ANALYSIS OF LUNAR ROCK SAMPLES
BY AUGER ELECTRON SPECTROSCOPY

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ABSTRACT

Auger electron spectroscopy of two lunar samples, 12002, 172 and 12021, 18 was performed to obtain the elemental distribution on the surface and the bulk up to 50-100 Å. Auger spectra were obtained on as-received, sputter-cleaned and progressively sputtered lunar samples. Different areas of the specimen surface were examined.

X-ray fluorescence spectroscopy, scanning electron microscopy and electron probe microanalyses using both the dispersive and non-dispersive x-ray analyzers were also performed on the same lunar samples to complement and correlate the results of Auger analysis.

Results of these studies will be presented and discussed in terms of the surface mineralogy of lunar rocks and further suggestions for more precise Auger analysis of these materials in the future.

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