Atom	Obs. wavelength (nm)	NIST wavelength (nm)	$E_g(cm^{-1})$	$E_e(cm^{-1})$
Ar	358.262	360.652	93750.598	121470.238
Ar	697.623	696.543	93143.760	107496.417
Ar	764.453	763.511	93143.760	106237.552
Ar	812.310	811.531	93143.760	105462.760
Ne	586.454	585.249	135888.717	152970.733
Ne	615.552	616.359	134818.641	151038.452
Ne	641.515	640.225	134041.840	149657.039
Ne	725.670	724.517	134459.287	148257.790
Xe	467.993	467.123	67067.547	88469.213
Xe	823.840	823.163	67067.547	79212.465
Xe	882.874	881.941	67067.547	78403.061
Xe	918.044	916.265	68045.156	78956.031