

This Week in PHOTONICS



LightMachinery
Excellence in Lasers and Optics



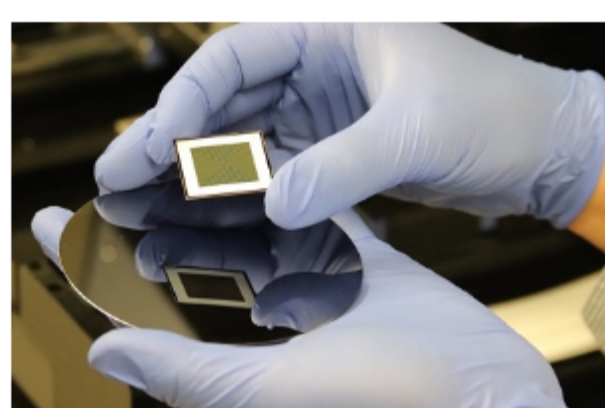
Hyperfine Spectrometer
A sub-picometer resolution spectrometer in a compact package.

.: Top Stories

ANU Scientists Set New Record with Bifacial Solar Cells

Researchers at Australia National University (ANU) have produced a more efficient type of solar cell — a true bifacial solar cell, using laser processing — and have set a world record for power output with bifacial solar cells in the process.

[Read Article](#)



NIR Spectroscopy Could Provide Window into AD Pathology, Therapeutics

To detect Alzheimer's disease (AD) in its early stages, researchers at the VA Bedford and VA Boston Healthcare systems developed a noninvasive optical technique that uses near-infrared spectroscopy to identify changes in the brain by capturing chemical and structural information from brain tissue.

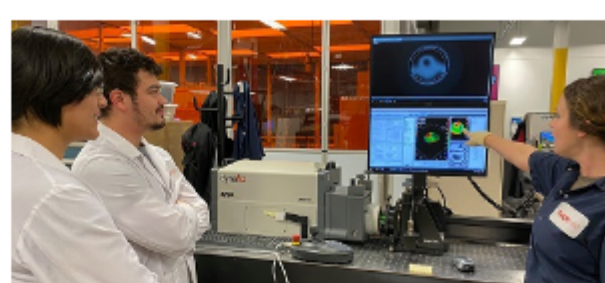
[Read Article](#)



AmeriCOM, Sussex County Community College Partner on Optics Tech, Education

Sussex County Community College (SCCC) in New Jersey is the first college to partner with the American Center for Optics Manufacturing (AmeriCOM), under AmeriCOM's Department of Defense-funded, five-year, \$34 million Defense Precision Optics Consortium partnership. SCCC announced the partnership Aug. 25.

[Read Article](#)



.: Featured Products



SYNOPTICS Rare Earth Doped Fluorides

Northrop Grumman Synoptics

SYNOPTICS provides Yttrium Lithium Fluoride (YLF) crystals doped with a variety of rare earths such as Nd, Pr, Tm Yb, Er, and Ho. Advantages include low beam divergence, efficient single-mode operation, weak thermal lensing, and naturally polarized light.

[Visit Website](#)

[Request Info](#)



Be Creative, Break the Rules – AI-based Imaging Without Prior Knowledge

IDS Imaging Development Systems GmbH

The application possibilities based on intelligent cameras are almost limitless. Since traditional vision solutions work with a fixed set of rules, organic or rapidly changing objects are a huge challenge for them. Artificial intelligence, on the other hand, can handle such situations with ease.

[Visit Website](#)

[Request Info](#)



.: More News

[Optical Society to Sponsor Luminate NY Finals 2021 Competition](#) [Read Article](#)

[SoCalGas to Use Gas-Mapping Lidar to Reduce Methane Emissions](#) [Read Article](#)

[Ansys to Acquire Optical Imaging System Simulation Firm Zemax](#) [Read Article](#)

[Robotic System Makes High-Precision Surface Measurements](#) [Read Article](#)

[Imaging System Enables Early Detection of Bowel Cancer](#) [Read Article](#)



.: Upcoming Webinars



Next Leading IR and 3D Sensors: Improved Process and Quality Control for IoT

Tue, Sep 7, 2021 10:00 AM - 11:00 AM EDT

Technology in the field of infrared cameras and 3D sensor technology requires more and more innovation, flexibility and user-friendliness. AT - Automation Technology has designed its portfolio around these parameters and offers customized solutions that can be individually adapted to any application. In this webinar, Guido Deutz of AT showcases that portfolio and how it is delivering precise, highly accurate, and reliable results in machine vision. Presented by AT - Automation Technology GmbH.

[Register Now](#)

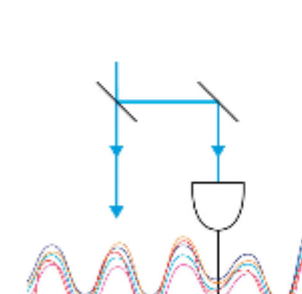


Silicon Nitride Photonics with MEMS: Enabling New Sensing and Filtering Systems

Wed, Sep 8, 2021 1:00 PM - 2:00 PM EDT

In this webinar, Philippe Babin, CEO of AEAPONYX, discusses silicon nitride photonics' advantages and capabilities and takes a systems-thinking approach to product success. He will also discuss how silicon nitride photonics applies to solving today's challenges and future applications.

[Register Now](#)



Get More Out of Your Optical Measurements

Thu, Sep 16, 2021 11:00 AM - 12:00 PM EDT

Maximizing the information captured within optical measurements is the key to discovering smaller effects and observing faster processes, and yet the signal of interest is often buried in an inevitable noise floor. Lock-in amplifiers and boxcar averagers can improve the signal-to-noise ratio by averaging the signal while suppressing spurious noise. In this webinar, Claudius Riek, Ph.D., of Zurich Instruments, focuses on three techniques within their typical application areas to help you choose the best approach and save time when setting up your measurement. Presented by Zurich Instruments.

[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*, *Vision Spectra*, and *EuroPhotonics*). Please submit an informal 100-word abstract to editorial@photonics.com, or use our [online submission form](#).



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 - 2021 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.

