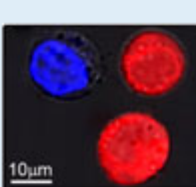



Plasmonic Nanobubbles Destroy Some Cells, Treat Others



A single laser blast can activate plasmonic nanobubbles that selectively kill diseased cells while at the same time treating others, and leaving neighboring healthy cells untouched. The unique tunable technique developed at Rice University shows promise for replacing several difficult processes now used to treat cancer patients, among others, with a fast, simple, multifunctional procedure.

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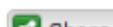








Fiber Optic 'Wrench' Twists, Turns Tiny Particles

The fiber optic equivalent of the world's smallest wrench, dubbed the fiber optic spanner, was developed at the University of Texas at Arlington and can precisely twist and turn microscale objects in any direction and along any axis without moving any optical component.





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18 Firms to Vie for \$94M at Invest in Photonics

Eighteen emerging technology companies from around Europe were selected for a special funding session at the two-day international business partnering convention Invest in Photonics next week in Bordeaux, France, a growing industrial region for lasers, optics and photonics.





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NIR Imaging Gets Big Boost


Studying arterial diseases and therapies just got easier, thanks to a new fluorescence imaging technique called NIR-II developed at Stanford University. The method allows visualization of the blood flow of living animals with unprecedented clarity.

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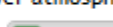





In this week's special biophotonics-themed edition of the industry's premier weekly newscast: A fiber optic wrench twists and turns tiny particles, near-infrared imaging gets a big boost, an x-ray laser helps fight sleeping sickness, and implantable silk micromirrors enhance imaging. Hosted by Photonics Media's Laura Marshall and Melinda Rose.

Camera Images Aurora Hyperspectrally

The first-ever hyperspectral pictures of the aurora borealis, or northern lights, revealed a previously unknown atmospheric phenomenon: A very faint wave pattern of unknown origin in the lower atmosphere.

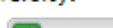



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Implantable Silk Micromirrors Enhance Imaging

Silk-based implantable optics that significantly enhance tissue imaging can simultaneously enable photothermal therapy, monitor drug delivery and administer drugs, said Fiorenzo Omenetto of Tufts University.





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Photon Funnel Captures Wider Spectrum of Sun's Rays

A solar "funnel" that exploits materials under elastic strain could capture a wider spectrum of solar energy, providing a new way of harnessing photons for electricity, a team at MIT theorized. Manipulating a material's strain could open a whole new field of research.

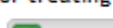



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X-ray Laser Helps Fight Sleeping Sickness

A weak spot in the parasite that causes African sleeping sickness, a disease that kills an estimated 30,000 people each year, has been mapped using an x-ray laser, pinpointing a promising new target for treating the fly-borne illness.

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Industry Events

ASCB 52nd 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



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 >>](#)

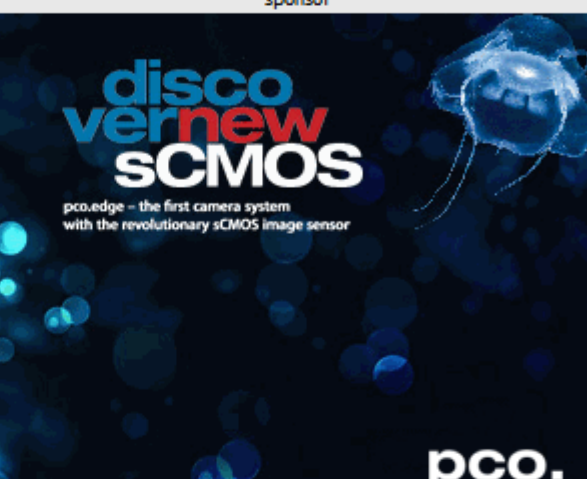
FEATURED VIDEO



Krell Technologies - REV Fiber Optic Micro-Polisher

Rev is a highly cost-effective system that provides the ability to polish optical connectors and bare fibers with Telcordia compliance. Rev is ideal for laboratory and R&D applications, as well as field termination and cable assembly repair.

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