

Webinar

Frontiers in Optical Parametric Oscillators

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Optical parametric oscillators (OPOs) are one of the most viable and practical sources of coherent radiation based on nonlinear frequency conversion. Starting from a fixed pump wavelength, OPOs are uniquely capable of providing wide wavelength tunability along with temporal versatility. Such broadly tunable sources in the mid-infrared wavelength range are critical for a variety of applications including spectroscopy and biomedicine. These applications are driving the rapid development and commercialisation of a new class of high power, high repetition rate, mid-infrared OPOs. In this seminar, I will present the development of state-of-the-art ultrafast mid-infrared OPOs in the 3-8 μm wavelength range along with associated challenges.

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4:00 PM