

Supporting information

Bond breaking and making in mixed clusters of fullerene and coronene molecules induced by keV-ion impact

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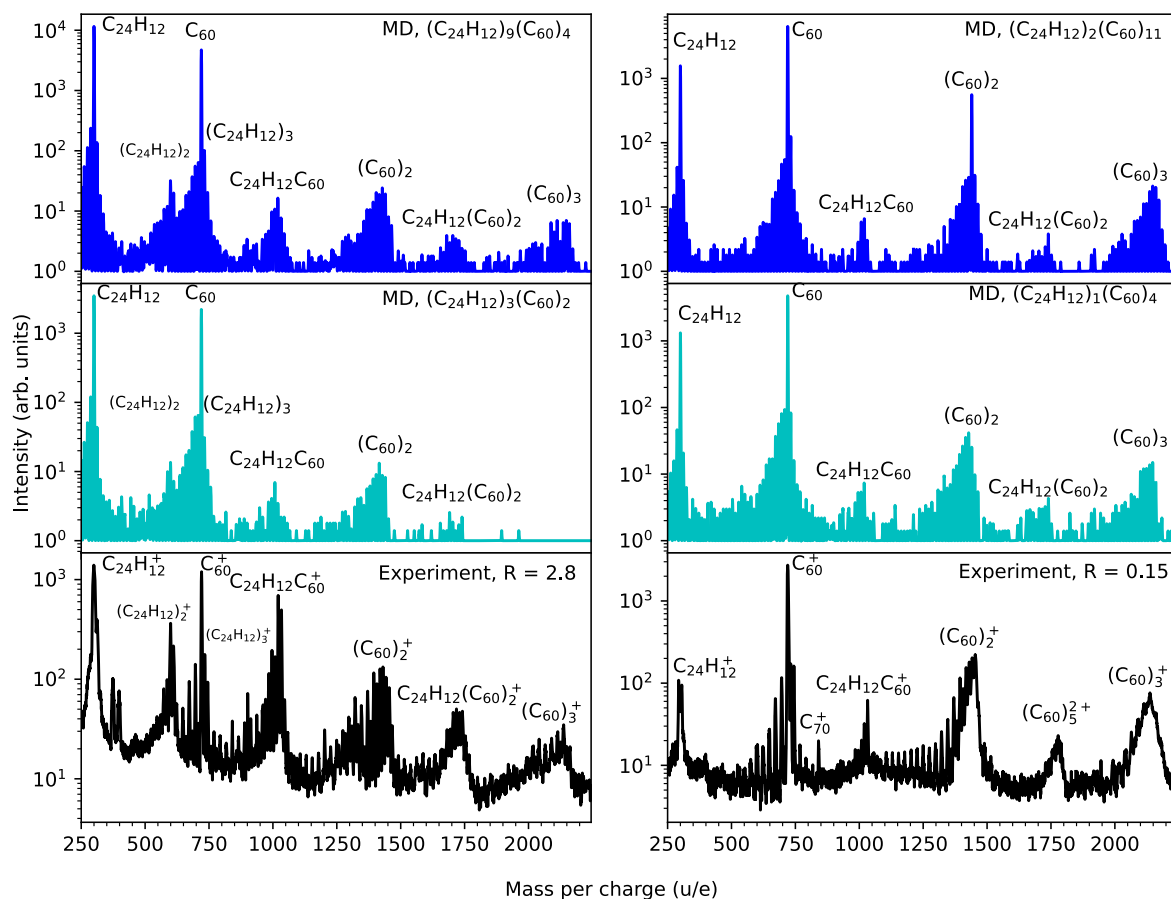


Figure S1: Mass spectra from collisions of 3 keV Ar atoms/cations and $(C_{24}H_{12})_n(C_{60})_m$ clusters. The top row shows results from our classical molecular dynamics simulations for clusters consisting of 13 molecules, where $(n,m) = (9,4)$ (left) and $(2,11)$ (right), respectively. The middle row is for simulation with smaller clusters consisting of 5 molecules, where $(n,m) = (3,2)$ (left) and $(1,4)$ (right), respectively. The bottom row is experimental data with two different cluster mixing ratios, coronene-dominated on the left, and C_{60} -dominated on the right, but with unknown broad size distributions. The two sets of simulated data are in good agreement with each other, with the main difference being that larger reaction products are formed with larger precursor clusters.