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Construction progress of THz-FEL for NFTHZ

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Superconductors, multiferroic materials, and giant magnetoresistance are the key to the information, energy, and optoelectronic industries. In the terahertz band, their common characteristics are related to the terahertz complex optical constant, and they also strongly interact with ultrafast terahertz waves, resulting in many fascinating physical phenomena. This paper will introduce an accelerator-based terahertz radiation source for a high-throughput material physical property measurement system. The method of a laser-modulated electron beam is adopted in this accelerator to generate tunable terahertz light in the frequency range of 0.5-5 THz.

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