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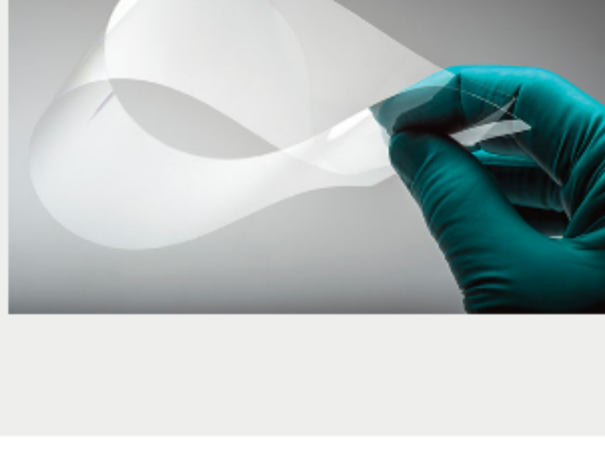
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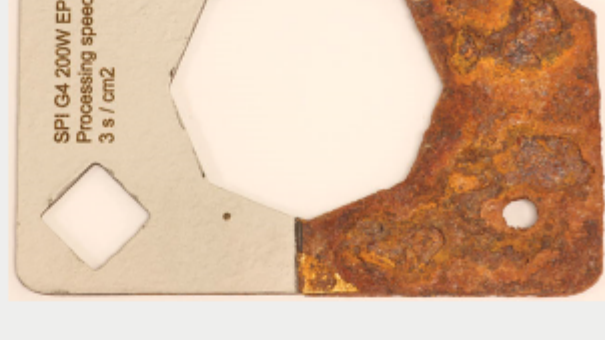
The latest machine vision news

Flexible Glass Substrates Enable Large-Scale Integration
 A strong driving force toward increased interaction and connectivity runs through our society. And it does not end when people put down their smartphones, tablets, or smartwatches. The ability to enjoy constant connection to communication and information began with ubiquitous mobile consumer electronics, but this functionality is now becoming integrated on larger scales into items such as automobiles, video walls, and household appliances — namely refrigerators.



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Fiber Lasers Enable Advances in Product Technologies
 Fiber lasers are a recognized powerhouse in the manufacturing sector of numerous industries because of the throughput, reliability, and low cost of operation they make possible for machines that cut, weld, mark, and micromachine materials. Specific design elements distinguish fiber lasers among industrial laser sources, and their unique attributes are enabling breakthrough manufacturing process capabilities. Specifically, high-power single-mode lasers for remote welding and widely flexible pulsed fiber lasers can address different process challenges by electronic control of operating parameters.



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Optical Coating Innovations Push Performance
 Optical coatings improve the performance of mirrors, lenses, and light-emitting or absorbing semiconductors by enhancing transmission and reducing reflection. They also harden surfaces, allowing components to withstand harsh environments or take pounding from high-power lasers. To continue to meet rising demands, however, coatings need advancements in control, measurements, and cost — areas vendors seek to address by rolling out innovations.



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Featured Products

IQ Lab™ Temperature Testing for Automotive Lenses

Optikos Corporation
 Optikos IQ Lab™ Services offers lens testing over extended temperature ranges IQ Lab temperature testing services are especially valuable for automotive lens manufacturers and integrators, whose applications have stringent performance and athermalization requirements to meet safety standards for camera image quality.

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Embed Focus with Ease, Precision

New Scale Technologies Inc.
 The M3-FS focus module is easy to integrate into the smallest instruments. The embedded controller accepts high-level commands over standard SPI or I2C interface. The complete module is only 20 x 23 x 16 mm INCLUDING CONTROLLER; no need to design, buy or program external control boards.

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Pulsed UV Light System

Xenon Corporation
 Since its introduction in January 2017, XENON's X-1100 High-Intensity, Pulsed Light system has been sold to 50+ research laboratories worldwide! Researchers and scientists spanning The Americas, Europe, Asia, are using this system for numerous markets and in Printed Electronics, Food Safety and semiconductor applications.

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Laser Area Warning Device

Kentek Corporation
 Kentek's laser AREA WARNING DEVICE is a low-cost option for automatically controlling signage to alert personnel on entry to a controlled laser area. The AWD-AUTO™ controls one or more 12V DC powered devices, triggered by the ampere draw of the laser.

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Lince 11M Sensor for High-speed Applications

Teledyne e2v (UK) Ltd.
 Teledyne e2v announces the expansion of its Lince family of image sensors with a new 11Megapixel detector. Lince11M is a new CMOS image sensor designed for applications that require 4K resolution at very high shutter speed. This standard sensor uniquely combines 4K resolution at 710 fps in APS-C format.

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SL Microcontroller Laser

Osela Inc.
 Osela is proud to introduce the new Microcontroller Option for our Streamline laser! This option allows for digital interfacing with the Streamline laser using RS-232 or RS-485 communication. The MC monitors and reports key parameters as well as allowing users to set operational conditions of the laser.

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In Case You Missed It

Photonic Chip Used as Quantum Simulator to Model Molecular Dynamics
 An international scientific team has shown how an optical chip can simulate the motion of atoms within molecules at the quantum level. Data from the chip allows a frame-by-frame reconstruction of atomic motions to create a virtual movie of a molecule's quantum vibrations.



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Scientists Model Metamaterial for Cloaking Nanosensors
 A new metamaterial could improve the accuracy of nanosensors in optics and biomedicine by cloaking them from external radiation.

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Scientists Find Way to Overcome Quantum Limit in GWDs
 Researchers are developing equipment that will enable gravitational wave detectors (GWDs) to monitor and carry out measurements in an eight times bigger volume of space than what is currently possible.

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Webinars

Materials and Methods for Smart Glass, Smart Windows, and Building Shells
 Wed, Dec 5, 2018 1:00 PM - 2:00 PM EST
 This webinar will introduce a cost-efficient, high-performing smart glass system for windows, windshields, roof panes, and building envelopes. The system is based on a reflective structure that switches to transmissive when an index-matching fluid is introduced. You will learn about the technology used to develop and fabricate the smart glass system, including the use of optofluidics and 3D printing. The presenter, professor Keith Goossen, will also discuss future goals and potential applications for his smart heating, cooling and lighting system.



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Coming in December...

Features
 High-Power Lasers, Lidar for Archaeology, Advances in Lens Design, Detectors, Diamond Optics

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Photonics Spectra*. Please submit an informal 100-word abstract to Susan Petrie, Senior Editor, at Susan.Petrie@Photonics.com, or use our online submission form www.photonics.com/submitfeature.aspx.

About Photonics Spectra



Since 1967, *Photonics Spectra* magazine has defined the science and industry of photonics, providing both technical and practical information for every aspect of the global industry and promoting an international dialogue among the engineers, scientists and end users who develop, commercialize and buy photonics products.

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