

- Ab initio calculations on the isomerization of the 1,3-hexadien-5-ynyl radical cation to the benzene structure and to non-classical ion structures, 731
- Ab initio characterization of ring-opening H-transfer in ionized cyclopentanone: similarity to ion-neutral complex-mediated alkane eliminations, 1251
- Ablation, Resonant laser, as a selective metal ion source for gas-phase ion molecule reactions, 664
- Abundance sensitivity, enhanced, by resonant ejection of atomic ions: Plasma source ion trap mass spectrometry, 1161
- Accurate base composition of double-strand DNA by mass spectrometry, 1266
- Acetone enolate anion, Gas-phase base-catalyzed Claisen-Schmidt reactions of, with various para-substituted benzaldehydes, 82
- Acidities, Apparent gas-phase, of multiply protonated peptide ions: ubiquitin, insulin B, and renin substrate, 1211
- Acids and esters, gas-phase methylation and dissociation of, Effects of functional group interactions on, 565
- Aglycons, glycoalkaloids, Analysis of, Comparison of high- and low-energy collision-induced dissociation tandem mass spectrometry in, 173
- Agostic effects in the gas-phase: SiCl_3^+ and SiCl^+ affinities for pyridines determined by using the kinetic method with multiple stage mass spectrometry, 198
- Air, laboratory, soil surfaces exposed to, cyclohexamine on, Static secondary ionization mass spectrometry detection of, 168
- Air analysis using Tenax collection with jet-separator enrichment and ion trap mass spectrometric analysis, 1172
- Airborne particulate matter and soil, nitro-substituted polynuclear aromatic hydrocarbons in, Sub-parts-per-billion determination of, by electron capture-tandem mass spectrometry, 1255
- Albumins, carbon isotope variability in, Direct analysis of, by liquid flow-injection isotope ratio mass spectrometry, 605
- Alcohols, gas phase reactions of Sc^+ , Y^+ and Lu^+ with. Effects of the class and chain length of alcohols on the nature of primary products, 1157
- Aliphatic molecules, saturated and unsaturated, 193-nm photodissociation of ions from, 114
- Alkane eliminations, ion-neutral complex-mediated, similarity to: Ab initio characterization of ring-opening H-transfer in ionized cyclopentanone, 1251
- Amino acid, substitution in the hemoglobin "core," an improved method to determine: Electrospray ionization-tandem mass spectrometry analysis of peptides derived by enzymatic digestion of oxidized globin subunits, 1040
- Amino acid, unusual, in a semisynthetic polypeptide, Use of high- and low-energy collision-induced dissociation tandem mass spectrometry in the identification of, 1034
- Amino acids, 20 common, The reactions of ground state Cu^+ and Fe^+ with, 722
- Ammonium salts, diquatery, observed charge states of, and ion pairing, in electrospray ionization mass spectrometry, Effects of solvent and counterion on, 1050
- Analog-to-digital converters, two, Increasing the dynamic range of a transient recorder by using, 107
- Analysis by fast-atom bombardment tandem mass spectrometry of phosphatidylcholine isolated from heart mitochondrial fractions: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Angiotensin II, doubly protonated, formed by electrospray ionization, charge-separation reactions in tandem mass spectrometry of, The importance of: experimental considerations and structural implications, 30
- Anomeric configuration of glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Antibiotic-containing mixtures from fermentation broths, Rapid analysis of, by using liquid chromatography-electrospray ionization-mass spectrometry matrix-assisted laser desorption ionization-time-of-flight-mass spectrometry, 1227
- Antibodies, mouse switch variant, Characterization of, by matrix-assisted laser desorption ionization mass spectrometry and electrospray ionization mass spectrometry, 707
- Antithrombotic, nonpeptide, in dog plasma, Quantitative determination of, by microbore high-performance liquid chromatography-tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, 1238
- Apparent gas-phase acidities of multiply protonated peptide ions: ubiquitin, insulin B, and renin substrate, 1211
