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New insertion devices for BRIGHT beamlines at the Australian Synchrotron

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In 2016 the Australian Synchrotron embarked on the BRIGHT program to build four new insertion device beamlines: Biological Small Angle X-ray Scattering (BioSAX), High Performance Macromolecular Crystallography, Advanced Diffraction and Scattering and Nanoprobe beamlines. To maximize the flux for these very demanding beamlines, cryogenic and short period devices have been selected. In particular a 1.6 m long 16 mm period superconducting undulator, a 3 m long 18 mm period cryogenic undulator (CPMU), 3 m long 17 mm in-vacuum undulator and a 2 m long 48 mm period superconducting wiggler. This report will discuss some of the design considerations and overall parameters of the new insertion devices.

Footnotes

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Paper preparation format

LaTeX

Region represented

Asia

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