vertical ionization

A process whereby an electron is removed from a molecule in its ground or an excited state so rapidly that a positive ion is produced without change in the positions or momenta of the atoms. The resultant ion is often in an excited state.

Source:
PAC, 1991, 63, 1541 (Recommendations for nomenclature and symbolism for mass spectrometry (including an appendix of terms used in vacuum technology). (Recommendations 1991)) on page 1548