- Application of nonresonance excitation to ion trap tandem mass spectrometry and selected ejection chemical ionization, 668
- Arachidonic acid, free-radical oxidation of, four regioisomers of F_2 -isoprostanes formed by, Mass spectrometric analysis of, 490
- Arginine-containing peptide ions formed by electrospray ionization, Modeling the maximum charge state of, 972
- Aromatic hydrocarbons, polycyclic, C_{10} to C_{160} , flame-generated, Characterization of, by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276
- Aromatic hydrocarbons, polynuclear, nitro-substituted, in airborne particulate matter and soil, Sub-parts-per-billion determination by electron capture-tandem mass spectrometry, 1255
- Asilomar conference on Mass Spectrometry, The 11th: Highlights of, 505
- Asilomar Conference on Mass Spectrometry The 12th: Elemental Mass Spectrometry, 613, 693, 760, 987
- ASMS Conference on Mass Spectrometry, 44th, 368, 509
- Atmospheric pressure, negative, chemical ionization liquid chromatography-mass spectrometry, sensitivity in, Effect of high-performance liquid chromatography mobile phase components on, 1059
- Atmospheric pressure chemical ionization liquid chromatography mass spectrometry interface, Optimization of, 69
- Atmospheric pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, Characterization of flame-generated C_{10} to C_{160} polycyclic aromatic hydrocarbons by, 276

- Atmospheric pressure interference, High-performance liquid chromatography-mass spectrometry of porphyrins by using, 965
- Atomic ions, Resonance ejection of, enhanced abundance sensitivity by: Plasma source ion trap mass spectrometry, 1161
- Automation, Data-controlled, of liquid chromatography/tandem mass spectrometry analysis of peptide mixtures, 532
- “Ball-and-chain” propagation and charge separation in the addition of 1-butene to C_{60}^{2+} , Collision-induced dissociation evidence for, 261
- Base composition of double-strand DNA, Accurate, by mass spectrometry, 1266
- Basicities, Gas-phase, of histidine and lysine and their selected di- and tripeptides, 1203
- Beam-induced dehalogenation of organic compounds, liquid secondary ionization mass spectrometry, secondary electron capture in, Evidence for a mechanism that involves, 1109
- Benzaldehydes, para-substituted, Gas-phase base-catalyzed Claisen-Schmidt reactions of the acetone enolate anion with various, 82
- Benzene structure, 1,3-hexadien-5-yne radical cation to, and to nonclassical ion structures, isomerization of, Ab initio calculations of, 731
- Benzodiazepin-4-one,-6-one, and -4,6-dione, pyrrolo[1,2-a], Mass spectrometry and molecular orbital calculations on. Part 2*. Characterization and differentiation of heterocyclic isomers, 653
- Biological nucleophiles, model, Reactions of polycyclic aromatic hydrocarbon radical cations with, 628
- B_n ($n \geq 3$) ions in peptide spectra, The structure and fragmentation of, 233
- Book Reviews
Advances in Gas Phase Ion Chemistry, Vols. 1 and 2, 1178
Introduction to Mass Spectrometry: An ACS Video Course, 298
Mass Spectrometry for Biotechnology, 1179
Mass Spectrometry in Biomolecular Sciences, 1273
Mass Spectrometry in the Biological Sciences, 692
Mass Spectrometry PITTCon'96, 500
Preview of Personal Computer Literature Abstract Sources for Mass Spectrometry, 299
Time-of-Flight Mass Spectrometry, 123
- Broad energy range focusing reflectrons, design of, Method for, 1002
- Broths, fermentation, Rapid analysis of antibiotic-containing mixtures from, by using liquid chromatography-electrospray ionization-mass spectrometry matrix-assisted laser desorption ionization-time-of-flight-mass spectrometry, 1227
- 1-Butene, addition to C_{60}^{2+} charge separation and “ball and chain” propagation in, Collision-induced dissociation evidence for, 261
- C_{60} , cirrannulene and coronene, electron affinities of, Estimation of, by using the kinetic method, 619
- C-C bond formation and H-transfer between partners, and channeling of energy into dissociation: A photoionization study of the ion-neutral complexes $[CH_3CH^+CH_3 \cdot CH_2CH_3]$ and $[CH_3CH_2CH^+CH_3 \cdot CH_3]$ in the gas phase, 73
