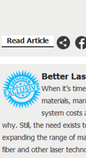
Wednesday, May 11, 2016

PHOTONICS spectra

PHOTONICS MEDIA

Monthly newsletter from the editors of Photonics Spectra, with features, popular topics, new products, and what's coming in the next issue.

From the Editor's Desk



Musings on Horses and Quantum Leaps

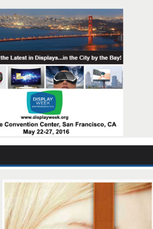
MIKE WHEELER, MANAGING EDITOR

The Kentucky Derby. The greatest two minutes in sports. Its very name evokes air thick with bourbon and cigar smoke, women's hats adorned with bows and feathers, sleek thoroughbreds and spectators dressed to the nines. Save, perhaps, for the Masters in April, few sporting events offer a more visually rich experience for TV viewers.

Read Article

Cadmium-Free Quantum Dots Offer Vibrant Color for Liquid Crystal Displays

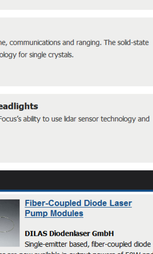
Display manufacturers are constantly striving to satisfy consumers' never-ending appetites for better and more true-to-life electronic displays. While cadmium-based quantum dots have been around since the mid-1980s, more recent advancements in their chemical makeup are giving quantum dot technology new potential in the marketplace without performance trade-offs.



Read Article

Better Lasers, Better Machining

When it's time to cut, weld, ablate, mark or otherwise machine materials, manufacturers are increasingly turning to lasers. Falling system costs and better resulting product quality are two reasons why. Still, the need exists to further lower the cost of laser machining while expanding the range of materials that can be handled. For that, there's progress in fiber and other laser technologies from greater power, more precise processing and new wavelengths.

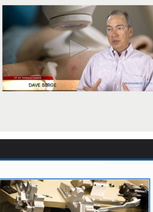


Read Article

In Case You Missed It

OLED Microdisplays: Advancing Virtual and Augmented Reality Smart Glasses of Today and Tomorrow

Size, power, contrast and color space advantages make OLED microdisplays a perfect fit for near-eye applications. Advances in subpixel patterning and the development of stacked OLEDs promise to extend color space and battery life.



Read Article

Novel Crystal Growth Method Enables Eye-Safe Laser

A compact, eye-safe laser light source has been developed for practical applications in medicine, communications and ranging. The solid-state laser emits in the 1500- to 1600-nm range, and is based on a novel laboratory growth technology for single crystals.

Read Article

Ford Autonomous Research Vehicles Use Lidar to Drive without Headlights

A recent test at the Ford Motor Company's Arizona Proving Ground demonstrated the Ford Focus's ability to use lidar sensor technology and 3D maps to drive in the dark without headlights.

Read Article

Featured Products

New SMARTEK Vision CMOS Camera

FRAMOS

New SMARTEK Vision CMOS Camera family for machine vision applications combines GigE Vision and USB3 Vision with a new sensor interface in miniature housing, standardized connectivity, enhanced processing capabilities and a flexible customization concept.

Request Info

Fiber-Coupled Diode Laser Pump Modules

DILAS Diodenlaser GmbH

Single-emitter based, fiber-coupled diode laser pump modules are now available in output powers of 50W and 90W at 976nm into a 106.5µm pigtailed fiber core with a numerical aperture of 0.22.

Request Info

Low-Cosmetic Defect IR Filters

Spectrogon US Inc.

Spectrogon manufactures infrared filters and windows with high transmission, high rejection outside the passband, and introducing low cosmetic defects.

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Ultra Fluorescence Filter Sets

Alluxa

Alluxa's ULTRA Series of fluorescence filter sets are designed to provide the highest level of performance currently available for off-the-shelf products.

Request Info

Arbitrary Waveform Generator

Zurich Instruments AG

With the UHF-AWG 1.8 GSa/s Arbitrary Waveform Generator, Zurich Instruments presents a unique solution for the generation and acquisition of complex signals.

Request Info

Telecentric 3D Laser

Osela Inc.

Osela's Telecentric Laser Projector (TLP) provides parallel non angular laser line illumination as opposed to conventional laser lines that project a diverging fan.

Request Info

Featured Video

REO A Heritage of Superior Laser Optics

REO was built on manufacturing optics specifically designed to enhance internal laser cavity performance. Our superior superpolished substrates combined with our low absorption coatings guarantee the lowest possible losses and highest laser damage resistance. Today, our optics continue to provide improved system performance and enable some of the most demanding laser systems in the world. From fabrication and coating to final alignment and assembly, partnering with REO guarantees a complete solution to simplify your supply chain.

Watch Now

Webinars

Optimizing Machine Vision Systems to Maximize Product Quality and Yield

Thu, May 19, 2016 1:00 PM – 2:00 PM EDT

Nelson Bridwell, president of Machine Vision Engineering LLC and an AIA Certified Advanced Vision Professional, discusses how to use statistical control to optimize reliability and yield of machine vision systems.

Topics that will be covered in this free webinar include: Ad hoc procedures for setting configuration parameters and the potential problems associated with them; characterizing normal process variation, and using the resulting statistics to identify optimal configuration parameters and accurately predict the resulting inspection failure rates and product yield; and more.

Register Now

Photonics for Ophthalmology

Thu, Jun 9, 2016 12:00 PM - 3:15 PM EDT

Photonics Media invites you to join us for our upcoming digital conference, "Photonics for Ophthalmology." The event will feature several 15-minute online presentations on the use of light-based imaging and surgical techniques for diagnosing and treating eye conditions. Brief question-and-answer sessions will follow each presentation. Topics include photo-mediated ultrasound therapy, ophthalmologic lasers, intraocular lenses, photobiomodulation and various aspects of optical coherence tomography.

Register Now

Coming in June...

Features

Short-Pulse Lasers; Optical Components; Microscopy; Vision Systems; Optical Sensing

Issue Bonus

Microscopy in Focus, with directory

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Photonics Spectra*. Please submit an informal 100-word abstract to Managing Editor Mike Wheeler at mike.wheeler@photonics.com or use our online submission form www.photonics.com/submitfeature.aspx

About *Photonics Spectra*

Since 1967, *Photonics Spectra* magazine has defined the science and industry of photonics, providing both technical and practical information for every aspect of the global industry and promoting an international dialogue among the engineers, scientists and end users who develop, commercialize and buy photonics products.

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