Thursday, October 27, 2022

This Week in PHOTONICS

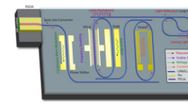
PHOTONICS MEDIA photonics.com

.: Top Stories

Multicolor Integrated Laser Expands Integrated Photonics Landscape

Integrated semiconductor lasers have enabled many advancements over the last few decades. However, integrated lasers continue to lack key functions needed for evolving applications like lidar and AR/VR. Using a type of integrated semiconductor laser based on the Pockels electro-optic effect, a University of Rochester team, with researchers at three institutions, believes it has developed a device with potential to reshape the integrated photonics landscape.

Read Article



Lidrotec's Wafer-Dicing Laser Tech Earns $1M Top Prize at Luminate Finals

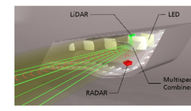
Lidrotec, a company that develops wafer-dicing laser technology for the semiconductor industry, took home $1 million in follow-on funding and Company of the Year honors as the winner of Luminate's 5th cohort. The winning company, as well as the names of the additional funding recipients, were revealed at Optica's Frontiers in Optics + Laser Science conference in Rochester, N.Y.

Read Article

Space-Saving Sensors Ease Automotive Design Woes

Since self-driving vehicles require a sufficient quantity of sensors to guide them safely through all traffic situations — and the sensors need enough space to work properly — researchers at Fraunhofer-Gesellschaft are developing a way to install multiple automotive sensors in a limited space. The solution combines optical light, radar, and lidar in the vehicle's headlights, and could be a perfect fit for the systems that guide self-driving cars.

Read Article



.: Featured Products & Services

The New Fast M200HD (High Definition)

Telops Inc.

The FAST M200HD brings in high acquisition rate (180 Hz) at Megapixel image resolution. It is a great camera to capture targets that require image resolution during high-speed experiments such as in experimental mechanics, NDT, and image signature.

Visit Website | Request Info

CODE V & LightTools Optical Design Software

Synopsys Inc., Optical Solutions Group

Interoperability features between CODE V® and LightTools® enable designers to easily simulate optical systems that contain imaging and non-imaging components with unparalleled speed and accuracy, from augmented reality headsets and head-up displays to smartphone optics and electro-optical systems.

Visit Website | Request Info

.: More News

Optics Accelerates Deep Learning Computations on Smart Devices Read Article

Gallium Nitride VCSEL Developer Inks Deal to Continue Development Read Article

Quandela Teams Up with CEA-Leti to Develop Quantum Photonic Chip Read Article

Camera Link HS v1.2 Standard Boosts Speed Read Article

PsiQuantum, Air Force to Build Utility-Scale Quantum Computer Read Article

.: Upcoming Webinars

Harnessing Photons for Bond-Selective Imaging, Neuromodulation, and the Killing of Superbugs

Tue, Nov 1, 2022 10:00 AM - 11:00 AM EDT

Chemical microscopy utilizing fingerprint vibrational spectroscopic signals opens a new window to visualize the orchestra of molecules and biological structures inside living systems. Dr. Ji-Xin Cheng, professor at Boston University, and his research team have recently started to harness photons to modulate the behavior of cells, including the photoacoustic modulation of neurons at ultrahigh spatial precision and photolysis of intrinsic chromophores to eradicate drug-resistant bacteria.

Register Now

Managing Laser Degradation in Industrial Applications

Wed, Nov 2, 2022 1:00 PM - 2:00 PM EDT

Lasers are made of physical matter. Due to this, the natural degradation of their materials can cause variability in performance. Aging optics can often cause slow changes in laser behavior and, when left unchecked, those changes can lead to loss of process efficiency. An unclean process environment can quickly change a laser's behavior through thermal lensing which is caused by debris collected on laser optics John McCauley of MKS Ophir discusses how these variabilities are managed, what aspects of a laser's performance should be analyzed, and what tools are available to perform this analysis. Presented by MKS Ophir.

Register 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.