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Title:High power terahertz pulses generated in intense laser-plasma interactions

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Abstract:Terahertz (THz) radiation has attracted much attention due to its wide potential applications. Though radiation can be generated with various ways, it is still a big challenge to obtain strong tabletop sources. Plasma, with the advantage of no damage limit, is a promising medium to generate strong THz radiation. This review reports recent advances on strong THz radiation generation from low-density gases and high-density solid targets at different laser intensities. &copy; 2012 Chinese Physical Society and IOP Publishing Ltd.

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Main heading:Terahertz waves

Controlled terms:Beam plasma interactions - Density of gases - Laser beams - Laser fusion

Uncontrolled terms:High-power - Laser intensities - Laser-plasma interactions - Low density - Potential applications - Solid targets - Terahertz pulse - Terahertz radiation - THz radiation

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