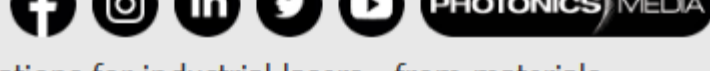
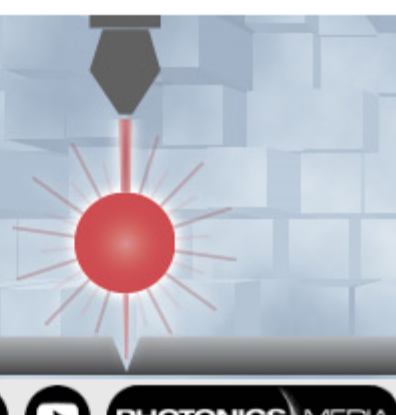


INDUSTRIAL PHOTONICS LASERS



A quarterly newsletter focused on the latest advancements in and applications for industrial lasers - from materials processing to metrology. Manage your Photonic Media membership at Photonics.com/subscribe.

sponsor

CORNING | Advanced Optics
Solving the world's toughest optical problems... Materials, Systems and Design

Industrial Laser News

3D Printing Creates Patient-Specific Implants

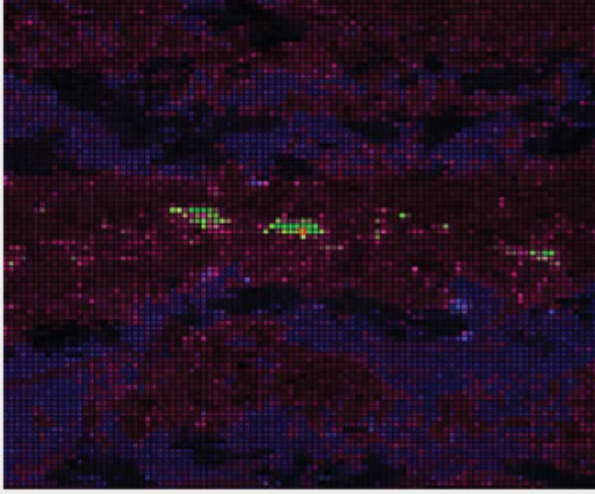
Laser-assisted manufacturing can build devices that shorten surgery time, improve results, and speed recovery. Laser sintering, commonly called 3D printing, enables the manufacture of PSIs and is one of the most prominent additive manufacturing processes. It relies on a digital 3D model that, in the case of medical implants, can be extracted from medical imaging techniques such as CT scans or MRI.



[Read Article](#)

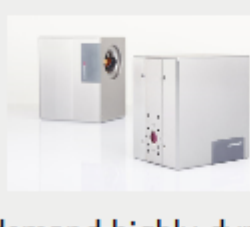
Laser-Induced Breakdown Spectroscopy Beyond the Lab

Laser-induced breakdown spectroscopy (LIBS) techniques have been studied and applied for more than half a century, but only recently has LIBS moved from research circles to industry. Offering advantages over other analytical techniques, laser-induced breakdown spectroscopy is useful in mineral extraction, forensics and point-of-care blood analysis.



[Read Article](#)

Featured Products



Speedy galvo-based z-scanner excellISHIFT

SCANLAB GmbH
Numerous laser applications

demand highly dynamic laser spot motion across complex three-dimensionally formed surfaces. Typical applications are: ultra-fast 3D processing, micro machining, marking of curved surfaces and deep engraving. Precisely for this need,SCANLAB developed a new type of z-scanner that extends a 2D scan system into a 3D system.

[Visit Website](#) [Request Info](#)



Precision Optics & Durable Optical Materials

Corning Incorporated, Advanced Optics

Corning is a world-leading supplier of optical materials and precision optics for the semiconductor industry. We produce fluoride crystals and fused silica that are optimized for transmission and durability at the harshest laser and radiation exposure levels.

[Visit Website](#) [Request Info](#)



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.

[Visit Website](#) [Request Info](#)



Pyroelectric Pulse Energy Detectors

Newport Corporation

The 919E Series detectors use innovative, patented technology which facilitates accurate and repeatable laser measurements of pulses over an extensive range of laser pulses. They can measure pulse sources with up to 25 kHz repetition rate.

[Visit Website](#) [Request Info](#)

sponsors

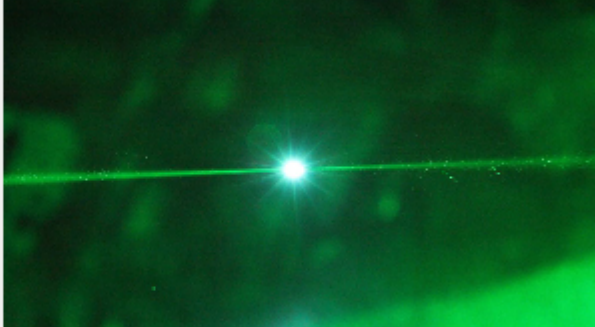
Find Your Solutions at Quality Expo
Quality expo
JUN 12-14, 2018
NEW YORK, NY
JACOB K. JAVITS CONVENTION CENTER
[REGISTER NOW](#)

IMTS2018
WHERE DREAMERS MEET & CONNECT

More News

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.



