

This Week in PHOTONICS

PHOTONICS MEDIA photonics.com

STABILIZING THE LINE OF SIGHT

By Peter J. Kennedy and Rhonda L. Kennedy

A methodology and an example for executing a successful end-to-end line-of-sight pointing design.

NEW From Photonics Media Press
PHOTONICS MEDIA PRESS

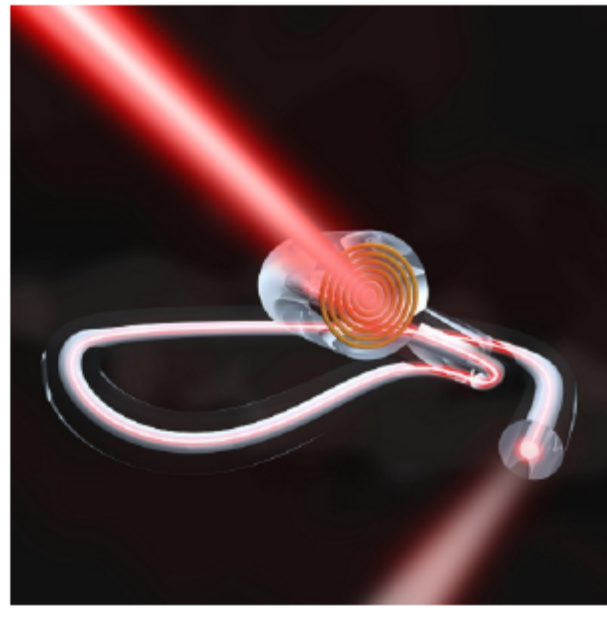
Order today ▶

.: Top Stories

Nanostructure Allows Large Incidence Angles in Fiber Optics

Researchers from ITMO, in collaboration with the Leibniz Institute of Photonic Technology and Australian National University, have resolved the fundamental problem of light coupling into optical fiber at incidence angles of over 70°.

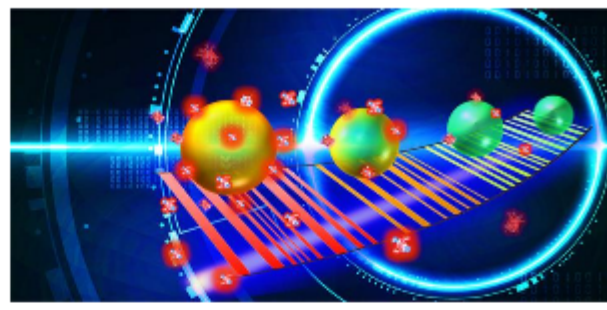
[Read Article](#)



Photonic Barcodes Pave New Roads for Encryption, Biosensing

Bioresponsive barcodes, capable of detecting molecules in a single liquid droplet, generated radiative energy that successfully converted dynamic biomolecular information into trillions of distinctive photonic barcodes. Microdroplet radiative energy that was transferred to binding biomolecules enabled the conversion.

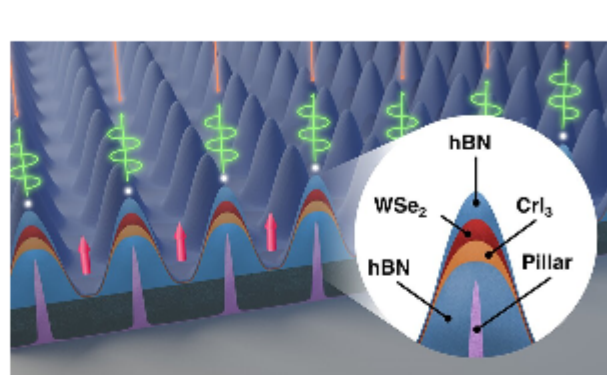
[Read Article](#)



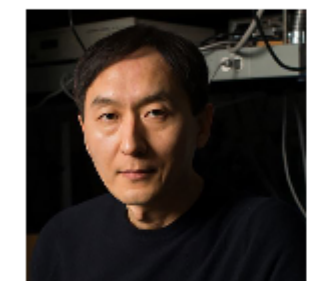
Light-Driven Quantum Network Promises Faster, Enhanced Communication

Using magnetic and semiconducting materials, researchers at the University of Rochester and Cornell University designed a nanoscale node capable of using laser light to emit and accept photons to interact with other nodes.

