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Thursday, September 11, 2014


Polymers Bring Future Solar Cells



A polymer-based technique could lead to production of highly efficient solar cells. A team of researchers has used polymers that absorb light at different wavelengths to produce solar cells with a tandem structure.

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FEATURED VIDEO



Edmund optics worldwide

POLARIZATION BASICS

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Edmund Optics – Polarization Overview

Polarizers are optical components designed to filter, modify, or analyze the various polarization states of light. Polarizers are commonly integrated into optical systems to decrease glare or increase contrast, or for measuring changes in magnetic fields, temperature, or chemical interactions. Join Brian McCall as he discusses the types of polarization and polarizers.

Acton Optics Expands to West Coast

Acton Optics & Coatings has expanded its sales network to the West Coast under an agreement with Silvaco Optics in San Jose, Calif.

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Handheld Scanner Roots Out Brain Tumor Traces

A new Raman laser scanner could help surgeons more effectively remove cancerous brain tumors.

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Products on PhotonicsBuyersGuide.com

<p>Streampix 6 DVR Software</p> <p>NorPix, Inc.</p> <p>Streampix 6 is a multiple camera capture software that supports over 200 different brands of scientific and machine vision cameras including GigE Vision, USB3 and Camera Link.</p> <p style="text-align: right;">More info >></p>	<p>CaF₂ & MgF₂ Optics</p> <p>Sydor Optics</p> <p>Sydor Optics, known for the double-side polishing of flat and parallel optics in the visible spectrum also provides machined blanks and polished optics for the UV and IR spectrums with Calcium Fluoride and Magnesium Fluoride.</p> <p style="text-align: right;">More info >></p>
<p>Spectroscopy-Certified Laser Diodes</p> <p>Photodigm</p> <p>Photodigm's latest advances in DBR lasers have led us to the development of advanced packaging. Thermal management of the high power was among our first considerations.</p> <p style="text-align: right;">More info >></p>	<p>Laser Safety Portable Barriers</p> <p>Kentek Corp.</p> <p>Kentek's portable barriers are an alternative to laser safety curtain systems and are available in Flex-Guard™, Ever-Guard® and laser-safe acrylic materials.</p> <p style="text-align: right;">More info >></p>

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Fast, Room-Temperature THz Detector Made of Graphene



A prototype graphene photodetector is capable of detecting terahertz frequencies quickly and at room temperature.

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Chemical Treatment Makes 3-D Cell Cultures Clearer

A chemical treatment could lead to better imaging of cells in 3-D cultures.

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Intel Silicon Photonics Group Wins OSA Award

OSA has recognized Intel Corp.'s Silicon Photonics Solutions Group with the 2014 Paul F. Forman Team Engineering Excellence Award.

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Light Matters

In this edition of the industry's **premier weekly newscast**: Laser rocket testing, carbon nanotube solar cells, brain tumor scanning, and our EDU Spotlight.

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- [Laser Diode Test Equipment](#)
- [Q-Switched Lasers](#)
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Nanocavity Switch Boasts Low Power Use

A new optical switch sets a record for minimal power use, making it a good candidate for nanophotonic circuitry.

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Laser System to Measure Air Pollution from Space Station



A laser system aboard the International Space Station will help scientists track pollution in the atmosphere.


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SERS Advances Noninvasive Prostate Cancer Screening

SERS spectroscopy could provide a noninvasive way to screen for prostate cancer.

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WHITE PAPER



Real-time Profiling for Focusing, M², Divergence & Alignment

DataRay Inc.

Beam intensity profiling is an essential tool in many aspects of photonics. The precise intensity distribution in a focused laser beam is critical in many applications: flow cytometry, laser printing, medical lasers, and cutting lasers are just a few examples. Intensity profile measurements can characterize and improve a product or process, leading to substantial cost and time savings that can pay for the measurement instrument many times over. This white paper describes how the unique, patented, real-time multiple z-plane XYZTF capabilities of the BeamMap2 slit-scan profiler can speed and simplify laser assembly alignment.

[DOWNLOAD WHITE PAPER >>](#)

WEBINAR



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Surface Enhanced Raman Spectroscopy: Methods and Applications

Friday, September 19, 2014 1:00 PM - 2:00 PM EDT

FREE WEBINAR

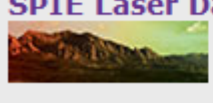


Tiziana C. Bond

This webinar will describe the technique of surface enhanced Raman spectroscopy (SERS). Limits and advantages will be highlighted in comparison to other analytical spectroscopic techniques. Presenter Tiziana C. Bond will provide a panoramic view of the current state of the art and future trends, taking the opportunity to describe the latest developments at Lawrence Livermore National Laboratory.

Industry Events

SPIE Laser Damage 2014 - Sept. 14-17, 2014 · Boulder, Colo.



The SPIE Laser Damage event is a comprehensive resource for the exchange of information on high-power and high-energy lasers. Scientists and engineers continue research in these areas, as well as in materials and thin films, durability, properties modeling, testing and component fabrication.

The event will feature a tutorial on the fundamentals of growth and characterization of amorphous thin films for interference coatings. There will also be several sessions, including Surfaces, Mirrors, and Contamination I; Fundamental Mechanisms; and Mirrors and Contamination II.

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