



sponsor



**LightMachinery**  
Excellence in Lasers and Optics

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

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



# PHOTONICS.com

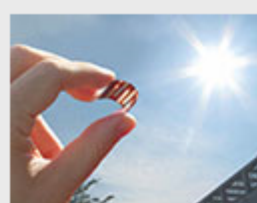
PHOTONICS MEDIA

THE PULSE OF THE INDUSTRY



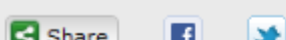
Thursday, August 28, 2014

## Spectroscopy Tests for Best Organic Photovoltaics



Spectroscopy may provide a way to identify materials for organic photovoltaics based on their charge formation efficiency. In a recent study of organic solar cells, researchers used photo-induced and electrochemical spectroscopy to determine the change in absorption after femtosecond excitation and charge injection.

[Read Article >>](#)



## Laser Cooling Enhances Atomic-Force Microscopy

Cooling nanowire probes with lasers could lead to significant improvements in the sensitivity and resolution of atomic-force microscopes.

[Read Article >>](#)



## Meadowlark Acquires Boulder Nonlinear Systems

Meadowlark Optics Inc. recently acquired the Commercial Products Group of Boulder Nonlinear Systems.

[Read Article >>](#)



## Products on PhotonicsBuyersGuide.com



### InGaAs Photodiodes

Fermionics Opto-Technology manufactures InGaAs photodiodes for data, voice, and video communications, large-area photodiodes for instrumentation and sensing applications, optical receivers, and linear and digital arrays.

[More info >>](#)



### Broad Spectrum Alignment Filter Eyewear

Kentek Corp. Broad Spectrum Alignment Filter Eyewear used in applications where you want to dial in low power alignment across the visible light spectrum. Comes with a variety of frame options to suit all needs.

[More info >>](#)



### The Laser Welding Experts

LaserStar Technologies LaserStar Technologies is an industry leader in standard and custom Nd:YAG and Fiber laser welding systems for a wide range of metal joining, complex assembly, automation and repair applications.

[More info >>](#)



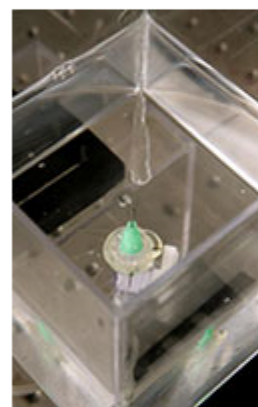
### Laser Diode Test System

Yelo The Y1000L is a universal tester capable of burn-in aging and life-time testing of multiple photonic devices at the same time. This means any photonic device, any package style and using any test, all within the same system.

[More info >>](#)

## More Articles on Photonics.com

## Imaging Shows Bubbles Could Make Energy-Efficient Nanoparticles



High-speed cameras and UV-sensitive materials are helping advance understanding of bubbles, which could mean big things for nanoparticles.

[Read Article >>](#)



## Laser Tweezers Used to Study Malaria

Optical tweezers are helping in the race to find new medicines or vaccines to wipe out malaria.

[Read Article >>](#)



## Fluorescence Lifetime Measurement Enhances Recycling

Sorting plastics using fluorescence lifetime measurement could simplify and speed up the recycling process.

[Read Article >>](#)



In this edition of the industry's premier weekly newscast: Optogenetics controls brain switchboards, sulfur copolymers boost IR optics, spectroscopy identifies organic photovoltaics, and our EDU Spotlight.

## 'Water Window' Poses Imaging Prospect

The "water window" of biological tissue can be exploited to achieve high-contrast microscope images, as well as precision spectroscopy.

[Read Article >>](#)



## Optogenetics Heightens Whisker Sensitivity in Mice



Researchers have heightened the sensitivity of mouse whiskers by using optogenetics to create gamma waves in the brain.

[Read Article >>](#)



## Quantum Cascade Laser Tests Blood Sugar

A new laser system could eliminate the need for conventional finger-prick tests for diabetics.

[Read Article >>](#)



## WHITE PAPER



### Spatial Light Interference Microscopy

Andor Technology plc, Corporate Headquarters

Spatial light interference microscopy (SLIM) is a highly sensitive quantitative phase imaging method, which is capable of unprecedented structure studies in biology and beyond. SLIM combines two classical ideas in optics and microscopy: Zernike's phase contrast method, by revealing the intrinsic contrast of transparent samples, and Gabor's holography, by quantitatively retrieving the phase information. SLIM provides the spatial uniformity associated with white light methods and the stability associated with common path interferometry. In addition, due to the short coherence length of the illumination, SLIM also provides excellent optical sectioning, enabling three dimensional tomography.

[DOWNLOAD WHITE PAPER >>](#)

## Industry Events

IMTS 2014 - Sept. 8-13, 2014 · Chicago, Ill.

Visit Photonics Media at Booth N-6488



The International Manufacturing Technology Show (IMTS) is a forum in which researchers and companies worldwide can exchange ideas and answers to manufacturing issues and problems. More than 100,000 manufacturing professionals are expected to attend.

New solution demonstrations will be featured, and attendees will be able to compare technologies from around the world. There will be conferences within the event, too, including Trends in Advanced Machining, Manufacturing and Materials, and a Global Automation and Manufacturing Summit.

[More info >>](#)

## 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 Laura Marshall at [laura\\_marshall@photonics.com](mailto:laura_marshall@photonics.com)

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

Unsubscribe: <http://www.photonics.com/Newsletter/EmailUnsubscribe.aspx>

[Subscribe](#) | [Manage Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

© 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.

## FEATURED VIDEO



Chris Earhart Principal Scientist

NanoTweezer Category of Life Sciences and Biophotonics

### Optofluidics – NanoTweezer

Chris Earhart, Principal Scientist at Optofluidics, talks about the Prism nominated NanoTweezer. The NanoTweezer system combines the power of our custom benchtop instrument with our patented optically resonant nanotweezer chips. A specially designed microscope mount enables direct interfacing of the chips to your existing microscopy equipment and spectroscopy systems.

## SMART STRUCTURES NDE



Applied technologies of advanced materials, smart sensor networks, non-destructive evaluation, and structural health monitoring.

REGISTER TODAY

Conferences & Course: 25-29 March 2017  
Portland Marriott Downtown Waterfront Hotel  
Portland, Oregon, USA

## AUTOMATE • 2017



Connect with leading suppliers and experts in vision!

REGISTER TODAY!

## PHOTONICS buyers' guide

Looking for **Test, Measurement and Positioning products?** Search the Photonics Buyers' Guide or Browse these product categories:

- [Interferometer](#)
- [Accessories](#)
- [Laser Diode Test Equipment](#)
- [Microscope Stages](#)
- [Optical Testing Instruments](#)
- [Solar Simulators](#)
- [Visible Spectrometers](#)

sponsor

sponsor

sponsor