





sponsor The HyperFine Spectrometer, Brillouin spectroscopy.

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# Spectroscopy Instrument to Aid in the Search for

**Extraterrestrial Life** 

**Top Stories** 

#### A compact spectroscopy instrument has been developed for use in planetary exploration. The system, called the standoff ultra-compact

micro Raman (SUCR) instrument, is capable of inspection and identification of minerals, organics and biogenic materials within several centimeters (2 to 20 cm) at a 10-µm resolution.

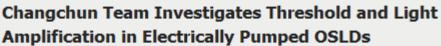


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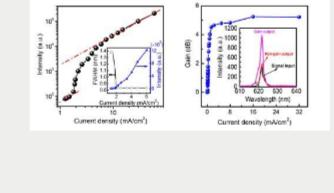






### Organic semiconductor laser diodes (OSLDs) can be prepared using simple processing technologies and can be integrated easily with other optoelectronic devices. This makes them attractive for use in low-cost,

compact, flexible and tunable lasers with spectral regions from the UV to NIR. Although lasing has been widely demonstrated under optical pumping, electrically pumped OSLDs have posed a challenge. Read Article





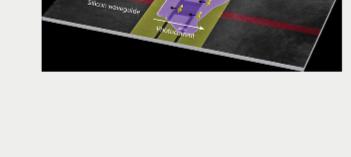
Photocurrent Using Topological Insulator

## photocurrent without using an electric voltage. This device, according to researchers, could provide a way of implementing coupled spin-orbit

Researchers have developed a device for controlling the direction of

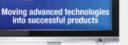
interaction between electrons and photons and could lead to applications in opto-spintronics and quantum information processing. Read Article

Successful Advanced



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A new, 12-lecture course from successful scientist-turnedbusinessman David Krohn will show you how to identify market opportunities and develop a roadmap for

**Technology Commercialization** 

# successful commercialization. Commercialization of

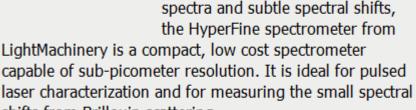
for Everyone!

Photonics Media

Innovative Technology through Entrepreneurship — CITE demonstrates how to move advanced technology into

successful commercial products. Visit Website Request Info sponsors





#### spectra and subtle spectral shifts, the HyperFine spectrometer from

LightMachinery Inc.

The HyperFine Spectrometer

Designed for measuring hyperfine

## LightMachinery is a compact, low cost spectrometer

shifts from Brillouin scattering. Visit Website Request Info

A new resource

on industrial laser technologies, applications, and markets.



A new positioning technology uses vehicle-mounted cameras



### supported by algorithms to track the position of a vehicle in underground tunnels to within yards of its location. Autonomous

in Mining Sites

# sensing or infrastructure modifications to navigate.

vehicles operating in underground mines currently rely on expensive

Read Article Furukawa Electric Opens Mexican Plant

Furukawa Electric LatAm, a company of the Furukawa Electric Group,

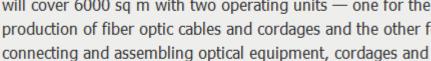
production of solutions for the communications market. The new plant

has opened a new manufacturing facility in Mexico focused on the



will cover 6000 sq m with two operating units — one for the production of fiber optic cables and cordages and the other for

accessories.



**More Headlines** 





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**Industry Events** SPIE Photonics West 2018

SPIE Photonics West 2018 is the flagship event for the photonics industry. Featured technologies will include: Lasers and other light sources; cameras and CCD components; fiber optics; high speed

imaging and sensing; optical materials, substrates and coatings; and much more. With more than 70 courses and workshops to choose from, there is one to fit each individual's needs. Program tracks

spectroscopy, microscopy and imaging; laser sources; nonlinear optics

include: Photonic therapeutics and diagnostics; biomedical

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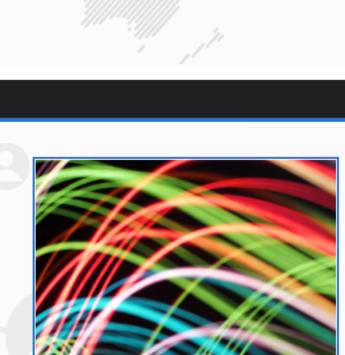
#### January 27 - February 1, 2018 - Moscone Center - San Francisco United States Photonics Media Booth: 846/847

LESA RPI Horticulture Lighting Study Points to Lumileds LEDs Read Article

## and beam guiding; optoelectronic materials and devices; photonic integration; semiconductor lasers and LEDs; and more.

# **Webinars**

This webinar will provide a brief history of the use of light and color to diagnose and treat disease; review the science behind photobiomodulation (PBM); and present examples of "real world" applications where this emerging technology is being successfully used. Presenter Robert S. Dotson, M.D., FAAO (board-certified, Ophthalmology) has been actively involved in researching and developing PBM technology for applications within ophthalmology for over 15 years. He is the founder of two companies focused on developing PBM applications, Photospectra and LumiThera. Register Now



**Optical Transfer Function Instrumentation** 

PBM 101: Photobiomodulation Basics

Tue, Jan 9, 2018 1:00 PM - 2:00 PM EST

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