

This Week In PHOTONICS

PHOTONICS MEDIA



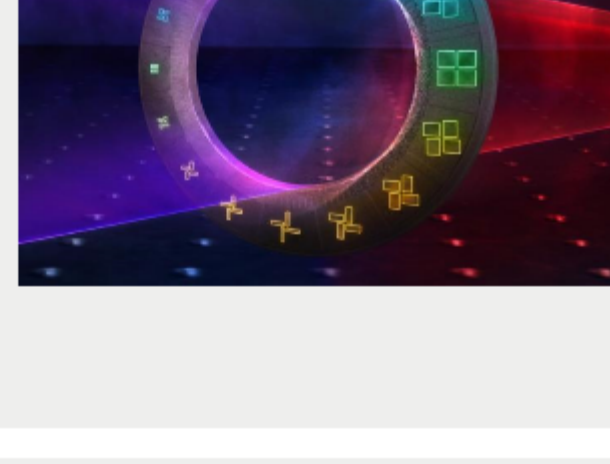
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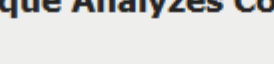
Top Stories

Chiral Nanostructures Could Be Used to Tailor Applications

Scientists have modeled the interaction between light and twisted molecules as the molecules transition from left- to right-handed versions, or vice versa. Understanding the behaviors of these transitional forms could lead to improved design of telecommunications components.

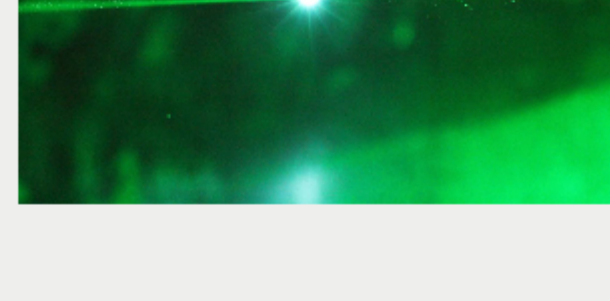


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LIBS Technique Analyzes Contaminants in Levitated Water Drops

A new approach to detecting metal contaminants in water involves the use of laser-induced breakdown spectroscopy (LIBS) to analyze the presence of heavy metals, such as mercury, in water drops that are levitated in midair using ultrasonic waves. Levitating the water droplets allows the water to evaporate in a controlled position, which increases the mass concentration of contaminants in the sample.



Camera Can Differentiate Between Exoplanet Light and Nearby Starlight

A new superconducting camera will be used in the search for exoplanets that could contain or support life. The camera's high-contrast imaging capabilities will help overcome the challenges inherent in distinguishing the light of a planet from the light of the star that it orbits.



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Featured Products

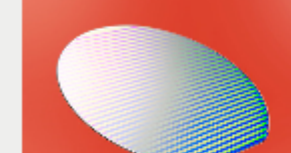
Broadband Wire-Grid Polarizers



Moxtek Inc.

Moxtek offers a variety of wire-grid polarizers and polarizing beamsplitters designed for demanding applications. Our polarizers are made from heat tolerant inorganic materials that enable exposure to temperatures that degrade film based polarizers. Our polarizers are designed for narrow and broadband UV-VIS-IR wavelengths.

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Patterned Thin-Film Coatings

Deposition Sciences Inc. (DSI)

The drive towards smaller photonic sensors, often integrated on monolithic substrates with other processing electronics, has created a need for coatings directly on semiconductor wafers, or on miniaturized substrates. Specifically, this allows the integration of optical filters, apertures or other features which modify...

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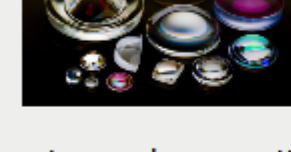
Micro-Tactical Cable



AFL

AFL's new Micro-Tactical Fiber Optic Cable combines the ruggedness of military tactical cable designs with the ultra-high fiber density of AFL's micro-cable technology. Designed for rapid deployment in optical networks requiring high mechanical performance specifications, extreme environmental exposure, and...

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Diverse Optics Inc. specializes in single point diamond turning of custom polymer optics. For over 30 years, we've manufactured the most challenging polymer optic components and assemblies for leading defense, medical, and commercial applications with advanced technology and an experienced team of professionals. In this time, our customers have enjoyed our capacity to produce high-quality lenses in a short amount of time.

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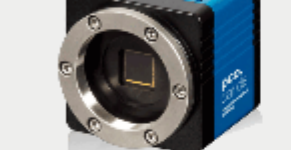
The New Collar Workforce



Photronics Media

U.S. manufacturing companies are expected to face a shortage of two million skilled workers by the year 2020, according to reports. As a result, manufacturers and educators are looking for real, actionable ideas to train workers, reduce the shortfall and realize the potential of the new age of manufacturing.

