# BIOPHOTONICS

BRINGING LIGHT TO THE LIFE SCIENCES®













developments in lasers, imaging, optics, spectroscopy, microscopy, lighting and more.

## Fountain of Youth

From the Editor's Desk



## JAMES SCHLETT, EDITOR

It wasn't that long ago when the biggest downside to laser facial rejuvenation was the significant recovery period after the procedure. In exchange for looking years younger, patients often had to brace for up to a month of uncomfortable recuperation. Cosmetic laser companies are now pushing the bounds of fractionated technology to further reduce costs and downtime, by introducing systems with multiple and new wavelengths as well as faster and more powerful picosecond

and diode lasers.

Read Article (3 (7) (8) (in C)

Multiplexed Imaging



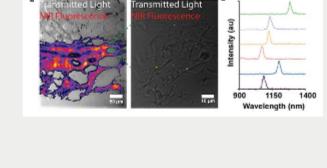
#### The field of biomedical imaging represents the acquisition of images for diagnosis and treatment evaluation using various imaging techniques, such as MRI, ultrasound, x-ray, PET and more. In the past few years, nondestructive

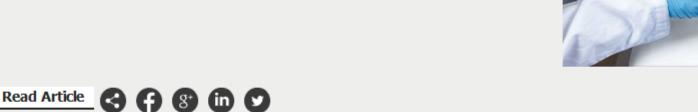
techniques based on optical imaging have grown in popularity, as this approach permits visualization of cells and molecules without requiring a biopsy or cell culture. Read Article (4)

> Picosecond lasers and the combination of fractional ablative and nonablative modalities are allowing cosmetic surgery technology

Facial Lasers' Future: Shorter Downtimes, Darker

Skin Types





demographic.



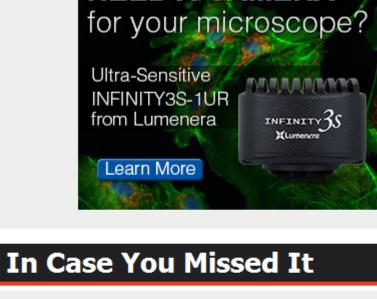






companies to reduce downtime and open up laser facials to a broader





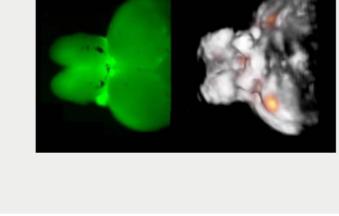
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#### Activity An optoacoustic tomography platform for imaging neural activation deep in the

#### brain has enabled researchers to observe the activation of large neural circuits, currently up to the size of a small-animal brain, in real time and 3D.

Novel Optoacoustic Technique Reveals Deep Neural

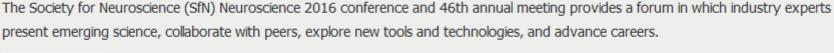


SfN 2016 Show Presents Emerging Science, Collaboration









## Read Article

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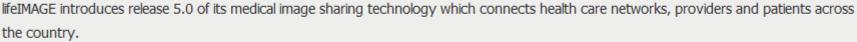
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#### How Machine Vision is Benefitting from Biomimicry

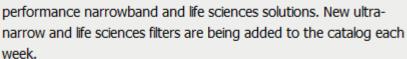






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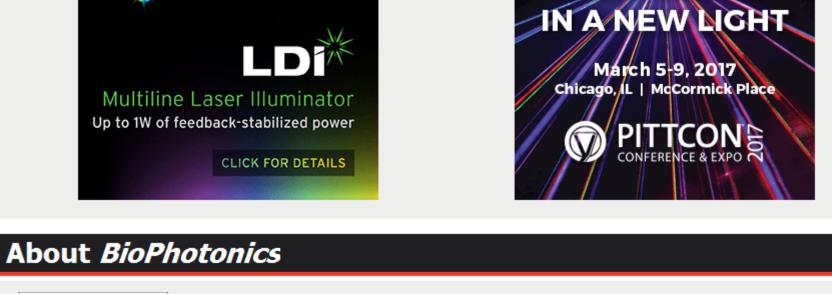
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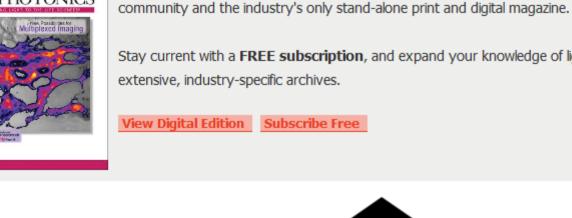
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