

1. Allan M., Heilbronner E. and Kloster-Jensen E.: A Photoelectron-Spectroscopic Investigation of Benzologue Tropones. *J. Electron Spectr.* **6**, 181 (1975).
2. Allan M. and Maier J.P.: Emission Spectra of the Radical Cations of Hexa-, Penta-, Tetra-, and Tri-Fluorobenzenes. *Chem. Phys. Lett.* **34**, 442 (1975).
3. Allan M., Heilbronner E., Kloster-Jensen E. and Maier J.P.: The  $\Pi$ -States of Tetraacetylene Radical Cation. *Chem. Phys. Lett.* **41**, 228 (1976).
4. Allan M. and Maier J.P.: The Emission Spectra of  $\text{ClCN}^+$ ,  $\text{BrCN}^+$ ,  $\text{ICN}^+$  Radical Cations:  $\tilde{\text{A}}^2\Pi \rightarrow \tilde{\text{X}}^2\Pi$  and  $\tilde{\text{A}}^2\Sigma^+ \rightarrow \tilde{\text{X}}^2\Pi$  Band Systems. *Chem. Phys. Lett.* **41**, 231 (1976).
5. Allan M., Kloster-Jensen E. and Maier J.P.: Emission Spectra of the Radical Cations of Diacetylene ( $\tilde{\text{A}}^2\Pi_u \rightarrow \tilde{\text{X}}^2\Pi_g$ ), Triacetylene ( $\tilde{\text{A}}^2\Pi_g \rightarrow \tilde{\text{X}}^2\Pi_u$ ) and Tetraacetylene ( $\tilde{\text{A}}^2\Pi_u \rightarrow \tilde{\text{X}}^2\Pi_g$ ,  $0_0^0$ ), and the Lifetimes of Some Vibronic Levels of the A States. *Chem. Phys.* **7**, 11 (1976).
6. Allan M., Heilbronner E. and Kaupp G.: The Photoelectron Spectrum of Dibenzo-p-Quinodimethane. *Helv. Chim. Acta* **59**, 1949 (1976).
7. Allan M. and Maier J.P.: Emission Spectra of the Radical Cations of *trans*-( $\tilde{\text{A}}^2\text{B}_g \rightarrow \tilde{\text{X}}^2\text{A}_u$ ) and *cis*-( $\tilde{\text{A}}^2\text{A}_2 \rightarrow \tilde{\text{X}}^2\text{B}_1$ ) 1,3,5-Hexatriene in the Gas Phase. *Chem. Phys. Lett.* **43**, 94 (1976).
8. Allan M., Kloster-Jensen E. and Maier J.P.: Emission Spectra of  $\text{Cl-C} \equiv \text{C-H}^+$ ,  $\text{Br-C} \equiv \text{C-H}^+$  and  $\text{I-C} \equiv \text{C-H}^+$  Radical Cations:  $\tilde{\text{A}}^2\Pi \rightarrow \tilde{\text{X}}^2\Pi$  Band Systems and the Decay of the  $\tilde{\text{A}}^2\Pi$  States. *J. Chem. Soc. Faraday Trans. II* **73**, 1406 (1977).
9. Allan M., Kloster-Jensen E. and Maier J.P.: Emission Spectra of  $\text{Cl-C} \equiv \text{C-Cl}^+$ ,  $\text{Br-C} \equiv \text{C-Br}^+$  and  $\text{I-C} \equiv \text{C-I}^+$  Radical Cations:  $\tilde{\text{A}}^2\Pi_g \rightarrow \tilde{\text{X}}^2\Pi_u$  Band Systems and the Decay of the  $\tilde{\text{A}}^2\Pi_g$  States. *J. Chem. Soc. Faraday Trans. II* **73**, 1417 (1976).
10. Allan M., Maier J.P. and Marthaler O.: Radiative Relaxation of the  $\tilde{\text{B}}(\pi^-)$  Excited Electronic States of the Radical Cations of Hexafluorobenzene, Pentafluorobenzene, 1,2,3,4-, 1,2,3,5-, 1,2,4,5-Tetrafluorobenzene, 1,3,5-, 1,2,4-Trifluorobenzene and 1,3-Difluorobenzene. *Chem. Phys.* **26**, 131 (1977).
