

This Week in PHOTONICS



PHOTONICS spectra CONFERENCE Jan. 9-12, 2023

Discover the latest trends, technical advancements, and best practices in photonics.

Register for FREE

#PSC2023

Top Stories

Programmable Device Enables Optical Control at Unprecedented Speeds

An international team led by MIT researchers has developed a spatial light modulator (SLM) that promises greater control of light at orders of magnitude more quickly than commercial devices. The team also developed a fabrication process to ensure consistent device quality when manufactured at scale.

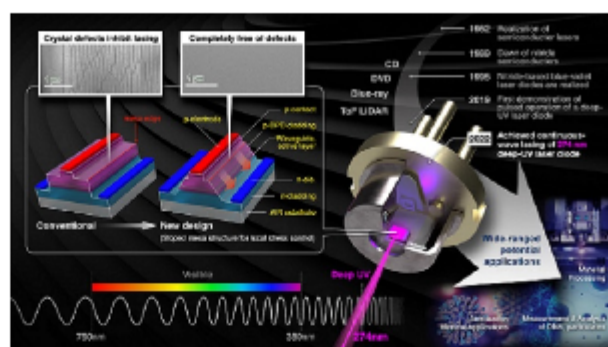
[Read Article](#)



Diode Demonstration Establishes Efficient Route to Sterile Settings

Researchers from Nagoya University, in collaboration with Asahi Kasei Corp., have reported room temperature continuous-wave (CW) lasing of a DUV laser diode, which the group claimed is a world first. The work is a milestone in the practical application of semiconductor lasers in all wavelength ranges and will allow UV-C laser diodes to be applied to health care, virus detection, particulate measurement, gas analysis, and high-definition laser processing.

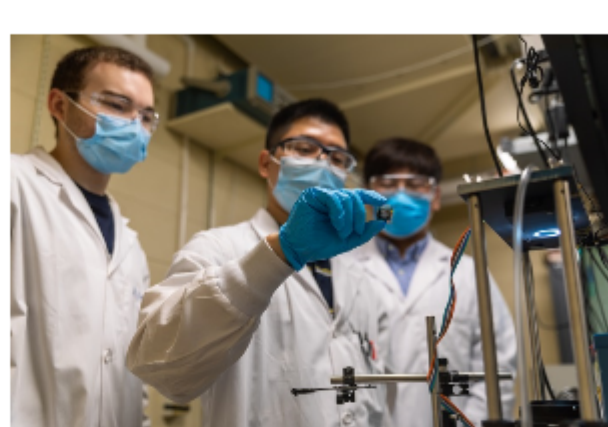
[Read Article](#)



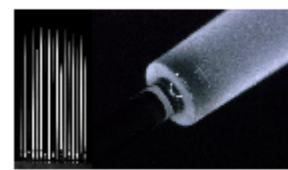
Low-Cost Solar Cell Amplifies Performance Potential of Perovskite

An international research team has produced an all-perovskite tandem solar cell with exceptionally high open-circuit voltage and efficiency. The prototype device demonstrates the potential of perovskite to overcome some of the limits of silicon solar cells.

[Read Article](#)



Featured Products & Services



CO₂ Laser Glass-Processing

NYFORS Teknologi AB
CO₂ laser glass-processing is

designed to produce high-power and sensitive photonic components and complex structures. It guarantees contamination-free processing for fiber linear, 2D and gapless array splicing, ball lensing, end-capping, and many other challenging processes.

[Visit Website](#)

[Request Info](#)

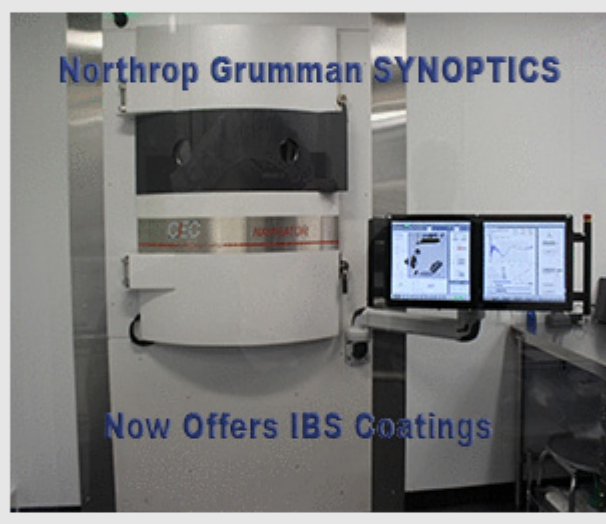


Custom Optical Time Delays

M2 Optics Inc.
Proven solution for solving critical optical signal timing and synchronization challenges.

[Visit Website](#)

[Request Info](#)



NYFORS

ADVANCED LASER FUSION SPLICING AND GLASS PROCESSING

[LEARN MORE](#)

More News

[Lightwave Logic Acquires Polymer Tech, Assets from Chromosol](#) [Read Article](#)

[BluGlass, Ganvix Partner to Develop Green Gallium Nitride VCSELs](#) [Read Article](#)

[TRUMPF Manufactures Particle Accelerator Component for CERN](#) [Read Article](#)

[Shorter Wavelength Expands Fluorophore's Role in Monitoring Cell Dynamics](#) [Read Article](#)

[Luminate and Silicon Catalyst Form Partnership](#) [Read Article](#)

2023 CALL FOR PAPERS

SPIE OPTICS+ PHOTONICS

20-24 August 2023
San Diego, California, USA

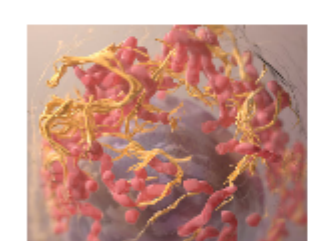
FORWARD AS ONE

SEMICON JAPAN

DEC 14-16, 2022
TOKYO BIG SIGHT

semi

Upcoming Webinars



Low-Cost Compact Optical Spectroscopy and Novel Spectroscopic Algorithms

Thu, Dec 8, 2022 2:00 PM - 3:00 PM EST

Dr. Caigang Zhu of the University of Kentucky, shares on a recently developed novel spectroscopic model with proper wavelength pairs that has been implemented with both a standard optical spectroscopy platform and a low-cost compact spectroscopy device. This model is utilized for the near real-time quantification of nanoparticle concentrations in biological tissue models. Both tissue-mimicking phantoms and ex vivo tissue sample studies show that these optical spectroscopic techniques can quantify concentrations in near real time with high accuracies of <5% error using a pair of narrow wavelengths. These techniques could potentially facilitate real-time monitoring of nanoparticle delivery in biological models using low-cost point-of-care optical spectroscopy platforms, which would significantly advance nanomedicine in cancer research.

[Register Now](#)



Fused Silica in Radiation Environments

Tue, Dec 13, 2022 1:00 PM - 2:00 PM EST

An increasingly wide range of applications need to be able to function in harsh environments, not only on space missions but also here on Earth, in particle detectors, for example. It is important to understand radiation's key processes and their effects on fused silica to complete its mission. Eduard Klett of Heraeus Conamic provides an overview of fused silica as an optical material and how it is affected by different types and doses of radiation. He classifies types of radiation and discusses their causes. Presented by Heraeus Conamic.

[Register Now](#)

All Things Photonics

Metallenz co-founder and CEO **Rob Devlin** recounts a decade of progress in the field of meta-optics, culminating in his company's rollout of commercial products and technology offerings. Devlin's insights span the growth of the market, current and forthcoming applications, and recollections of his time working in the group of photonics luminary Federico Capasso.

[Listen 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*, and *Vision Spectra*). 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 - 2022 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.

