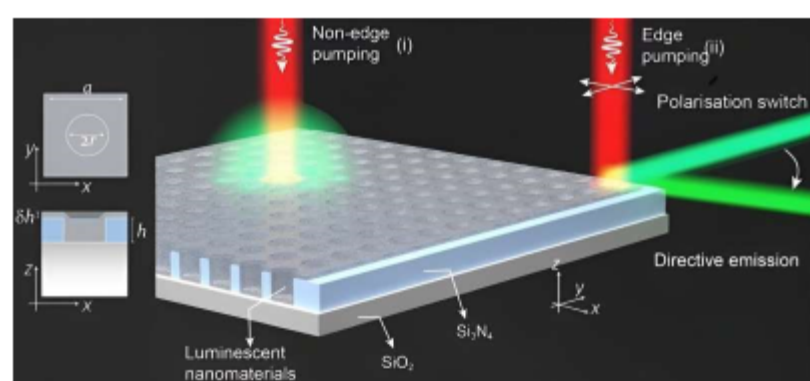




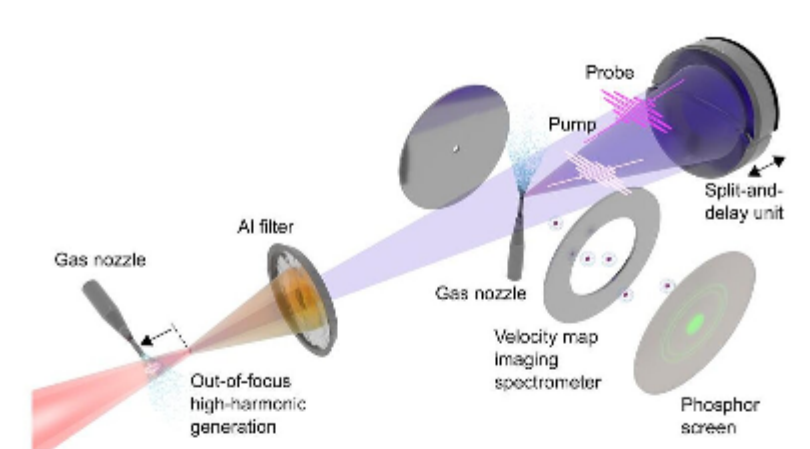
Weekly News



Supercritical Coupling Boosts Photon Upconversion

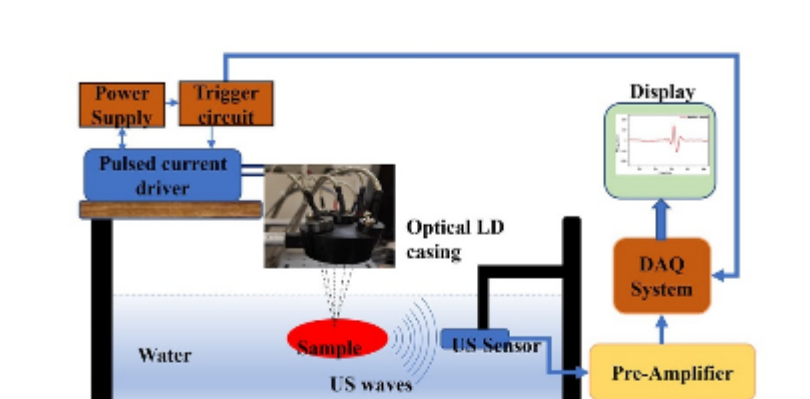
Researchers at the National University of Singapore have unveiled a novel concept termed supercritical coupling that enables a several-fold increase in photon upconversion efficiency. This discovery not only challenges existing paradigms, but also opens a new direction in the control of

light emission, the team said. [Read Article](#)



Attosecond Spectroscopy Milestone Reached

Researchers at the Max Born Institute in Berlin have demonstrated attosecond-pump attosecond-probe spectroscopy at a repetition rate of 1 kHz. The advance opens new avenues for the investigation of extremely fast electron dynamics in the attosecond regime. [Read Article](#)



Photoacoustic Device Probes Tissue with Low-Cost Laser Diodes

Photoacoustic (PA) technologies offer a noninvasive approach to probing biological tissues, but have seen limited use in clinical applications, partially due to bulky, expensive laser sources. A compact PA sensing instrument for biomedical tissue diagnosis, powered by laser diodes, could provide

clinicians with a practical, effective tool for evaluating breast disease. [Read Article](#)



Featured Products & Services

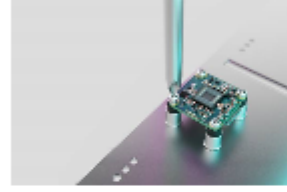


ZIVA Light Engine for Yokogawa CSU

Lumencor Inc. Yokogawa's CSU is extensively used for 3D confocal imaging of live cells, tissues, and microorganisms. Lumencor's ZIVA Light Engine offers seven lasers in support of the CSU-W1 at a price well below that of the scanner. A precision-engineered coupler yields intense, uniform light at the sample plane from the compact, bench-top illuminator.

