

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		md
	8.85E-12				5.29465E-11		3.3435860E-27
					aD		
		H2+			5.29321E-11		
			w(0) (s-1)				
			388.5944744				
			57.56955176				
		k(0)	165.5124613	E vib (0) (eV)	A(0) (m)	A (a0)	
			4.44865E+14	0.292817695	5.95244E-12	0.112484896	
						Ac'	
			329.9931055			0.056242448	ecent XA
			48.88786747				
			140.552619	Evib(1) (eV)			
			4.09951E+14	0.269836963			
		D2+					
			w(0) (s-1)				
			388.9117647				
			57.61655774				
		k(0)	165.6476035	E vib (0) (eV)	A(0) (m)	A(0) (a0)	
			3.14695E+14	0.207137891	5.00437E-12	0.094568847	
						Ac'	
						0.047284424	ecent XA
			338.8527667				
			50.20040987				
			144.3261784	Evib(1) (eV)			
			2.93745E+14	0.19334793			
H2+ rot (eV)							
0.007409958							
D2+ rot (eV)							
0.003704979							