[Read Article](#)

Biomedical OEM Lasers Meet Trends in Therapeutics

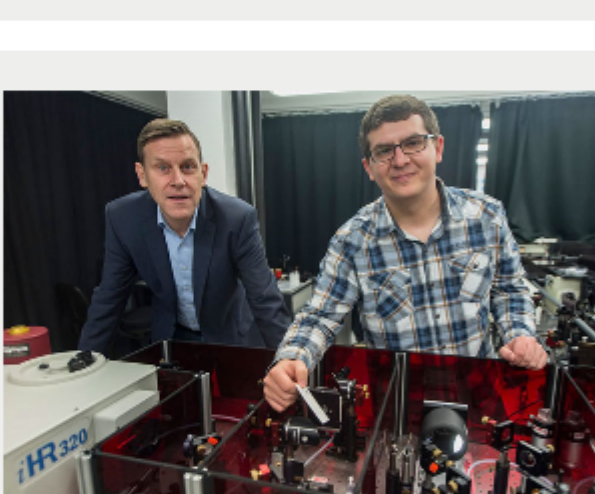
Biomedical lasers are experiencing strong growth, with a move toward diode and fiber lasers. The major market driver for medical therapeutics has long been the aging "baby boomer" population of the Western regions of the world. But today, an increasingly affluent and appearance-conscious population in Asia, namely China, is making medical therapeutics a more significant market.



[Read Article](#)

Ultrashort Laser Pulses Make Greenhouse Gas Reactive

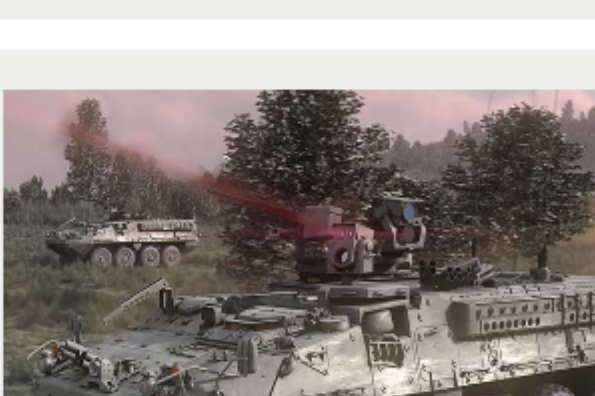
A highly reactive form of carbon dioxide (CO₂), created using ultrashort laser pulses, could help reduce dependence on nonrenewable energy sources. The CO₂ radicals could become building blocks for chemical products such as methanol, urea and salicylic acid.



[Read Article](#)

Lasers Adapt to Changing Threat Landscape

Speed-of-light engagements with limited collateral damage make laser weapon systems a highly precise and scalable option in modern warfare. Lasers offer a low-cost-per-shot solution to high-volume threats posed by drones and also offer the deep magazine capability to address multiple targets with reduced logistics tails.



[Read Article](#)

sponsors

LASYS International Trade Fair for Laser Material Processing
5 - 7 June 2018
Messe Stuttgart (Germany)

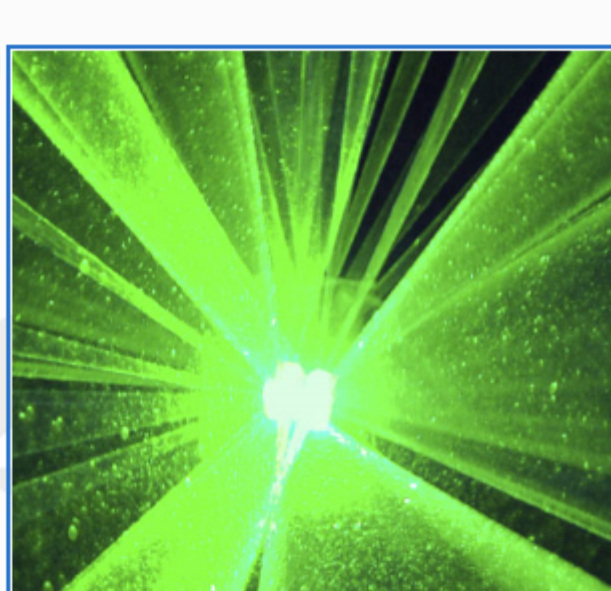
NEW PHOTONICS prodspec
FIND A LASER TO YOUR EXACT SPECS

Webinars

Practical Solutions for Laser Safety

Stay safe! This on-demand webinar explains the most important elements of laser safety and provides practical advice on how to implement a laser safety program in a research, academic and/or product development laboratory setting. The presenter, a laser safety consultant and long-standing expert in the field, offers lessons he has learned on lab design for a safe environment and laser accident prevention. This webinar is available for viewing any time, on demand.

[Watch Webinar](#)



Industrial Photonics Magazine



Industrial Photonics is your global resource on lasers, sensors, machine vision and automation systems for materials processing, process control and production.

Visit Photonics.com/subscribe to manage your Photonic Media membership.

[View Digital Edition](#) [Manage Membership](#)

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in *Industrial Photonics*. Please submit an informal 100-word abstract to our online submission form www.photonics.com/submitfeature.aspx.

Questions: info@photonics.com

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949
© 1996 - 2018 Laurin Publishing. All rights reserved. Photonics.com is Registered with the U.S. Patent & Trademark Office. Reproduction in whole or in part without permission is prohibited.