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by Sarah Boisvert

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Top Stories

Fraunhofer Dairy Quality Check Delivers Results in Minutes

In a test lasting around five minutes, a new optoplasmonic sensor analyzed a milk sample for a total of six substances. The sensor demonstrated its use as an early warning system within the supply chain, detecting the substances before the milk was pumped into the tanker.



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2D Material for Photodetectors Is Less Costly, More Sensitive Than Gold

Researchers at Drexel University are using a 2D transition metal carbide (Ti3C2) to fabricate photodetectors with improved sensitivity for substantially less cost. The researchers replaced gold, typically used in the fabrication of photodetectors because of its high conductivity, with a thin, transparent layer of MXene.



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100 Years Ago, Elmer Imes' Observations Informed a New Understanding of Molecular Physics

One hundred years ago this month, physicist Elmer Imes published his dissertation, "Measurements on the Near-Infrared Absorption of Some Diatomic Gases," in *Astrophysical Journal*. The paper provided the scientific world with the first accurate determination of the distances between atoms in molecules using his own customized spectrometers and expanded the range of applicability of quantum theory.



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Featured Products



Ultima 2Pplus Multiphoton Imaging

Bruker Nano Surfaces
With new advances in field of view, sensitivity, wavelength, and sample accommodation, Bruker's Ultima 2Pplus delivers the best commercially available combination

of flexibility, resolution, imaging depth, and speed, allowing users to perform simultaneous imaging, stimulation, and electrophysiology protocols with greater efficiency and effectivity.

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pco.edge 26 sCMOS Camera

PCO-TECH Inc.
Maximizing the amount of information per image is crucial for microscopy, quality control, high throughput screening, and other mesoscopic applications. This is

where the new pco.edge 26 fits superb. The pco.edge 26 offers you a 5120 x 5120 pixel resolution with 2.5 x 2.5 μm^2 pixel size.

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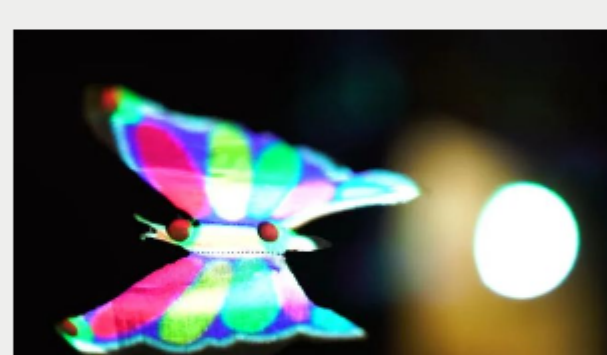
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More News

Interactive Hologram uses Ultrasound Waves and LEDs

Researchers at the University of Sussex have built a device that uses LEDs and ultrasound waves to levitate a polystyrene bead and create tactile, 3D holograms. The device, known as a Multimodal Acoustic Trap Display (MATD), maneuvers the 2-mm-wide bead at up to 20 mph, tracing shapes in the air colorized by the LEDs.

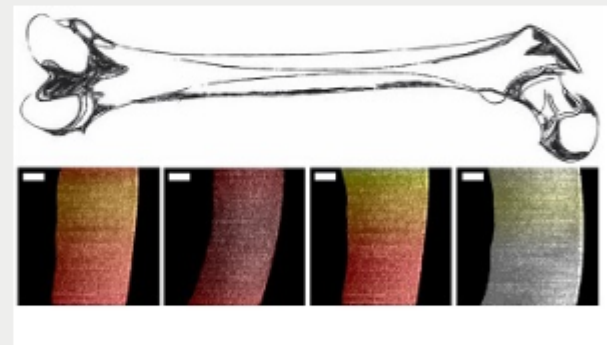


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Inexpensive, Portable System Expands OCT's Reach

Researchers from Duke University have developed a way to use optical coherence tomography (OCT) in hard-to-reach areas of the body such as joints. The researchers used a rigid borescope, essentially a thin tube of lenses, to deliver the infrared light necessary to perform OCT.



