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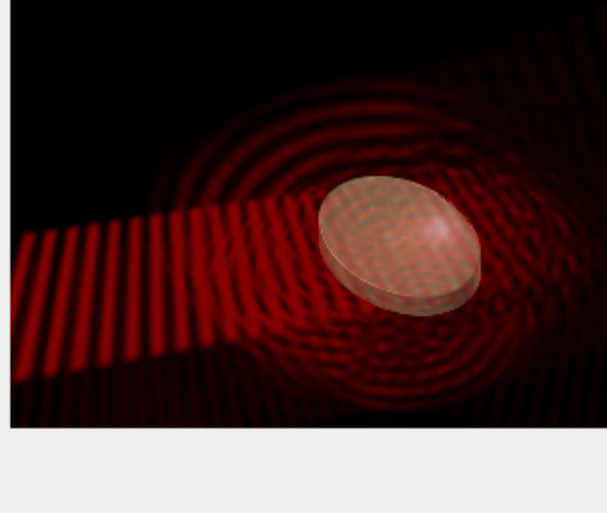
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Cloaking Approach Enables Light to Pass Through Without Scattering

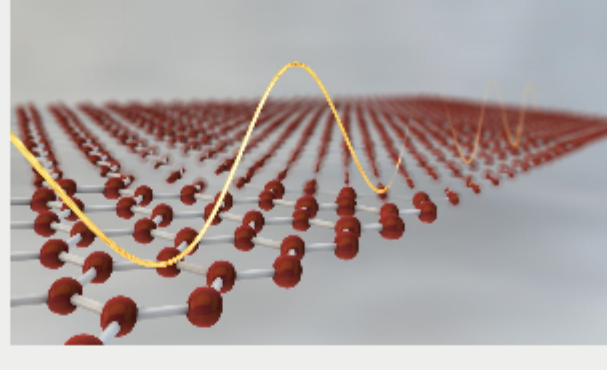
In a novel approach to cloaking technology, researchers irradiated an opaque material from above, using a specific wave pattern that allowed light waves from the left to pass through the material without any obstruction. The researchers believe that this approach could be applied to different types of waves, including sound waves.



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Graphene-Based Absorbers Could Enable Ultrafast Lasers in THz Range

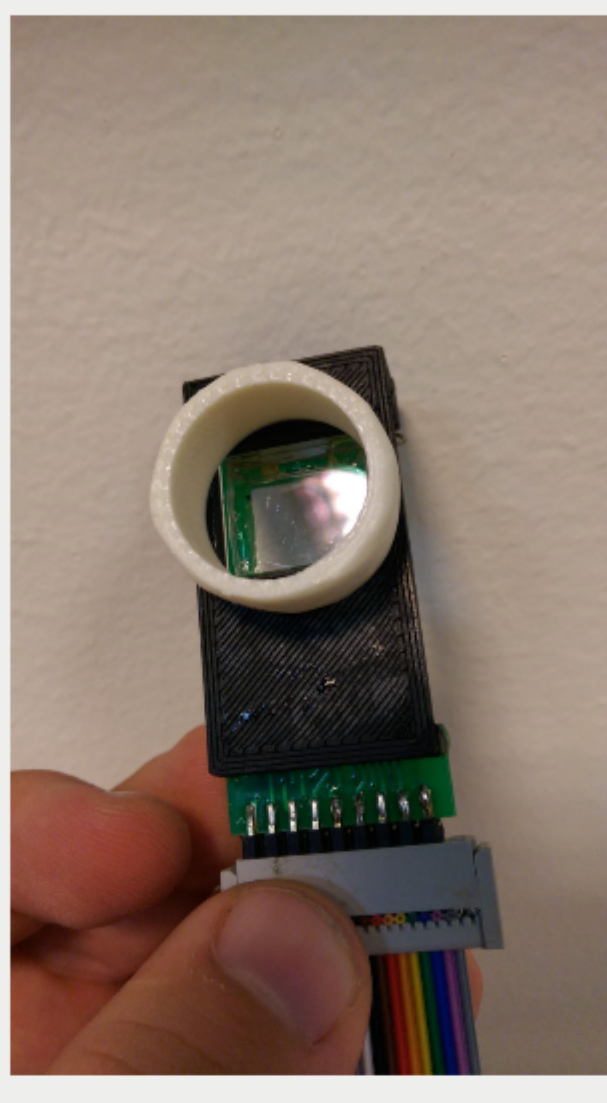
A terahertz saturable absorber has been created using printable graphene inks produced by liquid phase exfoliation (LPE) and deposited by transfer coating and ink jet printing. Such an absorber could enable the development of ultrafast lasers in the THz range. These lasers could be useful in applications where short time scale excitation of specific transitions is important, such as time-resolved spectroscopy of gasses and molecules.



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Device Allows Standard Cameras to Produce Hyperspectral Images

A miniaturized hyperspectral device has been developed as an add-on for a standard camera and could be used to repurpose a camera for generating hyperspectral images and videos for a range of applications. The device uses compressive sampling techniques to capture signals and images from much fewer samples or measurements than the traditional sampling theorem that has been used for decades.



