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Preliminary design for the JHLS storage ring

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Jinhua light source (JHLS) is a synchrotron radiation facility with the aim of the increasing requirement of user demands for industrial applications. The lattice contains 16 super-periods in order to accommodate different end users for experiments. The circumference is less than 240 m, and the natural emittance is less than 10 nm·rad at 2.6 GeV. In this paper, we present a modified Triple Bend Achromat (TBA) lattice as the preliminary design for the JHLS storage ring. The 'sandwich'longitudinal gradient bends and horizontal defocusing bends are introduced into lattice in order to decrease the natural emittance. The detail design is reported in this paper.

Footnotes

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Paper preparation format

Region represented

Asia

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