

Poster Session (P)

Poster Lunch (1)

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## RESEARCH ON AUTOMATIC CONTROL SYSTEM OF MULTI-XENON LAMPS FOR SIMULATED SOLAR RADIATION IN SPACE ENVIRONMENT

### Abstract

The paper presents a method of automatic control system based on thirty-seven xenon lamps for simulated solar radiation in space environment. The control system is divided into the control terminal and the executive terminal, which can process the function calls and data interaction between each other. According to the actual feedback of the test data, the system can adjust the drive output; automatically achieve the test process to reduce artificial operation. The system includes xenon lamp supply system, xenon lamp trigger system, lighting control system, irradiance detection system and irradiance automatic control system, which achieve the functions of the xenon lamp fault detection, xenon lamp circuit protection, xenon lamp anodic temperature monitoring function and xenon lamp life estimation function. The automatic control of the light source is great significance for the development of the solar simulator.