



ELSEVIER

International Journal of Mass Spectrometry 199 (2000) 289–292



Subject index

Ab initio calculations

The 1,2 migration of NH_3 in protonated β -aminoalkyl radicals, 71

The rearrangement and simple cleavage of metastable octanamine radical cations, 79

Ab initio MO calculations

Low energy fragmentation of protonated glycine. An ab initio theoretical study, 235

Ab initio quantum chemistry

Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

Acetone

Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17

Acetylene-ethane

Dissociative photoionisation of acetylene-ethane van der Waals clusters, 201

Alkene elimination

Effect of variations of the size and structure of the principal alkyl group on alkene elimination from the immonium ions $\text{CH}_3\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$ and $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$, 189

Alkylbenzenes

Gaseous $t\text{-C}_4\text{H}_9^+$ α,ω -diphenylalkane complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155

Alkyl shifts

A density functional theory study of methyl shifts and methylcyclopropanol ion formation in $\text{C}_4\text{H}_8\text{O}^{++}$ ions, 41

Antiknock

Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17

Audier mechanism

The rearrangement and simple cleavage of metastable octanamine radical cations, 79

Benzenium ions

Gaseous $[t\text{-C}_4\text{H}_9^+$ α,ω -diphenylalkane] complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155

B3LYP

Theoretical and experimental studies on the activation of ethylsilane by bare Co^+ cations, 107

tert-Butyl ether

Study of ion/molecule reactions of ion derived from *tert*-butyl methyl ether and trimethylsilyl methyl ether, 141

Carbenes

Dehalogenation of protonated *C*-halogeno-1,2,4-triazoles: synthesis of new heterocyclic carbenic and ylid radical cations and contrasting behaviour of collision gases, 221

$[\text{C}_9\text{H}_{11}]^+$

The involvement of ion-neutral complexes in ethylene loss from $[\text{PhC}(\text{CH}_3)_2]^+$ and its isomers, 29

Chirality

Gas-phase reactivity of diastereomeric acetate ion/tributylborate complexes, 211

$\text{C}_4\text{H}_8\text{O}^{++}$

A density functional theory study of methyl shifts and methylcyclopropanol ion formation in $\text{C}_4\text{H}_8\text{O}^{++}$ ions, 41

Co^+ cation

Theoretical and experimental studies on the activation of ethylsilane by bare Co^+ cations, 107

Collision gas effects

Dehalogenation of protonated *C*-halogeno-1,2,4-triazoles: synthesis of new heterocyclic carbenic and ylid radical cations and contrasting behaviour of collision gases, 221

C-Si bond activation

Theoretical and experimental studies on the activation of ethylsilane by bare Co^+ cations, 107

Degree of freedom effects

Effect of variations of the size and structure of the principal alkyl group on alkene elimination from the immonium ions $\text{CH}_3\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$ and $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}=\text{N}^+(\text{CH}_3)\text{R}$, 189

Density functional theory

A density functional theory study of methyl shifts and methylcyclopropanol ion formation in $C_4H_8O^{+}$ ions, 41

Deuterium labeling

Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

Isomeric dependence of the formation of ion/neutral complexes in dissociation reactions of ionized propoxy-pyridines, 1

Distonic ions

The 1,2 migration of NH_3 in protonated β -aminoalkyl radicals, 71

Ethylamine

Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

Ethylene elimination

The involvement of ion-neutral complexes in ethylene loss from $[PhC(CH_3)_2]^+$ and its isomers, 29

Ethylsilane

Theoretical and experimental studies on the activation of ethylsilane by bare Co^+ cations, 107

Fourier transform ion cyclotron resonance (FTICR) mass spectrometry

Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

Deuterium isotope effect on gas phase ion-molecule hydrogen-bonding interactions: multiply solvated fluoride, chloride, and alkoxide ions, 127

Gas-phase reactivity of diastereomeric acetate ion/tributylborate complexes, 211

Study of ion/molecule reactions of ion derived from *tert*-butyl methyl ether and trimethylsilyl methyl ether, 141

Successive reactions of iron carbonyl cations with methanol, 267

Fuel additive

Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17

Gas phase basicity

Is ionized cyclopropylamine cyclic?, 59

G2 calculations

Is ionized cyclopropylamine cyclic?, 59

G3 method

The 1,2 migration of NH_3 in protonated β -aminoalkyl radicals, 71

The rearrangement and simple cleavage of metastable octanamine radical cations, 79

G2(MP2,SVP)

The involvement of ion-neutral complexes in ethylene loss from $[PhC(CH_3)_2]^+$ and its isomers, 29

Heats of formation

The involvement of ion-neutral complexes in ethylene loss from $[PhC(CH_3)_2]^+$ and its isomers, 29

Henri Edouard Audier: Publications, 287

Homolysis

Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17

H-Si bond activation

Theoretical and experimental studies on the activation of ethylsilane by bare Co^+ cations, 107

Hydride abstraction

Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

Gaseous $[t-C_4H_9^+ \alpha,\omega$ -diphenylalkane] complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155

Hydrogen bonding

Deuterium isotope effect on gas phase ion-molecule hydrogen-bonding interactions: multiply solvated fluoride, chloride, and alkoxide ions, 127

Immonium ions

Effect of variations of the size and structure of the principal alkyl group on alkene elimination from the immonium ions $CH_3CH_2CH=N^+(CH_3)R$, $CH_3CH_2CH_2CH=N^+(CH_3)R$ and $CH_3CH_2CH_2CH_2CH=N^+(CH_3)R$, 189

Internal energy distribution

The rearrangement and simple cleavage of metastable octanamine radical cations, 79

Ion-dipole complex

Anionic rearrangement of deprotonated cyproconazole pesticide in the gas phase, 253

