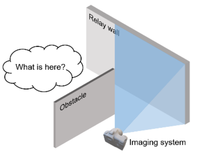
Thursday, December 7, 2023

PHOTONICS spectra

Weekly News



NLOS Imaging in the NIR, MIR Could Boost Autonomous Navigation

Non-line-of-sight systems provide the capability to see around corners and even through walls, making them valuable tools for applications ranging from endoscopy to autonomous vehicles and robotic vision. Most NLOS imaging is performed in the visible bands, due to the limited spectral sensitivity of the light sensors used. Extending NLOS imaging capabilities to the near- and mid-infrared wavelengths could expand the application spaces for this emerging technology. Using a superconducting nanowire single-photon detector as the light-sensing element, researchers from Tianjin University demonstrated NLOS imaging at two infrared wavelengths, 1560 nm and 1997 nm. **Read Article**

SPIE Names 2024 Startup Challenge Finalists

Seven early-stage startup companies have been selected to compete for a top prize of $10,000 at the 14th annual SPIE Startup Challenge at Photonics West on Jan. 30. The SPIE Startup Challenge is a competitive entrepreneurial platform for new businesses that use optics and photonics for innovative products or applications. Participating teams are competing for sponsored prizes, in addition to gaining increased visibility with potential investors. **Read Article**

Photonics Media Launches New Websites for its Family of Print B2B Magazines

Photonics Media, the leading publisher in the optics and photonics industry for more than 60 years, is set to unveil revamped websites for Photonics Spectra, BioPhotonics, and Vision Spectra on Monday, Dec. 4. The new sites feature all the content visitors have come to expect, with industry-leading news, feature-length articles, and products, online summits, and conferences only a click away. **Read Article**

Featured Products & Services

SK-1300 Fused Silica

Ohara Corporation

Ideal for semiconductor equipment, filters, and high energy laser applications. SK-1300 Fused Silica advantages include extremely low bulk absorption and fluorescence, no laser damage at 1070 nm, high transmission from UV through near IR, high homogeneity, and low stress birefringence.

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Give your instrument the edge with the latest LED illumination technology. The CoolLED Amora Series is ideal for OEM configurations, and features Sequence Runner for fast, cost-effective fluorescence automation.

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More News

Technique Generates Precise Wavelengths of Visible Laser Light

Barrier to Optical Wireless Broken with Photonic Chip

Compact Accelerator Achieves Major Energy Milestone

Optical Data Storage Dips Below the Diffraction Limit

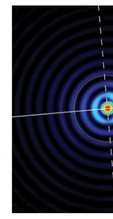
Latest Webinars

Custom Optics Unleashed: Rapid Prototyping and Engineering

Thu, Dec 7, 2023 1:00 PM - 2:00 PM EST

When designing an optical system, the use of catalog optics shortens lead times and can decrease bill of material (BOM) costs. However, it can be challenging to find a product that meets all the required specifications. This leads to the question: When is it appropriate to consider a custom solution? Large wavelength ranges, extreme resolution requirements, and tight packaging constraints are some of the design drivers toward custom solutions. To be able to achieve these requirements and overcome the challenge of leads times, Thorlabs has developed the processes to get custom components, designs, and assemblies to their customers quickly. In this webinar, Nate Burdick addresses custom solutions in detail to include fast track quotes, QuickTurn™ optics manufacturing, and priority assembly and testing. He covers the different avenues that can be taken to reduce lead times and ship the product to customers sooner. Presented by Thorlabs.

Register Now



Profiling Tightly Focused Beams in 2D Using Camera-Based Beam Profilers and Magnification Optics

Tue, Dec 12, 2023 1:00 PM - 2:00 PM EST

In this webinar, Logan Hatanaka of DataRay discusses camera-based options for capturing true 2D beam profiles of tightly focused beam waists by using magnification optics, like those included in DataRay's Industrial Laser Monitoring System (ILMS). By carefully magnifying a beam waist onto a camera sensor, engineers can produce detailed profiles in true 2D, an excellent option for characterizing small beam waists, regardless of beam shape. The goal is to produce an optical system which does not affect the original beam profile; therefore, choosing appropriate optics for a magnification system is critical. Hatanaka addresses important lens parameters and shows how these parameters affect measured beam profiles using real-world data. With a properly designed magnification system, profiling small, complex beam waists is easy and repeatable. Presented by DataRay Inc.

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Call for Articles

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazines (*Photonics Spectra*, *BioPhotonics*, and *Vision Spectra*). Please submit an informal 100-word abstract to editorial@Photonics.com, or use our online submission form.