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标题: Development of an ultra-widely tunable DFG-THz source with switching between organic nonlinear crystals pumped with a dual-wavelength BBO optical parametric oscillator
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摘要: We developed a difference frequency generation (DFG) source with an organic nonlinear optical crystal of DAST or BNA selectively excited by a dual-wavelength beta-BaB2O4 optical parametric oscillator (BBO-OPO). The dual-wavelength BBO-OPO can independently oscillate two lights with different wavelengths from 800 to 1800 nm in a cavity. THz-wave generation by using each organic crystal covers ultrawide range from 1 to 30 THz with inherent intensity dips by crystal absorption modes. The reduced outputs can be improved by switching over the crystals with adequately tuned pump wavelengths of the BBO-OPO. (C) 2012 Optical Society of America
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