

ProductNews

Andor Neo 5.5 sCMOS Camera for Light Sheet Microscopy



The soSPIM technique uses an array of micromirrored wells, where each mirror is inclined at precisely 45 degrees. Together with a beam-steering add-on unit, these micromirrors allow for both the excitation beam and resulting fluorescence signal to pass through a single standard, objective lens. The soSPIM technique exhibited fast

response and good sectioning capability for 3D imaging of a whole cell up to 30 micrometers above the coverslip.

Andor Technology plc.
www.andor.com

Leica Microsystems Launches sCMOS Microscope Camera



The Leica DFC9000 features a sCMOS sensor with high quantum efficiency over the entire spectrum of light, which provides a high signal-to-noise ratio to securely detect even faint signals. In combination with a very low noise level, this results in a crisp fluorescence signal

against a dark background—an effect very much desired in high-end fluorescence live cell imaging. The high sensitivity of the camera eliminates the need to monitor GFP-overexpressing specimens and protects cells from phototoxicity.

Leica Microsystems GmbH
www.leica-microsystems.com/dfc9000

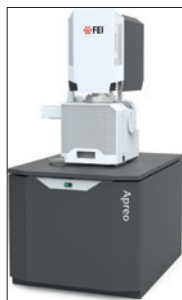
Applied Beams Offers FIB Aperture Strips



Applied Beams provides aperture strips for FEI FIB systems with Pre-lens, Magnum, Sidewinder, or Tomahawk columns. Using the same plasma-FIB technology found in the Applied Beam HyperFIB Upgrade system, the FIB aperture strips are precision micromachined and guaranteed to deliver the same quality beam as previously experienced for the life of the system. The aperture strips are available in a standard configuration or with custom hole sizes to custom specifications. HyperFIB milling provides extreme flexibility to meet unique aperture size requirements.

Applied Beams LLC
www.appliedbeams.com

FEI Launches Apreo High-Performance SEM



FEI announced the new Apreo™ scanning electron microscope (SEM), offering an industry-leading range of applications. In fields ranging from materials and life sciences to research in semiconductor, energy, and chemistry, Apreo offers exceptional versatility. Due to its proprietary compound final lens design, the Apreo SEM is capable of resolution down to 1.0 nm at 1 kV without the need for beam deceleration, providing high performance on nearly any sample, even if it is tilted or topographic.

FEI Company
www.fei.com/apreo

ZEISS Increases Speed of World's Fastest Scanning Electron Microscope



The ZEISS MultiSEM 506 features 91 beams working in parallel, which increases the throughput of the ZEISS MultiSEM 505 by a factor of three. Net acquisition speed of more than 2 terapixels per hour enables large-scaled experiments, such as imaging of cubic millimeters of brain tissue at nanometer resolution for the analysis of neural circuits. This product will speed up the ability to map whole areas of the brain to understand the neuronal network.

ZEISS Microscopy
www.zeiss.com/microscopy

Basler PowerPack for Microscopy: Tailored All-Round Camera Package for Microscopy Applications



Based on today's ambitious microscopy requirements, the Basler PowerPack for Microscopy offers high-quality cameras combined with all necessary components for an easy system setup and installation. The color cameras are equipped with the standardized USB 3.0 interface in various

performance configurations achieved by state-of-the-art CMOS sensor technology. The chosen camera comes along with tested and compatible accessories, as well as with the professional Basler Microscopy Software.

Basler AG
www.baslerweb.com

Bruker Introduces Dimension FastScan Pro Industrial AFM

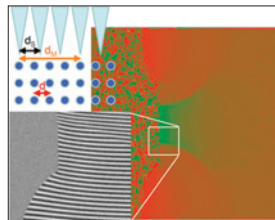


FastScan Pro incorporates both FastScan and Icon AFM scanners and Bruker-exclusive PeakForce Tapping® technology to perform accurate depth measurements from sub-nanometer steps to high-aspect

ratio trenches with high accuracy. Robust software and an intuitive user interface support automated laser and detector alignment. Included is a built-in user-accessible cantilever database for system auto-settings, safe fast-engage control, and easy sample navigation. AutoMET software delivers fast, automated metrology, exceptional ease-of-use, and AFM adaptability to capture critical-to-quality measurements.

Bruker Nano Surfaces Division
www.bruker.com

sMoire for DigitalMicrograph

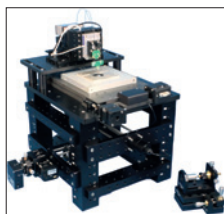


HREM Research Inc. announced that the STEM Moiré Analysis plug-in for DigitalMicrograph is available. sMoire allows strain analysis from a single or a set of moiré images obtained by using STEM. The sMore measures fringe deformation from a single Moiré pattern using the technique developed for the GPA (geometric phase

analysis) for DigitalMicrograph. Furthermore, the sMore can calculate two-dimensional strain maps using two geometric phases in a similar way to HoloDark (dark-field holography for strain) for DigitalMicrograph.