- C_{10} to C_{160} polycyclic aromatic hydrocarbons, flame-generated, Characterization of, by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276
- Calcote mechanism for soot formation, initial reaction of, Investigation of, 559
- Capillary electrophoresis-electrospray mass spectra of herbicides paraquat and diquat, 981
- Carbamates, thermally-labile, in supersonic molecular beams, Fast, very fast and ultra-fast gas chromatography-mass spectrometry of, 737
- Carbon isotope variability in albumins, Direct analysis of, by liquid flow-injection isotope ratio mass spectrometry, 605
- Carboxylic esters, long-chain, Characterization of, with $CH_3OBOCH_3^+$ in a small Fourier-transform ion cyclotron resonance mass spectrometer with, 1138
- Cation, radical, Methyl propionate, 482
 $[CH_3CH_2CH^+CH_3 \cdot CH_3]$ and $[CH_3CH^+CH_3 \cdot CH_2CH_3]$ and in the gas phase, A photoionization study of: formation, H-transfer and C-C bond formation between partners, and channeling of energy into dissociation, 73
 $[CH_3CH^+CH_3 \cdot CH_2CH_3]$ and $[CH_3CH_2CH^+CH_3 \cdot CH_3]$ in the gas phase, A photoionization study of: formation, H-transfer and C-C bond formation between partners, and channeling of energy into dissociation, 73
- $C_3H_9O^+$ formation from ionized phytyl methyl ether, The structure and mechanisms of, 205
- C_{60}^{2+} , addition of 1-butene to, charge separation and “ball and chain” propagation in, Collision-induced dissociation evidence for, 261
- Characterization and differentiation of heterocyclic isomers. Part 2*. Mass spectrometry and molecular orbital calculations on pyrrolo[1,2-a][1,4]benzodiazepin-4-one,-6-one, and -4,6-dione, 653
- Characterization of flame-generated C_{10} to C_{160} polycyclic aromatic hydrocarbons by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276
- Characterization of large, heterogeneous proteins by electrospray ionization-mass spectrometry, 1219
- Characterization of long-chain carboxylic esters with $CH_3OBOCH_3^+$ in a small Fourier-transform ion cyclotron resonance mass spectrometer, 1138
- Characterization of mouse switch variant antibodies by matrix-assisted laser desorption ionization mass spectrometry and electrospray ionization mass spectrometry, 707
- Charge separation and “ball-and-chain” propagation in the addition of 1-butene to C_{60}^{2+} , Collision-induced dissociation evidence for, 261
- Charge-separation reactions in tandem mass spectrometry of doubly protonated angiotensin II formed by electrospray ionization, The importance of: experimental considerations and structural implications, 30
- Charge-space effects in plasma mass spectrometry, Time-resolved measurements of individual ion cloud signals to investigate, 362
- Charge state, maximum, of arginine-containing peptide ions formed by electrospray ionization, Modeling the, 972
- Charge-state reduction with improved signal intensity of oligonucleotides in electrospray ionization mass spectrometry, 697
- Charged states, observed, of diquaternary ammonium salts, and ion pairing, in electrospray ionization mass spectrometry, Effects of solvent and counterion on, 1050
- $CH_2CH_2CH^+OH$, The distonic ion, keto ion $CH_3CH_2CH=O^+$, enol ion $CH_3CH=CHOH^+$, and related $C_3H_6O^+$ radical cations. Stabilities and isomerization proclivities studied by dissociation and neutralization-reionization, 573
- Chelation, metal, of dinucleotide analogs in the gas phase by fast-atom bombardment mass spectrometry, A study of, 42
- Chemical ionization, Cluster, and deuterium exchange mass spectrometry in supersonic molecular beams, 550

- Chemical ionization, ejection, selected, and ion trap tandem mass spectrometry, Application of nonresonance excitation to, 668
- Chemical ionization, negative ion, polarizable stationary phase, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Chemical ionization liquid chromatography, negative atmospheric pressure, -mass spectrometry, sensitivity in, Effect of high-performance liquid chromatography mobile phase components on, 1059
- Chemical ionization liquid chromatography mass spectrometry interface, atmospheric pressure, Optimization of, 69
