# This Week In







## **Top Stories**

### A new type of smart glass, developed by a team at the University of

Smart Glass Could Offer a New Route to Machine Vision

Wisconsin-Madison, leverages optical reflection to recognize images without requiring sensors, circuits, internet connection, or external power sources. Everything needed for image recognition is condensed into single pieces of glass.



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Communications







#### A new development in semiconductor technology, leading to an ultrafast, highly sensitive avalanche photodiode (APD) with extremely low excessive noise, could improve data transmission rates and/or

Low-Noise Avalanche Photodiode Could Advance Data

enable longer transmission distances.



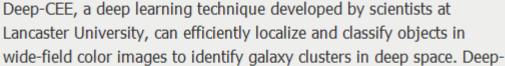
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**Galaxy Clusters** 









Deep Learning Technique Could Speed the Search for

CEE's developers used Abell galaxy clusters as the ground-truth labels in color images to develop an artificial intelligence (AI) model based on neural networks.



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#### Lasers in Industry Photonics Media



#### articles and other valuable resources into a guide to the

current use of lasers in industry, a reference tool and a resource for learning. This book is for anyone working on, implementing or considering the application of lasers for and in industrial settings for materials processing, quality control and production.

Photonics Media has gathered

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INDUSTRIAL

LASER SAFETY

#### laser safety elements and the necessary background materials for

Industrial Laser Safety at a

Glance

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the industrial laser environment. It raises awareness of the dangers of laser exposure, the proper tools needed to protect oneself from the potential hazards of industrial lasers, and the steps that must be taken to ensure a safe environment for all workers. Visit Website Request Info





#### Decontamination An imaging technique developed by Cornell University researchers

#### allows imaging of catalytic reactions at the nanoscale in real time to help scientists learn the optimal size and shape for the most effective catalyst particles.

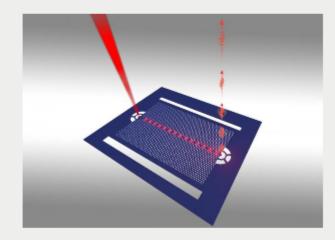
Read Article 🚷 🚹 🛅 💟 Squeezing Quantum Dots to Tune Their Wavelength, Allow Interaction

A technique for squeezing quantum dots, developed at the U.S. Naval

provides a way to realize quantum dots that are tuned precisely in both

Research Laboratory (NRL), could enable many quantum dots to interact with each other in a quantum network. The new technique

shows promise as a tool for decontaminating water. The new approach



Rofin-Sinar UK Rebrands as Luxinar Read Article



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their wavelength and position.





New Theory Aims to Advance Quantum Computing Read Article Smartphones Provide Cost-Effective Telemedical Eye Screening in India Read Article

**Industry Events** 

Partnership Between ams and MEGVII to Offer Face Recognition Read Article

OSA Advanced Photonics 2019

#### this year's program include integrated photonics, nanophotonics, novel optical materials and devices, photonic networks, and signal

Burlingame United States

#### processing in photonic communications. Image courtesy of OSA, The Optical Society.

More Info

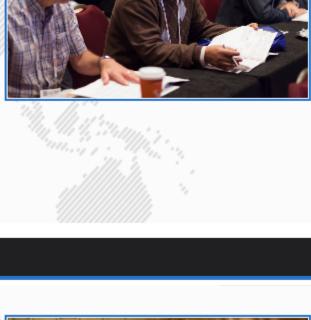
July 29 - August 1, 2019 - Hyatt Regency San Francisco Airport -

of photonic device research and development and their use in

The OSA Advanced Photonics Congress will address the many aspects

networks. The three plenary speakers will cover embedded photonics in high-performance systems; solar electricity; and next-gen spacebased laser communications. Other topics that will be addressed in

**Webinars** Optical Metrology Solutions for the Semiconductor and Microelectronic Industries Wed, Jul 31, 2019 11:00 AM - 12:00 PM EDT This webinar, presented by Sensofar Metrology, will discuss specific analysis for QC in PCB applications. It will also cover critical dimensional measurement, roughness, and defect identification. It will



discuss solutions pertaining to ISO 4287, ISO 25178, and how Sensofar's proprietary software quickly identifies profiles, roughness parameters, and defects for surface texture, height, and traces. The

cards. Register Now

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