Thursday, January 25, 2018

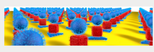
This Week In PHOTONICS

PHOTONICS MEDIA

Top Stories

Lithography, DNA Used to Build Structures That Could Lead to New Metamaterials

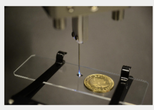
Researchers have developed a technique for creating optical structures that could lead to new classes of optical materials and devices. Their technique combines the traditional fabrication method of top-down lithography with a new method, programmable self-assembly driven by DNA.



Read Article

Using Optical Fibers to 3D Print Microstructures

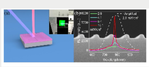
Researchers have used ultrathin optical fibers to create microscopic structures via laser-based 3D printing. The microstructures, which were created on a microscope slide, exhibited a 1.0-µm lateral and 21.5-µm axial printing resolution. The approach could one day be used to build tiny biocompatible structures inside the human body.



Read Article

All-Si Laser With High Optical Gains Could Advance Integrated Photonics

An optically pumped, all-silicon (Si) distributed feedback laser has been demonstrated. Researchers used active layers of high-density Si nanocrystals to develop the laser. The new laser provides high optical gains, overcoming the low efficiency that has been historically exhibited in Si emission.



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Featured Products

The HyperFine Spectrometer

LightMachinery Inc.

Designed for measuring hyperfine spectra and subtle spectral shifts, the HyperFine spectrometer from LightMachinery is a compact, low cost spectrometer capable of sub-picometer resolution. It is ideal for pulsed laser characterization and for measuring the small spectral shifts from Brillouin scattering.

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New Micro-Tactical Cable

AFL

AFL's new Micro-Tactical Fiber Optic Cable combines the ruggedness of military tactical cable designs with the ultra-high fiber density of AFL's micro-cable technology. Designed for rapid deployment in optical networks requiring high mechanical performance specifications, extreme environmental exposure, and highly dynamic operating conditions.

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More News

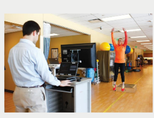
Nonplanar Design Could Increase Display Flexibility, Resolution and Imaging Speed

A newly developed transistor architecture could boost the performance of display circuitry, leading to flexible ultrahigh definition displays. The new, nonplanar design uses vertical semiconductor fin-like structures, which are laterally interconnected to form wavy transistor arrays.

Read Article

MU Researchers Use Depth Cameras for Physical Therapy

A team of University of Missouri (MU) researchers has found that depth cameras often associated with video game systems can provide a variety of health care providers with objective information to improve patient care.



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NASA Begins Work on WFIRST Telescope, a Hubble Cousin Read Article

UCF Team Using Microscopy to Diagnose Parkinson's Disease Read Article

Cork Researchers Enable Robust Image Capture of Unattenuated Bright Targets With Smart Camera Read Article

II-VI, USF Complete First Phase of Thin-Film Partnership Read Article

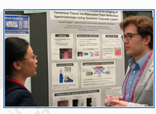
Industry Events

Medical Imaging 2018

February 10-15, 2018 - Marriott Marquis Houston - Houston United States

SPIE Medical Imaging 2018 will offer focused, face-to-face instruction from some of the leading minds in medical imaging research and applications. Over 900 papers, across nine conferences, will cover the latest information in image processing, perception, registration informatics and segmentation, as well as in digital pathology, tomography, computer-aided diagnosis and ultrasound. Join your peers in group discussions around focused technical topics, various workshops, live demos, and at the interactive poster sessions.

More Info



Webinars

Stray Light Absorption in Broadband Wavelengths

Tue, Feb 6, 2018 1:00 PM - 2:00 PM EST

This webinar will discuss the science behind broadband light absorption and introduce materials and techniques for applying optically black coatings that demonstrate ultralow reflectance across a broadband spectra. The presenter, who worked on the development of a number of coating processes for NASA, will provide examples of how low-reflectance technology is currently being used in the visible, NIR and IR wavelengths.

Register Now

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Optical Transfer Function Instrumentation | Fiber Optic Spectrum Analyzers

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