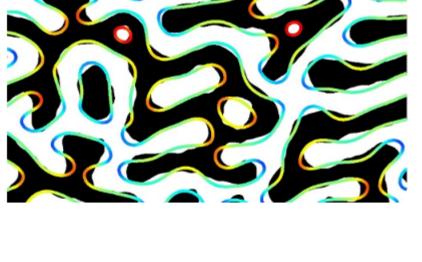


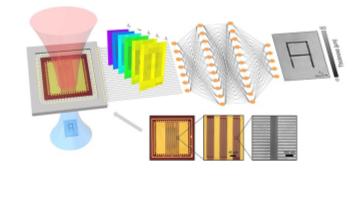
#### Weekly News





## Ultrafast Laser Pulses Could Increase Data Storage Energy Efficiency

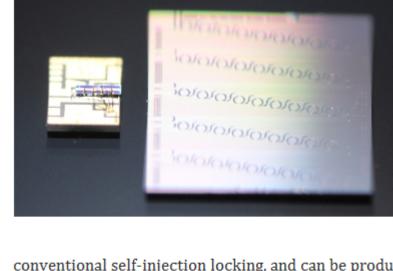
A recent discovery from the University of California, Davis, could enable faster and more efficient magnetic hard drives by using ultrafast laser pulses to process data. The findings could significantly reduce energy consumption for data centers. Read Article



# Deep Learning-Driven Terahertz System Captures Multispectral Images in Real Time

Researchers at UCLA have developed a focal plane array

capable of supporting real-time multispectral terahertz video in 3D. According to the team, led by UCLA professors Mona Jarrahi and Aydogan Ozcan, this is the first time a terahertz imaging system has been able to achieve real-time multispectral imaging with video capability while maintaining a high signal-to-noise ratio. Read Article



# Improved, Scalable Comb Lasers Laser technology startup Enlightra has collaborated with

Enlightra and DESY Hamburg Develop

DESY Hamburg to develop comb lasers that are more stable and efficient by design. The work demonstrated microresonators with programmable synthetic reflection, providing tailored injection feedback to the driving laser. The technology is a marked improvement compared to conventional self-injection locking, and can be produced using standard lithographic production. Read Article





## Gem - Solid-State



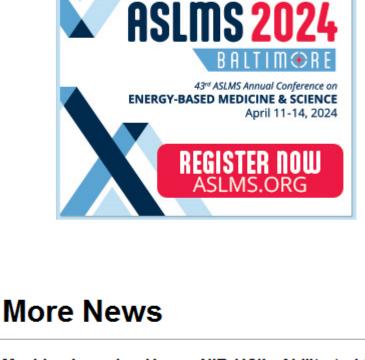
Novanta Inc. Air-cooled solid-state continuous-wave laser

Continuous-Wave Laser

designed for easy integration into OEM

instrumentation, delivering high power in a compact platform. Ideal for a range of applications from super resolution microscopy, Raman, holography through to semi-conduction inspection and particle counting. Visit Website Request Info







Raman microscope configured especially for

semiconductor research and development. Allowing

space for the Raman imaging of wafers on a bigger

scale, the microscope features a large-area scanning stage that helps characterize chemical composition, crystal quality, strain, and doping in up to 300-mm (12 in.) wafers. Visit Website Request Info

Edition from WITec is a

**Difficult Coatings Made Possible** 

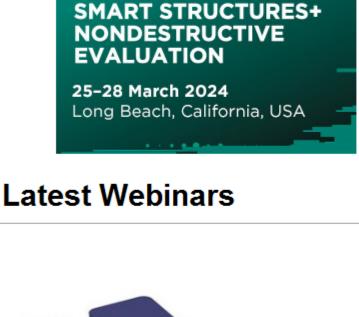


### Machine Learning Hones NIR-HSI's Ability to Identify Liver Disease Optofluidic Device Tests for Blood Disorders at Point of Care

Femtum Raises \$3.7M Seed Round

PsiQuantum, Mitsubishi Partner to Develop Energy-Efficient Materials

REGISTER TODAY



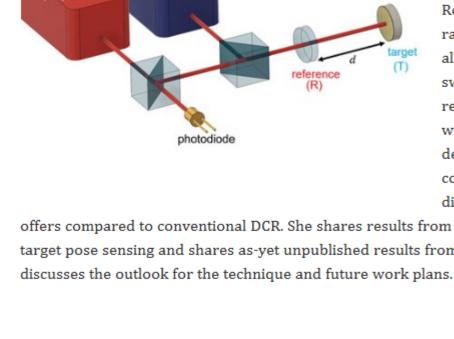


Researchers developed a simplified variation of the dual-comb ranging (DCR) technique: two-photon dual-comb LiDAR, which allows data to be collected using time-tagging electronics. The

IMAGE

SAVE 10%: ISEU24PM

#### "probe" laser local oscillato (LO) laser



## switch from high-bandwidth digitization to time-tagging represents a significant reduction in the data burden associated

with DCR. Despite the simplifications made, these demonstrations show comparable measurement precision to the conventional technique. In this webinar, Hollie Wright, Ph.D., discusses the technique and explains the many advantages it offers compared to conventional DCR. She shares results from various demonstrations including multi-target ranging and target pose sensing and shares as-yet unpublished results from demonstrations with non-cooperative targets. Finally, Wright Register Now

From Theory to Practice: Coherent Beam Combining's Impact on Laser

**Technology** 



editorial@Photonics.com, or use our online submission form.

Coherent Beam Combining

#### This presentation shines a spotlight on the transformative laser technology known as coherent beam combining (CBC). While this technology has been known for decades, it only recently has been introduced into commercial applications, with Civan Lasers emerging as a leading player in the field. During this webinar, Eyal Shekel delves into the fundamental principles of CBC and

Thu, Feb 15, 2024 10:00 AM - 11:00 AM EST

explores its versatile configurations, which encompass filled aperture and optical phased array techniques. He provides valuable insights into the latest developments in this field for laser technology enthusiasts or engineers seeking to harness the power of CBC. Presented by Civan Lasers. Register Now

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