THERMOCHEMICAL INFORMATION AND ROTATIONAL STRUCTURE IN THE AUTOIONIZATION SPECTRA OF HCO.

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Rotationally resolved autoionization spectra of the HCO radical in high-Rydberg states built on the (010) core vibrational state have been obtained from selected rovibrational levels of the $3p\pi\ ^2\Pi$ (010) Σ^+ Rydberg state. Simulations of the spectra lead to reliable ionization potentials for detailed rovibrational states of HCO^+. Data for bending overtones supply information on anharmonic terms in the cation vibrational potential. Rotational structure associated with autoionizing states is analyzed.