

Accurate characterisation of the $C(3)\Sigma^+$ state of the NaRb molecule

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*   Dunham parameters for the C(3)1Sigma+ state of Na85Rb
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The Dunham coefficients the experimental line positions in the range $0 \leq v' \leq 40$ and $8 \leq J' \leq 121$ with a standard deviation of 0.02 cm^{-1} . The ground state energy levels were calculated from the potential given in O. Docenko, M. Tamanis, R. Ferber, A. Pashov, H. Knoeckel, E. Tiemann, Phys. Rev. A 69, 042503 (2004).

parameter	value(cm-1)	uncertainty(cm-1)
Te+Y00 (Dun)	0.17568128E+05	0.12E-01
Y10	0.63601900E+02	0.44E-02
Y20	-0.41560000E-01	0.57E-03
Y30	-0.22266000E-02	0.33E-04
Y40	0.30505000E-04	0.86E-06
Y50	-0.33830000E-06	0.82E-08
Y01	0.45798040E-01	0.50E-05
Y11	-0.13316000E-03	0.11E-05
Y21	-0.11950000E-05	0.89E-07
Y31	0.40890000E-07	0.28E-08
Y41	-0.80970000E-09	0.32E-10
Y02	-0.91916000E-07	0.28E-09
Y12	0.94170000E-09	0.29E-10
Y22	-0.27880000E-10	0.70E-12