- Chemical ionization mass spectrometry, atmospheric-pressure, with liquid introduction via heated nebulizer interface, Characterization of flame-generated C₁₀ to C₁₆₀ polycyclic aromatic hydrocarbons by, 276
- Chemical ionization of phenyl *n*-propyl ether and methyl substituted analogs: propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring, 639
- Chemical ionization reagents, oxygenated, with vincamine, Ion-molecule reactions of, 250
- Chemical ionization tandem mass spectrometry, Desorption, of polyprenyl and dolichyl phosphates, 958
- Chloroaromatic compounds, oxygen addition to, Collision-induced, 1144
- CH₃OBOCH₃⁺, Characterization of long-chain carboxylic esters in a small Fourier-transform ion cyclotron resonance mass spectrometer with, 1138
- Chromatography, gas, -mass spectrometry, Fast, very fast, and ultra-fast, of thermally labile steroids, carbamates, and drugs in supersonic molecular beams, 737
- Chromatography, liquid, atmospheric pressure chemical ionization mass spectrometry interface, Optimization of, 69
- Chromatography, liquid, electrospray, -tandem mass spectrometry, Quantitation of SR 27417 in human plasma using: a study of ion suppression, 1099
- Chromatography, liquid, microbore high-performance-tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Chromatography, liquid, -electrospray ionization-mass spectrometry matrix-assisted laser desorption ionization-time-of-flight-mass spectrometry, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Chromatography, liquid, particle beam-mass spectrometry with massive cluster impact, 293
- Chromatography, liquid-mass spectrometry, High performance, of porphyrins by using an atmospheric pressure interface, 965
- Chromatography, liquid/tandem mass spectrometry analysis of peptide mixtures, Data-controlled automation of, 532
- Chromatography, mass-resolved, negative ion chemical ionization, polarizable stationary phase, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Cirranulene and coronene, C₆₀, electron affinities of, Estimation of, by using the kinetic method, 619
- Claisen-Schmidt reactions, Gas-phase base-catalyzed, of the acetone enolate anion with various para-substituted benzaldehydes, 82
- Cluster chemical ionization and deuterium exchange mass spectrometry in supersonic molecular beams, 550
- Cluster impact, massive, Liquid chromatography particle beam-mass spectrometry with, 293
- Cobalt, diastereomeric, -glucosyl-glucose disaccharide complexes, tandem mass spectrometry of: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Collision-induced oxygen addition to chloroaromatic compounds, 1144
- Collision induced decomposition of peptides. Choice of collision parameters, 677
- Collision-induced dissociation, high energy, Structural elucidation of O-linked glycopeptides by, 319
- Collision-induced dissociation evidence for charge separation and "ball-and-chain" propagation in the addition of 1-butene to C₆₀²⁺, 261
- Collision-induced dissociation mass spectrometry, High-energy, of synthetic mannose-6-phosphate oligosaccharides, 182
- Collision-induced dissociation spectra of peptides, uninterpreted high-energy, Search of, with sequence databases, 1089
- Collision-induced dissociation tandem mass spectrometry, high-and low-energy, in the analysis of glycoalkaloids and their aglycons, Comparison of, 173
- Collision-induced dissociation tandem mass spectrometry, low-and high-energy, Use of, in the identification of an unusual amino acid in a semisynthetic polypeptide, 1034
- Collision parameters, choice of. Collision induced decomposition of peptides, 677
- Combined mass spectrometry methods, Use of, for the characterization of a new variant of human hemoglobin: the double mutant hemoglobin Villeparisis B77(EF1) His → Tyr, β80 (EF4) Asn → Ser, 163
- Comparison of high- and low-energy collision-induced dissociation tandem mass spectrometry in the analysis of glycoalkaloids and their aglycons, 173
- Complexes of iron(II) with cysteine-containing peptides in the gas phase, 977
- Controlled-current electrolytic process inherent to electrospray, Observation of gas-phase molecular dications formed from neutral organics in solution via, 157