11. Allan M., Maier J.P., Marthaler O. and Kloster-Jensen E.: Emission Spectra of Two  $\text{C}_6\text{H}_6^+$  Cations in the Gas Phase: Competition of the Radiative,  $\tilde{\text{A}}(\pi^-) \rightarrow \tilde{\text{X}}(\pi^-)$ , and Fragmentation decay of the  $\tilde{\text{A}}(\pi^-)$  Excited State of 2,4- and 1,3-Hexadiyne Radical Cations. *Chem. Phys.* **29**, 331 (1978).
12. Allan M., Kloster-Jensen E., Maier J.P. and Marthaler O.: Emission Spectra of Polyatomic Radical Cations in the Gas Phase:  $\tilde{\text{A}}^2\Pi_u \rightarrow \tilde{\text{X}}^2\Pi_g$  Band Systems of

- Cl(C ≡ C)<sub>2</sub>Cl<sup>+</sup>, Br(C ≡ C)<sub>2</sub>Br<sup>+</sup> and I(C ≡ C)<sub>2</sub>I<sup>+</sup> and the Lifetimes of the  $\tilde{\text{A}}^2\Pi_u$  States. *J. Electron Spectr. Rel. Phen.* **14**, 359 (1978).
13. Allan M. and Wong F.: Effect of Vibrational and Rotational Excitation on Dissociative Attachment in Hydrogen. *Phys. Rev. Lett.* **41**, 1791 (1978).
14. Allan M., Maier J.P., Marthaler O. and Stadelmann J.-P.: Emission Spectra of the Radical Cations of Difluorodiacetylene, Perfluoropentadiyne-1,3 and Perfluorohexadiyne-2,4 in the Gas Phase:  $\tilde{\text{A}} \rightarrow \tilde{\text{X}}$  Band Systems and the Lifetimes of the  $\tilde{\text{A}}$  States. *J. Chem. Phys.* **70**, 5271 (1979).
15. Allan M., Dannacher J. and Maier J.P.: Radiative and Fragmentation Decay of the Cations of *trans*- and *cis*-1,3,5-Hecatriene and of all *trans*-1,3,5-Heptatriene in the  $\tilde{\text{A}}(\pi^-)$  States, Studied by Emission and Photoelectron-Photoion Coincidence Spectroscopy. *J. Chem. Phys.* **73**, 3114 (1980).
16. Allan M., Kovac B., Heilbronner E., Maier J.P., Gleiter R., Haenel M.W., Keehn P.M. and Reiss J.A.: He (I $\alpha$ ) Photoelectron Spectra [2.2]Cyclophanes. *J. Electron Spectr. Rel. Phen.* **19**, 167 (1980).
17. Allan M. and Wong S.F.: Dissociative Attachment from vibrationally and rotationally excited HCl and HF. *J. Chem. Phys.* **74**, 1687 (1981).
18. Allan M., Kovac B. and Heilbronner E.: "Trough Space" and "Trough Bond" Interaction in [2.2]Cyclophanes; the Assignment of Their Photoelectron Spectra. *Helv. Chim. Acta* **64**, 430 (1981).
19. Allan M.: Forward Electron Scattering in Benzene; Forbidden Transitions and Excitation Functions. *Helv. Chim. Acta* **65**, 2008 (1982).
20. Allan M., Haselbach E., von Büren M. and Hansen H.-J.: The Electron Affinities of (E)- and (Z)-Cyclooctene. *Helv. Chim. Acta* **65**, 2133 (1982).
21. Allan M.: Electron Scattering Experiments: Gas Phase Reactions Involving Free Electrons. *Chimia* **36**, 457 (1982).
22. Allan M.: Time-Resolved Electron-Energy-Loss Spectroscopy Study of the Long-Lifetime p-Benzoquinone Negative Ion. *Chem. Phys.* **81**, 235 (1983).
23. Dressler R., Neuhaus L. and Allan M.: An Electron-Retardation Device to Improve the Resolution of a Turner-Type UV Photoelectron Spectrometer. *J. Electron Spectr. Relat. Phenom.* **31**, 181 (1983).
24. Allan M.: Vibrational and Electronic Excitation in p-Benzoquinone by Electron Impact. *Chem. Phys.* **84**, 311 (1984).
25. Albrecht B., Allan M., Haselbach E., Neuhaus L. and Carrupt P.-A.: Molecular Ions of Transient Species: Vinyl-Alcohol Cation. *Helv. Chim. Acta* **67**, 216 (1984).
