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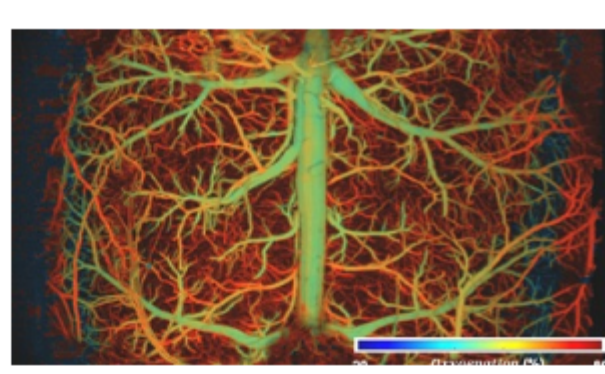
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Photoacoustic System Enables Real-Time Neurovascular Imaging

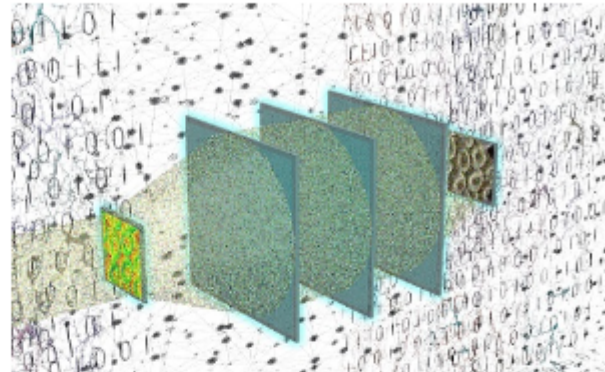
A photoacoustic imaging tool accommodates the need for speed and comprehensive detail in neurovascular imaging. The imaging modality enables an approach to visualize whole-brain hemodynamics and oxygenation in real time. It also tracks fast pathophysiological activities at the micro-vessel level. The approach breaks speed and resolution barriers in brain imaging technologies, and could lead to insights into stroke, dementia, and acute brain injury.



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Diffraction Optical Network Supports Quantitative Phase Imaging

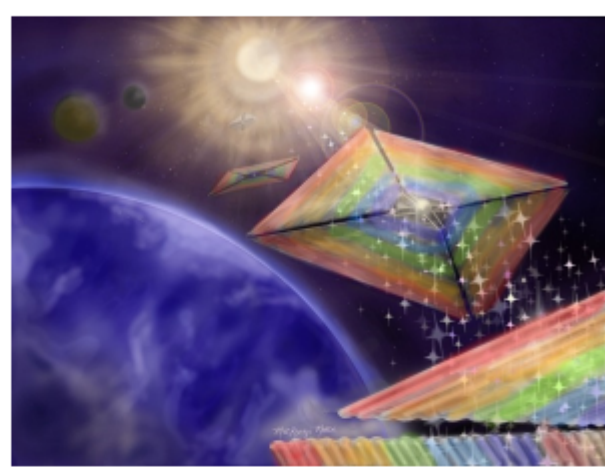
A team of researchers led by Aydogan Ozcan from the Electrical and Computer Engineering Department and California Nanosystems Institute at UCLA has developed a diffractive optical network to replace digital image reconstruction algorithms used in quantitative phase imaging (QPI) systems. The technology uses a series of passive optical surfaces that were spatially engineered with deep learning.



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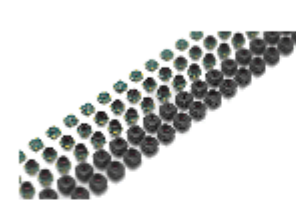
Diffraction Solar Sail Project Gets Green Light at NASA

NASA has selected a solar sail concept for development toward a demonstration mission with potential to advance space travel beyond what is currently possible. The Diffraction Solar Sailing project was selected for Phase III study under the NASA Innovative Advanced Concepts (NIAC) program. Phase III aims to strategically transition NIAC concepts with the highest potential impact for NASA, other government agencies, and commercial partners.



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Featured Products & Services



[New USB3 Industrial Cameras with Many Housing Variants](#)

IDS Imaging Development Systems GmbH

IDS Imaging Development Systems is introducing new uEye+ models with USB3 interface and Vision Standard compatibility, integrating popular Sony sensors from 1.6 to 6.4 MP. You can request design-in samples as of now. As known from the current uEye LE cameras, the new models are also characterized by their diverse housing options.

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LASYS International trade fair for laser material processing

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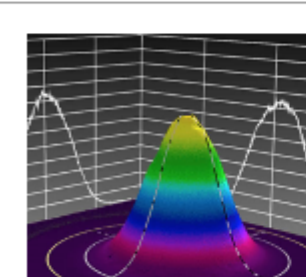
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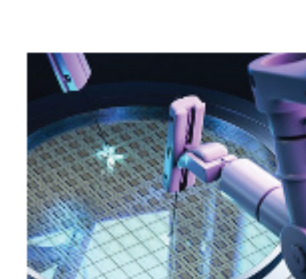


Measuring Long-Wavelength Lasers with IR Cameras, Pyroelectric Scanning-Slit Sensors, and Wavelength Conversion Apparatus

Tue, Jun 7, 2022 1:00 PM - 2:00 PM EDT

Numerous products and techniques have been developed to enable measurement of the beam quality parameters for long wavelength light sources. Kevin Kirkham, senior manager of new business development for Ophir at MKS Instruments, presents on the types of measurement tools available for long wavelength sources and helps determine which tools are appropriate for different applications. While there are many considerations that can significantly impact the laser process, an understanding of performance qualities can ensure users see successful outcomes. Presented by Ophir.

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Laser Measurement Solutions for Materials Microprocessing Applications

Wed, Jun 15, 2022 11:00 AM - 12:00 PM EDT

Mark Slutzki, a product manager at Ophir, shares innovative solutions for the challenges that accompany materials microprocessing applications. Those who use lasers in these applications, such as drilling via holes in PCBs, organic LED display lift-off, and cutting smartphone cover glass, are faced with many challenges. While the combination of laser parameters enables new and innovative processes, they can also cause unexpected damage to the measurement tools used to keep the process stable. These parameters include ultra-short pulse duration, high repetition rates, short wavelengths, and many others. Sponsored by Ophir, LaserPoint srl, and DataRay Inc.

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