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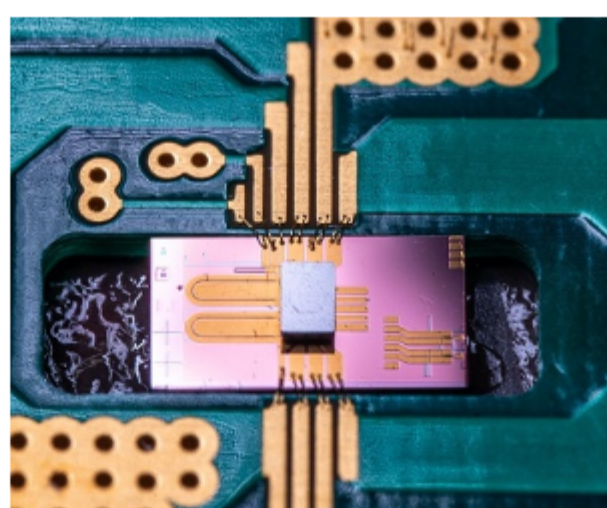
Lasers • Optics Spectroscopy • Biomedical Imaging

Top Stories

Silicon Modulator Integrates Photonics and Electronics to Perform at 100 Gbit/s

Researchers from the University of Southampton's Optoelectronics Research Centre have demonstrated an all-silicon optical modulator at 100 Gbit/s and beyond, without the use of digital signal processing. The transmitter nearly doubles the maximum power rate of current state-of-the-art devices.

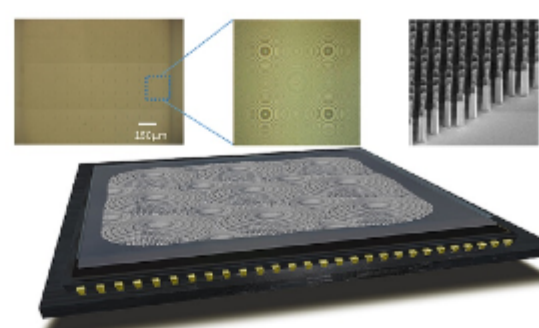
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Metalens Microscopy Eliminates FOV Constraints

Researchers from Nanjing University are using metalenses to enhance and shrink microscopes while maintaining resolution with a large field of view. Tao Li, professor of engineering and applied science, and his team mounted a metalens on a CMOS image sensor to create a prototype of an imaging system that is roughly the size of a coin.

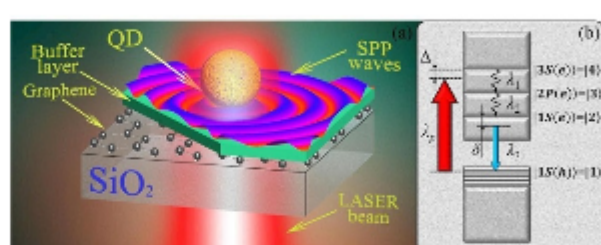
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Extra Level Helps Convert Light Energy into Surface Waves on Graphene with Increased Efficiency

Collaborating physicists from two Russian universities have successfully converted light energy into surface waves on graphene at nearly 90% efficiency. A so-called laser-like energy conversion process with collective resonances, and semiconductor quantum dots acting as intermediary converters are central to the plasmonics demonstration.

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Featured Products



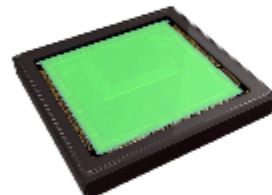
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Upcoming Webinars



Good, Better, Best: Pushing the Limit in Optical Spectroscopy

Tue, Dec 8, 2020 11:00 AM - 12:00 PM EST

UV-Vis-NIR and Fourier transform infrared (FTIR) spectroscopy are some of the most commonly used analytical techniques prevalent in materials testing labs today. UV-Vis-NIR is widely used across a variety of high-tech industries including optics, semi-conductors, solar, aerospace, automotive, virtual-reality, and defense, among others. Advances in FTIR spectrometers have primarily come in the form of improvements in spectral resolution and wavenumber accuracy (abscissa) instead of improvements in the photometric accuracy (ordinate), which is essential to the optics industry. In this webinar, presenters Doug Townsend and John Birtles, Ph.D., will focus on PerkinElmer's High Performance Lambda 1050+ UV-Vis-NIR, complete with its portfolio of diverse modular accessories, as well on the performance of the Spectrum 3 Optica FTIR spectrometer in measuring the transmittance of high refractive index samples. Presented by PerkinElmer.

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