

ProductNews

Hitachi AFM5100N Atomic Force Microscope



Hitachi's next-generation, multi-functional, tabletop SPM offers both performance and ease-of-use for a broad range of applications. The AFM5100N uses a self-detecting holder eliminating the need for laser alignment, and proprietary intelligent scanning (SIS) provides unmatched data accuracy. Seamless

operation via auto measurement features include high-speed Q-curve, auto-approach, and parameter optimization offering true point-and-click sample topography and phase imaging.

Hitachi High Technologies America, Inc.
www.hitachi-hitec.com/global/em/spm/afm5010n.html

Nikon Instruments, Inc. Introduces New Research Stereo Microscopes



Nikon announced the latest enhancement of its stereo microscope lineup: the new SMZ1270 and SMZ800N microscopes. These new systems feature an expanded zoom ratio, enhanced ease of operation, and excellent optical performance. Paired with

newly developed WF objectives, these new models offer unparalleled chromatic aberration correction for brighter, sharper images across a large field of view and best-in-class zoom ratio for use across a wide range of biological, medical, and industrial applications.

Nikon Instruments Inc.
www.nikoninstruments.com

New Intensified CCD Camera Provides Quadruple the Resolution of Other Available ICCD Camera Systems



Princeton Instruments introduced a new member of the PI-MAX[®]4 family of scientific ICCD cameras: PI-MAX4:2048f, the world's first 2k × 2k resolution fiber-

optically coupled, intensified camera with high frame rates at 6 MHz/16-bit digitization. In addition to the proven technological advancements of the remarkably precise and intelligent PI-MAX4 platform, the PI-MAX4:2048f provides an impressive resolution four times that of any other available intensified CCD camera.

Princeton Instruments
www.princetoninstruments.com/products/imcam/pimax

Park Systems Collaborates with Leading Hard Disc Drive Manufacturers to Develop New AFM

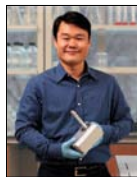


Park Systems, manufacturer of atomic force microscopy (AFM) products, introduced the NX-PTR, a fully automated system for hard disk drive slider manufacturing. Newly developed in collaboration with leaders in hard disk drive (HDD) production, Park's NX-PTR increases production yield by 200% with an enhanced automation routine, faster

scan rate, and recipe automation. The NX-PTR offers extremely accurate PTR measurements with sub-Angstrom gauge repeatability and reproducibility.

Park Systems
www.parkafm.com

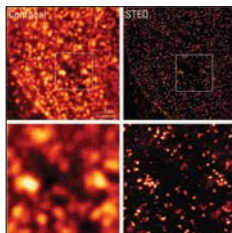
New Thermo Scientific Energy Dispersive X-ray Detector Features a Compact Solid-State Design



Scanning electron microscope users seeking small, simple, and powerful EDS should look to the new Thermo Scientific UltraDry Compact EDS X-ray Detector. Small enough to fit in the palm of the hand, this detector features a maintenance-free design that eliminates the need for liquid nitrogen. It handles collection rates up to 1,000,000 photons per second with detection sensitivity to boron (B) and EDS energy resolutions of 129 eV at Mn K-alpha.

Thermo Fisher Scientific
www.thermoscientific.com/en/product/ultradry-eds-detector.html

Leica Microsystems' New Pulsed STED Laser



The Leica TCS SP8 STED 3X super-resolution microscope is based on stimulated emission depletion technology. The instrument allows researchers to tune resolution in the lateral as well as the axial direction. The 775 nm pulsed STED laser is the most recent addition to the range of multiple STED lasers of different wavelengths. This new pulsed laser leads to a further increase in the resolution

of the instrument, revealing details in multicolor colocalization experiments.

Leica Microsystems CMS GmbH
www.leica-microsystems.com

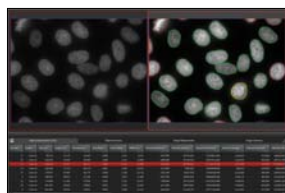
Paedia LLC Announced the Release of the Diabloc™ Optic Multifilter



The Diabloc Multifilter is 6 tools in one. It enables a microscopist to select among bright-field, dark-field, Rheinberg, polarized, single-color, and oblique diascopic illuminations, all by operating two knobs on the unit. Combinations of some methods are possible. Having more than one illumination type at their fingertips allows microscopists to quickly and easily view a subject under different conditions and very likely see what they have been missing.

