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PHOTONICS MEDIA



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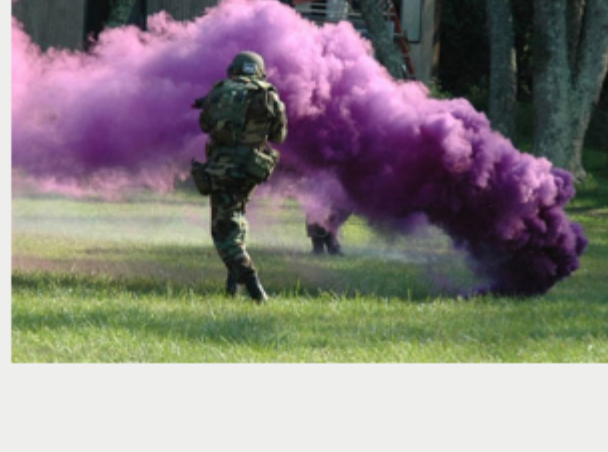
The HyperFine Spectrometer, Brillouin spectroscopy. Ready to go. Out of the box.

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Top Stories

AI Learns How to Approximate Light Scattering, Using Method That Could Speed Inverse Design

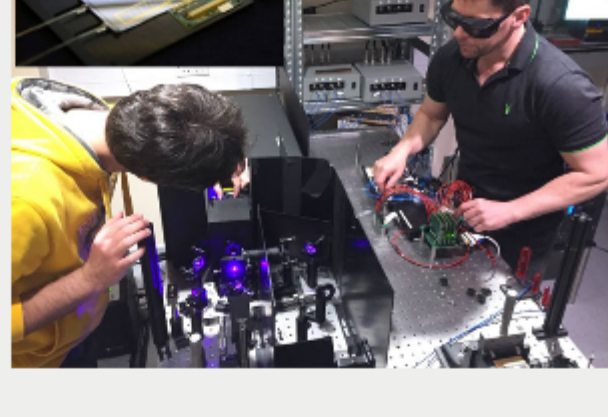
A computational neural network (a form of artificial intelligence) was able to learn how a multilayered nanoparticle scatters light by learning the relationship between the nanoparticle's structure and its behavior, based on thousands of training examples.



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Photonic Chip Used as Quantum Simulator to Model Molecular Dynamics

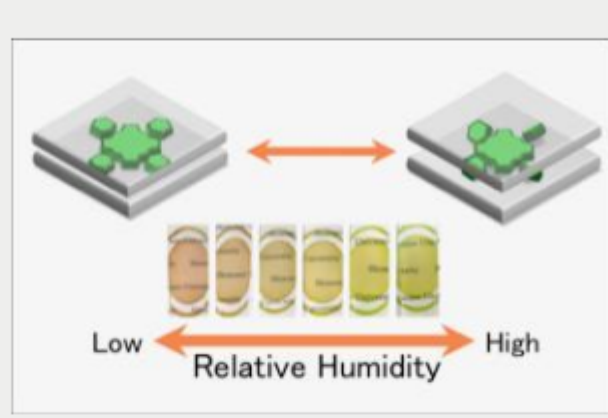
An international scientific team has shown how an optical chip can simulate the motion of atoms within molecules at the quantum level. Data from the chip allows a frame-by-frame reconstruction of atomic motions to create a virtual movie of a molecule's quantum vibrations.



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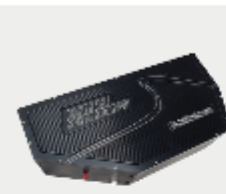
Transparent Hybrid Film Changes Color in Response to Humidity

Scientists developed a transparent hybrid film and investigated its chromic behavior in relation to relative humidity (RH). The film is made from environmentally friendly clay minerals and a dye, magnesium porphyrin, which changes color in response to environmental humidity.



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Featured Products



The HyperFine Spectrometer

LightMachinery Inc.

