

**The Advanced Light Source at the Lawrence Berkeley Laboratory\***

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The Advanced Light Source (ALS), a National facility currently under construction at the Lawrence Berkeley Laboratory (LBL), is a third-generation synchrotron light source designed to produce extremely bright beams of synchrotron radiation, in the energy range from a few eV to 10 keV. The design is based on a 1 - 1.9 GeV electron storage ring (optimized at 1.5 GeV), and utilizes special magnets, known as undulators and wigglers (collectively referred to as insertion devices), to generate the radiation. In this paper we describe the main accelerator components of the ALS, the variety of insertion devices, the radiation spectra expected from these devices, and the complement of experiments that have been approved for initial operation, starting in April 1993.

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