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摘要: The spectra and kinetics of the low-temperature interband photoluminescence of epitaxial structures of terahertz quantum cascade lasers is studied under conditions of strong pulsed excitation. Photoluminescence corresponding to transitions between both the ground and excited states of two tunnel-coupled wells is observed at high excitation levels (600 mW; spot diameter similar to 200 mu m). Kinetic measurements show that the rise and decay times significantly decrease up to the time resolution of the measuring system at wavelengths < 770 nm with decreasing photoluminescence observation wavelength.
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