Designed for measuring hyperfine spectra and subtle spectral shifts, the HyperFine spectrometer from LightMachinery is a compact, low cost spectrometer capable of sub-picometer resolution. It is ideal for pulsed laser characterization and for measuring the small spectral shifts from Brillouin scattering.

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New Vision App-based IDS NXT Vegas Model

IDS Imaging Development Systems GmbH

IDS has expanded its product range of vision app-based industrial cameras. A color sensor model of IDS NXT Vegas has joined the product family. German camera manufacturer IDS has also introduced a new firmware and a new cockpit to the market, which offer additional features and simplify the handling even further.

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More News

Scientists Discover How Light and Gold Interact

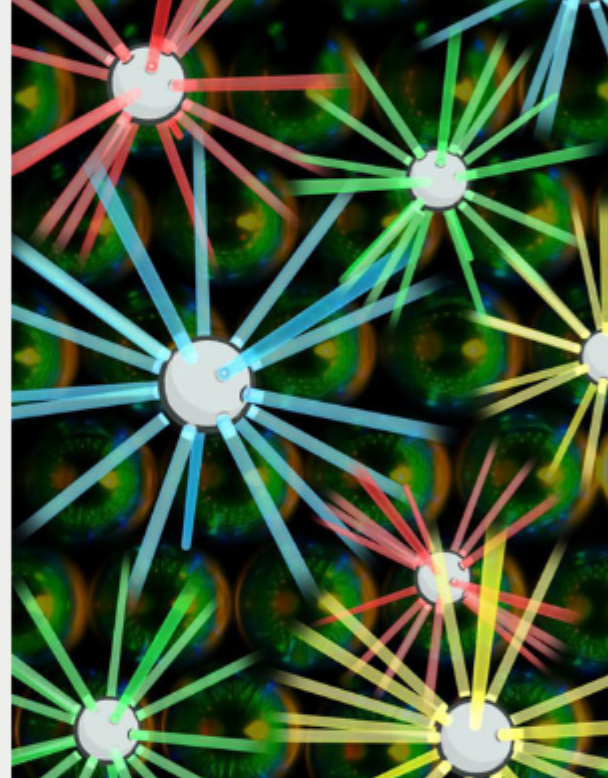
Physicists have devised a way to determine the electronic properties of thin gold films after they interact with light, a discovery that could further scientific understanding of how light affects materials.



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Liquid Crystal Shells Could Enable a New Type of Sensor

Future uses for liquid crystals (LCs) could range far beyond flat screen TVs to include applications for autonomous driving, anticounterfeiting technology, and a new class of sensors. Researchers explored the properties of LC shells, looking for future application opportunities from an interdisciplinary standpoint.



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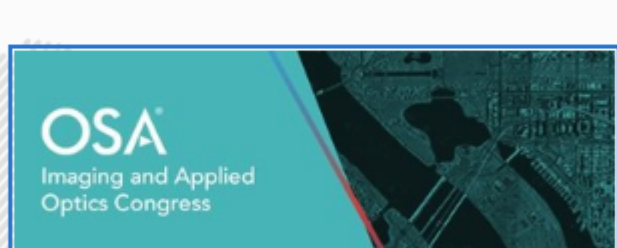
CST Joins EPIC [Read Article](#)

Industry Events

Imaging and Applied Optics Congress 2018

June 25-28, 2018 - Wyndham Orlando Resort International Drive - Hollywood US

OSA's Imaging and Applied Optics Congress will cover advances at the forefront of imaging and applied optics as well as the application of these technologies to industrial, military, and medical challenges. The scope of the research presented will range from fundamental research to applied, and more than 160 invited speakers, representing all fields of imaging, and ten topical meetings will address the challenges faced by the community.