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pco.panda 4.2 back illuminated (bi)

PCO-TECH Inc.

German-based sCMOS pioneer PCO has just introduced the latest addition to its camera family: the pco.panda 4.2 back illuminated (bi). PCO's sCMOS family is the most versatile scientific imaging portfolio on the market. It is renowned for its extremely low readout noise of 1.0 e- med, high resolution of up to 5.5 megapixels...

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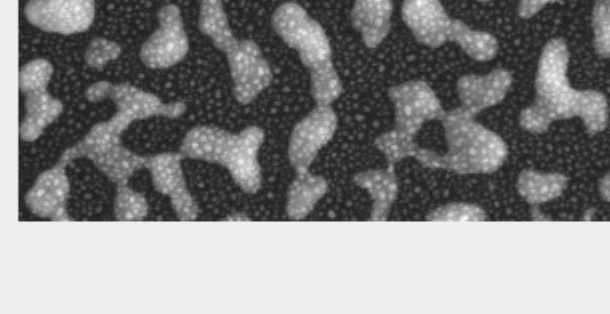
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More News

Sensing Chip Uses Raman Spectroscopy to Detect Cocaine in Minutes

A chemical sensing chip, developed for use with surface-enhanced Raman spectroscopy (SERS), has demonstrated the ability to detect the chemical fingerprint of cocaine in biological samples. In the future, the technology could be used to detect the presence of other drugs, including marijuana, and could be integrated into a hand-held, portable device for on-site testing.



Education, Technology at the Heart of Optatec 2018

Biennially, the Frankfurt (Germany) International Exhibition Center hosts some of the world's top innovators who showcase their work and products at the Optatec International Trade Fair. To be held May 15-17, this event highlights the latest optical technologies, components, and systems in areas such as optomechanics and laser components.



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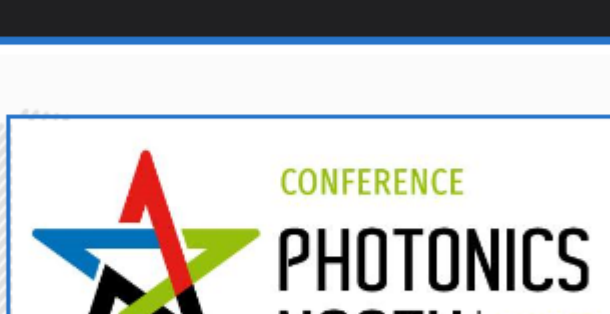
Industry Events

Photronics North 2018

June 5-7, 2018 - Centre Mont-Royal - Montreal Canada

Photronics Media Booth: 14

Photronics North has evolved into the largest annual gathering in Canada of photonics researchers. This conference, international in scope, will be an excellent opportunity to network and exchange ideas and information with researchers, government representatives and photonics industry professionals. The conference will include sessions on biophotonics, green photonics and related technologies, high power laser technology and ultrafast optics, light-matter interactions, and more.



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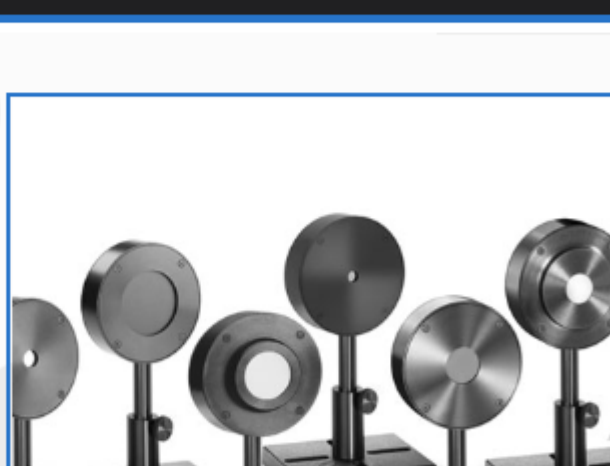
Webinars

Best Practices: How to Achieve the Most Accurate Laser Energy Measurements

Tue, May 15, 2018 1:00 PM - 2:00 PM EDT

Measuring a pulsed laser is complex. Besides power, you also need to worry about pulse energy, frequency, and pulse width (duration). In this webinar, you will learn how laser energy measurements work and how to do it right. It will discuss the technical principles of energy measurement and best practices for ensuring accurate readings. This webinar is presented by Ophir Photonics.

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Hand-held Spectrometers in 2018 and Beyond

Wed, May 16, 2018 1:00 PM - 2:00 PM EDT

This webinar will survey the hand-held and portable spectrometry field, with an emphasis on optical instruments, their underlying technologies and their applications. Presenter Richard Crocombe, Ph.D., will review some of the devices that are on the market today and conclude with a look at where hand-held spectrometry could be headed. This webinar is sponsored by B&W Tek, by United Power Research Technology Corporation (UPRtek), by Hamamatsu, and by SPECIM.

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