

Fragmentation of small carbon clusters, a review

K. Béroff, M. Chabot, F. Mezdari, G. Martinet, T. Tuna, P. Désesquelles et al
Nucl. Instr. Methods Phys. Res. Sec. B, 267(6), 866, (2009)

BELAU L Ionization thresholds of small carbon clusters: Tunable VUV experiments and theory JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 129: 10229 DOI 10.1021/ja072526q 2007

BIANCHETTI M Ab-initio study of the electromagnetic response and polarizability properties of carbon chains PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 357: 459 2002

BOUYER R Photodissociation kinetics of C-n(+) clusters JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 30: 135 1997

CALVO F Statistical dissociation of small carbon clusters: A phase space theory investigation COMPUTATIONAL MATERIALS SCIENCE 35: 198 DOI 10.1016/j.commatsci.2004.07.007 2006

CHABOT M Charge transfer in high velocity C-n(+) + He collisions JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 : 2593 DOI 10.1088/0953-4075/39/11/022 2006

CHABOT M Shape analysis of current pulses delivered by semiconductor detectors: A new tool for fragmentation studies of high velocity atomic clusters and molecules NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 197: 155 2002

CHABOT M Fragmentation of small carbon clusters Photonic, Electronic and Atomic Collisions: 607 2006

CHEN L Dynamical fragmentation processes of C-60(5+) ions in Ar8+ + C-60 collisions PHYSICAL REVIEW A 64: ARTN 031201 2001

CHOI H Photodissociation of linear carbon clusters C-n (n=4-6) JOURNAL OF PHYSICAL CHEMISTRY A 104: 2025 2000

DELEUZE MS Valence one-electron and shake-up ionization bands of carbon clusters II. The C-n (n=4,6,8,10) rings JOURNAL OF CHEMICAL PHYSICS 112: 5325 2000

DELEUZE MS Valence one-electron and shake-up ionization bands of carbon clusters I. The C-n (n=3,5,7,9) chains JOURNAL OF CHEMICAL PHYSICS 111 : 5851 1999

DELUCA MJ PHOTOFRAAGMENTATION OF C-N-4-LESS-THAN-OR-EQUAL-TO-N-LESS-THAN-OR EQUAL-TO-20 LOSS OF NEUTRAL C-3 CHEMICAL PHYSICS LETTERS 152: 67 1988

DIAZTENDERO S BRAZ J PHYS 36: 529 2005

DIAZTENDERO S Fragmentation of small neutral carbon clusters INTERNATIONAL JOURNAL OF MASS SPECTROMETRY 252: 126 DOI 10.1016/j.ijms.2005.12.055 2006

DIAZTENDERO S Structure, dissociation energies, and harmonic frequencies of small doubly charged carbon clusters C-n(2+) (n=3-9) JOURNAL OF PHYSICAL CHEMISTRY A 106: 10782 DOI 10.1021/jp0257956 2002

DIAZTENDERO S Statistical fragmentation of small neutral carbon clusters PHYSICAL REVIEW A 71: 3202 2005

GEUSIC ME PHOTOFRAGMENTATION OF MASS-RESOLVED CARBON CLUSTER IONS - OBSERVATION OF A MAGIC NEUTRAL FRAGMENT JOURNAL OF CHEMICAL PHYSICS 84: 2421 1986

GEUSIC ME Z PHYS D 3: 1986

HAUBRICH J A comparative MRD-CI study of the electronic spectrum of linear and cyclic C-8(+) clusters JOURNAL OF MOLECULAR SPECTROSCOPY 228: 31 DOI 10.1016/j.jms.2004.05.018 2004

HEBER O Dissociative recombination of small carbon cluster cations PHYSICAL REVIEW A 73: 2712 2006

HOCHLAF M Photoionization of C-4 molecular beam: Ab initio calculations JOURNAL OF CHEMICAL PHYSICS 127: 14310 2007

KRUMMACHER S INNER-SHELL PHOTOIONISATION IN MOLECULES - THE CARBON-MONOXIDE CASE JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 16: 1733 1983

LEPADELLEC A Electron-impact detachment and dissociation of C-4(-) ions JOURNAL OF CHEMICAL PHYSICS 115: 10671 2001

LEPINE F Computed electron affinity of carbon clusters C-n up to n=20 and fragmentation energy of anions JOURNAL OF PHYSICAL CHEMISTRY A 106: 7177 DOI 10.1021/jp014701+ 2002

LIFSHITZ C Carbon clusters INTERNATIONAL JOURNAL OF MASS SPECTROMETRY 200: 423 2000

LIFSHITZ C PROPERTIES OF CARBON CLUSTER IONS, CN+, FORMED BY DISSOCIATIVE IONIZATION INTERNATIONAL JOURNAL OF MASS SPECTROMETRY AND ION PROCESSES 93: 149 1989

MARTIN JML Structure and relative energetics of C-2n+1 (n=2-7) carbon clusters using coupled cluster and hybrid density functional methods CHEMICAL PHYSICS LETTERS 252: 9 1996

MARTINET G Fragmentation of highly excited small neutral carbon clusters PHYSICAL REVIEW LETTERS 93: 3401 2004

MCELVANY SW ION MOLECULE REACTIONS OF CARBON CLUSTER IONS WITH D-2 AND O-2 JOURNAL OF CHEMICAL PHYSICS 86: 715 1987

MEZDARI F THESIS U P M CURIE P: 2005

MONTAGNON L Self-consistent field tight-binding model for neutral and (multi-) charged carbon clusters JOURNAL OF CHEMICAL PHYSICS 127: 84111 2007

OHNO M Theoretical study of the valence ionization energies and electron affinities of linear C-2n+1 (n=1-6) clusters JOURNAL OF CHEMICAL PHYSICS 106: 3258 1997

RADI PP A NEW METHOD FOR STUDYING CARBON CLUSTERS IN THE GAS-PHASE - OBSERVATION OF SIZE SPECIFIC NEUTRAL FRAGMENT LOSS FROM METASTABLE REACTIONS OF MASS SELECTED CN+,N-LESS-THAN-OR-EQUAL-TO-60 JOURNAL OF CHEMICAL PHYSICS 88: 2809 1988

RADI PP STRUCTURE, REACTIVITY, AND ENERGETICS OF COVALENTLY BOUND CARBON CLUSTER IONS, C5+ TO C11+ - EXPERIMENT AND THEORY JOURNAL OF PHYSICAL CHEMISTRY 93: 6187 1989

RAGHAVACHARI K STRUCTURE, STABILITY, AND FRAGMENTATION OF SMALL CARBON CLUSTERS JOURNAL OF CHEMICAL PHYSICS 87: 2191 1987

SANCHEZ G THESIS: 2006

SOWARESAT MB DISSOCIATION-ENERGIES FOR SMALL CARBON CLUSTER IONS (C-2-19(+)) MEASURED BY COLLISION-INDUCED DISSOCIATION JOURNAL OF PHYSICAL CHEMISTRY 99: 10736 1995

TUNA T Fragmentation branching ratios of highly excited hydrocarbon molecules CnH and their cations CnH+ (n <= 4) JOURNAL OF CHEMICAL PHYSICS 128: 24312 2008

VANHEMERT MC CHEM PHYS 343: 292 2007

VANORDEN A Small carbon clusters: Spectroscopy, structure, and energetics CHEMICAL REVIEWS 98: 2313 1998