Thursday, July 31, 2025

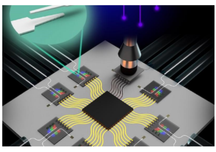
PHOTONICS spectra

Weekly News

Lumotive adds Amazon as Investor, Digger Deeper Into TRUMPF's Fiscal Report

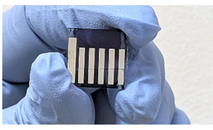
EUV source startup, xLight is bringing in millions to advance its newest technology. Lumotive reopens its own round of funding and brings Amazon into the fold. TRUMPF releases reports of declining sales following the close of the fiscal year. Micro-LED display startup, Q-Pixel, is releasing a new technology that could overcome a major hurdle that has plagued the displays sector. Researchers from Rutgers University and Brookhaven National Laboratory have developed an eco-friendly and ultra-stable material to generate deep-blue light in LEDs. And scientists from NYU have found a new method to measure cellular structures, without damaging them. Sponsored by Thorlabs.

Watch Now



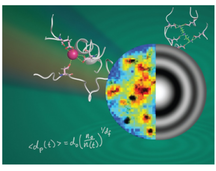
Chip-to-Chip Coupler Offers Larger Alignment Tolerance for Efficient Co-Packaging

The future of digital computing and communications will undoubtedly involve both electronics and photonics to move data traffic around the globe with greater energy efficiency. Against this backdrop, researchers from MIT's FUTUR-IC research team have developed a way to co-package photonic chips with their electronic counterparts — a development that the scientists said solves several problems associated with the current co-packaging process. One advantage of the method, they said, is that the newly developed co-packaged device can be manufactured using existing equipment in traditional electronics foundries with a less-expensive passive alignment process. Read Article



Spectrometer Measures from UV to NIR, Small Enough for Smartphone

Researchers at North Carolina State University have successfully demonstrated a spectrometer that is orders of magnitude smaller than current technologies and can accurately measure wavelengths of light from ultraviolet to the near-infrared. The technology makes it possible to create hand-held spectroscopy devices and holds promise for the development of devices that incorporate an array of the new sensors to serve as next-generation imaging spectrometers, the researchers said. Read Article



Holographic Imaging Measures Cellular Structures without Distorting Them

Biomolecular condensates — membraneless, microscopic structures that concentrate proteins and other molecules in cells — are crucial to the organization of cellular biochemistry. Insight into the development and behavior of condensates could lead to better treatments for infectious diseases, cancer, and neurological disorders. Researchers at New York University (NYU) aimed to measure condensate composition and dynamics without relying on conventional techniques, like fluorescence labeling or surface attachment, which can damage fragile condensate samples. Until now, scientists have needed to distort condensate samples to study them. Read Article

Featured Products & Services

Stabilizing the Line of Sight

Photonics Media

In Stabilizing the Line of Sight, authors Peter J. and Rhonda L. Kennedy provide a methodology and an example for executing a successful end-to-end line-of-sight (LOS) design. Comprehensive in scope, this book will give readers a better understanding of the relationships between the various engineering disciplines that are required for successful LOS control.

Visit Website | Request Info

CO_2 Laser Glass-Processing

NYFORS Teknologi AB

CO_2 laser glass-processing is designed to produce high-power and sensitive photonic components and complex structures. It guarantees contamination-free processing for fiber linear, 2D and gapless array splicing, ball lensing, end-capping, and many other challenging processes. NYFORS also manufactures automated high-precision solutions for fiber preparation, such as stripping, cleaving, recoating, and end-face inspection. NYFORS offers custom workcell automation solutions.

Visit Website | Request Info

Looking for something else? Check the Photonics Marketplace.

PHOTONICS marketplace

More News

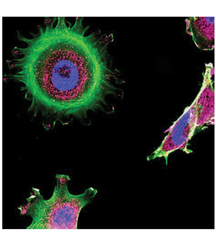
ams-OSRAM Divests Entertainment and Industry Lamps Business to Ushio

Ephos Secures $48.3M for Chip Manufacturing Facility

LG Innotek Invests in Aeva, Launches Collaboration

SPIE Adds 92 Senior Members

Latest Webinars



The Evolution of Microscopy – Current Landscape and Considerations

On-Demand

David Biss of Optikos walks through a brief history and primer on microscopy, which was largely unchanged until the last 70 years. With that backdrop, this presentation delves into common types of modern microscopy: confocal microscopy, fluorescence microscopy, multiphoton microscopy, and superresolution microscopy. He explores a comparison of similarities and differences between these modalities and considerations for selection. Attendees will learn that the optical principles of lens design for microscope objectives have not changed significantly over time, i.e., the importance of contrast and resolution. However, new microscopy modalities have improved the core principles to address specific market applications. Specifically, microscopy has evolved significantly from early single-lens devices to sophisticated techniques capable of observing individual molecules and complex biological processes. Key advancements include improvements in lens technology, the development of various light sources, the introduction of fluorescence microscopy, and the rise of super resolution microscopy techniques. Presented by Optikos.

Watch Now

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.

PHOTONICS MEDIA photonics.com