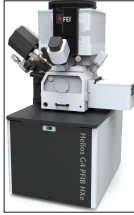


ProductNews

Helios G4 Plasma Focused Ion Beam (FIB) System



The G4's FIB and proprietary Dx chemistry is used to expose metallization layers, allowing electrical fault isolation and analysis to be performed down to the 7 nm node and offers automated end pointing that stops milling automatically when the metal or via layer of interest is exposed. It provides up to 10–20 times faster milling rates than conventional (Ga⁺) FIB solutions, allowing engineers to create larger samples for nanoprobe and TEM imaging.

Thermo Fisher Scientific Inc.
www.thermofisher.com

JEM-ARM200F “NEOARM” Atomic Resolution Analytical Electron Microscope



"NEOARM"/JEM-ARM200F comes with JEOL's unique cold-field emission gun and a new Cs corrector that compensates for higher-order aberrations, enabling atomic-resolution imaging from 200 to 30 kV accelerating voltage. "NEOARM" is also equipped with an automated aberration correction system that incorporates JEOL's new aberration correction algorithm for automatic, fast, and precise aberration correction. Furthermore, a new STEM detector that provides enhanced contrast of light elements is incorporated as a standard unit.

JEOL USA, Inc.
www.jeolusa.com

Olympus MX63



The new MX63 and MX63L industrial microscopes are designed for the inspection of large samples. The MX63 can be used with wafer diameters up to 200 mm and the MX63L with diameters up to 300 mm. The capabilities of the new microscopes include

detecting defects that were difficult to find using past observation techniques. They also feature a high-intensity white LED light source that maintains image stability such that changes to the light source brightness during viewing do not affect the image coloring.

Olympus Corporation
www.olympus-lifescience.com

Themis S Transmission Electron Microscope



The Themis S system is Thermo Fisher's latest addition to the industry-standard Themis TEM platform. Targeted at the needs of semiconductor failure analysis labs working at the sub-20-nanometer technology node, the Themis S system is designed for high-volume semiconductor imaging and analysis and includes an integrated vibration isolation enclosure and full remote operation capability. The DualX x-ray spectrometer is probe-corrected with an 80–200 kV column, automated alignments, and XFEG source. It provides robust, sub-Ångström imaging and fast, accurate elemental and strain analysis.

Thermo Fisher Scientific Inc.
www.thermofisher.com

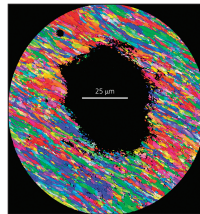
Leica Launches DMi8 S Live Cell Imaging Solution



The DMi8 S imaging solution from Leica provides 5× more speed and an increased viewing area up to 10,000×. It is combined with the new photomanipulation scanner to activate, ablate, and bleach within one experiment. For super resolution and nanoscopy, the Infinity TIRF has been added allowing simultaneous multi-color imaging with single-molecule resolution. This allows researchers to see more, see faster, and find the hidden, opening up the next chapter in wide-field imaging.

Leica Microsystems
www.leica-microsystems.com/dmi8

OXFORD Symmetry® EBSD Detector



Operating at over 3,000 patterns per second, Symmetry is the world's fastest EBSD detector. With unparalleled sensitivity and dynamic range, Symmetry is ideal for even the most challenging applications, where low beam currents coupled with fast, high-resolution patterns are a necessity. Now there's no compromise between speed and sensitivity. One detector fits all applications: features such as variable tilt, dynamic calibration, automated setups, and seamless EDS integration ensure that everyone will get the right results every time.

OXFORD Instruments Asylum Research
www.oxford-instruments.com

Princeton Instruments Introduces the Fastest and Highest-Resolution 1 M Pixel Electron-Multiplying CCD Camera



Princeton Instruments introduced the fastest and highest-resolution 1 M pixel, 10 µm² pixel EMCCD camera, the ProEM-HS:1K BX3-10µm. This addition to the popular ProEM®-HS product line uses both the latest low-noise readout electronics and Princeton Instruments' patented eXcelon®3 (X3) fringe-suppression technology to deliver single-photon sensitivity. The ProEM-HS:1K BX3-10µm delivers 30 fps at full 1024 × 1024 pixel resolution and <1 e⁻ rms effective read noise, all at 36.67 MHz readout speed.

Princeton Instruments
www.princetoninstruments.com/products/ProEM-EMCCD

JEOL Announces New Field Emission SEM

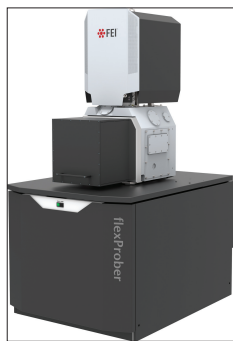


JEOL introduced the JSM-7900F scanning electron microscope, a uniquely flexible platform that combines the ultimate in high-resolution imaging with unparalleled nanoscale microanalysis. At the heart of this cutting-edge microscope is the new electron optical system, NeoEngine, that significantly enhances alignment accuracy, optimizes probe diameter at all conditions, and simplifies observation for all levels of

operators. A powerful new navigation system, Smile Navi, guides the operator through the data acquisition process.

