If you are having problems seeing this newsletter, please click **here to view**

Wednesday, October 17, 2018

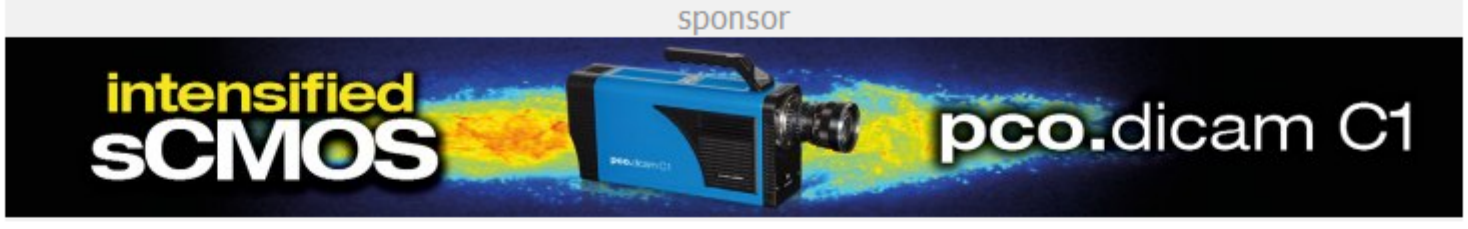
IMAGING
Tech Pulse

PHOTONICS MEDIA

October 2018

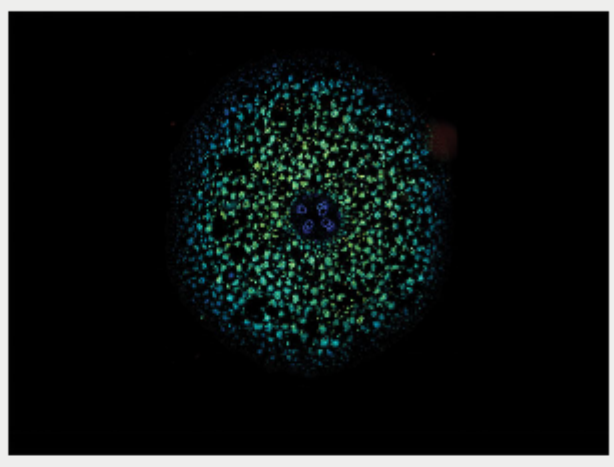
Imaging Tech Pulse is a special edition newsletter from Photonics Media and PCO-TECH Inc. covering key developments in imaging technology. Manage your Photonics Media membership at Photonics.com/subscribe.

sponsor



Advanced Imaging Techniques Enhance Fluorescence Sensing

New developments in image sensor technology have improved the light detection efficiency of imaging devices. Scientific CMOS (sCMOS) and electron-multiplying CCD (EMCCD) sensors exhibit low noise levels and can record clear images in low-light conditions, enabling new applications for fluorescence sensing.



Read Article

PROMOTED CONTENT

PCO-TECH Inc.

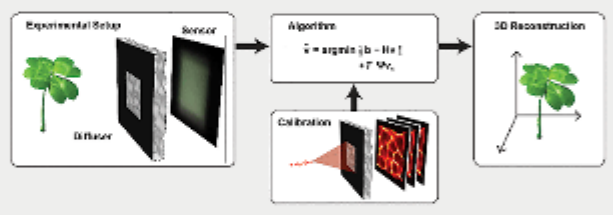
Intensified 16 bit sCMOS pco.dicam C1

After more than 30 years of experience with image intensified cameras, PCO is proud to introduce the new pco.dicam C1. It is the first camera system with image intensifier technology that harnesses the full power of the sCMOS sensor. Unique is the optical connection of the high-resolution 25 mm image intensifier to the 16 bit sCMOS sensor via an efficient tandem lens. Individual photons are detected using the shortest exposure times. A sustained frame rate of 104 fps at 4.2 MPix resolution and 16 bit dynamic is now reality for the first time with intensified cameras. It's not only the fast sCMOS sensor but also the ultra-fast CLHS interface that have opened the door to an unprecedented intensified image data rate of up to 1187 MB/s.

Request Info Visit Website

Lensless Cameras May Offer Detailed Imaging of Neural Circuitry

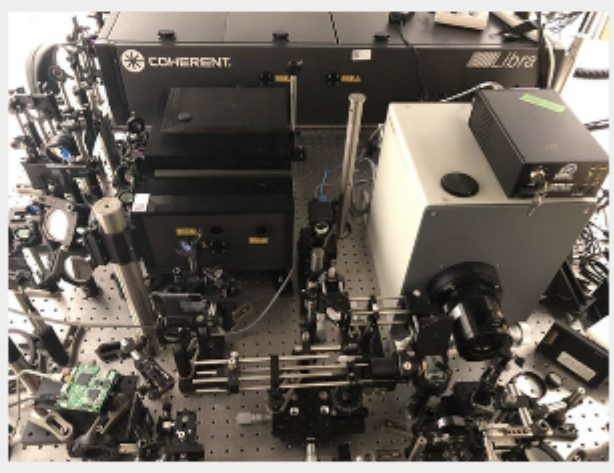
Lensless imagers do not rely on lenses to form the image. Instead, a single thin optical element is placed between the sample and the sensor. The optic is designed such that each point within the volume casts a unique and identifiable pattern.



Read Article

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. The camera system, called T-CUP, passively captures dynamic events with 100-femtosecond (fs) frame intervals in a single camera exposure.



Read Article

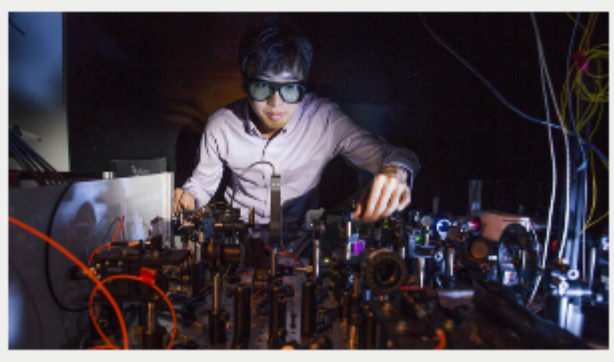
Emerging Applications Drive Image Sensor Innovations

CMOS sensors are being taken for a ride. Forecasts call for image sensor market growth to be driven by automobiles, with increasing use of lidar, cameras, and sensors. To not hit a stop sign, though, vendors need to up product performance and cut costs.

Read Article

Miniature Lens Could Enable Fast Transfer of Quantum Information

A tiny camera lens, invented by an international research team, could one day be used to link quantum computers to an optical fiber network. The lens is made of a silicon film with millions of nanostructures that form a transparent metasurface.



Read Article

We respect your time and privacy. You are receiving this email because you are a Photonics Media subscriber, and/or a member of our website, Photonics.com. You may use the links below to manage your subscriptions or contact us.

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.

LAURIN PUBLISHING