

# This Week In PHOTONICS

PHOTONICS MEDIA



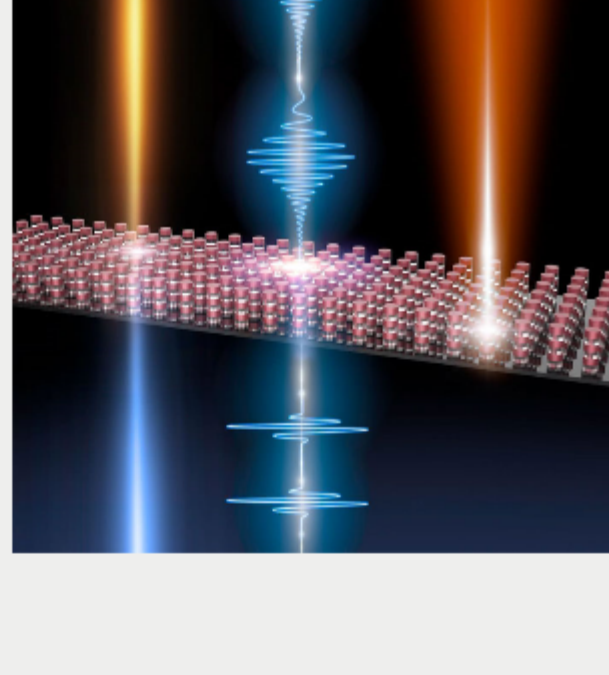
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## Top Stories

### Optical Metamaterials Use III-V Semiconductors as Building Blocks

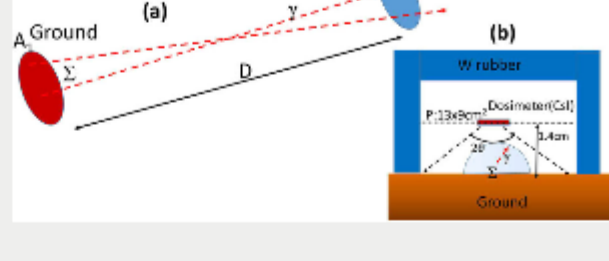
Materials that are more efficient than metals and that feature wider bandgap measures than silicon are being developed for possible use in optical metamaterial applications. All-dielectric materials using III-V semiconductors could be used to develop metamaterials that are efficient, resistant to energy loss and able to operate in the IR range.



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### Imaging Gamma Rays to Help Decontaminate Fukushima

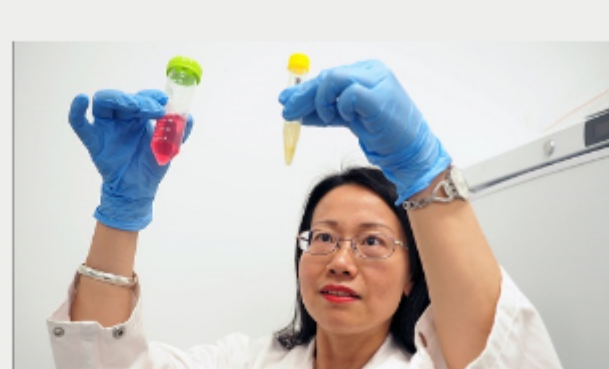
A novel camera for visualizing radioactive hot spots is being used to develop radioactivity maps for use in the decontamination of the site of the 2011 nuclear accident in Fukushima. The Electron Tracking Compton Camera (ETCC) can perform simultaneous measurement of brightness and spectrum of MeV gamma rays.



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### Nanoscale Sensor Detects Disease

A new nanoscale sensor has been developed that can help detect cytokines — molecules that play a critical role in cellular response to infection, inflammation, trauma and disease. Researchers at the Australian Research Council Centre of Excellence for Nanoscale Biophotonics created the modified graphene quantum dot (GQD) sensor that allows ultra-small amounts of cytokines to be identified in and around cells.



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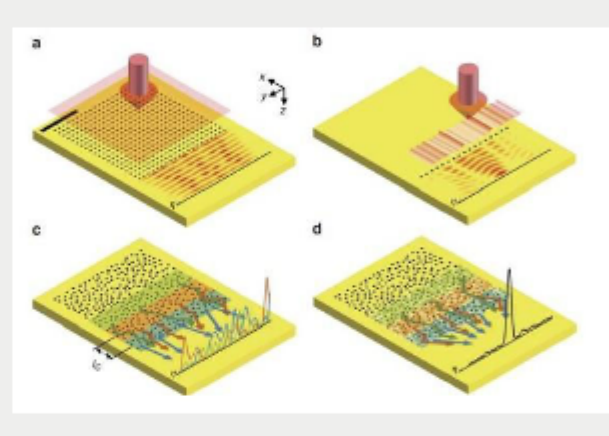
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### Optoelectronic Device Speeds Parallel Processing

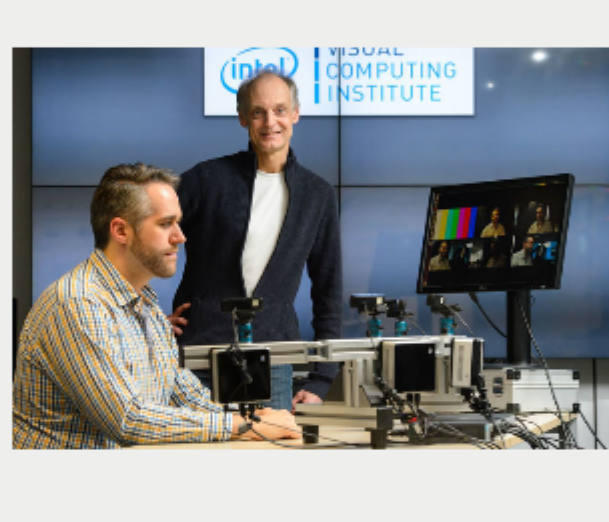
To increase the speed of data transfer when many microprocessors are used in parallel, a novel device has been developed that uses surface plasmons to mediate optoelectronic imaging. The on-chip plasmonic switching device consists of a 2D disordered array of nanoholes on a thin metal film that can provide multiple-input and multiple-output channels for transferring information from a photonic to an electronic platform.