Ionized cyclopropylamine

Is ionized cyclopropylamine cyclic?, 59

Ionized 1-propene amine

Is ionized cyclopropylamine cyclic?, 59

Ion-molecule reactions

Anionic rearrangement of deprotonated cyproconazole pesticide in the gas phase, 253

- Deuterium isotope effect on gas phase ion-molecule hydrogen-bonding interactions: multiply solvated fluoride, chloride, and alkoxide ions, 127
- Gas-phase reactivity of diastereomeric acetate ion/tributylborate complexes, 211
- Study of ion/molecule reactions of ion derived from *tert*-butyl methyl ether and trimethylsilyl methyl ether, 141
- Successive reactions of iron carbonyl cations with methanol, 267
- Ion-neutral complexes**
- Gaseous [*t*-C₄H₉⁺ α,ω-diphenylalkane] complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155
- The involvement of ion-neutral complexes in ethylene loss from [PhC(CH₃)₂]⁺ and its isomers, 29
- Isomeric dependence of the formation of ion/neutral complexes in dissociation reactions of ionized propoxy-pyridines, 1
- Study of ion/molecule reactions of ion derived from *tert*-butyl methyl ether and trimethylsilyl methyl ether, 141
- Iron carbonyl cations**
- Successive reactions of iron carbonyl cations with methanol, 267
- Isomerization**
- The rearrangement and simple cleavage of metastable octanamine radical cations, 79
- Kinetic energy release**
- Effect of variations of the size and structure of the principal alkyl group on alkene elimination from the immonium ions CH₃CH₂CH=N⁺(CH₃)R, CH₃CH₂CH₂CH=N⁺(CH₃)R and CH₃CH₂CH₂CH₂CH=N⁺(CH₃)R, 189
- Kinetic isotope effect**
- Deuterium isotope effect on gas phase ion-molecule hydrogen-bonding interactions: multiply solvated fluoride, chloride, and alkoxide ions, 127
- Kinetics**
- Gas-phase reactivity of diastereomeric acetate ion/tributylborate complexes, 211
- Label exchange**
- The involvement of ion-neutral complexes in ethylene loss from [PhC(CH₃)₂]⁺ and its isomers, 29
- Low energy collisions**
- Low energy fragmentation of protonated glycine. An ab initio theoretical study, 235
- Metastable ions**
- Effect of variations of the size and structure of the principal alkyl group on alkene elimination from the immonium ions CH₃CH₂CH=N⁺(CH₃)R, CH₃CH₂CH₂CH=N⁺(CH₃)R and CH₃CH₂CH₂CH₂CH=N⁺(CH₃)R, 189
- Isomeric dependence of the formation of ion/neutral complexes in dissociation reactions of ionized propoxy-pyridines, 1
- Methanol**
- Successive reactions of iron carbonyl cations with methanol, 267
- Methyl radical**
- Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17
- Negative ion chemical ionization**
- Anionic rearrangement of deprotonated cyproconazole pesticide in the gas phase, 253
- Neutralization-reionization**
- Dehalogenation of protonated *C*-halogeno-1,2,4-triazoles: synthesis of new heterocyclic carbenic and ylid radical cations and contrasting behaviour of collision gases, 221
- NH₃ migration**
- The 1,2 migration of NH₃ in protonated β-aminoalkyl radicals, 71
- Oxygenate**
- Photoionization of methyl *t*-butyl ether (MTBE) and *t*-octyl methyl ether (TOME) and analysis of their pyrolyses by supersonic jet/photoionization mass spectrometry, 17
- Pesticides**
- Anionic rearrangement of deprotonated cyproconazole pesticide in the gas phase, 253
- Photoionisation**
- Dissociative photoionisation of acetylene-ethane van der Waals clusters, 201
- Propoxy-pyridines**
- Isomeric dependence of the formation of ion/neutral complexes in dissociation reactions of ionized propoxy-pyridines, 1
- Proton affinity**
- Is ionized cyclopropylamine cyclic?, 59
- Protonated glycine**
- Low energy fragmentation of protonated glycine. An ab initio theoretical study, 235
- Proton transfer**
- Competition between proton transfer and hydride abstraction in chemical ionisation mass spectrometry of ethylamine, 91

- Gaseous [$t\text{-C}_4\text{H}_9^+$ α,ω -diphenylalkane] complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155
- Rate constants
Successive reactions of iron carbonyl cations with methanol, 267
- Reaction mechanism
Isomeric dependence of the formation of ion/neutral complexes in dissociation reactions of ionized propoxy-pyridines, 1
- Substituent effects
Gaseous [$t\text{-C}_4\text{H}_9^+$ α,ω -diphenylalkane] complexes: methyl substituent effects on the intracomplex proton transfer and regioselective hydride abstraction, 155
- Thermokinetic method
Is ionized cyclopropylamine cyclic?, 59
- Three-membered rings
A density functional theory study of methyl shifts and methylcyclopropanol ion formation in $\text{C}_4\text{H}_8\text{O}^{+\cdot}$ ions, 41
- Transition states
The 1,2 migration of NH_3 in protonated β -aminoalkyl radicals, 71
- Trialkylborates
Gas-phase reactivity of diastereomeric acetate ion/tributylborate complexes, 211
- Trimethylsilyl ether
Study of ion/molecule reactions of ion derived from *tert*-butyl methyl ether and trimethylsilyl methyl ether, 141
- van der Waals clusters
Dissociative photoionisation of acetylene-ethane van der Waals clusters, 201
- Ylide ions
Dehalogenation of protonated *C*-halogeno-1,2,4-triazoles: synthesis of new heterocyclic carbenic and ylid radical cations and contrasting behaviour of collision gases, 221