[Read Article](#)



.: Photonics Spectra Conference



Lasers Track to Spotlight Wide Ranging Applications, Techniques

KEYNOTE: Surface Functionalization with Femtosecond Lasers and Applications

Presented by: Chunlei Guo, The Institute of Optics, University of Rochester

In his keynote, Chunlei Guo will discuss developments in femtosecond laser micro- and nanopatterning, including formation dynamics, drastically altered surface functionalities, and various applications. Among Guo's considerable accomplishments is the application of femtosecond lasers to high-precision materials processing and functionalization, including the development of superhydrophilic and superhydrophobic surfaces, as well as so-called black and colored metals. Guo's work has supported efforts to expand clean water solutions on a global scale, which led to funding from the Bill & Melinda Gates Foundation.

Other highlights from the lasers track feature the use of fiber lasers in e-mobility applications, the role of lasers and multiphoton imaging in neuroscience, and the expanding application of blue lasers in materials processing.

For more information and to register, www.photonics.com/pscinfo.

[Register Now](#)

.: Featured Products

Optical Fabrication

Photonics Media
Optical Fabrication is a new book for anyone working on or interested in the methods, materials and measurement techniques used in modern manufacturing. The book will serve as an introduction or update, moving beyond methods and materials to design and complex modern applications.

[Visit Website](#)

[Request Info](#)



SYNOPTICS Now Offers IBS Coatings

Northrop Grumman Synoptics

Quasi-Rugate thin film designs are optimized for high-power laser applications for ultra-fast through CW applications across the wavelength range of 355 nm to 2200 nm. Each design has a unique refractive index profile specifically tuned to give optimal performance for our customer's applications.

[Visit Website](#)

[Request Info](#)



.: More News

[Large-Area Organic Photodiodes Offer Alternative to Silicon Devices](#) [Read Article](#)

[Terahertz Quantum Cascade Laser Operates Outside Lab Setting](#) [Read Article](#)

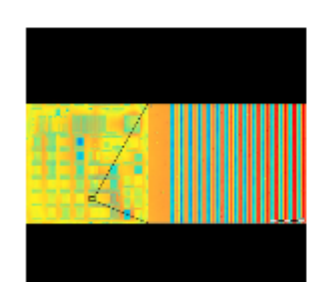
[Pleora Appoints Jonathan Hou President](#) [Read Article](#)

[TRUMPF and SICK to Develop Industrial Quantum Sensor](#) [Read Article](#)

[PerkinElmer Acquiring Horizon Discovery](#) [Read Article](#)



.: Upcoming Webinars

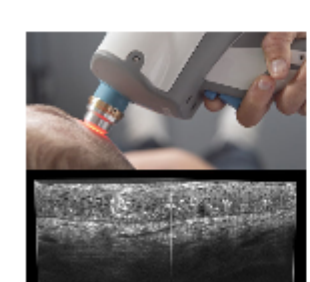


Optical-Based Surface Metrology for CMP Optimization and Die Flatness Control

Tue, Nov 17, 2020 11:00 AM - 12:00 PM EST

This webinar with Samuel Lesko, Ph.D., highlights the use of optical profilers (based on white light interferometry, WLI) to assess die flatness on semiconductor wafers, as well as to optimize the chemical mechanical polishing (CMP) process. Lesko will discuss unique combination of nanometer accuracy and micron lateral resolution to automatically identify hot spots, unwanted erosion, or dishing along the die map and reference position on wafers. Presented by Bruker.

[Register Now](#)



Line-Field Confocal Optical Coherence Tomography (LC-OCT): A New Tool for Noninvasive Cellular-Resolution Imaging of Human Skin

Wed, Nov 18, 2020 10:00 AM - 11:00 AM EST

This webinar with Jonas Ogien, Ph.D., of DAMAE Medical in France, will present a technique for high-resolution OCT, referred to as LC-OCT, which allows in particular to obtain vertical section images of in vivo human skin at cellular resolution and in real-time, revealing morphological features comparable to the ones that can be observed in histology images.

[Register Now](#)



Applications for Video and High-Resolution Hyperspectral Imaging

Thu, Nov 19, 2020 1:00 PM - 2:00 PM EST

In this webinar with Paul Danini and Wouter Charle of imec, you will learn how the unique capabilities of hyperspectral imaging are applied to innovate businesses, applications, and research. The webinar will also elaborate on imec's unique on-chip technology and off-the-shelf camera systems, as well as advanced imaging software and the comprehensive support tools that imec can provide. Presented by imec.

[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 - 2020 Laurin Publishing. All rights reserved. Photonics.com is Registered U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.