IMPROVED THEORY OF THE EFFECTIVE DIPOLE MOMENT AND ABSOLUTE LINE STRENGTHS OF THE XY$_2$ ASYMMETRIC TOP MOLECULE IN THE X^2B_1 DOUBLET ELECTRONIC STATE

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A new effective dipole moment model for the XY$_2$ (C_{2v}−symmetry) molecule in a doublet electronic state is derived that includes (as special cases) all currently known models of effective dipole moment for such type molecules, and allows, at the same time, to take into account an influence of spin–rotation interactions on the effective dipole moment operator which were not taken into account in the before studies.