25 - 28 June 2018
Orlando, Florida, USA

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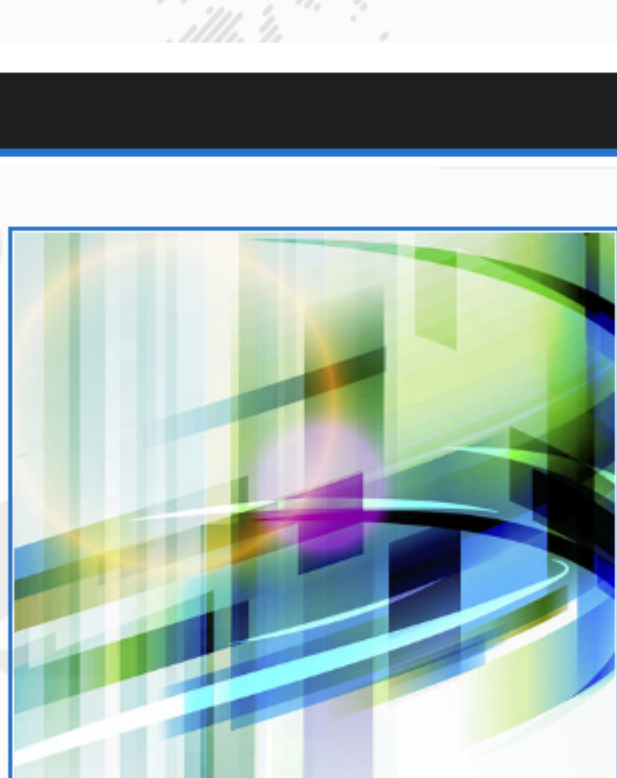
Webinars

Holography for Display: From AR to HUD to 3D

Tue, Jun 12, 2018 1:00 PM - 2:00 PM EDT

Because holograms have the advantage of being thin and light, they are finding application in the fields of augmented reality and head-up display, where constraints on the size and weight of the optics exist. Holograms can also be used for integral imaging-based 3D display, Alexandre Blanche, from the University of Arizona will discuss the application of holography in all of these areas and the technological advantages of holography over other techniques. This webinar is sponsored by RPMC Lasers Inc. and UnikLasers Ltd. and Radiant Vision Systems.

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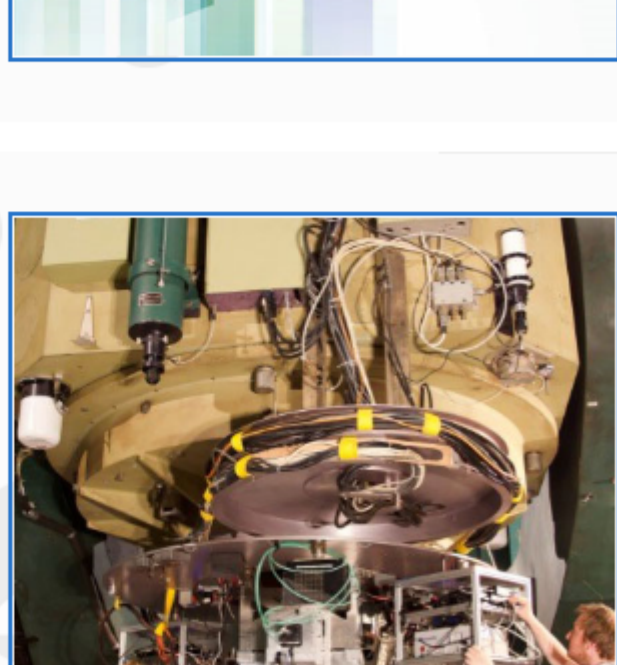


Optics and Astronomy

Wed, Jun 20, 2018 1:00 PM - 2:00 PM EDT

This webinar will cover optical and IR instruments for astronomy, with a particular focus on how innovations in adaptive optics and IR spectroscopy are pushing the technical and scientific envelope. The speaker will discuss how these optical tools can be used to make extremely sensitive and high fidelity measurements of astronomical objects at next-generation large optical telescopes like the Thirty Meter Telescope (TMT). The design and fabrication of novel astronomical instrumentation will be covered from both a scientific and an engineering standpoint.

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