

This Week In PHOTONICS

PHOTONICS MEDIA



sponsor

Never question seal protection.

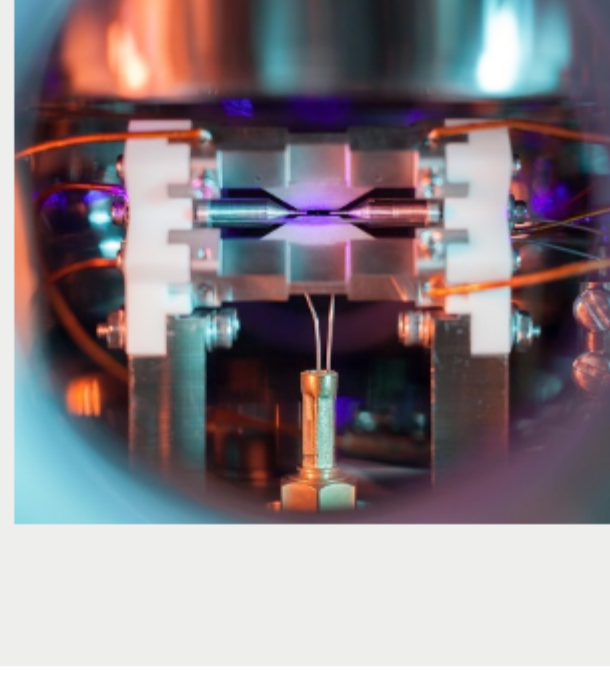
Apple Rubber

[Learn how](#)

Top Stories

Atom Photo Wins EPSRC Award

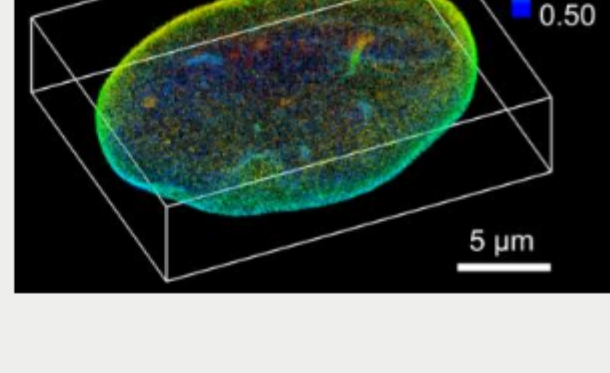
An image of a single positively charged strontium atom, held near motionless by electric fields, has won the overall prize in a national science photography competition organized by the U.K.'s Engineering and Physical Sciences Research Council (EPSRC).



[Read Article](#)

Microscope Provides Precise 3D Imaging of Thick Mammalian Cells

TILT3D — tilted light-sheet microscopy with 3D point spread functions (PSFs) — combines a tilted light-sheet illumination technique with long axial range PSFs for low-background, 3D super-localization of single molecules and for 3D superresolution imaging in thick cells.



[Read Article](#)

Researchers Share Recipe for Low-Cost DIY Hyperspectral Imagers

Researchers used 3D printing and low-cost parts to create an inexpensive hyperspectral imager that is light enough to use on drones. The visible-wavelength hyperspectral imager (HSI) weighs less than half a pound and, according to researchers, can be built for as little \$700 (USD).



[Read Article](#)

Featured Products



Canon Surface Reflectance Analyzer

Canon U.S.A. Inc., Industrial Products Div.

Canon RA-532H, Surface Reflectance Analyzer (goniophotometer), is a compact, portable device capable of measuring 4 surface appearance conditions in a single pass: Gloss, Haze, Image Clarity (IC), and BRDF (Bidirectional Reflectance Distribution Function).

[Visit Website](#) [Request Info](#)



Pioneering sCMOS Back Illuminated!

PCO-TECH Inc.

