



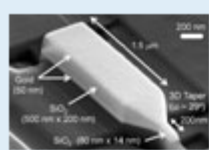
**PHOTONICS MEDIA**  
THE PULSE OF THE INDUSTRY

**photonics.com**

**LIGHT EXCHANGE**

Follow Photonics Media on Facebook and Twitter

**Pointing Light Toward Faster Optical Communications**



Coupling light beams with electron oscillations called surface plasmon polaritons produces light beams smaller than the wavelength of the light itself but that carry the same signals, something that could enable more efficient optical devices and higher-resolution imaging systems, say Caltech engineers. Because the device is built on a semiconductor chip with standard nanofabrication techniques, it's easy to integrate with existing technology.

[Read Article >>](#)



**SPIE Urges Leaders to Avoid Fiscal Cliff, Support Science**

SPIE and other science, engineering and education organizations are urging President Obama and Congress to find a balanced, bipartisan plan including tax and entitlement reform to avoid the fiscal cliff – one that ensures strong support for economy-building science and technology.

[Read Article >>](#)



**Tiny Terahertz Imager Chip Created**

Tiny, inexpensive silicon microchips developed at Caltech that generate and radiate terahertz waves could be incorporated into handheld devices, such as smartphones, to suss out explosives in solid objects.

[Read Article >>](#)



**Materion Consolidating Manufacturing**

The Cleveland-area chemicals supplier will close an optical coatings facility in California and cut its Advanced Materials business in New Mexico in an effort to reduce costs and boost efficiencies.

[Read Article >>](#)



**A Black Hole for Light**

A nanostructured “sandwich” of semiconductor material that collects and traps light has nearly tripled the efficiency of organic solar cells, say electrical engineers at Princeton.

[Read Article >>](#)



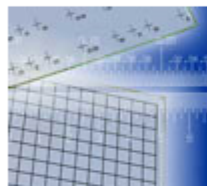
**Products on PhotonicsBuyersGuide.com**



**Large Fresnel Lens**  
RHK Japan, Inc.



**Evolve 128 EMCCD Camera**  
Photometrics



**Machine Vision Metrology Standards**  
Max Levy Autograph, Inc.



**Powerful & Flexible Ultrafast Fiber Lasers**  
TOPTICA Photonics, Inc.



In this week's edition of the industry's premier weekly newscast: light points make optical devices more efficient, plasmonic nanobubbles precisely target cancer, a nanosandwich traps light to boost solar cells, sprinkled nanocubes act as super light absorbers, and we share some notable business news. Hosted by Photonics Media's Melinda Rose and Laura Marshall.

**Microscopy Tool Adds 'Color' with Nanoscale Resolution**

Nanoscale objects can now be examined in full color, thanks to a new microscopy tip created at Lawrence Berkeley National Laboratory that delivers chemical details with a resolution once thought impossible.

[Read Article >>](#)



**Semrock Ships Millionth Filter**

The unit of IDEX Corp. recently shipped its millionth hard-coated optical filter, the company announced this week.

[Read Article >>](#)



**Sprinkled Silver Nanocubes Make Super Light Absorbers**

Microscopic silver cubes, when sprinkled at random on a polymer-coated gold surface, can provide a simple and tunable way to create large-area absorbers that “perfectly” absorb light of a given wavelength, Duke engineers revealed.

[Read Article >>](#)



**Plasmonic Optical Tweezers Could Trap Tiny Proteins**

An innovative aperture design based on plasmonics could focus light so effectively that tiny beams could trap and manipulate particles as small as a few atoms, say engineers at Stanford.

[Read Article >>](#)



**Industry Events**

**ASCB 52<sup>nd</sup> Annual Meeting** - December 15 - 19, 2012 · San Francisco, CA  
Visit us at booth 1201



ASCB is the premier international cell biology meeting for scientists and students in academia, industry, government and higher education. Engage with more than 3000 poster presentations and attend over 100 scientific sessions, science discussion tables, symposia and minisymposia sessions, workshops and a Frontier symposia that will synthesize current, exciting progress in the field. The 2012 event features will also include an exhibit of more than 350 companies, education initiative forums, a postdoc/student town hall council meeting and keynote presentations by US Secretary of Energy Steven Chu and Arthur D. Levinson, chair of Genentech Inc. and Apple Inc.

[MORE EVENTS >>](#)

**Automate 2013** - January 21 - 24, 2013 · Chicago, IL  
Visit us at booth 127



Automate – formerly the International Robots, Vision & Motion Control Show – is the largest solutions-based showcase of automation technologies in North America. The biennial event demonstrates the latest robotics, vision, motion control and automation technologies and solutions for a broad array of industries. The 2013 event features four full days of classes taught by experienced industry professionals, Certified Vision Professional (CVP) basic and advanced certification opportunities, and keynote presentations on the impact of robotics on economic growth and navigating the new political climate for business growth and success.

[MORE EVENTS >>](#)

**Unsubscribe:** <http://www.photonics.com/Newsletter/EmailUnsubscribe.aspx>

**Questions:** [pr@photonics.com](mailto:pr@photonics.com)

[Subscribe](#) | [Manage Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

**FEATURED VIDEO**

**Continuum - Introducing Horizon OPO**

In this video, Continuum introduces Horizon, its new mid-band Optical Parametric Oscillator (OPO) providing 192-2750 nm tuning range, up to 40% conversion efficiency, narrow linewidth, and active precision control throughout for hands-free operation. Compatible with Continuum pump lasers, Horizon is a complete & robust package built for consistent output.

**Can your supplier meet the demands of your applications?**

**Cambridge Technology**  
MOVING LIGHT, YEARS AHEAD.™

**Higher Performance. Better Price.**

**Alluxa**  
1-855-4ALLUXA  
[www.alluxa.com](http://www.alluxa.com)

**Testing for 100G?**

eye diagram analysis + BER contour + complex modulation

Tektronix Can Help with the Complexities

**discover new SCMOS**

pco.edge – the first camera system with the revolutionary sCMOS image sensor

**PHOTONICS buyers' guide**

Looking for Lasers and Laser Systems products? Search the Photonics Buyers' Guide or Browse these product categories:

- [Current Monitors](#)
- [Diode-Pumped Solid-State Lasers](#)
- [Laser Amplifiers](#)
- [Laser Gratings](#)
- [Mode-Locked Lasers](#)
- [Sapphire Crystals](#)

Read the industry's **LEADING** magazines

Because staying informed has never been so critical.

Photonics news from *your* industry and *your* part of the world.

**LIGHT EXCHANGE**

Follow Photonics Media on Facebook and Twitter