

PHOTONICS MEDIA





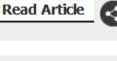
## Holograms Gain Efficiency from Metasurface Fabrication

Technique

### Nanostructured metasurfaces have been incorporated into compact holograms, enabling the production of different images depending on the polarization of

incident light. The highly efficient holograms lose very little light in the processing of creating the image, and are expected to improve antifraud holograms as well as those used in displays.











world-leading 7.6 percent efficiency in a 1-cm<sup>2</sup> solar cell. The achievement marks a milestone for thin-film photovoltaic (PV) technology — which is being explored for

### zero-energy buildings, among other applications — on its path toward commercially competitive 20 percent efficiency.

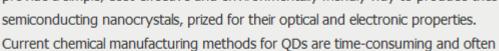
**3 4 8 6 9** 

A Greener Way to Create Quantum Dots A method for manufacturing quantum dots (QDs) from a single enzyme may provide a simple, cost-effective and environmentally friendly way to produce these semiconducting nanocrystals, prized for their optical and electronic properties.



require toxic solvents.

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providing an additional \$1.7 million for the project.





universe, from its earliest moments to today. The Heising-Simons Foundation is

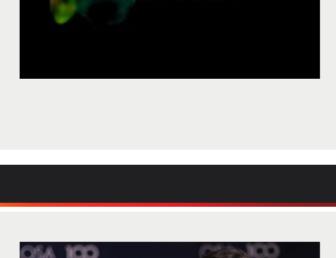
Tomography (OPT) has been demonstrated as useful for imaging and monitoring apoptosis in whole live organisms in 3D. Termed FLIM OPT, the method may

potential drug therapies in live organisms over space and time.

provide a means to visualize cell signaling processes and even responses to

Fluorescence Lifetime Imaging (FLIM) combined with Optical Projection

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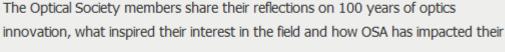
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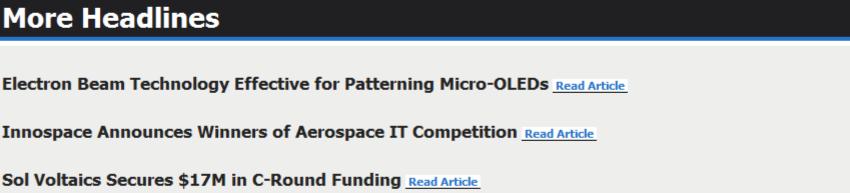


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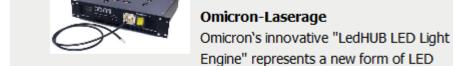
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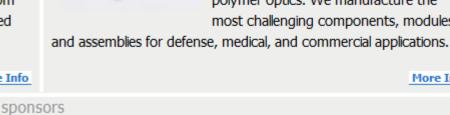
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**Industry Events** SID Display Week 2016 May 22-27, 2016 - The Society for Information Display Moscone Convention Center - San Francisco, CA Display Week is the premier international event for the electronic display industry, where breakthrough technologies are introduced. Comprised of attendees and exhibitors representing the foremost display-engineering talent from the world ove, and leaders representing both the commercial and consumer markets, Display Week offers synergies unparalleled by any other display event. Display



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