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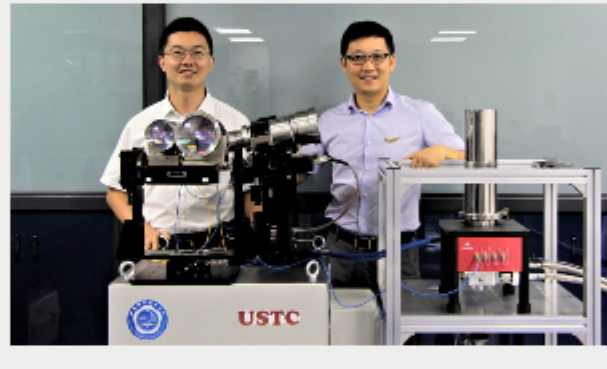
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Doppler Lidar Could Aid Weather Forecasting, Aircraft Safety

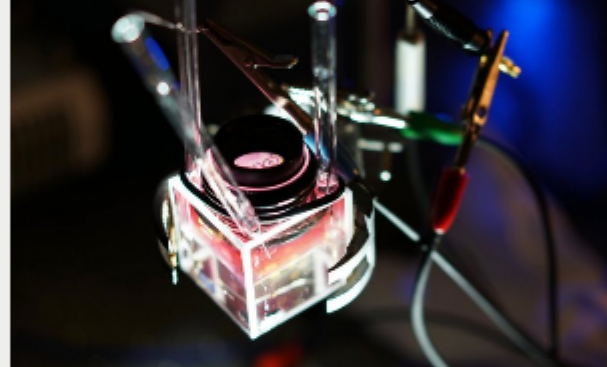
A dual-frequency direct detection Doppler lidar system could offer a simplified yet robust way to accurately measure wind speed. The detailed, real-time wind measurements provided by the system could help scientists better understand how hurricanes form and provide information that meteorologists could use to pinpoint landfall earlier.



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Tunable Nanoparticle Layer Switches Between a 'Mirror' and a 'Window'

Researchers have made a reversible electro-tunable filter that can change between a reflective 'mirror' and a transmissive 'window'. This discovery could help scientists create metamaterials with optical properties that could be changed in real time, making these materials useful for a range of applications, from tunable optical filters to miniature chemical sensors.



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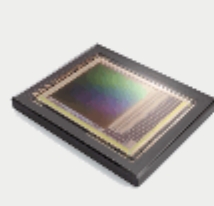
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Compact, Low Cost <30pm Resolution in the VIS and NIR

LightMachinery Inc.

The Hornet Spectrometer achieves the resolution of large grating spectrometers at a fraction of their cost and size while covering a larger wavelength range. Simple PC based software allows the user to review spectra in real time and save or export for more analysis. Labview drivers enable the Hornet spectrometer to be integrated into automated experimental setups.

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Industry Events

Image Sensors Auto Americas 2017

October 10-11, 2017 - Parc 55 San Francisco by Hilton at Union Square - San Francisco United States

Image Sensors Americas and Image Sensors Auto Americas brings together key decision makers from across the supply chain. Presentations from industry leaders will cover near- and long-term automotive requirements for next generation sensor technology, imaging and sensors, building blocks for next generation auto sensors and more.



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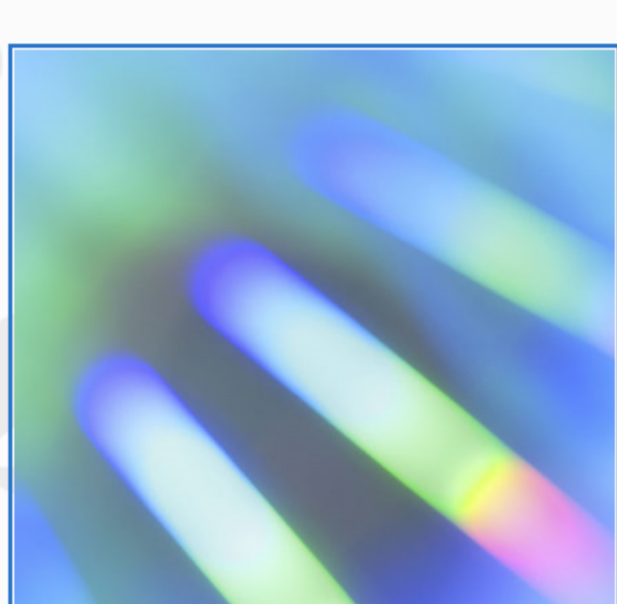
Webinars

Mobile Hyperspectral Imagers: Implementations and Applications

Tue, Oct 10, 2017 1:00 PM - 2:00 PM EDT

This webinar will provide an overview of the state of the art in hyperspectral imaging (HSI) and cover a number of diverse applications for HSI, from medical imaging to agriculture and anti-counterfeiting. The webinar will conclude with an outlook on some of the exciting new technologies that are expected to continue to transform this imaging modality and move it into the domain of the consumer. Presenter Hod Finkelstein is CTO of TruTag Technologies where he leads imaging systems development and micro-particle productization.

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