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Status of tune feedback system in Taiwan Photon Source

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Taiwan Photon Source (TPS) is a 3-GeV dedicated synchrotron light source, consisting 24 double bend achromat that provide six 12-m long straights and eighteen 7-m short straights to accommodate insertion devices including in-vacuum undulators (IU) and elliptical polarization undulators. The gap/phase moving will cause tune shift, lattice function distortion, closed-orbit distortion, variation of emittance and energy spread. These effects deteriorate the quality of the synchrotron light source. Many actions are taken to cure these undesired effects, among which a tune feedback system has been implemented to compensate the tune shifts.

Footnotes

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Paper preparation format

Word

Region represented

Asia

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