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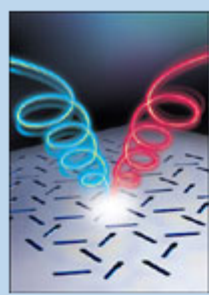
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Spin-controlled Photonics Could Streamline Communications Components
The components used in communications technology today are bulky and difficult to integrate with microelectronic circuits. But in the new class of metamaterials developed at Technion-Israel Institute of Technology, the standard characteristics of waves can be altered so the spread of light can be controlled more simply.

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Photonics Growth in Europe Outpaces GDP

With a worldwide market value projected to hit €615 billion in 2020 and remain stronger than the gross domestic product (GDP), photonics has moved from a niche application to a key enabling technology, according to the Photonics Industry Report 2013 presented this week at Laser World of Photonics in Munich.

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Sound Camera Ready to Hit the Market

The handheld camera, SeeSV-S205, visualizes sound in color contours similar to the way a thermal camera displays temperature with visual images, detecting noise arising from sources such as heavy machinery, home appliances, vehicles and vessels.

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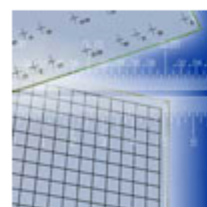
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Laser Safety Portable Barriers
Kentek Corp.

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IMRA Files Patent Suit Against Coherent in Germany

The US-based laser maker filed an infringement suit in Germany against two Germany-based subsidiaries of laser maker Coherent. The patent relates to using picosecond and femtosecond lasers to micromachine parts used for microelectronics applications.

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Boson-Sampling Computer Prototyped

Photons - highly mobile bosons - were inserted into a complex optical network, where they could propagate along many different paths. The entirely new and efficient model of a quantum computer was created by the universities of Vienna and Jena.

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Underwater Laser Imager Uses Separate Platform Approach

In a new approach for optics, the transmitter and receiver in an underwater laser imaging system were placed on separate platforms, a move that could enhance their performance in murky water, reports the Naval Air Warfare Center Aircraft Div.

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On this edition of the industry's premier weekly newscast: A moon-shaped metamaterial broadens bandwidths, optical gratings could make quantum technology portable, and Managing Editor Laura Marshall reports from Laser World of Photonics in Munich. Hosted by Photonics Media Senior Editor Melinda Rose.

Solar Cell Material Made in the Microwave

University of Utah metallurgists cooked up a nanocrystal semiconductor in just 18 minutes in an old microwave. They believe the semiconductor, which uses cheaper, more abundant and less toxic metals, could lead to more efficient photovoltaics, LEDs, biological sensors and systems.

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Optical Gratings Could Make Quantum Tech Portable

A microfabricated chip that produces ultracold atoms could lead to portable, ultraprecise clocks and quantum sensors, say physicists at the universities of Strathclyde and Glasgow, Imperial College London and the National Physical Laboratory.

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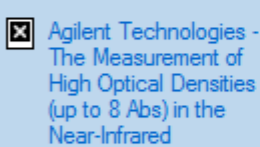
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UK Photonics Group Elects New Leaders

The Photonics Leadership Group (PLG), which includes members from more than 50 UK photonics manufacturers, associations and research institutes, elected a new chairman and chief executive, a move it said would help maximize growth of a £10.5 billion UK industry with global impact.

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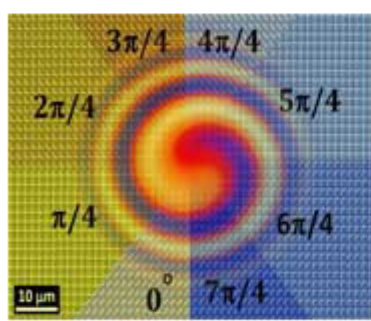
The Measurement of High Optical Densities (up to 8 Abs) in the Near-Infrared
Agilent Technologies

The optical densities of various materials used in the manufacture of laser safety eyewear have been determined in the NIR. The lens materials were measured over wavelength ranges corresponding to the laser wavelengths for which the eyewear was designed (InGaAs, 980 nm and Nd:YAG, 1064 nm). Prior to measurement, a variety of filters of known optical density were used to validate the photometric performance of the spectrophotometer. Using the addition of filters technique, photometric range, accuracy and linearity were demonstrated up to 8 Absorbance units at 1200 nm in the near-infrared.

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The Society for Information Display (SID) International Symposium, Seminar and Exhibition, dubbed Display Week, is the premier international gathering of scientists, engineers, manufacturers and users in the electronic information displays industry.

The 2013 technical program will include more than 70 technical sessions consisting of nearly 400 oral and poster presentations placing emphasis on special topic tracks such as 3-D, OLED TV, oxide thin-film transistors, lighting, and touch and interactivity. The event also will feature 20 90-minute seminars and four short courses that cover diverse topics related to information display, two market focus conferences and more than 200 exhibitors.

Keynote speakers include Kinam Kim of Samsung Display Co. presenting "Displays and Innovation: An Exciting Future," Bill Buxton of Microsoft Corp. who will deliver a keynote address titled, "The Society Life of Devices," and John F. Wager of Oregon State University who will present "Exciting Developments in Oxide TFT Technology."

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