26. Albrecht B., Allan M., Haselbach E., Neuhaus L., and Carrupt P.-A.: Molecular Ions of Transient Species: Vinylamine-Cation. *Helv. Chim. Acta* **67**, 220 (1984).

27. Allan M.: Electronic Structure of the 1,3-Butadiyne Anion Studied by Electron Transmission and Vibrational Excitation Spectra in the Gas Phase. *Chem. Phys.* **86**, 303 (1984).
28. Allan M.: The Excited States of 1,3-Butadiyne Determined by Electron Energy Loss Spectroscopy. *J. Chem. Phys.* **80**, 6020 (1984).
29. Allan M., Neuhaus L. and Haselbach E.: (All-E)-1,3,5,7-Octatetraene: Electron-Energy-Loss and Electron-Transmission Spectra. *Helv. Chim. Acta* **67**, 1776 (1984).
30. Allan M.: Low Energy Electron Scattering in Organic Molecules. *Lect. Notes in Chemistry* **35**, 14 (1984), Springer Verlag.
31. Dressler R. and Allan M.: Energy Partitioning in the O<sup>-</sup>/CO<sub>2</sub> Dissociative Attachment. *Chem. Phys.* **92**, 449 (1985).
32. Allan M.: Experimental Observation of Structures in the Energy Dependence of Vibrational Excitation in H<sub>2</sub> by Electron Impact in the <sup>2</sup> $\Sigma_u^+$  Resonance Region. *J. Phys. B.: At. Mol. Phys.* **18**, L451 (1985).
33. Dressler R. and Allan M.: CH<sub>3</sub><sup>-</sup> Formation Through Predissociation of Feshbach Resonances in Acetaldehyde. *Chem. Phys. Lett.* **118**, 93 (1985).
34. Allan M.: Excitation of Vibrational Levels up to  $v = 17$  in N<sub>2</sub> by Electron Impact in the 0-5 eV Region. *J. of Phys. B.* **18**, 4511 (1985).
35. Dressler R., Allan M. and Haselbach E.: Symmetry Control in Bond Cleavage Processes: Dissociative Electron Attachment of Unsaturated Halocarbons. *Chimia* **39**, 385 (1985).
36. Dressler R., Gremaud M., Chassot P.-H. and Allan M.: The Control of a Negative-Ion Mass Spectrometer by an Apple II Computer: A Versatile Interface Card for Control of Chemical Instrumentation. *Chimia* **39**, 327 (1985).
37. Allan M., Snyder P.A. and Robin M.B.: Electronic Excitations in Bicyclohexylidene. *J. Phys. Chem.* **89**, 4900 (1985).
38. Allan M., Bally T., Haselbach E., Suppan P. and Avar L.: Photo-Physics and Photo-Chemistry of Aromatic Oxanilides Used as Polymer Light Stabilizers. *Polymer Degradation and Stability* **15**, 311 (1986).
39. Dressler R. and Allan M.: Energies and Decay Channels of Negative Ion Resonances in Acetaldehyde. *J. Electron Spectrosc. Relat. Phenom.* **41**, 275 (1986).
40. Dressler R., Allan M., Tronc M.: A Reinvestigation of the S<sup>-</sup>/CS<sub>2</sub> Dissociative Attachment Spectrum. *J. Phys. B.* **20**, 393 (1987).
41. Allan M.: Some Recent Experiments on Inelastic Electron-Molecule Collisions at Low Energies. *I. J. Quant. Chem.* **31**, 161 (1987).

42. Allan M.: Electron Spectroscopic Methods in Teaching. *J. Chem. Education* **64** (5), 418 (1987).
43. Dressler R. and Allan M.: A Dissociative Electron Attachment, Electron Transmission, and Electron Energy-Loss Study of the Temporary Negative Ion of Acetylene. *J. Chem. Phys.* **87**, 4510 (1987).
44. Allan M.: Resonant Excitation of High Vibrational Levels by Slow Electron Collisions. Invited Talks, *Proceeding of the 15th ICPEAC*, Elsevier 1988, 93.
45. Allan M.: Study of Triplet States and Short-Lived Negative Ions by Means of Electron Impact Spectroscopy. *J. Electron. Spectr. and Rel. Phenomena* **48**, 219 (1989).
