PHOTONICS MEDIA
THE PULSE OF THE INDUSTRY
photonics.com

Lunar Orbiter Lasers Mona Lisa to Moon

NASA's next moon mission has the acronym LADEE (Lunar Atmosphere and Dust Environment Explorer), but they've already sent a lady to the moon - or at least the image of one. Using a precisely timed laser, scientists at NASA's Goddard Space Flight Center have beamed an image of Leonardo da Vinci's masterpiece, the Mona Lisa, to the Lunar Orbiter Laser Altimeter (LOLA) instrument on the Lunar Reconnaissance Orbiter (LRO) orbiting the moon. The famous face traveled nearly 240,000 miles in digital form from the Next Generation Satellite Laser Ranging station at NASA Goddard, the first demonstration of laser communication with a satellite.

Read Article >> Share

Image Compressor Beats JPEG

Unlike jpeg algorithms, which compress an image after it is taken, a new low-profile metamaterial sensor developed at Duke University uses microwave imaging to compress pictures as they are being recorded.

Read Article >> Share

Nanowire Solar Cells Soak Up Sunlight

A team at Lund University is first to show that it is possible to use nanowires to manufacture solar cells. Such nanowires created from indium phosphide show potential for drastically improving cell efficiency and cost.

Read Article >> Share

Optical Projection Moves from VIS to IR

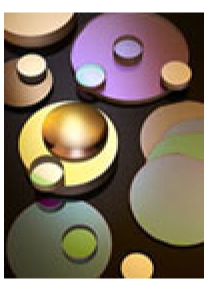
A new imaging method enables optical projection tomography to be extended from the visible to the near-IR spectrum, something that could be used to study insulin-producing cells in diabetics, scientists at Umeå Center for Molecular Medicine in Sweden report.

Read Article >> Share

Products on PhotonicsBuyersGuide.com

Apex Raman 785 Spectrometer
Ocean Optics, Inc.

Nanopositioning Stages for Biotech
PI (Physik Instrumente) L.P.



High-Energy Laser Mirrors
Precision Photonics Corporation

Automatic Solids Discharging Centrifuge
Sanborn Technologies

sponsored by: EDINBURGH PHOTONICS A Division of Edinburgh Instruments

In this edition of the industry's premier weekly newscast: NASA beams Mona Lisa to the moon, graphene plasmonics beat drug cheats, a metamaterial sensor provides a bigger picture, and nanowire solar cells soak up the sun. Hosted by Photonics Media's Laura Marshall and Melinda Rose.

nLight Expands Fiber Laser Development Team

The company added Dahv Kliner as director of fiber laser product development. Kliner has more than 15 years of experience in high-power fiber lasers and most recently led JDSU's commercial kW fiber laser program.

Read Article >> Share

New Material Warms White LEDs

The University of Georgia's prototype is thought to be the world's first single-phosphor, single-emitting-center-converted LED.

Read Article >> Share

Block Engineering to Develop QCL System with Pfizer

The pair will develop a quantum cascade laser-based infrared spectroscopy system for noncontact cleaning verification of vessels during pharmaceutical manufacturing.

Read Article >> Share

Active and Passive Modes in One IR Camera

A new approach that integrates active and passive infrared imaging capability into a single chip paves the way toward lighter, simpler dual-mode active/passive cameras with lower power dissipation, say its creators at Northwestern University's Center for Quantum Devices.

Read Article >> Share

Featured White Paper

Real-time Profiling for Focusing, M², Divergence & Alignment

Real-time Profiling for Focusing, M2, Divergence & Alignment

DataRay Inc.

Beam intensity profiling is an essential tool in many aspects of photonics. The precise intensity distribution in a focused laser beam is critical in many applications: flow cytometry, laser printing, medical lasers, and cutting lasers are just a few examples. Intensity profile measurements can characterize and improve a product or process, leading to substantial cost and time savings that can pay for the measurement instrument many times over. This white paper describes how the unique, patented, real-time multiple z-plane XYZTF capabilities of the BeamMap2 slit-scan profiler can speed and simplify laser assembly alignment.

DOWNLOAD WHITE PAPER >>

Play Light Masters and you could win a Google Nexus 7 tablet!

- Are you good at guessing company logos?
- Current on industry news and events?

Are you the next Light Master? There's only one way to find out! Play Light Masters at the Photonics Media booth at both BiOS (booth 8600) and Photonics West (booths 600 & 601) AND be entered into a random drawing for a Google Nexus 7 tablet!

Drawings will be held at 3 p.m. on Sunday (2/3/13), Tuesday (2/5/13), Wednesday (2/6/13) and Thursday (2/7/13).

Pick up a copy of the current issues of *Photonics Spectra*, *BioPhotonics* and *EuroPhotonics*. Fill out a subscription form and pick up a small token of our appreciation.

Scan your badge and enter to win a $300 gift card from Amazon!

Industry Events

Photonics West 2013 - February 2 - 7, 2013 · San Francisco, CA

Visit us at BIOS Booth 8600 and Photonics West Booths 600 & 601

Photonics West 2013, to be held at the Moscone Center, will feature more than 4450 technical presentations, 18 plenary talks, 40 technical events and 70 continuing education accreditation short courses. The technical conferences - up about 5 percent over last year - are organized around four symposia: BiOS (Biomedical Optics), LASE (Lasers and Applications in Science and Engineering), OPTO (Integrated Optoelectronic Devices) and MOEMS-MEMS (Micro- and Nanofabrication). A virtual symposium on Green Photonics also will be held. The trade show and conference kicks off with BiOS, where the latest optical and photonic technologies used in diagnostics, therapeutics, and imaging are presented and discussed.

MORE EVENTS >>

OFC/NFOEC 2013 - March 17 - 21, 2013 · Anaheim, CA

The Optical Fiber Communication Conference and Exposition and the National Fiber Optic Engineers Conference (OFC/NFOEC) is the premier international event for both the science and business of optical communications and networking. It features more than 110 short courses, over 550 exhibitors and 750 technical papers covering technologies and applications in cloud and data center networking, space division multiplexing, 1 TB and beyond optical networking, flexible grid networks, convergence of optical and wireless networks, 100 G/400 G network design and optimization, and more.

MORE EVENTS >>

LIGHT EXCHANGE

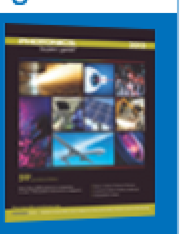
Follow Photonics Media on Facebook and Twitter

FEATURED VIDEO

United Lens - Vertically Integrated Manufacturer of Optics

Founded in 1916 and still under continuous family ownership, over the past century ULC has evolved from the world's largest manufacturer of molded lens blanks to the only truly vertically integrated manufacturer of optics providing thin film coatings, ground and polished optics, precision machined optics and hand molded optical blanks. www.ulc-inc.com

PHOTONICS buyers' guide



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

- Alexandrite Lasers
- Diode Lasers
- Laser Barriers, Enclosures and Screens
- Laser Inspection Systems
- Nd:YAG Lasers
- Solid-State Laser Components

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.

Unsubscribe: http://www.photonics.com/Newsletter/EmailUnsubscribe.aspx
Questions: pr@photonics.com

Subscribe | Manage Subscriptions | Privacy Policy | Terms and Conditions of Use

LIGHT EXCHANGE

Follow Photonics Media on Facebook and Twitter

PHOTONICS MEDIA
THE PULSE OF THE INDUSTRY