

技术及应用

联动真空联锁保护控制系统研制

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摘要 本工作研制国家同步辐射实验室U7站的3套联动真空联锁保护控制系统。研究给出了实现此联动系统的方法, 实现了在3个共用前端区的线站之间的光纤通信, 使整个系统的响应速度、可靠性及抗干扰能力均得到提高, 系统的快阀响应时间最快可达8 ms。

关键词 [真空保护](#); [联锁](#); [控制](#)

分类号

Development of Linked Vacuum Interlock Protection Systems

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Abstract Three linked vacuum interlock protection systems were developed for three U7 stations shared one beam line of National Synchrotron Radiation Laboratory. The system control principle, logical points and method were described. Optical fibre was used for communications between beam lines. By implementing the protection system, reliability and anti jamming of the system were enhanced with fast response time. The response time of FCV valve can be reduced to 8 ms.

Key words [systems vacuum protection](#) [interlock](#) [control](#)

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