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Status of SACLA

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SACLA has continuously provided stable and high-quality XFEL light for users at three beamlines with a cumulative user operation time of more than 6,000 hours per year. Recently, the improvement of the hardware components, the installation of the various feedback controls, and the implementation of machine learning (ML) tools have enabled us to enhance the stability and to achieve a quick and systematic optimization of the XFEL beam parameters at the SASE and self-seeding operation conditions. As a scientific highlight, an extreme focus of 7 nm with an unprecedented X-ray intensity of $1e22$ W/cm² has been achieved with a novel focusing system. The commissioning of the next-generation detector CITIUS has recently started.

Footnotes

Funding Agency

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Session Classification: First Lasing, New FEL projects and Facility Reports

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