- Converters, analog-to-digital, two, Increasing the dynamic range of a transient recorder by using, 107
- Copper, ground state and Fe⁺, The reactions of, with the 20 common amino acids, 722
- Copper-glycine solutions, Electrospray ionization of, 25
- Coronene and cirranulene, C₆₀, electron affinities of, Estimation of, by using the kinetic method, 619
- Counterion and solvent, Effects of, on ion pairing and observed charge states of diquatary ammonium salts in electrospray ionization mass spectrometry, 1050
- Critical energies, estimation of, An empirical approach to, by using a quadrupole ion trap, 1116
- Cu⁺. See Copper
- Cyclohexamine on soil surfaces exposed to laboratory air, Static secondary ionization mass spectrometry detection of, 168
- Cyclopentanone, ionized, ring-opening H-transfer in, Ab initio characterization of: similarity to ion-neutral complex-mediated alkane eliminations, 1251
- Cylindrical ion trap source for time-of-flight mass spectrometry, A segmented ring, 1009
- Cysteine-containing peptides, Complexes of iron(II) with, in the gas phase, 977
- Databases, sequence, with uninterpreted high-energy collision-induced dissociation spectra of peptides, Search of, 1089
- Data-controlled automation of liquid chromatography/tandem mass spectrometry analysis of peptide mixtures, 532
- DDT metabolites and PCBs, oxygen addition-induced dechlorination of, in electron capture mass spectrometry, Regioselectivity of, 66

- Dechlorination of PCBs and DDT metabolites in electron capture mass spectrometry, Oxygen-addition induced, Regioselectivity of, 66
- Decomposition of peptides, Collision induced. Choice of collision parameters, 677
- Decompositions, low energy, of gas-phase peptide ions, Role of the site of protonation in, 522
- Defect formation on surfaces bombarded by energetic multiply charged proteins: implications for the conformation of gas-phase electrosprayed ions, 329
- Dehalogenation of organic compounds, liquid secondary ionization mass spectrometry beam-induced, secondary electron capture in, Evidence for a mechanism that involves, 1109
- 2'-Deoxyadenosine and 2'-deoxyadenosine, Phenylglycidyl ether adducts of: stability in solution and structure analysis by electrospray tandem mass spectrometry, 682
- 2'-Deoxycytidine and 2'-deoxyadenosine, Phenylglycidyl ether adducts of: stability in solution and structure analysis by electrospray tandem mass spectrometry, 682
- Desorption, laser, matrix-assisted, observed fast fragmentation of peptides in, Factors that influence, 225
- Desorption chemical ionization tandem mass spectrometry of polyprenyl and dolichyl phosphates, 958
- Desorption ionization, laser, matrix-assisted, of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, High resolution end group determination of low molecular weight polymers by, 449
- Determination of the anomeric configuration of glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates by fast-atom bombardment tandem mass spectrometry, 541
- Deuterium exchange and Cluster chemical ionization mass spectrometry, in supersonic molecular beams, 550
- Diastereomeric cobalt–glucosyl–glucose disaccharide complexes, tandem mass spectrometry of: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Dication, dichlorocarbene, single-electron capture by, Mechanisms of, 266
- Dications, molecular, gas-phase, formed from neutral organics in solution, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Dichlorocarbene dication, single-electron capture by, Mechanisms of, 266
- Differentiation of stereochemistry of glycosidic bond configuration: tandem mass spectrometry of diastereomeric cobalt–glucosyl–glucose disaccharide complexes, 953
- Dimethyl diselenide, Distinguishing conventional and distonic radical cations by using, 1245
- Dimethylpyrroles, dissociation of, Reactions of isomeric parent ions in, 930
- Dinucleotide analogs in the gas phase, metal chelation of, by fast-atom bombardment mass spectrometry, A study of, 42
- Dipeptides, selected, Gas-phase basicities of histidine and lysine and their, 1203
- Diquat, Capillary electrophoresis–mass spectra of, 981
- Diquaternary ammonium salts, observed charge states of, and ion pairing, in electrospray ionization mass spectrometry, Effects of solvent and counterion on, 1050
