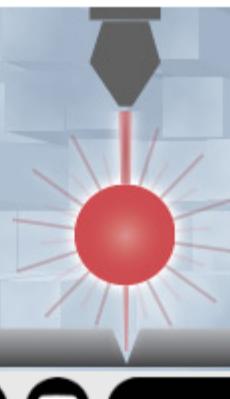


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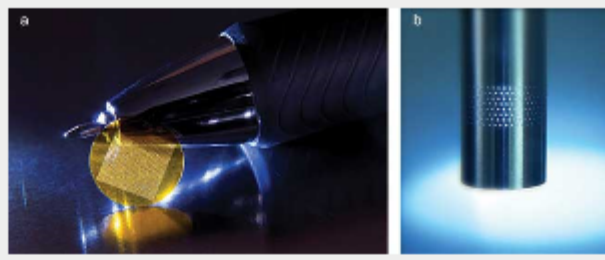
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Industrial Laser News

Lasers for Micromachining: Shorter Pulses, More Power

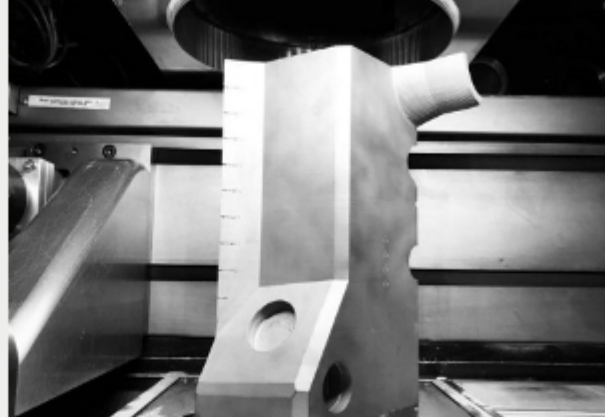
Smaller devices, tighter tolerances, and higher performance demand finer and finer features — hence the increasing need for micromachining. For lasers, this often translates into a requirement for shorter pulse widths. However, these must be at the right wavelength. What's more, the entire solution, including the laser, must be cost-effective.



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3D Printed Metals Shown to Be Both Strong and Ductile

A joint research team developed a technique to 3D-print metals — involving a widely used stainless steel — and achieved exceptional levels of both strength and ductility when compared to counterparts from more conventional processes.



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Featured Products

Lasers in Industry

Photonics Media

Photonics Media has gathered articles and other valuable resources into a guide to the current use of lasers in industry, a reference tool and a resource for learning. This book is for anyone working on, implementing or considering the application of lasers for and in industrial settings.

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Navigating Best Laser Choices Crucial for Microwelding

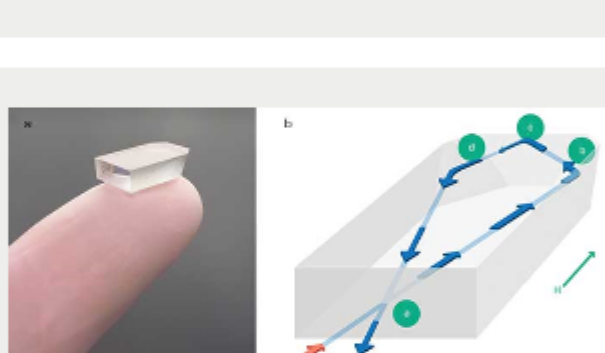
Four distinct laser types are suitable for microwelding: pulsed neodymium-doped yttrium aluminum garnet (Nd:YAG); continuous-wave (CW) ytterbium-doped fiber; quasi-continuous-wave (QCW) fiber; and nanosecond pulsed fiber. Each laser offers unique features that work best for specific applications.



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Quiet Lasers, Cool Science

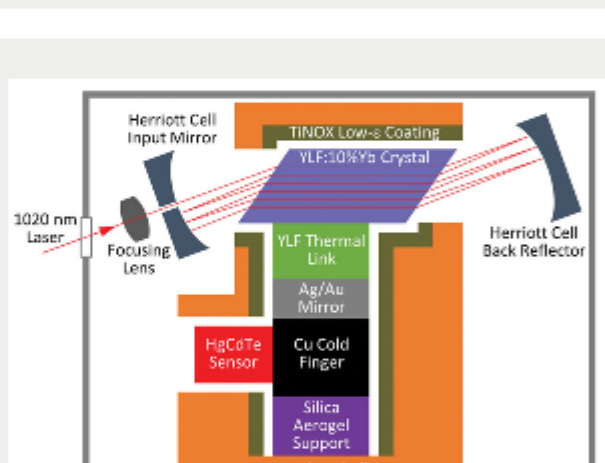
Trapping and cooling of atoms and nanoparticles is a growing area of laser-assisted research, with implications for quantum computing and ultraprecise sensing. Depending on the specifics of the atomic species being trapped and the target temperature range, several different laser cooling and trapping methods are now used.