To see or not to see: If every single photon counts, PCO's back illuminated sCMOS camera system pco.panda 4.2 bi can lead you to the answer. Enabled by PCO's new back illuminated sensor and based on the latest innovations in sCMOS technology, the pco.panda 4.2 bi reaches a quantum efficiency of up to 95%.

[Visit Website](#) [Request Info](#)

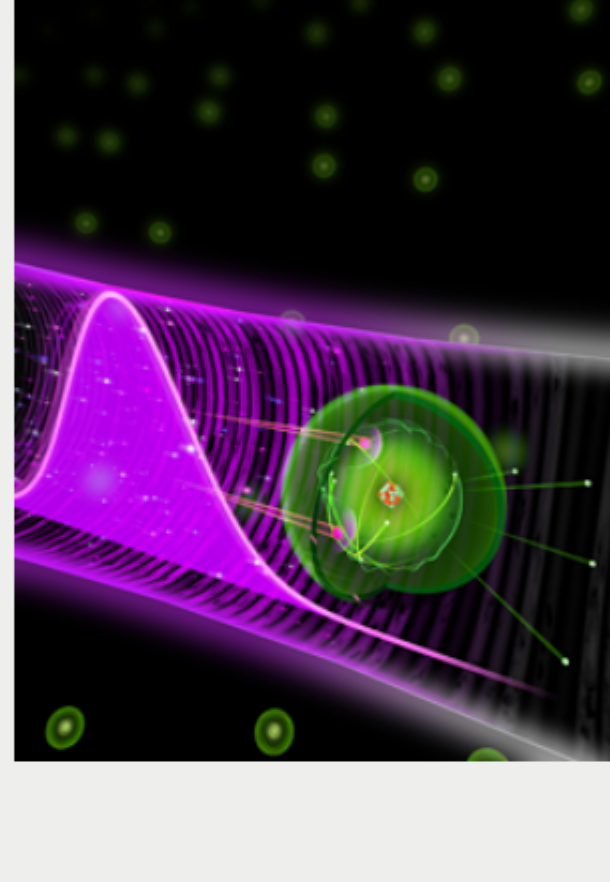
sponsors



More News

Attosecond Pulses Break Into Atomic Interior

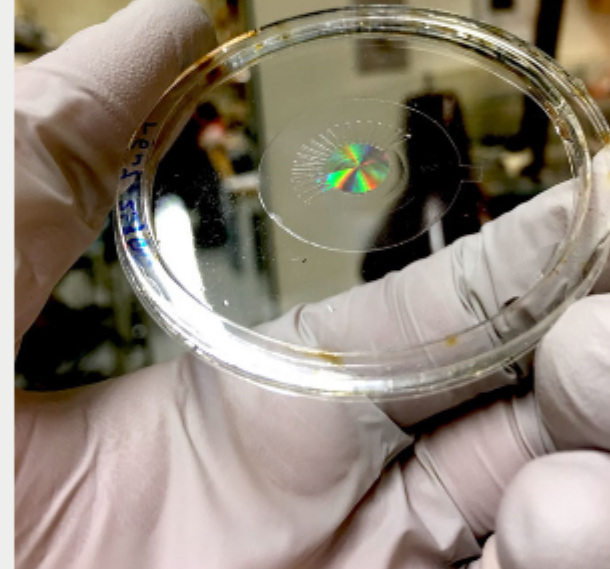
To observe the ultrafast electron motion in the inner shells of atoms with short light pulses, the pulses must be ultrashort, very bright, and the photons that are delivered must have sufficiently high energy. Physicists at the Laboratory for Attosecond Physics (LAP) have met the conditions necessary to achieve this goal.



[Read Article](#)

Tunable Metalens Can Change Its Focus in Real Time, Like a Human Eye

Researchers have demonstrated electrically tunable large-area metalenses controlled by artificial muscle technology. The adaptive metalens simultaneously controls for three of the major contributors to blurry images: focus, astigmatism and image shift. The device thickness is only 30 micrometers.



