













Diamond Metalens Could Improve Quantum Device

Performance and Scalability Collecting light from deeply embedded nitrogen-vacancy centers usually requires a bulky optical microscope in a highly controlled

laboratory environment. Now, a research group at the University of Pennsylvania has designed a specialized metalens that circumvents the need for a large, expensive microscope.

Quantum Dot Microscope Can Measure Electric Surface

A new scanning quantum dot microscopy method can measure the











electric potential of a sample at atomic accuracy. It was developed by a team from Forschungszentrum Jülich, working with researchers from

Potentials of Single Atoms

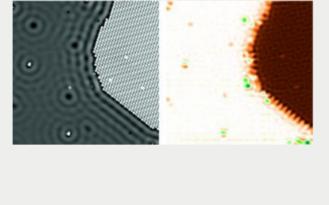
two other institutions. The new technique has potential application for chip manufacturing and the characterization of biomolecules.

Read Article

Researchers from the Nagoya Institute of Technology used UV light to

UV Light Used to Characterize Devices, Improve

test the performance of miniaturized semiconductors for next-



PMMA

Graphene

Cu foil (111)

2D/3D interface

PMMA coating

Graphene

generation electronics. Specifically, the team determined the interface properties of a graphene-gallium nitride heterojunction device by characterizing the device under UV illumination.

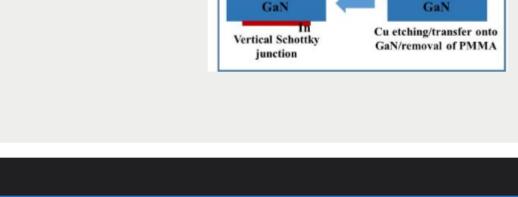








PCO-TECH Inc.



Graphene

Cu foil (111)

CVD growth of

graphene Ultraviolet illumination

Graphene

Au

Functions

MicroDyn[®].







new technology. When PCO's tried and trusted sCMOS cameras pool forces with modern back illuminated (bi)

Unique technology comes from

evolution, combining existing and

with their nearly perfect quantum... Visit Website Request Info Flexible Sputtered Coatings

flexible surfaces, including unbalanced stress on each side

(DSI) developed their batch coating technology,

sensor technology, pco.edge 4.2 bi and pco.panda 4.2 bi

come into the world of science. Both cameras stand out

number of challenges when coating

Roll-to-roll processes present a

of the substrate and limited line speed. These limitations affect the thickness and possibility of complex coatings. To address these challenges, Deposition Sciences, Inc.

Deposition Sciences Inc. (DSI)

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September 24-26, 2019



only to create and load individual image processing tasks, but also to

GenlCam-Compliant Camera

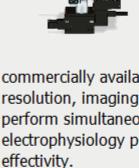
IDS Imaging Development

make them available to any GenICam-compliant

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sensitivity, wavelength, and sample accommodation, Bruker's Ultima 2Pplus delivers the best

With new advances in field of view,

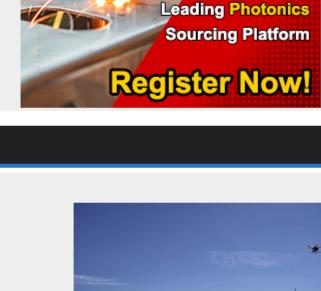
commercially available combination of flexibility, resolution, imaging depth, and speed, allowing users to perform simultaneous imaging, stimulation, and electrophysiology protocols with greater efficiency and

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and when they start and communicating this information to emergency services in real time.

prevent large-scale forest fires by locating and detecting fires where

A Light-Driven Process to Oxidize Plastic Surfaces for **Industry Safely** Researchers at Osaka University have developed a light-driven process

for oxidizing polypropylene, a widely used plastic, without creating

waste. The process uses a reactive chlorine dioxide radical to make the

plastic reactive.



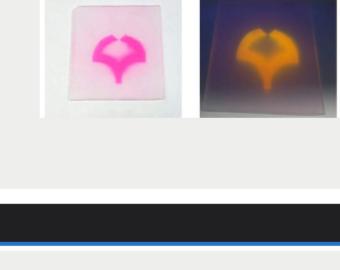


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June 25-27, 2019 - Rochester United States

Laser Source Selection for Microwelding Applications Tue, Jun 25, 2019 1:00 PM - 2:00 PM EDT

This webinar will cover laser engine and beam delivery options for

Innovators, technologists, and subject-matter experts will converge in

technologies at Light and Sound Interactive 2019. Tracks will include:

Department of Defense. The optics, photonics, and imaging track will

Optics, Photonics, and Imaging; Augmented and Virtual Reality; Audio and Music; Cinema; Games and Interactive Media; and

Rochester, N.Y. to push the edge of light- and sound-based

microwelding applications for a range of markets, including medical device manufacturing, automotive components, electronic leads, and batteries. There are a number of microwelding laser sources and techniques available today for the manufacturing engineer. This presentation will cover the differences between the various laser sources and the manufacturing considerations to keep in mind when you select the best laser for your application from the different commercial options available today. This webinar is sponsored by Ophir.

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