



Figure 1. Production of ions in excited vibrational levels causing the presence of fine structure in PE spectral bands.

$$\begin{aligned}
 I E_{v'} &= E(AB^+) - E(AB) \\
 &= \Delta E_{\text{elect}} + hc(v' + \frac{1}{2})\bar{\nu}' - \frac{1}{2} hc\bar{\nu}
 \end{aligned}$$

Different peaks \leftrightarrow excitation to different v' states of AB^+