

## RESOURCES

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

### Cryogenic Temperature Sensors:

Lake Shore's DT-600 silicon diode sensors offer tight tolerances with low-temperature repeatability and long-term stability. The silicon diodes provide a temperature range of 1.4–500 K. The sensors are available as bare die and with silicon diode packaging options. At 0.4 mm × 0.43 mm, the bare-die sensors offer a small physical size and fast thermal response. Contact: sales@lakeshore.com; www.lakeshore.com. **Circle No. 62 on Inside Back Cover.**

### CW and Single-Pulse Measurement Head:

Ophir Optronics' L30A-10MM Thermopile Surface Absorber head is designed for continuous-wave or single-pulse measurement of laser power and energy. The device features a 26-mm aperture, spectral range of 0.15–20 μm, power range of 80 mW to 30 W, and an energy or exposure range of 20 mJ–60 J. Response time with a display is 1.5 s, and power accuracy is specified at +3%. Contact: sales@ophiropt.com; www.ophiropt.com.

**Circle No. 67 on Inside Back Cover.**

### Single-Side Wet Chemical Wafer Processing:

MATECH Systems' Model V Single-Side Universal Wet Processing System (SSUWP™) provides thickness uniformities of better than ±0.1%, repeatedly obtained, for a variety of material substrates, etch rates, and chemistries. The automated, dry-in-dry-out, cassette-to-cassette wet chemical processing system allows for independent optimization of all process parameters, regardless of the substrate. The unprocessed side of the substrate remains protected and free from invasive chemical encroachment. Contact: info@matech.com; www.matech.com.

**Circle No. 68 on Inside Back Cover.**

### Online Chemical Technology Encyclopedia:

Wiley InterScience's Kirk-Othmer Encyclopaedia Online includes more than 200 new and revised articles annually on topics such as risk management, bioinformatics, micron-scale chemical analysis, development strategies, nanoparticles, specialty silicones, electronic chemicals, combinatorial synthesis and technology, and medical applications of biodegradable materials. Features include a chemical thesaurus, chemical properties available in a pop-up window, and preferences that can be customized for viewing material. Contact: www.interscience.wiley.com/kirkothmer; www.wiley.com.

**Circle No. 69 on Inside Back Cover.**



### High-Capacity Vacuum Inlet and Exhaust Trap:

The MV Multi-Trap® Model IC from MV Products is designed for collecting solids in LPCVD, MOCVD, WCVD, and metal etch processes. It provides >200 in.<sup>2</sup> (1300 cm<sup>2</sup>) of surface area. Two customizable filtration stages condense and collect heavy particulates. The vacuum inlet and exhaust trap has >500 in.<sup>3</sup> (8000 cm<sup>3</sup>) of space to accumulate solids. Contact: sales@massvac.com; www.massvac.com.

**Circle No. 60 on Inside Back Cover.**

### Color Digital Microscope Camera:

The DC 200 from Leica features near real-time image previews with nine frames/s color and 17 frames/s black-and-white imaging. Users can focus and magnify directly from a computer monitor. The microscope enhances true color images in both preview and captured images. The transfer speed is 14.75 MB/s from camera to computer. Contact: news@leica-microsystems.com; www.leica-microsystems.com.

**Circle No. 64 on Inside Back Cover.**

### Automated Mercury Analyzers:

The Hydra Instrument Series from Leeman Labs is a line of high-performance mercury analyzers and sample-preparation equipment for high-throughput mercury analysis. Hydra AA analyzes mercury in the sub-ppb to ppm range. The Hydra AF systems meet the requirements of U.S. EPA Method 245.7, Method 1631, or both Methods 245.7 and 1631. Contact: salesinfo@leemanlabs.com; www.leemanlabs.com.

**Circle No. 63 on Inside Back Cover.**

### LED Life Test Station:

The OmniLED® LTS from Labsphere is a complete turnkey solution for high-volume testing of light-emitting diodes. A single measurement sequence performs optical and electrical tests simultaneously on an array of up to 20 LEDs in less than 60 s. Users can enter up to 50 test parameters for pass/fail criteria. Contact: labsphere@labsphere.com; www.labsphere.com.

**Circle No. 61 on Inside Back Cover.**

### Fine-Grain-Size Copper Targets:

Tosoh SMD's Forte® copper targets are designed for use in advanced semiconductor PVD processes. They consist of homogeneous fine-grained microstructures with an average grain size of <20 μm. The copper alloy backing-plate assembly is stiffer than current aluminum backing plates, reducing target deflection and particle generation. Contact: portugaljv@tsmd.com; www.tsmd.com.

**Circle No. 66 on Inside Back Cover.**

### Laser Pulse Duration Control Device:

The Pulse Stretcher from Light Age provides users with continuous control over the range of 0.1–5 μs. Pulse duration can be continuously varied from 100 ns to several microseconds. The device can be configured to offer fiber-coupled outputs in the red and near-UV ranges with average powers of 0.5 W and 1 W. Contact: kimpreston@laserexpert.com; www.light-age.com.

**Circle No. 65 on Inside Back Cover.**

## Showcase Your New Products

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

Mary E. Kaufold  
MRS Bulletin  
Materials Research Society  
506 Keystone Drive  
Warrendale, PA 15086  
Tel: 724-779-8312  
Fax: 724-779-4397  
kaufold@mrs.org

For further contact information for these products, check [www.mrs.org/publications/bulletin/resources](http://www.mrs.org/publications/bulletin/resources)