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More Headlines

Search and Rescue May See Help from Swarms of Tiny Drones [Read Article](#)

SPIE Announces Annual Award Winners [Read Article](#)

Hexagon and URI Form Collaborative Partnership for Advanced Manufacturing [Read Article](#)

Headwall, geo-konzept Partner to Create Center for Hyperspectral Remote Sensing Europe [Read Article](#)

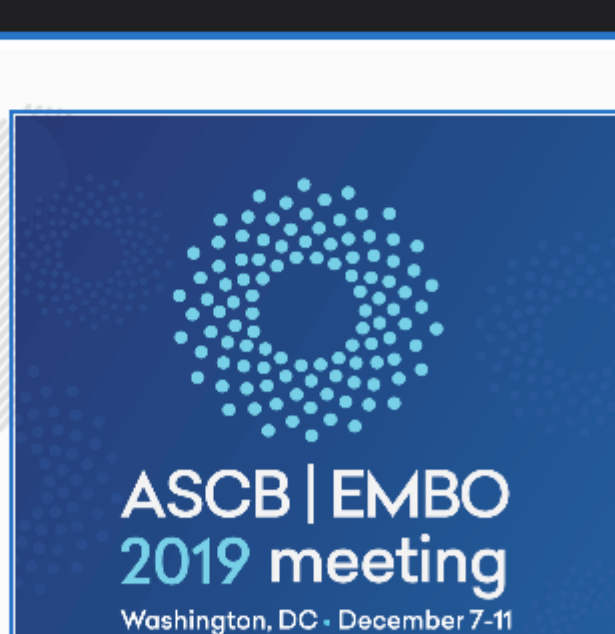
Researchers Better Understand How Light Affects Circadian Rhythms in Insects [Read Article](#)

Industry Events

ASCB/EMBO Meeting 2019

December 7-11, 2019 - Washington
The 2019 joint meeting of the American Society for Cell Biology (ASCB) and European Molecular Biology Organization (EMBO) will focus on cell biology as the fundamental basis of biology, and will offer sessions on emerging topics such as nontraditional model organisms and the use of computational modeling and biophysics to "build the cell from the ground up." Bruce Stillman, president and CEO of Cold Spring Harbor Laboratory, will deliver the keynote address.

[More Info](#)



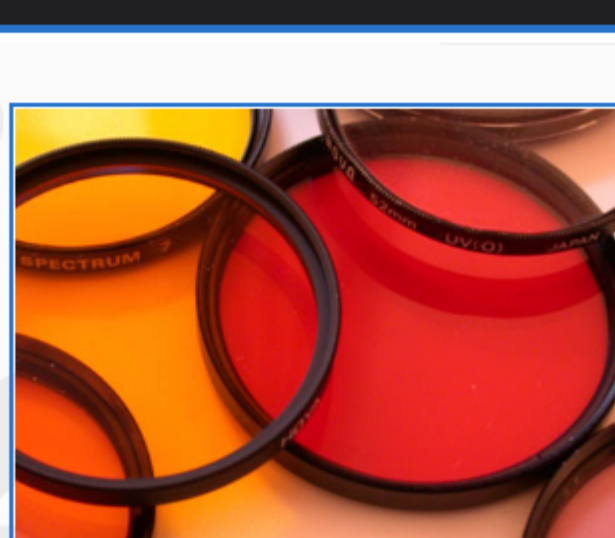
Webinars

Filters: The Key to Image Quality in Modern Vision Applications

Wed, Dec 4, 2019 1:00 PM - 2:00 PM EST

Optical filters are a simple, cost-effective way to enhance repeatability and to achieve the highest level of performance from your machine vision system. Join technical trainer Georgy Das from Midwest Optical to learn more about how optical filters can be used to solve even the toughest issues in machine vision applications and how filters can help you get ahead of the curve when it comes to next-generation applications.

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