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Recent Advances in the Generation and Application of Synchrotron Radiation

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Publication Date

1990-05-01



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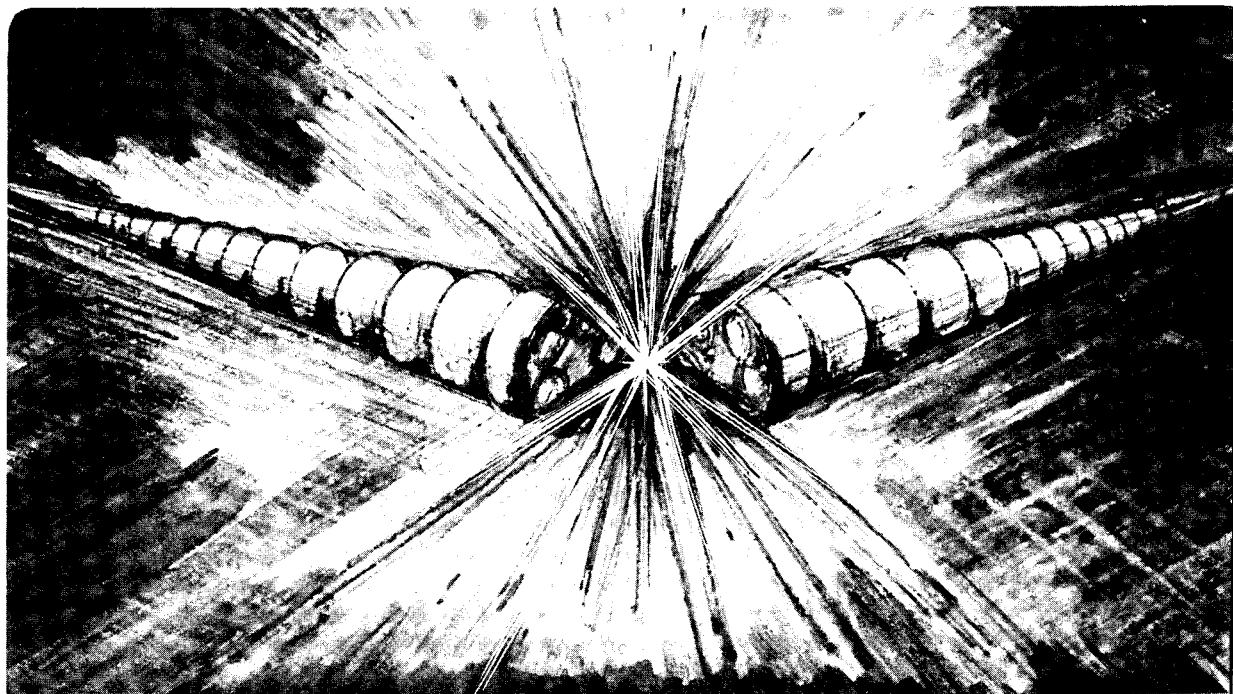
Accelerator & Fusion Research Division

Presented at the American Physical Society—New Sources
of Short Wavelength Radiation Conference,
Monterey, CA, May 21–23, 1990, and to
be published in the Proceedings

Recent Advances in the Generation and Application of Synchrotron Radiation

B.M. Kincaid

May 1990



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LBL-28580

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Recent Advances in the Generation and Application of Synchrotron Radiation.*

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A new generation of synchrotron radiation light sources covering the VUV, soft x-ray and hard x-ray spectral regions is under construction in several countries. These sources are designed specifically to use periodic magnetic undulators and low-emittance electron or positron beams to produce high-brightness near-diffraction-limited synchrotron radiation beams. Some of the novel features of the new sources will be discussed, along with the characteristics of the radiation produced. Potential applications and experiments in atomic and molecular physics taking advantage of the high flux, broad tunability, and spectral coverage of the new sources will be discussed.

*This work was supported by the Director, Office of Energy Research, Office of Basic Energy Sciences, Materials Sciences Division, of the U.S. Department of Energy under Contract No. DE-AC03-76SF00098.

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