

ANALYSIS AND DEPERTURBATION OF THE $A^2\Pi$ and $B^2\Sigma^+$ STATES OF CaF

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A laser excitation spectrum of the (0,0) and (1,1) bands of the CaF $A^2\Pi$ - $X^2\Sigma^+$ system has been recorded. The present set of molecular constants for both $A^2\Pi$ and $B^2\Sigma^+$ states represent a vast improvement in precision over previously reported values^b because of larger number of lines position measurements and the use of a more reasonable effective Hamiltonian model which accounts explicitly for the $A - B$ interaction via off-diagonal matrix elements. Accurate spectroscopic parameters for the X , A , and B states will be presented.

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