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Electro-optical sampling non-synchronous delay scanning measurement of electron beam bunch length at BFEL

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摘要

The Electro-optical sampling delay scanning technique can be used for electron beam bunch length measurement. A novel non-synchronous delay scanning technique based on the electro-optical sampling measurements is presented. Based on Beijing Free Electron Laser (BFEL), the electron beam bunch length was measured with the electro-optical sampling technique for the first time in China. The result shows that the electron beam bunch length at BFEL is about 5.6 ± 1.2 ps.

关键词

[electro-optical sampling, measurement of electron beam bunch length, non-synchronous delay scanning technique](#)

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