46. Schafer O., Allan M., Haselbach E. and Davidson R.S.: Triplet Energies and Electron Affinities of Methyl-Acrylate and Methyl-Methacrylate. *J. Photochem. Photobiol.* **50**, 717 (1989).
47. Pariat Y. and Allan M.: Dissociative Electron Attachment to Methyl Acetate: Evidence for Ion/Molecule Complexes as Intermediates. *Int. J. of Mass Spectr. and Ion Proc.* **103**, 181 (1991).
48. Schafer O. and Allan M.: Measurement of Near-Threshold Vibrational Excitation of HCl by Electron Impact. *J. Phys. B: At. Mol. Opt. Phys.* **24**, 3069 (1991).
49. Allan M.: Measurement of Differential Cross Sections for Excitation of Helium by Electron Impact within the First 4 eV above Threshold. *J. Phys. B: At. Mol. Opt. Phys.* **25**, 1559 (1992).
50. Schafer O., Allan M., Szeimies G. and Sanktjohanser M.: Low-Energy Electron Impact Spectroscopy of [1.1.1]Propellane: Electron Attachment Energies and Singlet and Triplet Excited States. *J. Am. Chem. Soc.* **114**, 8180 (1992).
51. Schafer O., Allan M., Szeimies G. and Sanktjohanser M.: ETS Study of the Negative Ion States of Bicyclo[1.1.1]Pentane, and its Mono- and Di-Ethyne Derivatives: Through-Bond Coupling of  $\pi^*$  Orbitals Mediated by the Staffane Bridge. *Chem. Phys. Lett.* **195**, 293 (1992).
52. Schafer O., Allan M., Boyarskaya I.A. and Domnin I.N.: Measurement of Electron Affinities of Substituted Cyclopropenes by Electron Transmission Spectroscopy. *Chem. Phys.* **167**, 241 (1992).
53. Allan M.: Low Energy Electron Impact Spectra of the van der Waals Cluster  $Xe_2$  and  $Xe_n$  ( $n = 3,4$ ). *J. Phys. B: At. Mol. Opt. Phys.* **26**, L73 (1993).
54. Allan M., Asmis K., Bulliard Ch., Haselbach E., and Suppan P.: Triplet-State Energy of the Photostabilizer Tinuvin P. *Helv. Chim. Acta* **76**, 993 (1993).
55. Smith J.M., Hrovat D.A., Borden W.T., Allan M., Asmis K., Bulliard Ch., Haselbach E. and Meier U.C.: Synthesis and Spectroscopy of Tricyclo [3.3.3.0<sup>3,7</sup>]undec-3(7)-ene: Confirmation of Computational Predictions Regarding the Effects of Pyramidalization

- on Alkene Ionization Energies and Electron Affinities. *J. Am. Chem. Soc.* **115**, 3816 (1993).
56. Allan M.: Vibrational Excitation by Electron Impact in Cyclopropane. Electron Affinity and  $\sigma^*$  Orbitals. *J. Am. Chem. Soc.* **115**, 6418 (1993).
57. Bulliard Ch., Allan M. and Leach S.: Electron Energy-Loss Spectra of Fullerene C<sub>60</sub> in the Gas Phase. *Chem. Phys. Lett.* **209**, 434 (1993).
58. Allan M.: Experimental Study of Vibrational Excitation of Allene by Slow Electron Impact: Vibronic Coupling in the Short-Lived Negative Ion States. *J. Chem. Phys.* **100**, 5588 (1994).
59. Allan M.: Measurement of Absolute Differential Cross Section for the Excitation of the Lowest Triplet State of Ethene. *Chem. Phys. Lett.* **225**, 156 (1994).
60. Allan M.: Electron-Impact Spectroscopy: A Versatile Tool for Chemistry. *Chimia* **48**, 372 (1994).
61. Allan M., Asmis K., El Houar S., Haselbach E., Capponi M., Urwyler B. and Wirz J.: Triplet Energy of 2,2-Dimethylisoindene from Electron-Energy-Loss Spectroscopy and Photoinduced Triplet Energy Transfer. *Helv. Chim. Acta* **77**, 1541 (1994).
62. Allan M.: Recent Experiments on Electron-Polyatomic Molecule Scattering. in: *Electron Collisions with Molecules, Clusters, and Surfaces*. Ed. Ehrhardt and L.A. Morgan, Plenum Press, New York, 105 (1994).
