Interaction of the solar wind with the lunar rocks

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Thermodynamic simulation of vapor phase deposition from lunar basalt in vacuum in wide temperature range and their comparison with experimental mass-spectroscopy method were carried out. Codeposition of iron and silica vapor by $2 \text{ SiO} + O_2 = 2 \text{ SiO}_2$ reaction was considered. Besides we investigated the impact processes at the lunar surface. Experimental results on basalt evaporation in vacuum furnace are in good agreement with the calculation data.