

Poster Session (P)

Poster Lunch (1)

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TECHNOLOGY OF ACTUATOR APPLY FOR LUNAR SAMPLE SEALING

Abstract

Abstract after lunar samples is collected, in order to prevent the lunar samples from being contaminated, maintain the original state of lunar surface and also ensure the reliability of the ground analyzing based on lunar samples returned to Earth, collection container must be sealed and locked up. According to principle of lunar samples collection container lock up device, design the actuator can reliable work on lunar surface circumstance, it can supply driving power for collection container lock up action. The actuator adopt especial gunpowder can be detonate in vacuum circumstance, have capability of prevent the lunar dust from being contaminated and endure temperature of lunar surface, so it can be applicable lunar surface. By ground experimentation of simulate lunar surface vacuum circumstance, this actuator can satisfaction request of lunar samples collection container seal and lock up. Keywords lunar sample sealing actuator seal and lock up lunar surface circumstance