Thursday, March 2, 2017

This Week In PHOTONICS

PHOTONICS MEDIA

Top Stories

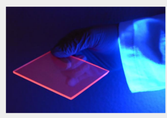
Laser-Generated Bubbles Create 3D Liquid Images

A volumetric bubble display using lasers allows viewers to see 3D images without 3D glasses or headsets. Researcher Kota Kumagai of Utsunomiya University in Japan said the new work is currently a proof of concept, but one day might allow full-color updatable volumetric displays.

Read Article

Silicon Nanoparticles Used for Photovoltaic Windows

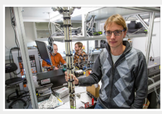
Windows that can efficiently collect solar energy are one step closer to becoming a reality thanks to high-tech silicon nanoparticles. Researchers at the University of Minnesota and University of Milano-Bicocca have developed technology to embed the silicon nanoparticles into what they call efficient luminescent solar concentrators (LSCs). These LSCs are the key element of windows that can efficiently collect solar energy.



Read Article

Photon Gun Could Further Development of Photonic Quantum Network

A photonic nanostructure for constructing quantum photonic circuits for quantum networks has been developed, which could impact the optics and photonics that underlie quantum information processing. Photons (unlike electrons) display weak interaction with their environment, so they do not lose a lot of energy during transmission. This makes them well suited to carrying and distributing information over long distances.



Read Article

AI Helps Autonomous Vehicles Locate Themselves on Maps

Self-driving cars need onboard artificial intelligence (AI) technology able to link them to highly detailed maps that reflect every change in the status of lanes, hazards, obstacles, and speed-limits in real time. Researchers at the NYU Tandon School of Engineering are working hard to make this machine-to-machine interaction possible.

Read Article

Underwater Camera, Sensor System Track Dolphin Behavior in the Wild

A study testing novel underwater camera technology may lead to possible ways to advance conservation and rehabilitation efforts on behalf of wild sea creatures. A remote cetacean-borne video camera and integrated sensor system (C-VISS) was deployed on eight free-swimming dusky dolphins off the coast of New Zealand from December 2015 to January 2016, collecting a total of 535 minutes of video footage.

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More Headlines

Millénium 3D to Distribute German RepRap's Industrial 3D Printers Read Article

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Panasonic Develops Electric Control of Light Sensitivity Read Article

Laser-Based Camera Improves View of Carotid Artery Read Article

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Featured Products

IPEX-700 Excimer Laser

LightMachinery Inc.

Designed for industrial and R&D environments, LightMachinery's IPEX-700 Series lasers deliver high power ultraviolet laser machining combined with state-of-the-art performance.

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Emerald CMOS Sensors

e2v

e2v's new Emerald family of CMOS sensors, feature the world's smallest true global shutter pixel available on the market today (2.8µm). With a smaller optical format and higher resolutions, the sensors lead to improved performance and reduced system costs for customers.

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Industry Events

LASER World of PHOTONICS CHINA 2017

March 14-16, 2017 - Shanghai New International Expo Center - Shanghai China

From components to industrial applications, Laser World of Photonics China is a leading event in the photonics industry. It is Asia's largest trade show for lasers, optics and photonics, showcasing technologies in five categories: Lasers and Optoelectronics; Optics and Manufacturing Technology for Optics; Laser Systems for Production Engineering; Imaging; and Optical Metrology and Quality Assurance. The Photonics Congress China will be held in conjunction with the trade show. The congress topics range from the latest research and development in laser technology, laser processing and its applications to optical technology, advanced laser materials, films and devices, laser safety and laser beam analysis.

More Info

Webinars

Integrating Camera Technology Into an Outstanding Machine Vision Solution

Fri, Mar 10, 2017 1:00 PM - 2:00 PM EST

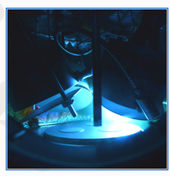
Are you planning an update or a new build of a machine vision system? This webinar with Rex Lee, Ph.D., will help ensure that you get it right the first time. Lee will discuss the components of a successful machine vision system, including cameras, lighting, lenses, software, sensors and detectors; and will provide examples of successful machine vision solutions for every industry. Who should attend: Engineers, designers, business owners, scientists, educators and anyone who is considering using cameras for image analytics.

Register Now

Transition Mode Reactive Sputtering Using PEM

Wed, Mar 15, 2017 1:00 PM - 2:00 PM EDT

This webinar will discuss the architecture and operation of a Plasma Emission Monitoring (PEM) system integrated into a Denton Vacuum (DV) sputtering chamber, with confocal cathode configuration (DV-PEM). It will cover everything you need to know about pulsed DC reactive sputtering with PEM, and will provide you with a thorough understanding of how Denton Vacuum provides fully integrated PEM with its thin film deposition system. Who should attend: process engineers, scientists, CTOs and others involved in product or materials development. Presented by Denton Vacuum.



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Laser Beam Profilers
Position Sensing Equipment
Infrared Detectors
Vision-Based Sensors
Fiber Optic Detectors

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