This Week In













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Top Stories

Enable Quantum Circuits Researchers integrated silicon photonic devices with a solid-state single

Integration of Quantum Emitters to Photonic Device Could

photon emitter, using a hybrid approach that combines silicon photonic waveguides with quantum dots. The waveguides were used for manipulating light, and the InAs/InP quantum dots were used to generate light efficiently at wavelengths spanning the O-band and Cband.

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Imaging



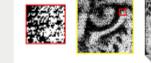




A new imaging technology has been developed that can capture and count single photons with resolution as high as one megapixel and as

Next-Gen Image Sensor Delivers High-Quality, Low-Light

fast as thousands of frames per second. Called the Quanta Image Sensor, or QIS, this technology enables highly sensitive, high-quality, easy-to-manipulate digital imaging as well as computer vision and 3D sensing, even in low-light situations.







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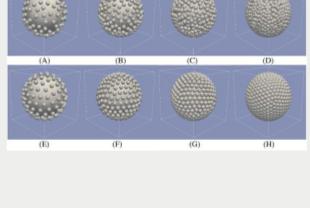




Team Studies Optical Properties of Plasmonic Nanovesicles **Using Computational Approach** An on-demand, light-triggered drug release method, known as

vesicular assembly of small plasmonic nanoparticles, or plasmonic vesicle, could be used to treat disease; support the study of the nervous system in real time; provide insight into how the brain works; and provide rapid clearance of small inorganic particles from the body.

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Superresolution Microscopy Poster



With interest in the superresolution microscopy field growing rapidly, the editors of

acknowledged experts – created a poster with readers in mind that is suitable for lab, classroom and office. It features visually stunning, high-resolution images that reveal never-before-seen worlds at the sub-cellular level.

Photonics Media



Teledyne e2v (UK) Ltd. The 3D Time of Flight (ToF) BORA

BORA 1.3M Time of Flight

image sensor, designed with Teledyne e2v's proprietary CMOS imaging technology. It is ideal for systems operating at short or mid distances and

sensor is a 1.3 million pixel CMOS

ranges. It features an optimized multi-integration mode together with an electronic global shutter. Visit Website Request Info

<u>Sensor</u>

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PHOTONICS MEDIA

Reconstructed image

(without magnetic assist)



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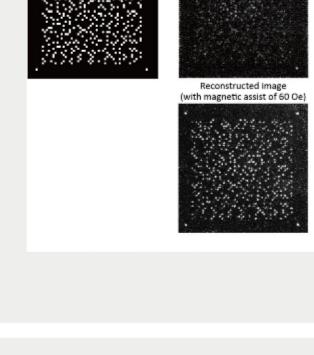
Original signal pattern

Data Storage A research team has applied magnetic assist recording technology to

magnetic-holographic memory, reducing recording energy consumption and achieving non-error data reconstruction. Their work could pave the way for practical application of magnetic-holographic

Improving Quality of Hologram Memory for Use in Optical

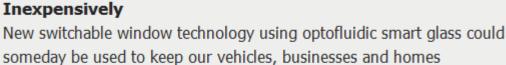
memory for storing large volumes of data at ultrahigh recording density and at ultrahigh speed.



Optofluidic Smart Glass Heats and Cools Efficiently, Inexpensively



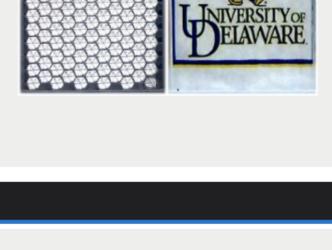




Rather than reflecting light in all directions, like a mirror, the retroreflective panel reflects light back in the direction it came from.

comfortable regardless of the temperature outside. This technology contains a plastic panel with a retroreflective pattern of structures.

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Industry Events

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Complex Lenses

Infrared Lenses