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Title:Langmuir wave undulator for terahertz radiation

Authors:Son, Seunghyeon (1); Moon, Sung Joon (2); Park, Jaeyoung (3)

Author affiliation:(1) Princeton University, 18 Caleb Lane, Princeton, NJ 08540, United States; (2) 28 Benjamin Rush Lane, Princeton, NJ 08540, United States; (3) 5771 La Jolla Corona Dr., San Diego, CA 92037, United States

Corresponding author:Son, S.(seunghyeonson@gmail.com)

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Abstract:A source of terahertz (THz) radiation based on the free-electron laser, where a plasma wave plays the role of undulator, is theoretically studied. This scheme can generate coherent photons in the range of 0.1-10 THz. The feasible physical parameters in laboratories are estimated.
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