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Optical spectra from Collisions of 128keV/amu O5+ projectiles on CO KENNETH MILLER, PHILLIP GEE, THOMAS EHRENREICH, ERIN SEDER, QUENTIN KESSEL, EDWARD POLLACK, WINTHROP W. SMITH[1]
— Optical spectra in the range 400 to 800 nm from collisions of O^{5+} with CO targets have been measured. Lines from atomic transitions are observed; however, the spectra are dominated by molecular emission from the CO^+ ion. These molecular lines are consistent with large cross sections for electron capture by highly charged O projectiles. The dominant molecular bands have been identified as the ($A^2\Pi$-$X^2\Sigma$) band of the CO^+ molecular ion, which has been observed in comet tails. This research program is sponsored by NASA EPSCoR grant NCC5-601

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