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Title:Stable dual-wavelength microlaser controlled by the output mirror tilt angle
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Abstract:A continuous-wave dual-wavelength solid-state microlaser is presented and a technique for regulating the gain competition between the two wavelengths is proposed, based on the angular tilt of the laser cavity output mirror. Laser behavior is studied and balanced dual-wavelength emission is obtained with output power levels as high as 200 mW for 2 W pump power. Sum frequency mixing is demonstrated making the source promising for Terahertz generation in the 0.5-0.7 THz range through difference frequency generation.
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