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标题: High-Power Broadband Terahertz Generation via Two-Color Photoionization in Gases
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摘要: We review high-energy, broadband terahertz (THz) generation in two-color laser-produced gaseous plasma. We first describe our microscopic plasma current model for directional plasma current and far-field THz radiation generation. Experimental results for THz yield dependence on laser energy, optical phase difference, gas species, and gas pressure are presented. We also describe ultrabroadband THz generation and detection in our experiments and numerical simulations. Finally, we discuss 2-D plasma currents for THz polarization control and macroscopic phase-matched THz generation.
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