Design and Accomplishing of the Ground Facility for Lunar Sample's Transfer in a Non-contamination environment. D. Li^{1,2}, Q. Wu¹,Z. Fu¹,J. Li¹(1.Lanzhou institute of Physics, Lanzhou 730000 China 2.Science and Technology on Material Performance Evaluating in Space Environment Laboratory Material Performance Evaluating in Space Environment Laboratory)

Abstract:One of the important tasks of lunar exploration is to collect the soil and rock samples on the surface of lunar, and to seal them in good condition and take them to earth for scientific research. According to the program of China's lunar exploration, it will be achieved for collecting the lunar samples and taking them to the earth. In order to guarantee that the research value of the samples don't be affected after being returned to earth, they must be preserved under special conditions, to avoid the influence by the living things on earth and water, oxidation conditions and so on. For this purpose, design of an advance ground facility was done, it will reality opening the seal device of samples and transfer-ring the treasure samples to deferent place all in contamination prevention course. In this paper, principle of the design is described. Now the facility has been accomplished already and waits for being used in no far future.