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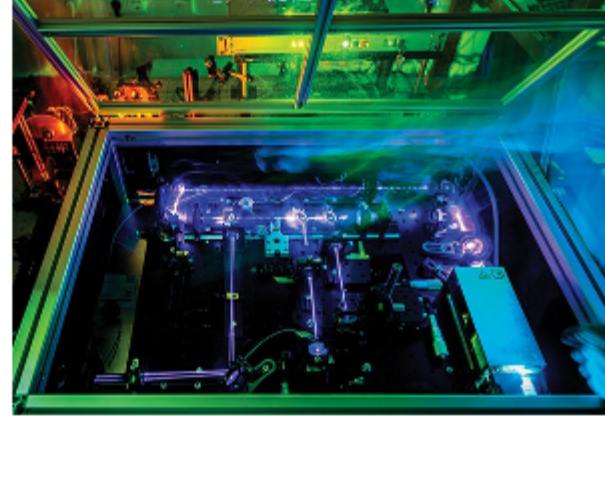
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Monthly newsletter from the editors of Photonics Spectra, with features, popular topics, new products, and what's coming in the next issue. Manage your Photonics Media membership at [Photonics.com/subscribe](https://www.photonics.com/subscribe).

Quantum Leaps into the Imaging Market

Quantum ghost imaging was less than two decades old when the U.K. government launched the £1 billion Quantum Technologies Program in 2016. The program established four hubs dedicated to various fields in quantum research and development. One of these hubs, QuantIC, is focused on furthering advancements in quantum-enhanced imaging with 120 full-time researchers spread across eight partner institutions.

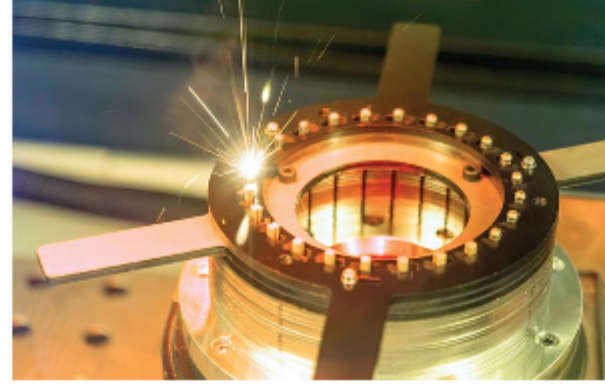
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Fiber Lasers Scale Up Output Powers and End Markets

High-power fiber lasers are a versatile and powerful tool for a wide range of industrial applications, from cutting and welding to defense and beyond. Advancements in laser head design, beam optimization, and wavelength flexibility have caused fiber lasers to become an increasingly attractive option for manufacturers who are seeking to improve the throughput, quality, and efficiency of their production line.

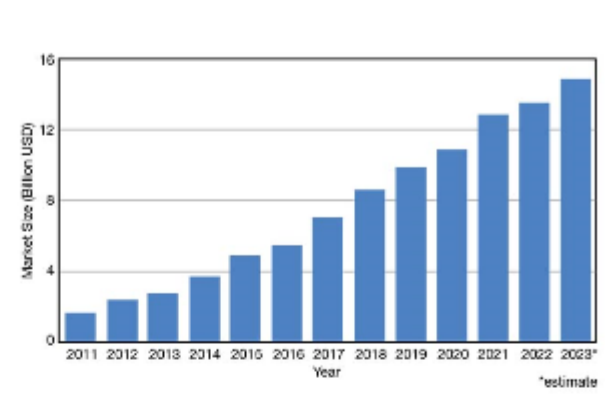
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China's Industrial Laser Market Shows Post-Pandemic Recovery

The Chinese economy was on a roller coaster in 2022 but evened out at the end to grow its gross domestic product by 3%, which is very slow growth by China's standard. The bright side, however, was that the country's high-tech manufacturing industries grew at a much faster pace of 7.4% compared to the previous year. This latter trend strongly supports the stable development of China's laser industry and has led to the rapid transformation and upgrade of its national economy.

