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DESIGN AND IMPLEMENTATION OF INTELLIGENT CONTROL SYSTEM FOR LUNAR
SAMPLING&ENCAPSULATION

Abstract

Due to the influence of communication delay and mission environment, the unmanned intelligent control system for lunar sampling and encapsulation of Chang e-5 probe have been brought great challenges. In order to ensure the reliability and efficiency of Sampling and Encapsulation control, the design scheme of the bilateral control system is established, and the intelligence is carried out based on the model control system design. The special verification test results show the system design is correct and effective. Under the support of the system, the lunar probe has successfully completed China's first unmanned lunar surface sampling and encapsulation mission.