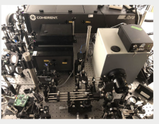
Thursday, October 18, 2018

This Week In PHOTONICS

PHOTONICS MEDIA

Top Stories

Ultrafast Camera Takes Trillions of Images per Second in a Single Exposure
Single-shot 10-trillion-frame-per-second compressed ultrafast photography (CUP) is now possible with a new camera, called T-CUP, which passively captures dynamic events with 100-femtosecond (fs) frame intervals in a single camera exposure. According to the researchers, T-CUP has set a new record for real-time imaging speed.

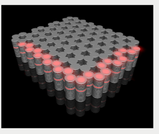


Read Article

Uncovering Reasons for Light-Driven Structural Changes in Biomolecules for Use in Optogenetics
Using various spectroscopic methods, researchers have gained new insights into how the light-sensitive part of the biomolecule phytochrome changes from a light-adapted to a dark-adapted state. Their discovery could be put to potential use as an optogenetic tool.

Read Article

New Topological Insulator Paves Way for Light-Matter Interaction Between Systems
An international research team has built a topological insulator that can operate with light and electronic excitations simultaneously. The new system can be used for both switched electronic systems and laser applications.



Read Article

Featured Products

AR/VR Lens: Measure Displays in Headset
Radiant Vision Systems, Test & Measurement
Displays viewed near to the eye, such as those in AR/VR devices, create immersive virtual experiences. However, as display images are magnified to fill a user's field of view, display defects are also magnified.

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Pulsable IR Source Model EVF-555X
HelioWorks Inc.
Helioworks, Inc. offers a a unique pulsable blackbody infrared emitter in an industry standard TO-39 package with approximately 1.6 watts input power at a peak temperature of 700°C (973°K). The radiating element is made of NiCr.

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Ensenso X: 3D Vision System Now With 5 MP Models
IDS Imaging Development Systems GmbH
Ensenso X is a modular 3D camera system offered by IDS which is now also available with the high-resolution 5 MP IMX264 Sony sensor. This allows for an expanded field of view, higher resolution and lower noise levels.

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A Smart Cloud-AI Handheld Raman Spectrometer
CloudMinds Technology Inc.
The Cloudminds XI™ is the world's first cloud AI based handheld Raman spectrometer with 785nm laser excitation. The handheld Raman unit is fully integrated with the Cloudminds Data A1 Android smartphone.

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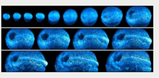
More News

Smart Light-Sheet Microscope Provides Progressive Multiview of Mice Embryo Development
Researchers at Howard Hughes Medical Institute's Janelia Research Campus have developed a new microscope that uses adaptive light-sheet microscopy techniques to capture mouse embryo development at the single-cell level. The team is making the microscope, associated computational tools, and its imaging data freely and publicly available.



Read Article

Model Explores the Hallmarks of Quantum Behavior
Could the way we categorize nonintuitive phenomena such as quantum interference and quantum entanglement be a result of our cognitive limitations, that is, the ways in which we study the world? Not nature, but our lack of full knowledge about the system, could be causing the phenomena observed in the system to acquire the features of unexplainable exoticism.

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NRG Acquires Pentalum Lidar Portfolio Read Article

Nanoscope Technologies Gets NIH Research Grant for Vision Restoration Read Article

Purdue Researchers Develop Augmented Reality Tool for Remote Health Care Read Article

Sensor Technology's Transducers Used for Sustainable Vehicles by AVID Technology Read Article

UNL Using Optomec Additive Manufacturing System for Medical Implants Read Article

Industry Events

The Laser Congress 2018
November 4-8, 2018 - The Westin Boston Waterfront - Boston United States
The 2018 OSA Laser Congress will offer a comprehensive view of the latest technological advances in solid state lasers, as well as the applications of laser technologies for industrial products and markets. The congress will feature an extensive exhibition comprised of a global audience of laser leaders and a peer-reviewed technical program. It will be comprised of two topical meetings: the Advanced Solid State Lasers Conference (ASSL), which will highlight new sources, advanced technologies, components, and system design to improve the operation and application of solid state lasers; and the Laser Applications Conference (LAC), which will focus on materials processing and applications for high-power lasers. Image courtesy of OSA, The Optical Society.

More Info

Webinars

A Thermally Tuned PIC with External Light Coupling: Design and Layout
Tue, Oct 23, 2018 1:00 PM - 2:00 PM EDT
Anyone who is involved in the design of photonic integrated circuits (PICs) and who uses simulation to design and optimize a circuit should join us for this webinar. The speakers will demonstrate how a diffraction grating coupler for surface coupling can be designed and optimized using a combination of Luceda Photonics IPKISS and CST Studio Suite. High-performance computation will used to speed up simulation of the ultralarge simulation domain and find the optimum performance.

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