[Visit Website](#)

[Request Info](#)

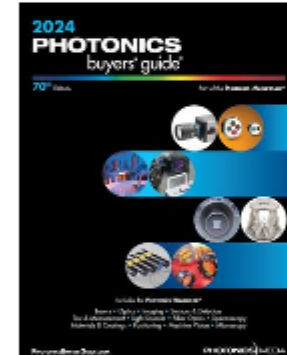


Exceptional Image Quality in the Most Space-Efficient Package

IDS Imaging Development Systems GmbH Cost-effective, industrial-grade cameras are an important growth driver for automation. IDS Imaging Development Systems' portfolio of low-cost cameras is aimed specifically at price-sensitive applications. New: tiny industrial uEye XCP/XLS cameras with the high-resolution 20 MP sensor onsemi AR2020.

[Visit Website](#)

[Request Info](#)



The 2024 Photonics Buyers' Guide

Photonics Media The 2024 edition is now available! It lists over 4000 companies under 1600 product categories and includes 30 articles from the Photonics Handbook. Use coupon code **HP24** for a special offer!

[Visit Website](#)

[Request Info](#)



Lightning-Fast LED Illumination

CoolLED Ltd. From high-content imaging to FRET and Fura-2 calcium imaging, lightning-fast LED microscopy illumination with the 8-channel pE-800 Series accelerates a range of applications.

[Visit Website](#)

[Request Info](#)



More News

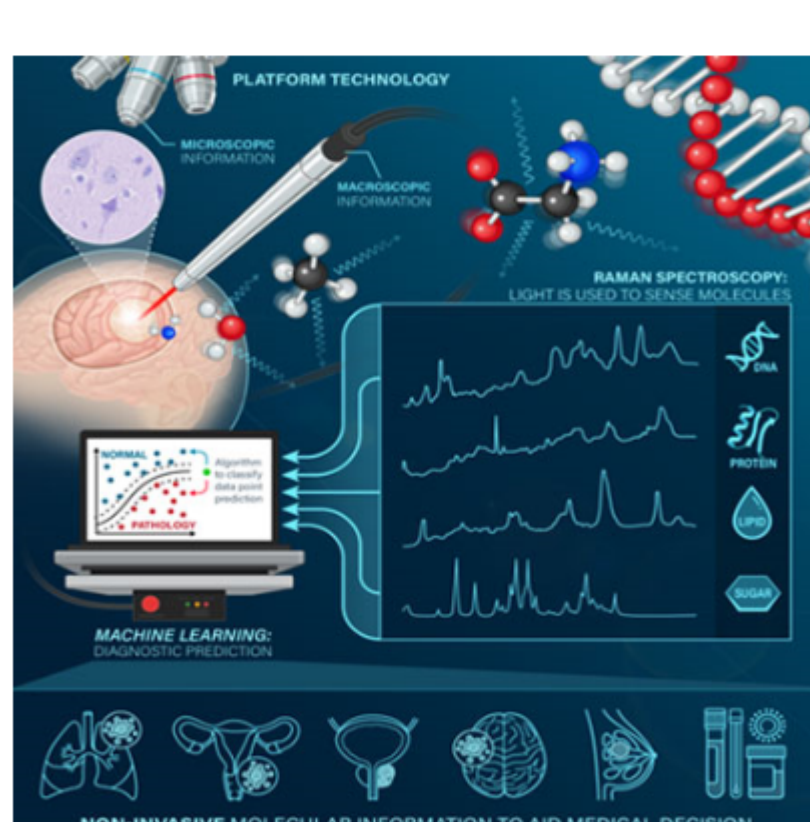
[Terahertz Biosensor Allows Early Skin Cancer Detection](#)

[DMD-Based SIM Attains Fast Superresolution Bioimaging in 3D](#)

[UK Funding Fuels Future Telecom Research](#)

[Photonics West 2024: Notable Trends and an Excursion](#)

Latest Webinars



What is the Role of Vibrational Spectroscopy in Surgery and Diagnostics?

Wed, Mar 13, 2024 1:00 PM - 2:00 PM EDT
Vibrational spectroscopy techniques are used for a wide range of materials characterization applications that require detailed molecular fingerprinting and quantification of molecular species based on the detection of specific vibrational bonds. In this talk, Frederic Leblond describes how the integration of technologies that rely on spontaneous Raman spectroscopy signal detection can complement current medical practice for surgical guidance, in situ diagnostics, and disease detection in biofluids. He presents case studies in infectious disease detection, neurosurgical oncology, breast-conserving surgery, bronchoscopy, prostate cancer diagnostics, and orthopedic surgery. He also addresses aspects relating to clinical translation, commercialization challenges, and regulatory strategies. Finally, he presents a SWOT (strengths, weaknesses, opportunities, and threats) analysis as it is related to the clinical deployment of vibrational spectroscopy techniques.

[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*, 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 - 2024 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.

