

Table S4 Energy (in cm^{-1}) of the dimer in the lowest rotovibrational states of A_2^- (top) and A_1^+ (bottom) symmetry and with $J \leq 6$ (for the quintet electronic state)

J = 0	J = 1	J = 2	J = 3	J = 4	J = 5	J = 6
-65.82112	-90.19567	-91.48161	-89.69298	-90.46884	-88.60962	-88.87841
-42.18787	-89.78861	-79.59088	-88.82069	-78.82778	-87.25882	-77.53446
-33.05820	-71.68308	-78.68974	-81.56828	-78.64125	-80.33903	-77.07452
-29.95727	-68.77956	-72.09297	-77.40793	-77.51203	-76.23458	-75.75697
-18.70908	-66.93307	-68.55764	-71.00956	-71.27201	-76.08057	-69.80310
-15.82496	-64.02603	-65.36692	-68.42681	-71.16578	-69.79721	-69.59111
-10.11401	-58.57609	-62.87372	-67.03981	-67.59897	-67.64089	-66.09180
-4.452259	-57.02298	-60.61236	-65.79830	-64.31078	-66.78065	-63.93053
-2.742346	-56.20663	-57.31395	-65.20235	-62.23294	-65.84184	-62.66132
	-53.85194	-55.27063	-63.39613	-61.59788	-64.12868	-60.93225
-93.17298	-89.89037	-92.74479	-89.18398	-91.74760	-87.91334	-90.18625
-73.59487	-71.71312	-91.48151	-81.56826	-90.46640	-80.33902	-88.86730
-66.10246	-68.96258	-79.59015	-77.40807	-78.82076	-76.23508	-77.51219
-63.39282	-67.01941	-78.68789	-71.17911	-78.64127	-76.08103	-77.07446
-56.94524	-58.58501	-73.16957	-68.12322	-77.51104	-70.18325	-75.76445
-51.16815	-56.21378	-72.04026	-67.14511	-72.17821	-66.78062	-70.62343
-47.72935	-53.86791	-68.55764	-66.14887	-71.26047	-66.65014	-69.67207
-42.49871	-48.94313	-65.73118	-65.20386	-71.00433	-66.13081	-69.36752
-41.95687	-48.30327	-63.06749	-58.69325	-67.59860	-64.75670	-66.08992
-38.65456	-43.57964	-62.86572	-57.91557	-64.86401	-63.77575	-63.93057