[Read Article](#)

More Headlines

Laser World of Photonics China: Manufacturing, System Processing in Focus [Read Article](#)

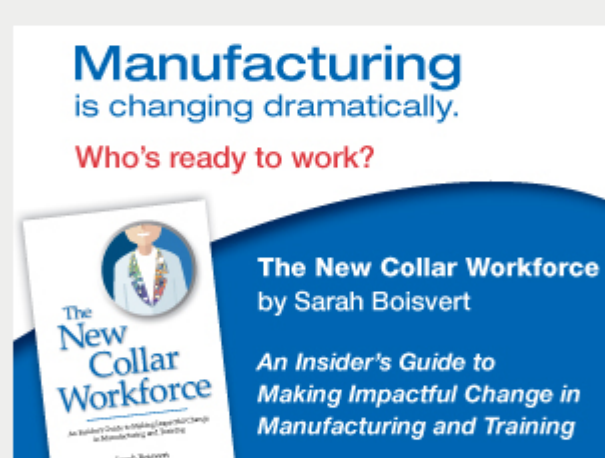
Kitt Peak Telescope to Study Dark Energy [Read Article](#)

Vrije Hosts Photonics Show for High School Students [Read Article](#)

Chip-Scale Dual-Comb Spectroscopy Could Be Used in the Field [Read Article](#)

Nanophotonic Sensors Monitor Processes in Living Cells [Read Article](#)

sponsors



Industry Events

Image Sensors Europe 2018

March 13-15, 2018 - Park Plaza Hotel - London United Kingdom
Image Sensors is recognized as the leading European event to drive forward the future of sensor applications. It will offer end users, camera system suppliers, technology developers, optics suppliers and others the chance to network with other attendees from across the image sensing value chain. Attendees will gain a comprehensive overview of future trends within the industry to ensure they stay ahead of the competition in the areas of 3D imaging and technology, new sensors and functions, applications and more.

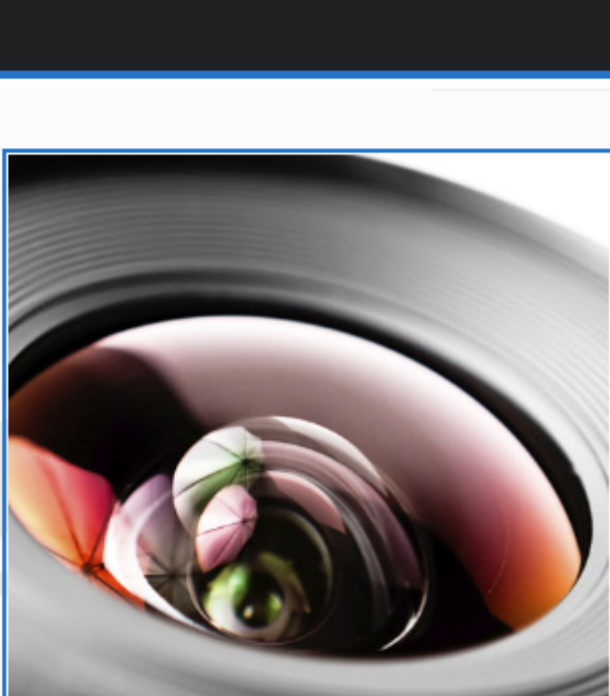


[More Info](#)

