AU Martinet, G, Diaz-Tendero, S, Chabot, M, Wohrer, K, Della Negra, S, Mezdari, F, Hamrita, H, Desesquelles, P, Le Padellec, A, Gardes, D, Lavergne, L, Lalu, G, Grave, X, Clavelin, JF, Hervieux, PA, Alcami, M, Martin, F
TI Fragmentation of highly excited small neutral carbon clusters
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AB We present a combined experimental and theoretical study of fragmentation of small C-n clusters (n=5,7,9) produced in charge transfer collisions of fast (v=2.6 a.u.) singly charged C-n(+) clusters with He. Branching ratios for all possible fragmentation channels have been measured. Comparison with microcanonical Metropolis Monte Carlo simulations based on quantum chemistry calculations allows us to determine the energy distribution of the excited clusters just after the collision.
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