Paedia LLC
www.diabloc.com

Leica Microsystems Releases Leica Application Suite Advanced Fluorescence (LAS AF) 4.0



Leica Microsystems launched the Leica Application Suite Advanced Fluorescence (LAS AF), the software platform for advanced life science research in wide-field and confocal microscopy, in its 4.0 version. With LAS AF, researchers can now perform 2D image analysis on multi-channel

experiments and fully control the environmental conditions of an experiment. In addition, users of wide-field systems can now connect to the acquisition station remotely at any time.

Leica Microsystems GmbH
www.leica-microsystems.com

Introducing The Lumen 300-LED Broad-Spectrum White Light Fluorescence Excitation Illumination System



The new Lumen 300-LED from Prior Scientific is specifically designed to offer broad-spectrum LED illumination for fluorescence applications. Fitting directly to most microscopes, the system is simple to install and use. Controlled by a manual keypad controller, the Lumen 300-LED offers instant on/off operation via TTL, manual 0–100% intensity control in 1% increments, and on/off control for each LED.

Prior Scientific, Inc.
www.prior.com

Aven Integrates Ring Light in Stereo Zoom Scope System



The new Aven illuminated microscope system has a 60 LED ring light as an embedded element of the focus mount. The combination adds one-piece convenience and practicality to Aven's most popular stereo zoom binocular scope, which now can be selected with illumination securely installed. The SPZ-50 model microscope offers a magnification range of 6.7× to 50×, or up to 200× with three optional lenses and eyepieces.

Aven, Inc.
Aveninc.com

Andor Launches Revolution DSD2: an Alternative to Laser-Scanning Confocals



Andor announced the launch of the Revolution DSD2. A compact, laser-free confocal module that can be fitted to most fluorescence microscopes. With the addition of Andor sCMOS camera technology, it delivers a large field of view and high

dynamic range for stunning image quality. As DSD2 uses a broadband white light source instead of lasers, it can image any fluor by selection of filters and is extremely cost-effective to purchase and maintain.

Andor Technology Ltd.
www.andor.com/microscopy-systems/revolution-dsd

LED Light Engine Filter Sets from Semrock



Semrock announced their newest fluorescence filter set product family, LED-DA/FI/TR/Cy5-4X-A, optimized for LED light engines. Seven sets are available in single-band, full, and Pinkel multiband configurations optimized for compatibility with the most popular LED light sources available on the market. Designed to be spectrally aligned with the output of popular LED light engines, all of the new filters offer the high performance and value you expect from Semrock filters.

Semrock, Inc.
www.semrock.com

FEI Announces NanoEx Sample Holder for *In-Situ* TEM



The NanoEx™-i/v sample holder is for atomic-resolution imaging at elevated temperatures and applied electrical bias to observe the effects of heating and electrical bias on nanostructured materials during *in-situ* experiments. The holder is optimized to accept a variety of sample geometries, from nanoparticles to thin FIB-prepared lamellae. The holder uses a small MEMS device as the heating element to quickly heat the samples inside the TEM to temperatures greater than 1000° C.

FEI Company
www.fei.com/nanoex

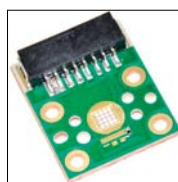
13-Megapixel Auto-Focus Microscope Camera



The Imaging Source 13-megapixel camera is based on Sony Exmor CMOS technology. It can be mounted on either the microscope's ocular or C-mount. The camera, which is equipped with a distortion-free 5.3 mm (35 mm equivalent) auto-focus lens, allows the user to capture exactly what an observer sees through the ocular. Thanks to the camera's USB 3.0 interface, a Full HD (1920 × 1080) preview at 30 FPS is available on the host PC.

The Imaging Source
www.theimagingsource.com

UV LEDs Feature Flat, High-Density Arrays Emitting Near 40 Watts of Optical Power from a Large Chip-on-Board Form Factor



Innovations in Optics, Inc. introduces LumiBright™ UV Boards for high-power UV LED applications such as UV curing, 3D printing, maskless lithography, photodynamic therapy, and fluorescence excitation in life science or machine vision. LumiBright UV Boards offer maximized heat and current spreading to deliver high UV optical power with superior thermal management and open platform flexibility.

Innovations in Optics, Inc.
www.innovationsinoptics.com

Leica Microsystems Introduces an Inverted Microscope for Cell Culture Quick Check



The Leica DMi1 enables cell biologists to check and document cell and tissue cultures within seconds. Its ease-of-use and efficient operation make it an excellent choice for routine laboratory work as well as for training. Combining high-performance and affordability, the Leica DMi1 is equipped with LED illumination that provides constant color

temperature with up to a 20-year lifetime. The convenient two-hour auto-off function helps reduce energy costs.

Leica Microsystems CMS GmbH
www.leica-microsystems.com