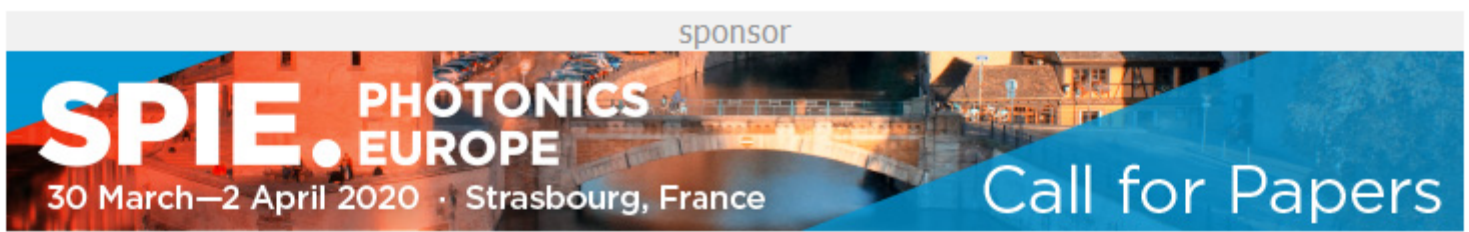


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Ever-Vigilant: Machine Learning and AI Move into Surveillance

The business of surveillance, whether by still or video camera, is booming. It's being driven by military, industrial, and commercial customers as well as consumers. With machine learning pushed to the edge of the surveillance system, human operators may no longer need to monitor video feeds from multiple cameras.

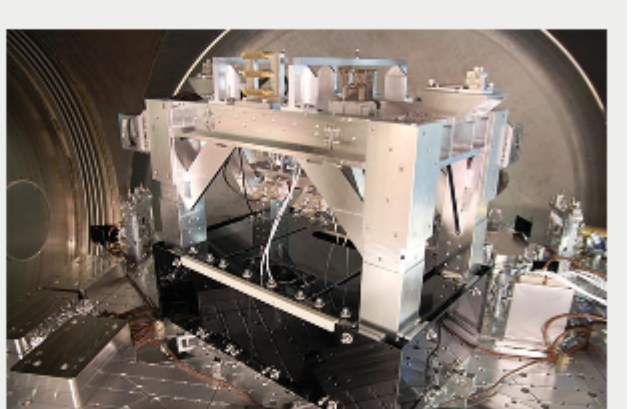
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Custom Optical Coatings for Cinema, Avionics, and LIGO

Three real-world applications in which specialized optics were required to meet design specifications are considered. The first application was for wide-screen digital cinema projectors. The second, for military avionics, required customized short-wave bandpass filters. The third specified 100 individually customized antireflection-coated optics for LIGO.

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Polarization-Maintaining Fiber Market and Competitive Analysis – June 2019

Photonics Media
The competitive polarization-maintaining (PM) fiber market is expected to grow over the next five years at rates between 5% to 12% depending on the market segment, but there's a lot more to the market than a growth forecast. Before you put your project out for bid or invest in new PM fiber product development, it pays to get the whole picture. This new PM Fiber Market report was written by an analyst with three decades of fiber market experience and a finger on the market's pulse today.

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Drawing mainly from the pages of Photonics Spectra and focusing on the last decade or so of developments, Defense & Aerospace offers an overview of these industries as only Photonics Media can present it — from laser paint removal and laser bonding in aerospace, to breakthroughs in quantum sensing. It is a resource for designers, engineers, researchers, marketers, and students looking for a broad survey of advancements in optic and photonics technologies and their applications in defense and aerospace.

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US Army Awards Team Dynetics \$130M Contract for High Energy Laser

The U.S. Army has awarded a \$130 million contract to Dynetics Inc. and its partners to build a U.S. Army Space and Missile Defense Command (SMDC)/Army Forces Strategic Command High Energy Laser Tactical Vehicle Demonstrator (HEL TVD), a 100-kW-class laser weapon system.

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A History of the Laser: 1960 - 2019

Photonics Media presents a timeline of some of the more notable scientific accomplishments related to the light amplification by stimulated emission of radiation (laser), which will celebrate its 60th anniversary in 2020.

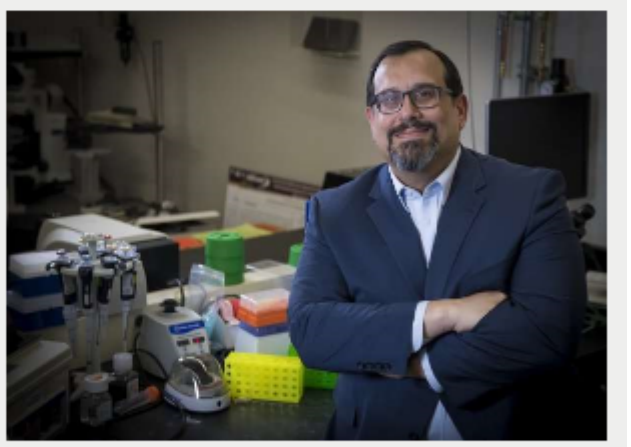
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Piecing Together the Future Battlefield with Mosaic Warfare at DCS

The "Mosaic Warfare" concept combines unmanned and manned systems to work seamlessly in real time. It will use rapid interoperability and AI to create an evenly distributed and resilient system that, eventually, will work at mission speeds.

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Drone Using IoT Tech Could Lead to Earlier Detection of Forest Fires

An automatic flight system with real-time connectivity could help prevent large-scale forest fires by locating and detecting fires where and when they start and communicating this information to emergency services in real time.

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UTA and ARL to Develop Longwave-IR Photonic Device Technology

A research team from the University of Texas at Arlington is working with the Army Research Laboratory to develop nanophotonic devices that could have applications in thermal imaging and resonant filtering.

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