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An ultrafast strong-field terahertz light source to characterize quantum functional materials

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An ultrafast strong field terahertz(THz) lightsource will be built at the Hefei National Laboratory. This lightsource aims to characterize the multi-quantum collective behavior of the quasiparticles and enable the cutting-edge exploration of materials for the quantum information technique. To meet these goals, the lightsource needs to cover the electromagnetic spectrum of 0.1-10THz, the minimum width of light pulse should be shorter than 100fs, and the maximum intensity of electric field should exceed 1MV/cm. In this paper, the ultrafast strong field THz lightsource is introduced.

Footnotes

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