

RESOURCES

A summary of new products and services
for materials research...

Aluminum Sputtering Target: Tosoh's SOLO PLUS™ target has a fine grain size, low particle generation, and a controlled crystallographic texture. The evenly distributed microstructure ensures minimal variation in copper content throughout the target. The aluminum target is bonded to a high-strength aluminum backing plate. This produces a rigid structure with lower deflection than a monolithic design, reducing particle generation and arc events. High strength in the flange area also provides reliable mounting integrity. Contact: wielst@tsmd.com; www.tsmd.com.
Circle No. 68 on Inside Back Cover.



Narrow-Linewidth Deep-UV Solid-State Source: Positive Light's Indigo-DUV produces milliwatts of single-frequency 193-nm light in a TEM₀₀ spatial mode. It provides 772-nm pulses with an average power of 1.5 W and a repetition rate of up to 5 kHz. The proprietary harmonic generation scheme produces up to 10 mW at 193 nm with a linewidth of <0.03 pm. The company's Nd:YLF diode-pumped Evolution laser is combined with the Indigo Ti:sapphire laser to provide a compact package that can be specified to produce 193-nm, 248-nm, or other UV wavelengths. The Indigo operates on 110 V or 220 VAC and does not require an external water supply. It can be paired with either the 6-W Evolution or 10-W Evolution X for higher power. Contact: poslight@poslight.com; www.poslight.com.
Circle No. 65 on Inside Back Cover.

Self-Contained Vacuum Gauges: Vacuum Research Corporation's vacuum gauges include both digital display and sensor in one compact package. All models include a linear analog output for interface with computers or PLCs, and they are available with 1/8-in. NPT, KF-16, VCR-4, and other popular flanges. The Pirani gauge model has a range of 1–1200 mTorr, ±1 mTorr. The diaphragm gauge model has a range of 1–1500 Torr, ±1 Torr. The battery-powered diaphragm gauge has a range of 1–1000 Torr, ±1 Torr. Contact: vrc@vacuumresearchcorp.com; www.vacuumresearchcorp.com.
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Microarray Station: The SPBIO™ Microarray Spotting Station from Hitachi Genetic Systems is a fully enclosed system that uses a proprietary pin design. The pen tip, available in different sizes, achieves high spot reproducibility and can spot on glass slides or membranes. Spot pitch can be adjusted from 0.2 mm to 1.00 mm in 0.01 mm increments. The design accommodates 96- or 384-well plates, and up to 48 chips can be prepared under the same setting. The station also offers optional automated plate loading of 14 plates. Contact: ldowney@miraibio.com; www.miraibio.com.
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Vacuum Instrumentation: Free 500-page catalog from INFICON features vacuum instruments for monitoring, analysis, control, leak detection, and plasma cleaning for the semiconductor, vacuum coatings, air conditioning/refrigeration, and industrial markets. New products include the FabGuard Sensor Integration and Analysis System, and Sky Ceramic Capacitance Diaphragm and Bayard-Alpert Pirani Gauges. Contact: reachus@inficon.com; www.inficon.com.
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Refractive Increment Data Book: Nottingham University Press 58-page book provides a survey of published experimental values for the refractive index increment for specific macromolecules in specific solvents and conditions. It is useful to researchers using the techniques of light scattering, analytical ultracentrifugation, and viscometry, as well as those who use refractive index detection as an assay of biopolymer or polymer concentration. Contact: orders@nup.com; www.nup.com.
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Composites Newsletter: Sartomer's *Composites Concepts* newsletter assists formulators in the creation of enhanced product performance for advanced composites applications. Topics in the first issue, available free, include enhancing composite formulations, reducing HAPS emissions, and improving performance properties using methacrylate and acrylic monomers. Also included are technical resources for composite fabricators. Contact: young@sartomer.com (literature); lorenz@sartomer.com (technical); www.sartomer.com.
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Five-Axis Laser: The PEDILAS laser system from Schuler Held Lasertechnik features a modular design that allows the system to be configured to cut large sections of multistory telescoping cranes. The equipment involves a gantry or portal system with five-axis laser-beam movement for integrated cutting or welding of large workpieces. The large work area can be used for processing or it can be divided into two sections, one for processing, and one for fixturing the next workpiece. The x-axis travel is extended because the laser resonator travels alongside the system with its own carriage and drive system. The y-axis bridge is completely open and accessible from both ends. Contact: info@schulergroup.com; www.schulergroup.com.
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Ultrahigh-Resolution FESEM: LEO Electron Microscopy's LEO 1530VP can operate in high vacuum and in variable-pressure mode, allowing imaging and high-kV analysis of nonconducting, porous, or outgassing materials. Standard are an in-lens SE detector that provides high-resolution surface-specific imaging, plus the VPSE detector and standard SE detector for secondary-electron imaging. A choice of backscattered electron detectors is offered to complement the secondary-electron detectors. In high-vacuum mode, a resolution of 2.5 nm at 1 kV and 1.0 nm at 20 kV is specified. In variable-pressure mode, a resolution of 2 nm or better can be achieved. Contact: info@leo-em.co.uk; www.leo-em.co.uk.
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Showcase Your New Products

To appear in MRS Bulletin Resources, submit new product announcements to:

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