EINSTEIN A COEFFICIENTS FOR VIBRATION-ROTATIONAL TRANSITIONS OF NO

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Using an algebraic approach[a] with software for symbolic computation, we calculated the Einstein A coefficients for vibration-rotational transitions with $\Delta v = 1$ and 2 for NO in its electronic ground state, $^2\Pi$, in substates both $\Omega = 1/2$ and $3/2$, up to $v = 10$. These values will be applicable in an analysis of the chemiluminescence of NO resulting from exothermic chemical reactions in the gaseous phase.

[a] J. F. Ogilvie, The Vibrational and Rotational Spectrometry of Diatomic Molecules, Academic Press, London UK, 1998