HREM Research Inc.
www.hremresearch.com/Eng/plugin/sMoireEng.html

Versatile, High-Precision Near Field Scanning Optical Microscope



MadCityLabs announces the release of MCL-NSOM, a versatile near-field scanning optical microscope (NSOM). The MCL-NSOM is an aperture NSOM built on the Mad City Labs RM21™ inverted optical microscope, which allows users to convert to aperture-less NSOM, AFM, and fluorescence optical microscopy. The MCL-NSOM includes XYZ closed-loop nanopositioning for sample and fiber scanning, providing sub-nanometer precision and exceptional low-noise performance. Six axes of automated positioning are provided.

Mad City Labs, Inc.
www.madcitylabs.com

Dual-Camera Link Interface Enables IMX174 Imager to Run at 165 fp



JAI has introduced the GO-2400-PMCL. The new camera is equipped with a two-channel Mini Camera Link interface enabling its imager to output full-resolution 2.35-megapixel images at up to 165.5 frames per second in 8-bit continuous mode. As part

of JAI's Go Series, the new GO-2400-PMCL places the IMX174 into a small and versatile form factor weighing only 46 grams—one of the lightest cameras available at this resolution.

JAI Inc.
www.jai.com

Recent Developments in the Raman Microscope Range at WITec



WITec announced the launch of the alpha300 access micro-Raman system. WITec's line of microscopes for Raman spectroscopy and imaging, atomic force microscopy, and near-field microscopy all share a unique modularity that allows for single-technique solutions as well as correlative imaging configurations. Additional methods of analysis can be integrated with any instrument in the series at any time. Sophisticated analysis techniques and high-quality components maintain the alpha300 series' position at the worldwide market's leading edge.

WITec GmbH
www.witec.de

UV-Visible-NIR Polarization Spectroscopy of Microscopic Samples

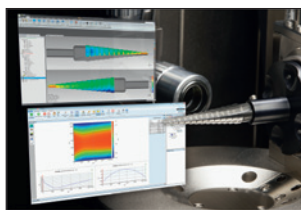


CRAIC Technologies announced the addition of UV-visible-NIR polarization spectroscopy capabilities to CRAIC microspectrophotometers. This unique feature is offered as a package that allows the user to measure polarization spectra in either transmission or

reflectance modes. With the additional ability to measure polarization microspectra™ in the ultraviolet, visible, and near-infrared regions, the UV-visible-NIR polarization package represents a powerful new tool for both materials science and biological research.

CRAIC Technologies, Inc.
www.microspectra.com

Bruker Introduces Dimensional Analysis System

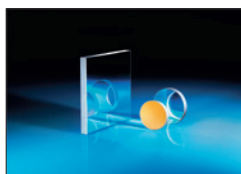


Bruker announced the release of Contour CMM™ dimensional analysis system, which is the world's first non-contact metrology system to perform simultaneous nanoscale surface height, texture, waviness, and form measurements, as well as 3D coordinate measurements

for geometric dimensioning and tolerancing. The Contour CMM system enables more accurate and convenient metrology for R&D and manufacturing of small structures in precision-machined components across a wide range of industries, from medical devices and optics, to automotive and aerospace.

Bruker Nano Surfaces Division
www.bruker.com

TECHSPEC® First Surface Mirrors Provide 4–6 λ Surface Flatness with Maximum Durability

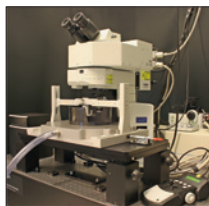


Edmund Optics (EO) introduced a newly expanded line of TECHSPEC® First Surface Mirrors, featuring a surface flatness of 4–6 λ, which now includes 26 new models of the protected silver-coated mirrors. The coated surface is designed to face the incident light, minimizing

energy loss by preventing the light from passing through the glass substrate. TECHSPEC First Surface Mirrors use metal coatings with a protective dielectric overcoat layer to protect the coating.

Edmund Optics
www.edmundoptics.com

Novel *In-Vivo* Imaging Solution for Neuroscientists



Prior Scientific reports that its collaboration with Neurotar (Helsinki, Finland) has produced a seamlessly integrated solution for *in-vivo* microscopic imaging in the brain of awake and moving rodents. The solution is based on Prior's ultra-stable and easily adjustable Z-Deck platform. Neurotar's Mobile HomeCage™ is an accessory device

for microscopy and electrophysiology, which enables high-precision tests in the brain of awake, head-fixed, but otherwise freely moving rodents eliminating the need for anesthesia.

Prior Scientific Instruments Ltd
www.prior.com

GloQube Glow Discharge System for TEM and Surface Modification



The GloQube® is a new glow discharge system, used for the hydrophilization (wetting) of TEM support films and grids and for surface modifications, for example, polymer bonding. The GloQube is available in two formats. The GloQube-D has two independent vacuum chambers: a clean chamber for applications requiring hydrophobic/

hydrophilic conversion and a vapor chamber designed for hydrophilic/hydrophobic conversions, typically using reagents such as methanol and alkylamine. The GloQube-S has a single clean chamber.

Quorum Technologies Ltd
www.quorumtech.com