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THE NECESSARY TECHNOLOGIES AND NOVEL SOLUTIONS FOR HUMAN LIVING ON MARS

Abstract

Human were dreaming to explore Mars, and the growing number of people and the dwindling resources promote us to action immediately. However, Mars is far from Earth and the natural environment is harsh, thus, plenty of technology problems need to be settled. Roadmaps of exploring Mars have been presented by many organizations such as IAA, NASA, etc, but the solutions of technologies are not yet clear. Indeed, most of these problems should be settled based on the existing technology which is improved according to Mars condition This article analyzed the technology problems and provided potential solutions necessary for living on Mars, including the surviving problems such as oxygen, water, food, clothing, shelter, and ramble, and the development problems like resource extraction and environmental transformation, and even the Earth return problems.