Abstract Submitted
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Si^{3+} +H collisions: role of rotational couplings[1] D.C. JOSEPH, B.C. SAHA, Department of Physics, Florida A&M University, Tallahassee, FL-32307 — State selective charge exchange cross sections are calculated using both the quantal and the semi classical molecular orbital close coupling approaches in the adiabatic representation. In addition to radial coupling, all angular couplings are also incorporated in our close coupling calculations. The multi-reference single- and double-excitation configuration interaction (MRD-CI) method [1] is employed to describe the adiabatic electronic states of $(SiH)^{3+}$ system. Details of our findings will be reported at the conference.

[1] R. J. Buenker, in *Current Aspects of Quantum Chemistry*, edited by R. Carbo, in Physical and Theoretical Chemistry Vol. 21 (Elsevier, Amsterdam, 1981).

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