Webinars

Smart Cameras: Technology and Applications

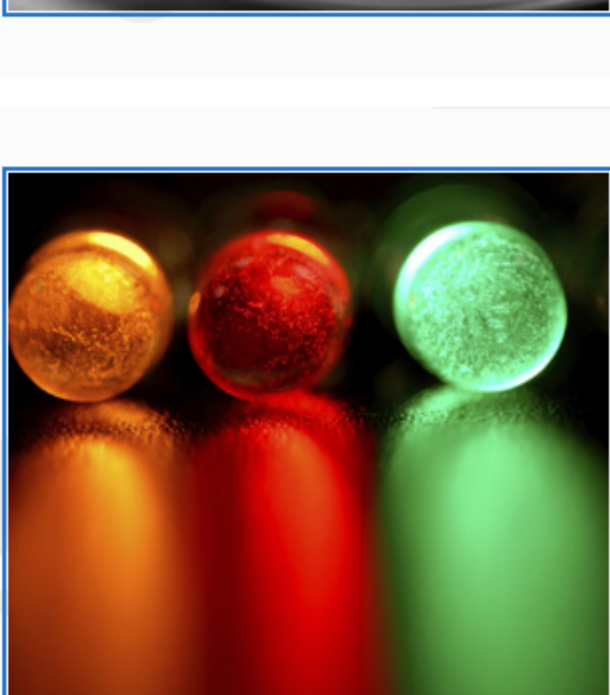
The, Mar 13, 2018 1:00 PM - 2:00 PM EDT
The capabilities of smart cameras is increasing dramatically over the past few years. This webinar will explore the characteristics of today's smart cameras, typical applications, and how to ensure that you select the camera that best meets your needs. You will learn how smart cameras can be used to simplify machine vision requirements and how they can reduce the overall cost of a machine vision application. Sponsored by Teledyne DALSA.



[Register Now](#)

Optics and Lighting Solutions for Machine Vision

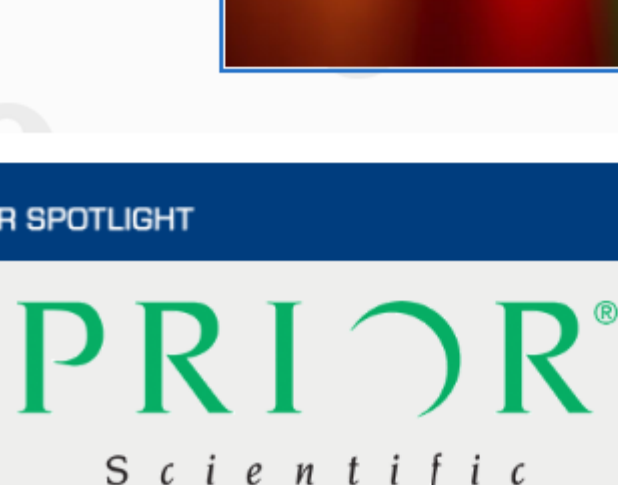
Tue, Mar 20, 2018 1:00 PM - 2:00 PM EDT
A crucial first step in any good machine vision application is developing the right optics and lighting for the application. This webinar will address the basic principles and methods of machine vision optics and lighting and review advances in methods and components that have made machine vision easier to implement in recent years. Sponsored by Smart Vision Lights and Euresys S.A. and Chroma Technology.



[Register Now](#)

PHOTONICS buyers' guide • EXHIBITOR SPOTLIGHT

Prior Scientific is the leading manufacturer of high precision motorized microscope stages, nanopositioning Piezo Z stages, automated slide loading systems, laser autofocus systems, fluorescence illumination systems, fiber optic inspection equipment, motorized filter wheels, microscopes, custom optical systems and a wide array of microscopy accessories for a variety of applications.



[Learn more about Prior Scientific Inc.](#)

[Visit Website](#)

Looking for Fiber Optic products? Search [PhotonicsBuyersGuide.com](#), or browse these product categories:

[Fiber Optic Test Equipment](#)

[Fiber Optic Cable Assemblies](#)

[Optical Glass](#)

[Fiber Optic Passive Components](#)

[Fiber Lasers](#)

[Fiber Optic Sensors](#)



CALL FOR ARTICLES!

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazines (*Photonics Spectra*, *Industrial Photonics*, *BioPhotonics* and *EuroPhotonics*). Please submit an informal 100-word abstract to Managing Editor Michael Wheeler at Michael.Wheeler@Photonics.com, or use our [online submission form](#).

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
© 1996 - 2018 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.