

COUPLED CLUSTER CALCULATIONS FOR C_4H^- , AN ANION OF INTEREST TO ASTROCHEMISTRY

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Large-scale coupled cluster calculations have been carried out for C_4H^- . The ground-state rotational constant is predicted to be $B_0 = 4658$ MHz. The equilibrium dipole moment, referred to the center of mass, is calculated to be 6.19 D. Various properties are reported.