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Solid-State Optical Cryocooler Refrigerates an IR Sensor to 135 K

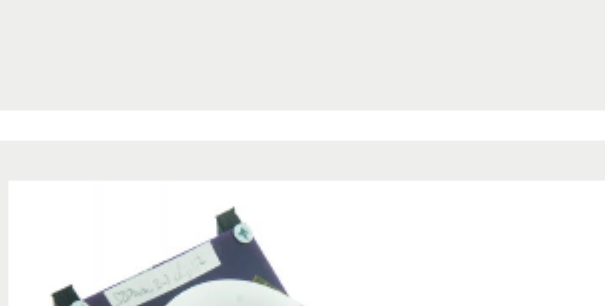
Researchers have demonstrated an all-solid-state optical cryocooler. The structure, which according to researchers is the first demonstration of laser cooling of a payload connected to a cooling crystal, could serve as a baseline for future optical cryocooler devices.



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Point-of-Use Power Meter Can Monitor High-Power Lasers in Real Time

A high-accuracy point-of-use laser power meter, in the form of a folding mirror called the Smart Mirror, could make in situ, real-time measurement of laser power possible. Unlike most traditional meters, the Smart Mirror is compact, fast, and can report laser powers at any time during the manufacturing process without interrupting work.



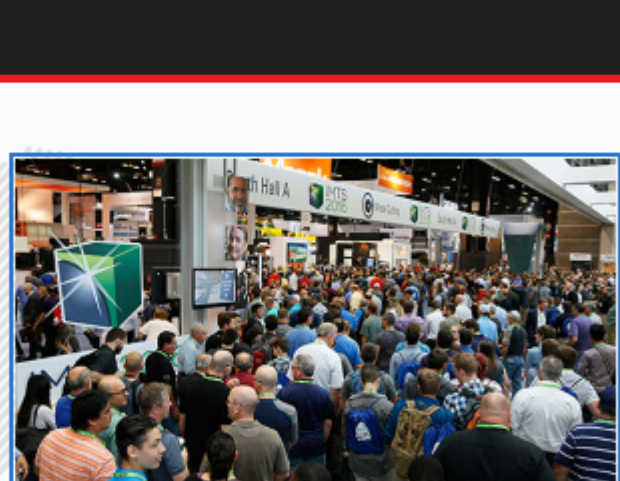
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Industry Events

IMTS 2018

September 10-15, 2018 - McCormick Place - Chicago United States
Photonics Media Booth: 236466

At IMTS, the International Manufacturing Technology Show, you will experience first-hand the manufacturing technologies that will help keep you on the cutting edge of your industry. It's the largest display and demonstration of global manufacturing technology in the western hemisphere, with more than 115,000 industrial decision-makers in attendance. The IMTS 2018 program will focus on six topics: Process Innovations, Alternative Manufacturing, Plant Operations, Automation, Quality, and Industry 4.0/IIoT.



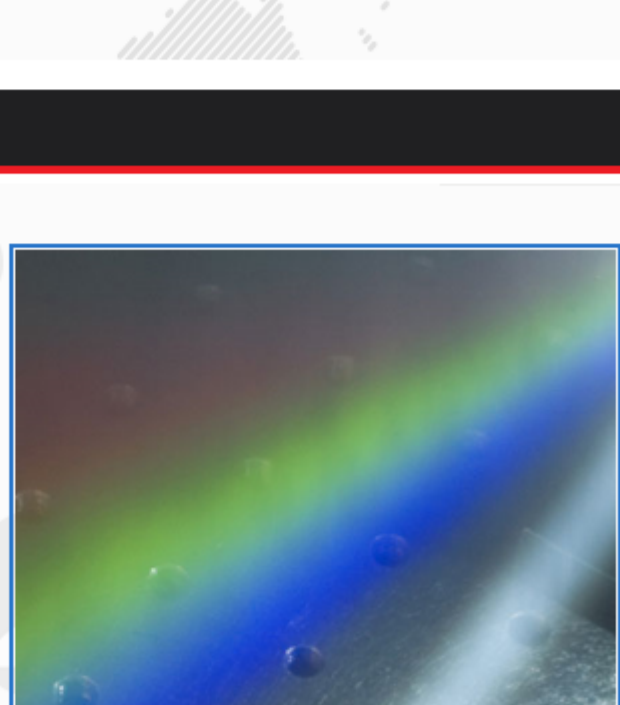
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Webinars

Laser Light Sources for Automotive and Specialty Lighting Applications

Tue, Sep 25, 2018 1:00 PM - 2:00 PM EDT

Laser light sources, which can offer more than 10 times the luminance of LEDs, are now being adopted into automotive headlights, specialty lighting, projection displays, and are being developed for biomedical and industrial applications. This webinar will address the latest advances in laser light sources and the technology that is now being developed to support this progress. Paul Rudy, co-founder of SLD Laser, will discuss the use of GaN laser diodes, phosphor chip technology, and high-luminance packaging to develop new laser light sources and will introduce SLD Laser's LaserLight illumination source technology. This webinar is sponsored by Lambda Research Corporation.



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