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### Multiview Video Streaming Emerges as a Form of Visual-Content Representation

Multiview video streaming — the ability to view a recorded scene from different perspectives — could revolutionize the entertainment industry and the workplace. Possible applications range from consumer electronics, computer games and virtual worlds to realistic video conferences and autonomous driving.



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## Featured Video

### Trio Optics - Online Event: Strategies for Active Alignment of Lenses

As today's optical systems require higher performance, we present solutions for the alignment of doublets and triplets that guarantee smaller tolerances in a shortened production time. At the beginning of the video, that is the recording of an online event conducted on March 29, 2017, traditional alignment methods are...



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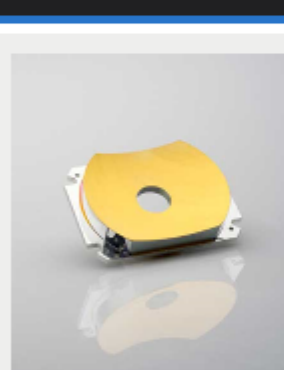
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 Corning Advanced Optics serves a variety of commercial markets with cutting-edge, advanced optical solutions. Our unmatched expertise in specialty glass and optical physics results in a diverse set of products from materials to full optical systems.

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**Suprasil® 313**  
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 Suprasil® 313 may be used for optics requiring high transmission and low absorption from UV to IR combined with low bubble & inclusion content. Optics may include windows, lenses, laser debris shields and mirror substrates.

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The Rhea series spectrometer offers a unique combination of ease-of-use and accurate measurement capabilities packed in a robust jacket. The Rhea utilizes a high-end cooled CCD camera for low noise and high dynamic range. The Neutral density filter wheel extends this dynamic range and also adds a shutter function.

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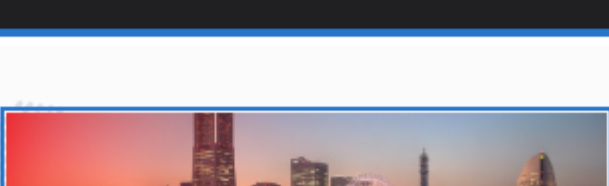
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**CLEO**  
 Laser Science to Photonic Applications  
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 Advance Registration Ends: 10 April 2017  
 San Jose, California, USA [REGISTER >](#)

## Industry Events

### SPIE Technologies and Applications of Structured Light

April 18-21, 2017 - Pacifico Yokohama - Yokohama Japan  
 SPIE Technologies and Applications of Structured Light 2017 features the latest advances in optical trapping and manipulation, pulse and beam shaping, and the applications of structured optical fields. These novel optical techniques combine with microscopy, spectroscopy and tomography on next-generation biomedical imaging. Structured Light 2017 is organized into two parallel conferences with some combined joint sessions: Optical Manipulation Conference and Biomedical Imaging and Sensing Conference. These two conferences comprise the full spectrum of advanced structured light technologies and biomedical sensing and imaging applications.

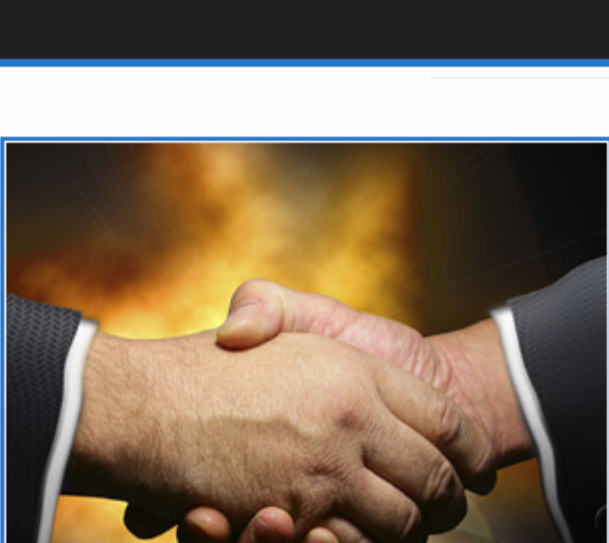


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## Webinars

### Technology Business Champions' Guide to Successful Commercialization

Thu, Apr 13, 2017 1:00P - 2:30PM EDT  
 This webinar, presented by David Krohn, Managing Partner of Light Wave Venture LLC, is for scientists, engineers and others seeking potential opportunities for marketing and selling a new technology, whether a product, a service or a groundbreaking idea. You will learn how to focus R&D with an eye toward commercialization; how to source funding and much more. The trained instructor has over 50 years of experience in the photonics industry. A trained scientist turned businessman, Krohn has assisted more than 127 companies and organizations, working with key management on product development, commercialization, funding and acquisitions. Please note: there is a registration fee for this webinar.



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