JEOL USA, Inc.
www.jeolusa.com

Thermo Fisher flexProber System



The flexProber system is designed to quickly locate and identify electrical faults using an SEM to position fine mechanical probes on exposed circuit elements. Accurately locating the fault can improve productivity and cost-effectiveness in subsequent analysis by ensuring that the fault is included when a thin section is extracted for high-resolution imaging in a TEM. The flexProber system includes a new SEM column specifically designed for probing applications, with a 2× improvement in resolution compared to

its predecessor.

Thermo Fisher Scientific Inc.
www.thermofisher.com

Dynamic Positioning and Scanning Delivered in Integrated XY Linear Motor Drive



PI (Physik Instrumente) now offers a new reference class XY stage in its PIMag® series of high-dynamics linear motor stages with the V-731, equipped with incremental linear encoders for direct position measurement and 3-phase electro-

magnetic linear motors. The PIMag stages do not require mechanical components in the drivetrain as the force is transmitted directly by magnetic forces to the motion platform, without friction and zero-wear on the drive.

PI (Physik Instrumente) L.P.
www.pi-usa.us

Olympus BX53 Microscope with High-Luminosity LED



The BX53's high-luminosity LED illuminator enables researchers to clearly see the purple, cyan, and pink dyes that are commonly used in life science applications. Its consistent color temperature also helps speed up the observation workflow since users don't have to waste time adjusting a color filter. With the BX53, users experience the brightness and color reproduction of a 100-watt halogen

lamp in a long-life, low-maintenance LED illuminator. The BX53 is an ideal system for clinical laboratories.

Olympus Corporation
www.olympus-lifescience.com

Park Systems Introduces Park NX12 High-Resolution NanoScale Imaging Required for Advanced Analytical Chemistry, Materials Research, and Multi-User Facility



Park Systems announced the new Park NX12, an affordable versatile platform for analytical chemistry, electrochemistry researchers, and multi-user facilities. Park NX12 features a versatile inverted optical microscope (IOM) based SPM platform for SICM, SECM, and SECCM in addition to atomic force microscopy for research on a broad range of materials from organic to inorganic, transparent to opaque, soft to hard.

Park Systems
www.parkafm.com

JEM-1400Flash Electron Microscope



In the observation of biological and material TEM specimens, target locations and observation area are first confirmed at low magnification, and then fine structures of interest are carefully studied at high magnification. Recent demands for easier observation steps to acquire higher-throughput image data are increasing. To meet those needs, a new 120 kV electron microscope JEM-1400Flash is equipped with a high-sensitivity sCMOS camera, an ultra-wide area montage system, and an optical microscope (OM) image linkage function.

JEOL USA, Inc.
www.jeolusa.com

Allied Vision High-Bandwidth Cameras with CoaXPress Interface



Allied Vision introduces a new high-speed camera family: The Bonito PRO CoaXPress camera is perfectly suited for high-bandwidth applications. The new camera series is equipped with 4 × CXP-6 ports enabling bit rates of 25 Gbit/s over four coaxial cables with a maximum communication distance of 68 meters. The first two Bonito PRO series models support the latest high-resolution ON Semi PYTHON CMOS sensors with 26.2 megapixel and 12.5 megapixel resolutions.

Allied Vision Technologies GmbH
www.alliedvision.com

Twenty New ace Models with IMX Sensors from Sony

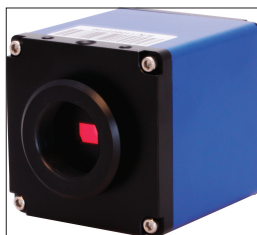


Twelve of the 20 new cameras are equipped with the IMX253, IMX255, IMX267, and IMX304 sensors from Sony's Pregius line. These twelve models form the ace L product line. They offer resolutions of 9 and 12 megapixels and frame rates of up to 40 fps. These cameras offer brilliant

Pregius image quality at high resolutions and a pixel size of 3.45 μm. State-of-the-art global shutter technology ensures distortion-free images, even at high speeds.

Basler AG
www.baslerweb.com/ace-product-lines

Aven Mighty Cam HDMI Color Camera



Aven's Mighty Cam HDMI Color Camera has integrated measurement software and an SD card, allowing imaging without a computer. By eliminating outside software or a laptop for image processing, the Aven HDMI Color Camera reduces workbench space, avoids software installation or updating, and removes compatibility concerns. Engineers, inspectors, and research technicians

simply need a monitor, as the camera's HDMI port allows a direct link. Users can save five sets of measurement data on the SD card.

Aven Inc.
www.aveninc.com