read Article](#)
- [FluxData Joins Halma](#) [Read Article](#)
- [Sensofar to Supply GF Machining with Metrology Systems](#) [Read Article](#)

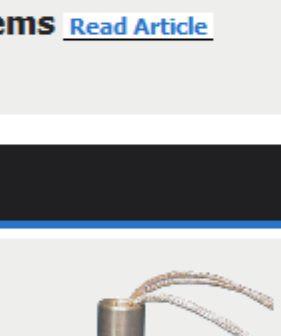
Featured Products



The Prism Specialists

Precision Optical
Precision Optical's core product has always been the ultra-precise prism. We manufacture some of the most challenging prisms in the world, from standard prism shapes to intricate custom geometries.

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



Custom Nanopositioning Systems

Mad City Labs Inc.
Mad City Labs has proven expertise in designing and producing custom nanopositioning systems for integration into a wide variety of technical products.

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

ISA AUTO 2017

24- 26 April 2017
Düsseldorf, Germany

SAVE 15% - QUOTE ISAUPHOTO

sponsors

San Diego ASLMS 2017

37th ASLMS Annual Conference on ENERGY-BASED MEDICINE & SCIENCE
April 5-9, 2017

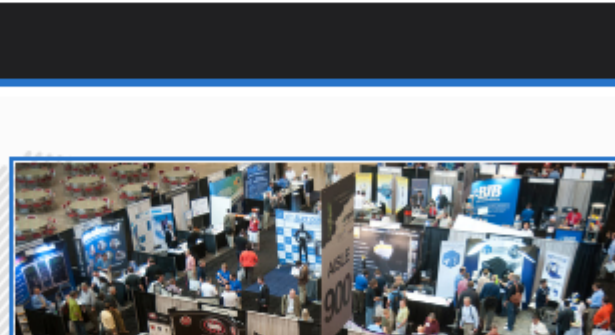
The premier international meeting in the field of medical lasers and energy-based technologies.

REGISTER TODAY | ASLMS.ORG

Industry Events

Advanced Manufacturing Expo & Conference

February 7-9, 2017 - Anaheim Convention Center - Anaheim, CA, United States
The Advanced Manufacturing Expo & Conference is the nation's biggest annual destination for specialists and buyers across the advanced design and manufacturing space. With more than 20,000 professionals in attendance, the Expo & Conference will deliver multiple industry-leading shows under one roof: MD&M West, Electronics West, WestPack, Pacific Design & Manufacturing, ATX West and PLASTECH West. The shows will run in parallel, offering multiple crossover opportunities for attendees and exhibitors. You will meet key decision makers from leading advanced manufacturing companies at this year's Expo & Conference, and you will enjoy a range of sessions and activities that will help you make strong connections with others in your industry.



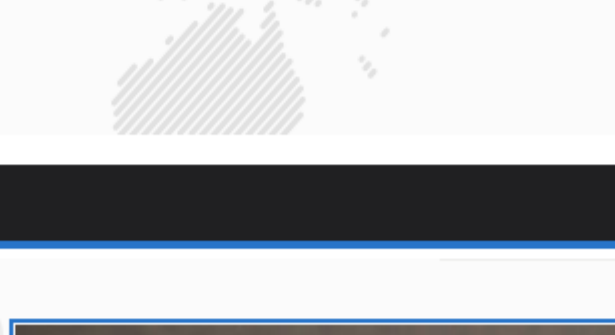
[More Info](#)

Webinars

Characterizing Photonics Devices with Transmission Electron Microscopy

Fri, Feb 10, 2017 1:00 PM - 2:00 PM EST

This webinar will help advance your understanding of light-matter interactions at the nanoscale, an area of science that holds great promise for increasing speed in computers and communications. Eric Stach, Ph.D., from Brookhaven Lab, will discuss how Transmission Electron Microscopy can be used to take images of the structure of photonics devices at the Angstrom to micron scale; how diffraction can be used to characterize crystal structure; and how chemical spectroscopy can be used to determine chemical speciation and electronic structure at the nanoscale. Throughout his presentation he will draw on examples of applications from current literature, using them to share his own understanding and approach to these issues.



[Register Now](#)

PHOTONICS buyers' guide®

Looking for Test & Measurement products? Search PhotonicsBuyersGuide.com, or browse these product categories:

[Particle Size Analyzers](#)

[Adaptive Optics](#)

[Spectrographs](#)

[Infrared Test Equipment](#)

[Wavelength Meters](#)

[Lens Testing Equipment](#)



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, or use our [online submission form](#).

Questions: 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.