- Direct analysis of carbon isotope variability in albumins by liquid flow-injection isotope ratio mass spectrometry, 605
- Disaccharide, glucose, –glucosyl complexes–diastomeric cobalt, tandem mass spectrometry of: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Diselenide, dimethyl, Distinguishing conventional and distonic radical cations by using, 1245
- Dissociation, channeling of energy into: A photoionization study of the ion-neutral complexes $[\text{CH}_3\text{CH}^+_3 \cdot \text{CH}_2\text{CH}_3]$ and $[\text{CH}_3\text{CH}_2\text{CH}^+\text{CH}_3 \cdot \text{CH}_3]$ in the gas phase, 73
- Dissociation, Collision-induced, evidence for charge separation and “ball-and-chain” propagation in the addition of 1-butene to C_{60}^{2+} , 261
- Dissociation, high-energy collision-induced, Structural elucidation of O-linked glycopeptides by, 319
- Dissociation and gas-phase methylation of acids and esters, Effects of functional group interactions on, 565
- Dissociation and neutralization–reionization, Stabilities and Isomerization proclivities studies by. The distonic ion $^-\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, 573
- Dissociation mass spectrometry, collision-induced, High-energy, of synthetic mannose-6-phosphate oligosaccharides, 182
- Dissociation spectra of peptides, uninterpreted high-energy collision-induced, Search of, with sequence databases, 1089
- Dissociation tandem mass spectrometry, collision-induced, High- and low-energy, Use of, in the identification of an unusual amino acid in a semisynthetic polypeptide, 1034
- Dissociation tandem mass spectrometry, collision-induced, high-and low-energy, in the analysis of glycoalkaloids and their aglycons, Comparison of, 173
- Distinguishing conventional and distonic radical cations by using dimethyl diselenide, 1245
- Distonic and conventional radical cations, Distinguishing, by using dimethyl diselenide, 1245
- Distonic ion $^-\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, The, Stabilities and isomerization proclivities studied by dissociation and neutralization–reionization, 573
- DNA, double-strand, Accurate base composition of, by mass spectrometry, 1266
- Dog plasma, nonpeptide antithrombotic in, Quantitative determination of, by microbore high-performance liquid chromatography–tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, 1238
- Dolichyl and polyprenyl phosphates, Desorption chemical ionization tandem mass spectrometry of, 958
- Double mutant hemoglobin Villeparisis B77(EF1) His → Tyr, β 80 (EF4) Asn → Ser: Use of combined mass spectrometry methods for the characterization of a new variant of human hemoglobin, 163
- Doubly protonated angiotensin II formed by electrospray ionization, charge-separation reactions in tandem mass spectrometry of, The importance of: experimental considerations and structural implications, 30
- Drug, thermally-labile, in supersonic molecular beams, Fast, very fast and ultra-fast gas chromatography–mass spectrometry of, 737
- Dynamic range of a transient recorder, Increasing the, by using two analog-to-digital converters, 107
- Effect of high-performance liquid chromatography mobile phase components on sensitivity in negative atmospheric pressure chemical ionization liquid chromatography–mass spectrometry, 1059
- Effect of ion–molecule collisions in the vacuum chamber of an electrospray time-of-flight mass spectrometer on mass spectra of proteins, 342
- Effects of functional group interactions on the gas-phase methylation and dissociation of acids and esters, 565
- Effects of heavy gases on the tandem mass spectra of peptide ions in the quadrupole ion trap, 1194
- Effects of solvent and counterion on ion pairing and observed charge states of diquaternary ammonium salts in electrospray ionization mass spectrometry, 1050

- Eighth Lake Louise Workshop on Tandem Mass Spectrometry, The, 611
- Ejection chemical ionization, selected, and ion trap tandem mass spectrometry, Application of nonresonance excitation to, 668
- Electrolytic process, controlled current, inherent to electrospray, Observation of gas-phase molecular dications formed from neutral organics in solution via, 157
