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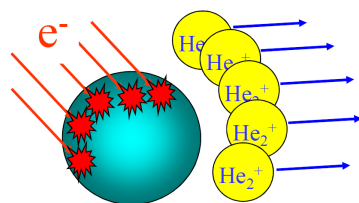
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Abstract

The size distribution and droplet flux in a beam of large He droplets of about 10^{10} atoms were measured. Single droplets in the beam were isolated and subjected to multiple ionization events in the electron beam ionization region resulting in a burst of ejected He_2^+ ions which were analyzed via quadrupole mass spectrometry. The amplitude of the resulting pulses was proportional to the droplet cross section. The results show that the size distribution could deviate considerably from the exponential distribution obtained previously for smaller droplets consisting of $10^6 - 10^7$ atoms.

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