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Featured Products & Services



Custom Fiber Optic Solutions

Armadillo SIA

Armadillo SIA offers a comprehensive line of optical fibers, cables, bifurcated assemblies, patch cords, bundles, and more — all custom designed to your specifications. Assemblies can be made from any of our high-quality fibers and your choice of sheathing, cabling, and jacketing. In addition, we offer all standard connectors or custom-designed ferrules to suit applications from deep UV to MIR.

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TracePro 2022.6



Lambda Research Corporation

Lambda Research Corp. is proud to announce the release of TracePro 2022.6, the latest release of its award-winning

TracePro optical design and analysis program. TracePro is intuitive and easy to use in a wide variety of applications including illumination, display design, stray light analysis, biomedical, aerospace, and many others.

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The 2023 Photonics Buyers' Guide

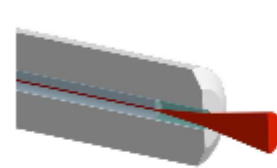
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SP23 for a special offer!

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Fiber End-Caps for Longer Life

Coastal Connections

Coastal Connections has produced thousands of Fiber End-Caps over the past 15 years for laser pigtailed and free space laser communications. Fiber End-Caps in ferrules and connectors reduce power density where laser light enters or exits SM or PM fibers extending the cable's life. PER and NA are mostly maintained making incorporation into existing system easy.

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In Case You Missed It

Light from Electrically Driven QDs Shines on Silicon Photonics

Scientists at Los Alamos National Laboratory demonstrated amplified spontaneous emission from electrically pumped colloidal quantum dots (CQDs). The CQD-based lasing devices, developed after many years of work by the LANL team, use compact, continuously graded QDs with suppressed Auger recombination incorporated into a pulsed, high-current charge-injection structure that is supplemented by a low-loss photonic waveguide.

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Chiral Circularly Polarized Light Plays Its Hand to Brighten OLED Screens

Physics principles dictate that light of only a single handedness is permitted to pass through an OLED display — causing even the most advanced OLED display light sources to waste about half of the light they emit. Seeking to ameliorate this issue, researchers at the Weizmann Institute of Science led by Binghai Yan discovered that, in contrast to traditional scientific theory, reversing the current flow in OLEDs switches the handedness of the circularly polarized light that it emits. The researchers used a method that has shown its efficacy for the control of the chirality of light to make the discovery, which the researchers said could boost the net polarization rate in OLEDs by orders of magnitude.

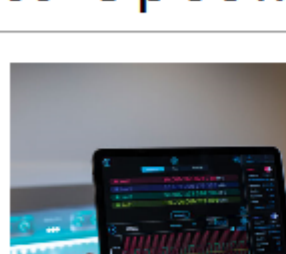
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Argonne's Advanced Photon Source Upgrade Underway

Argonne National Laboratories' Advanced Photon Source has begun its long-scheduled comprehensive upgrade. The process will see the electron storage ring at the heart of the facility removed and replaced with a state-of-the-art storage ring that will grant the synchrotron a 500-fold boost in brightness.

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Upcoming Webinars



Revolutionizing Measurements: Next-Generation Strategies for Modern Phase Detection

Tue, Jun 20, 2023 10:00 AM - 11:00 AM EDT

Liquid Instruments co-founder and CEO Daniel Shaddock shares next-generation strategies to perform optical phase locking using digitally implemented, FPGA-based lock-in amplifiers and phasemeters. He covers advanced phase measurement techniques essential for applications such as coherent beam combining (CBC), optical metrology, free-space optical (FSO) communication, and gravitational wave detection. The presentation introduces phase and compares several common phase measurement techniques. Learn how to improve measurement confidence and speed with dedicated phase detection, consistent legacy test equipment, and reduce costs with software-defined instrumentation. Presented by Liquid Instruments.

[Register Now](#)

Next Issue:

Features

Laser Scanners, Micromachining, Ultrafast Laser-Based Secondary Sources, Digital Holography for Optical Measurement, Hyperspectral Imaging for Agriculture

Issue Bonus

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 Daniel McCarthy, Senior Editor, at Daniel.McCarthy@Photonics.com, or use our online submission form www.photonics.com/submitfeature.aspx.

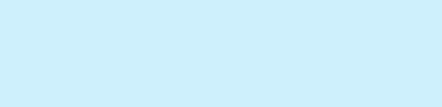
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