

## 合肥国家同步辐射实验室工程进展

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**摘要** <正> 合肥国家同步辐射实验室工程的目的是建设我国第一台真空紫外光和软X射线专用同步光源,为超大规模集成电路光刻、超微细加工、自由电子激光、材料科学、生命科学、固体物理、表面物理、原子物理、分子物理、光化学、辐射计量学、医学等高技术发展和科学研究服务。该工程于1984年11月奠基,目前正处于紧张建设阶段。

关键词

分类号

### STATUS REPORT OF HESYRL PROJECT

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**Abstract** The purpose of Hefei National Synchrotron Radiation Laboratory (HESYRL) project is to build a dedicated VUV and soft X-ray Synchrotron light source, an 800 MeV storage ring with a 200 MeV linac injector. The critical wavelength of the Synchrotron radiation from bending magnets is 24 Å. The brilliance at 300 mA stored beam current can reach  $3.48 \times 10^{14}$  photons/s/mm<sup>2</sup>·mrad<sup>-2</sup>·1% BW. A total of 27 photon beam ports, including three ports from insertion devices, can accommodate photon beamlines. However, only 4 beamlines will be installed and open to users during the start-up phase of the light source. Two of them cover UV region, while the other two cover soft x-ray region. The construction of the light source is underway. Most of the linac components have been completed. The components of the storage ring are being manufactured in factories. The photon beamlines are in design and prototype phase. The construction of the linac tunnel and klystron gallery are finished. The storage ring hall will be completed by the end of this year. The linac installation began last summer, and the storage ring installation is scheduled for next year.

### Key words

DOI

通讯作者

#### 扩展功能

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