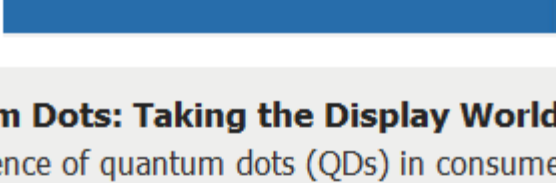


PHOTONICS spectra



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.

sponsor



Lasers in Industry

A resource on materials processing, micromachining and more.

ORDER NOW!

Only \$69.00

Quantum Dots: Taking the Display World by Storm

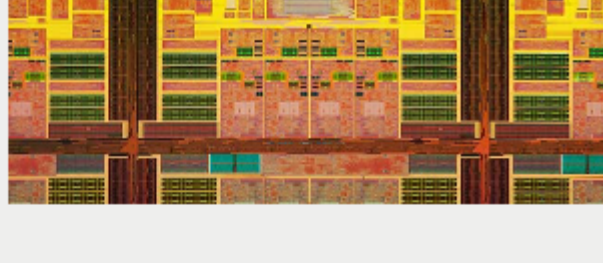
The presence of quantum dots (QDs) in consumer displays has been on the rise since Sony introduced QD Vision's edge optic in its 2013 Triluminos TV series. Samsung introduced its super ultrahigh-definition QLED TV two years later, accompanied by a strong marketing campaign for QLED, which has since driven interest from consumers and display makers alike. With improved color and energy efficiency, nearly every major display manufacturer is now incorporating QDs into their high-end displays.



[Read Article](#) [f](#) [in](#) [t](#)

Extreme UV Sources Fill the Gap

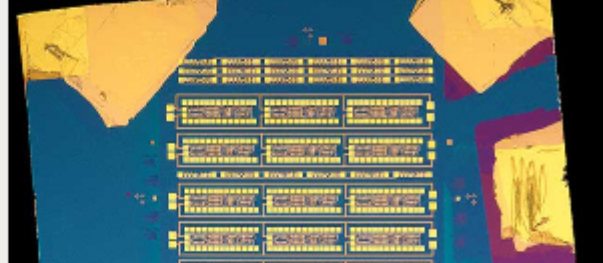
With several pressing applications in the EUV region, much effort has been directed at developing compact sources of ultrashort-wavelength UV radiation in recent years. That work has paid off with the commercial availability of several types of EUV light sources. These include the laser-produced plasma (LPP) sources — suitable for semiconductor lithography — and discharge-produced plasma (DPP) sources that can be used for less demanding applications in mask inspection and materials analysis.



[Read Article](#) [f](#) [in](#) [t](#)

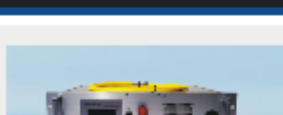
Thinnest of Materials Loom Large

Only a few atomic layers thick, 2D materials such as graphene, the compound semiconductor germanium selenium, the transition metal dichalcogenide molybdenum ditelluride, and others can provide new photonic capabilities — better multispectral imaging and single-photon sources, for example. As a result, areas ranging from imaging to quantum information processing could benefit.



[Read Article](#) [f](#) [in](#) [t](#)

Featured Products

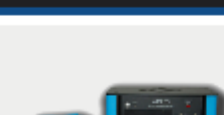


Turn-key Fiber-coupled Diode Laser System

PhotonTec Berlin GmbH

PhotonTec Berlin extends its diode laser portfolio with a new turn-key system. It integrates fiber-coupled diode laser module, power supply and cooling in one 19" rack, enabling both local and remote control of the power, operating mode and pulse parameters.

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



Aries Spectroradiometer

Gooch & Housego Orlando

The Aries spectroradiometer is the next generation optical measurement instrumentation focused on providing higher reliability and greater measurement throughput. Based on the industry standard OL 770 optical core, the Aries utilizes state-of-the-art on-board signal processing and a new powerful software suite...

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



New AvaSpec-NIR in EVO Series

Avantes BV

For measurements in the near infrared range out to 1.7 μm, Avantes offers a new series of uncooled spectrometer configurations. The AvaSpec-NIR256-1.7-EVO and the AvaSpec-NIR512-1.7-EVO offer the same high sensitivity optical bench with the next generation of electronics.

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



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 12VDC powered devices, triggered by the ampere draw of the laser.

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



Online Web Optics Software Launched

Laser Quantum Ltd.

Laser Quantum has recently launched a free online version of vChirp, a software developed in coordination with Prof. Uwe Morgner's group at the Institute of Quantum Optics at Leibniz Universität Hannover. This user-friendly software, designed with an easy drag and drop handling of desired components, has been set up ...

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



Collimation & Beam Shaping Optics

FISBA AG

Diode lasers are robust laser sources and when integrated with FISBA's optical components, high quality laser beam output can be achieved. FACS collimate output beams in the fast axis, but should be combined with other micro optical components for optimum performance.

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



The New Collar Workforce

Photonics Media

U.S. manufacturing companies are expected to face a shortage of two million skilled workers by the year 2020, according to reports. As a result, manufacturers and educators are looking for real, actionable ideas to train workers, reduce the shortfall and realize the potential of the new age of manufacturing.

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



Next Generation of Trilinear Line-Scan Cameras

Teledyne e2v (UK) Ltd.

Teledyne e2v announces its next generation of line-scan cameras - the high-resolution ELIIXA+ trilinear color range. These new 8k pixel cameras are ideal for industrial applications that require high color resolution and image sharpness such as print, label, textile, electronic and PCB inspection.

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

sponsors



In Case You Missed It

Combining Two Ultrathin Materials in a New QD Could Enable Widely Tunable Quantum Systems

A new type of quantum dot (QD) has been developed that allows for more accurate and more widely tunable energy levels of confined electrons. The advance in QD technology combines graphene (a conductive single atomic layer of carbon atoms) and hexagonal boron nitride (h-BN), a single layer of material similar to graphene except that it is insulating.



[Read Article](#) [f](#) [in](#) [t](#)

Maximizing Optical Alignment

Advances in silicon photonics and micro-optic technologies are driving automated alignment tolerances down to nanometer levels.

[Read Article](#) [f](#) [in](#) [t](#)

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.

[Read Article](#) [f](#) [in](#) [t](#)

Webinars

Holography for Display: From AR to HUD to 3D

Tue, Jun 12, 2018 1:00 PM - 2:00 PM EDT

Because holograms have the advantage of being thin and light, they are finding application in the fields of augmented reality and head-up display, where constraints on the size and weight of the optics exist. Holograms can also be used for integral imaging-based 3D display, lensless projection, and lidar beam steering. Professor Pierre-Alexandre Blanche from the University of Arizona will discuss the application of holography in all of these areas and the technological advantages of holography over other techniques.



[Register Now](#)

Coming in June...

Features

MOEMS; Detectors; Flat Optics; Optical Sensing; Thermal Imaging

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Photonics Spectra*. Please submit your intended 100-word abstract to Managing Editor Mike Wheeler at michael.wheeler@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.

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

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

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.