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## Study of an upgraded lattice for Taiwan photon source

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To maximize the performance of the current Taiwan Photon Source (TPS) while minimizing costs, a feasibility study was conducted to reassess the lattice scheme within the existing tunnel. The current TPS configuration exhibits a considerable difference in length between the long (12 m) and short (7 m) straight section. In an effort to minimize the source points displacement for insertion devices and enhance overall beam performance, we propose an upgrade lattice design based on the 5BA scheme. The report discusses the challenges and preliminary results of this 5BA lattice design, showcasing its potential for enhancing TPS capabilities.

### Footnotes

### Funding Agency

### Paper preparation format

### Region represented

Asia

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