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标题: Controlling the spectrum of high-power terahertz radiation from a laser-driven plasma wave
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摘要: Generation of strong THz waves is a very important and difficult research issue. We performed particle-in-cell (PIC) simulation studies to investigate the possibility of powerful THz generation and spectrum controllability by using a laser-driven plasma wave. Our results show that it is possible to produce spectrum-controllable high-power (>1 MV/cm) THz waves by manipulating the plasma density profiles. This method may provide a good way for coherent high-power THz radiation sources, of which the spectrum ranges from a narrow bandwidth to a wide bandwidth. (C) 2012 Elsevier B.V. All rights reserved.

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