

## H2 and D2 vibration and rotation

pi	nu 0	e	h bar	m sub e	a0	c	mp
3.1415927E+00	1.2566371E-06	1.6021892E-19	1.0545888E-34	9.1095345E-31	5.2917706E-11	2.9979246E+08	1.6726486E-27
	epsilon 0				aH		
	8.854188E-12				5.29465E-11		
		H2	w(0) (s-1)				
			1556.918904				
			312.9564664				
		k(0)	621.981219	Evib(0) (eV)	A(0) (m)	A (a0)	
			8.62385E+14	0.56763688	4.27522E-12	0.080789992	
						Ac'	
						0.057127151	ecent XA
			1317.633198				
			283.4938761				
			517.0696612	E vib (1) (eV)			
			7.86298E+14	0.517554986			
			w(0) (s-1)				
		D2	1556.918904				
			312.9564664				
		k(0)	621.981219	Evib(0) (eV)	A(0) (m)	A (a0)	
			6.09798E+14	0.401379887	3.59502E-12	0.067936015	
						Ac'	
						0.048038017	ecent XA
			1352.639744				
			287.9753795				
			532.3321823	Evib(1) (eV)			
			5.64143E+14	0.371328542			
	H2 rot	0.014819916					
	D2 rot	0.007409958					