ProductNews

Advanced Microscope Ring Light Has 72 LEDs and Zone Controls

A new high-intensity microscope ring light features 72 LED lights and adjustable illumination for any specimen or application. All electronics are part of the compact, self-contained design from Aven, Inc. Features include: variable 70 K lux intensity, four independent light quadrants, and a high-resolution dimmer. Moreover, the six dozen white LEDs don't flicker or emit heat, in contrast to fluorescent and halogen ring lights.

AVEN, Inc
www.aveninc.com

Popular Semrock Fluorescence Filter Sets Now Offer Enhanced Performance

Semrock has substantially improved the performance of twenty-seven of its most popular BrightLine® fluorescence filter sets by launching enhanced versions of the dichroic beamsplitters used in these sets. Filter sets were rolled out for use with DAPI, GFP, FITC, mCherry, Texas Red, and many other fluorophores, as well as sets optimized for FRET, FISH, and Qdots. These dichroics offer the most efficient management of light in even the lowest-light-level experiments.

Semrock, a Unit of IDEX Corporation.
www.semrock.com

Highly Stable Optical Cryostat Introduced

The Cryostation, by Montana Instruments, is a new generation of optical cryostat with unparalleled optical access and stability that allows complete computer control of your sample temperature. The Cryostation achieves long- and short-term temperature stability of less than 10 mK peak to peak, even at temperatures of 3 Kelvin. Peak-to-peak vibrations are less than 5 nm. The unit provides simple sample access and optical access through five windows.

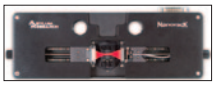
Montana Instruments Corp
www.montanainstruments.com

EMS 150T Turbo-pumped Sputter Coater/Carbon Coater

The EMS 150T is a turbomolecular-pumped coating system for SEM, TEM, and thin-film applications. Depending on the selected configuration, the EMS 150T can be a top-of-the-range sputter coater for high-resolution scanning electron microscopy (SEM), a carbon coater suitable for SEM and transmission electron microscopy (TEM), or both, in a single easy-to-use system. The EMS150T can sputter a wide selection of oxidizing and non-oxidizing metals rapidly, which also makes it ideal for many thin-film applications.

Electron Microscopy Sciences
www.emsdiasum.com

Asylum Research Introduces the New NanoRack™ Sample Stretching Stage for MFP-3D™ Atomic Force Microscopes



Asylum Research has announced the new NanoRack™ Sample Stretching Stage Accessory for its MFP-3D™ AFMs. This high-strain, high-travel manual stretching stage provides two-axis stress control of tensile loaded samples under different loads. Automatic load cell calibration provides integrated force measurements with MFP-3D images or other measurements and returns both stress and strain data. Maximum sample load is 80 N.

Asylum Research
www.MyAsylumAFM.com

Novel Electron Tomography Software Using Multi-GPUs by Digisens

More than just cross-correlation to align a raw tilt-series without fiducials, 3D reconstruction with iterative algorithms uses multi-GPUs and intuitive 3D/2D visualisation: DigiECT positions itself as a revolutionary alternative compared to existing software. Requiring only a raw tilt-series at input, DigiECT is compliant with all TEM brands and imaging modes. Its core philosophy allows reduced 3D reconstruction times, targeted to better image quality using iterative algorithms best suited to cope with the missing wedge.

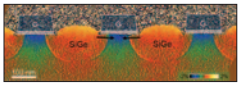
Digisens
www.digisens.fr

Flat Panel Display Color and Intensity Testing

CRAIC Technologies announces the 308 FPD™: a spectrophotometer designed to analyze the color and relative intensity of individual pixels. The system attaches to a probe station or microscope to enable you to obtain color data for flat panel displays of all types. Able to measure spectra on the micron scale, the 308 FPD™ can map the variations due to mura, perform pixel-to-pixel comparisons, and even map spectral variations within a single pixel.

CRAIC Technologies, Inc.
www.microspectra.com

HoloDark for DigitalMicrograph



HREM Research Inc.'s HoloDark is a patented procedure developed by Martin Hytch at CEMES-CNRS, Toulouse, France. HoloDark measures geometric phase from a dark-field hologram. Using two geometric phases, HoloDark calculates a strain map in a similar way to GPA (Geometric Phase Analysis) for DigitalMicrograph. The user can obtain the same information but at a much higher accuracy and with wider fields of view because each dark-field hologram is obtained at lower magnification compared with a HREM image required by GPA.