63. Allan M.: Experimental Absolute Differential Cross Section for the Excitation of the Lowest Triplet State of [1.1.1]propellane by Electron Impact. *J. Chem. Phys.* **101**, 844 (1994).
64. Bulliard Ch., Allan M. and Haselbach E.: Intramolecular Competition of Phenylidic and Benzylic C-X Bond Breaking in Dissociative Electron Attachment to Dihalotoluenes. *J. Phys. Chem.* **98**, 11040 (1994).
65. Allan M.: What can Electron Impact Spectroscopy offer to Photochemistry? Triplet States, Negative Ions and Intramolecular Electron Transfer. *Pure & Appl. Chem.* **67**, 1 (1995).
66. Allan M.: Experimental Differential Cross Sections for the Electron Impact Excitation of the a<sup>1</sup> $\Delta_g$ , b<sup>1</sup> $\Sigma_g^+$ , and the 6 eV States of O<sub>2</sub>. *J. Phys. B: At. Mol. Opt. Phys.* **28**, 4329 (1995).
67. Allan M.: Measurement of Absolute Differential Cross Sections for Vibrational Excitation of O<sub>2</sub> by Electron Impact. *J. Phys. B: At. Mol. Opt. Phys.* **28**, 5163 (1995).
68. Allan M., Asmis K.R., Popović D.B., Stepanović M., Mason N.J. and Davies J.A.: Production of vibrationally Autodetaching O<sub>2</sub><sup>-</sup> in Low-Energy Electron Impact on Ozone. *J. Phys. B: At. Mol. Opt. Phys.* **29**, 3487 (1996).

69. Allan M. and Andrić L.:  $\sigma^*$ -Resonances in Electron Impact-Induced Vibrational Excitation of n-Propane, Cyclopropane, Ethylene Oxide, Cyclopentane, and Cyclohexane. *J. Chem. Phys.* **105**, 3559 (1996).
70. Allan M., Mason N.J. and Davies J.A.: Study of Electronically Excited States of Ozone by Electron-Energy-Loss Spectroscopy. *J. Chem. Phys.* **105**, 5665 (1996).
71. Allan M., Asmis K.R., Popović D.B., Stepanović M., Mason N.J. and Davies J.A.: Resonances in Collisions of Low-Energy Electrons with Ozone: Experimental Elastic and vibrationally Inelastic Differential Cross Sections and Dissociative Attachment Spectra. *J. Phys. B: At. Mol. Opt. Phys.* **29**, 4727 (1996).
72. Asmis K.R. and Allan M.: Excess Energy Partitioning between Electrons Departing at 0° and 180° in the Ionization of Helium near Threshold. *J. Phys. B: At. Mol. Opt. Phys.* **30**, L167 (1997).
73. Asmis K.R., Allan M., Schafer O. and Fülscher M.: Electron-Energy-Loss Spectroscopy and Theoretical Study of Triplet and Singlet Excited States of Fulvene. *J. Phys. Chem. A*, **101**, 2089 (1997).
74. Allan M.: Recent measurements of differential cross sections for electron-molecule collisions at low energies. In: *Photon and Electron Collisions with Atoms and Molecules*, Plenum (NY) 1997, p. 81.
75. Asmis K.R. and Allan M.: Measurement of Absolute Differential Cross Sections for the Excitation of the  $n = 2$  States of Helium at 0° and 180°. *J. Phys. B: At. Mol. Opt. Phys.* **30**, 1961 (1997).
76. Allan M. and Popović D.B.: Vibronic Coupling and Selectivity of Vibrational Excitation in the Negative Ion Resonances of Ozone. *Chem. Phys. Lett.* **268**, 50-54 (1997).
77. Asmis K.R. and Allan M.: Measurement of Absolute Differential Cross Sections for the Excitation of the  $\pi, \pi^*$  Triplet State of Ethene by Electron Impact at 0° and 180°. *J. Chem. Phys.* **106**, 7044 (1997).
78. Bulliard Ch., Allan M., Smith J.M., Hrovat D.A., Borden W.T., Grimme S.: Singlet and Triplet Excited States of a Pyramidalized Alkene: Electron-Energy-Loss Spectra, Photoelectron Spectra, and Calculations of the Excited States of Tricyclo[3.3.3.0<sup>3,7</sup>]undec-3(7)-ene. *Chem. Phys.* **225**, 153 (1997).