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标题: Generation of Elliptically Polarized Terahertz Waves from Laser-Induced Plasma with Double Helix Electrodes

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摘要: By applying a helical electric field along a plasma region, a revolving electron current is formed along the plasma and an elliptically polarized far-field terahertz wave pattern is observed. The observed terahertz wave polarization reveals the remarkable role of velocity retardation between optical pulses and generated terahertz pulses in the generation process. Extensive simulations, including longitudinal propagation effects, are performed to clarify the mechanisms responsible for polarization control of air-plasma-based terahertz sources.

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