HREM Research Inc.
www.hremresearch.com

Multi-touch Interface Creates New Electron Microscope Experience with JEOL InTouchScope™

JEOL offers a whole new electron microscope experience with the introduction of the InTouchScope™, an analytical, low-vacuum scanning electron microscope (SEM) featuring integrated energy dispersive spectroscopy (EDS) with the latest silicon drift detector (SDD) technology. The intuitive multi-touch screen interface puts all SEM "apps" at the operator's fingertips. The user can expand images, dial in magnification, and focus with a finger swipe.

JEOL USA, Inc
www.jeolusa.com

AURIGA 60 CrossBeam Workstation from Carl Zeiss: High Resolution Slicing and 3D-Imaging

Carl Zeiss SMT introduced a new family member of AURIGA CrossBeam (FIB-SEM) workstations featuring a large 6-inch stage vacuum chamber and a total of 23 free accessory ports. The new AURIGA 60 platform essentially broadens the application spectrum of the well-established ZEISS CrossBeam technology. Its vacuum chamber is large enough to handle wafers of up to 6-inch diameter.

Carl Zeiss SMT AG
www.smt.zeiss.com

Norcada 15 nm TEM Windows

Norcada Inc. is pleased to announce the availability of ultra-thin (15 nm) Transmission Electron Microscopy Silicon Nitride Windows to the TEM and STEM microscopy and microanalysis research community. The ultra-thin membrane will allow for better contrast imaging, and it is robust enough to hold samples of various materials and cell cultures. The new product also benefits from a new frame outer finish that is closer to a circular shape, which will facilitate easier handling of the windows with tweezers.

NORCADA
www.norcada.com

Agar Scientific Announces the New, Versatile Fischione Cleaning Solution for Electron Microscopists

Agar Scientific announced the new 1070 NanoClean system from Fischione Instruments. The new Model 1070 NanoClean automatically and quickly removes organic contamination (hydrocarbon) for microscopy applications. It is multifunctional and simultaneously cleans electron microscopy (EM) specimens, specimen holders, and stubs. It is also ideal for other surface science techniques. The use of a touchscreen interface allows quick, easy, and simple setup.

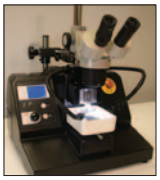
Agar Scientific, Ltd
www.agarscientific.com

Olympus Introduces Two New Motorized BX3® Series Microscopes

Olympus has introduced two new microscopes to its leading BX3 series: the BX53 Motorized Advanced Research Microscope and the BX43 Motorized Clinical and Research Microscope. The new microscope stands are powerful and easy-to-use complete microscopy systems that can be customized to meet users' specific needs. Their motorized components are controlled by the latest Olympus cellSens® software, helping the instruments deliver new levels of performance and ease of use through enhanced functionality.

Olympus America Inc
www.olympusamerica.com

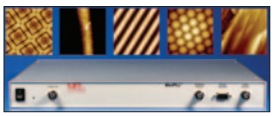
The EMS7000smz and EMS5000mz Vibrating Microtomes Sub-micron *Z*-axis Deflection at All Amplitudes and Speeds



The EMS7000smz / EMS5000mz represent a significant advance in higher precision and lower cost. The all-new vibrating mechanism, developed after two years of extensive research and development, delivers unprecedented precision for the utmost accuracy and nearly silent operation. Every vibrating microtome is tested before delivery by in-house measurement devices, and each vibrating microtome is supplied with its own *z*–axis calibration verifier.

Electron Microscopy Sciences
www.emsdiasum.com

MadPLL™ for "Instant" AFM/NSOM Instrumentation



MadPLL™ is a fully integrated instrument package that allows the user to create an inexpensive, high-resolution resonant scanning probe microscope. MadPLL™ can create an "instant" closed loop AFM/NSOM at a fraction of the cost of commercial systems. MadPLL™ has been specifically designed for tuning forks and Akiyama probes and is fully compatible with Mad City Labs's high-resolution closed loop nanopositioning systems, making it easy for users to build a scanning probe microscope.

Mad City Labs, Inc.
www.madcitylabs.com.

Olympus 30× and 60× Silicone Oil Objectives Offer Brighter, Higher-Resolution Performance for Live Cell and Time-Lapse Imaging

Olympus has introduced new 30× and 60× silicone oil objectives. The new UPLSAPO 30× and UPLSAPO 60× objectives can markedly improve optical performance for live cell confocal, widefield fluorescence, multiphoton, differential interference contrast (DIC), and other applications. The new silicone oil objectives have distinct advantages over both traditional oil and water immersion objectives for deep and long-term imaging.

Olympus America Inc
www.olympusamerica.com