- Electron affinities of C_{60} , cirrannulene and coronene, Estimation of, by using the kinetic method, 619
- Electron capture, secondary, in the liquid secondary ionization mass spectrometry beam-induced dehalogenation of organic compounds, Evidence for a mechanism that involves, 1109
- Electron capture, single, by the dichlorocarbene dication, Mechanisms of, 266
- Electron capture ionization of explosives with a microflow rate particle beam interface, 753
- Electron capture mass spectrometry, oxygen addition-induced dechlorination of PCBs and DDT metabolites in, Regioselectivity of, 66
- Electron capture–tandem mass spectrometry, Sub-parts-per-billion determination of nitro-substituted polynuclear aromatic hydrocarbons in airborne particulate matter and soil by, 1255
- Electron ionization mass spectral library search results, Evaluating, 313
- Electrophoresis, capillary, –electrospray mass spectra of herbicides paraquat and diquat, 981
- Electrospray, controlled-current electrolytic process inherent to, Observation of gas-phase molecular dications formed from neutral organics in solution via, 157
- Electrospray, Nano, combined with a quadrupole ion trap for the analysis of peptides and protein digests, 150
- Electrospray ionization, arginine-containing peptide ions formed by, Modeling the maximum charge state of, 972
- Electrospray ionization, doubly protonated angiotensin II formed by, charge-separation reactions in tandem mass spectrometry of, The importance of: experimental considerations and structural implications, 30
- Electrospray ionization, internal, low magnetic field, –Fourier transform ion cyclotron resonance mass spectrometer, A high performance, 915
- Electrospray ionization, pneumatically assisted, microbore high-performance liquid chromatography–tandem mass spectrometry utilizing, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Electrospray ionization and low energy tandem mass spectrometry of polyhydroxy unsaturated fatty acids, 140
- Electrospray ionization mass spectrometry, and matrix-assisted ionization laser desorption mass spectrometry, Characterization of mouse switch variant antibodies by, 707
- Electrospray ionization mass spectrometry, improved signal intensity of oligonucleotides in, Charge-state reduction with, 697
- Electrospray ionization–mass spectrometry, Characterization of large, heterogeneous proteins by, 1219
- Electrospray ionization–mass spectrometry, of nucleobases and nucleosides, Processes that affect, 1106
- Electrospray ionization of copper–glycine solutions, 25
- Electrospray ionization–tandem mass spectrometry, positive and negative mode, Identification of phosphorylation sites in phosphopeptides by, 243
- Electrospray ionization–tandem mass spectrometry analysis of peptides derived by enzymatic digestion of oxidized globin subunits: an improved method to determine amino acid substitution in the hemoglobin “core,” 1040
- Electrospray liquid chromatography–tandem mass spectrometry, Quantitation of SR 27417 in human plasma using: a study of ion suppression, 1099
- Electrospray mass spectra–Capillary electrophoresis of herbicides paraquat and diquat, 981
- Electrospray mass spectrometry, nonoliter, Long-lived metalized tips for, 1270
- Electrospray tandem mass spectrometric structural characterization, Negative ion, of leukotriene B_4 (LTB_4) and LTB_4 -derived metabolites, 129
- Electrospray tandem mass spectrometry, structure analysis of: Phenylglycidyl ether adducts of 2'-deoxycytidine and 2'-deoxyadenosine, 682
- Electrospray time-of-flight mass spectrometer, vacuum chamber of, ion–molecule collisions in, Effect of, on mass spectra of proteins, 342
- Electrosprayed ions, gas-phase, implications for the conformation of: Defect formation on surfaces bombarded by energetic multiply charged proteins, 329
- Electrosprayed nucleotide ions, non-covalent adducts of, Infrared photodissociation of, 209
- Electrostatic ion guide, Stacked-ring, 101
- Electrospray ionization–mass spectrometry matrix-assisted laser desorption ionization–time-of-flight-mass spectrometry–Liquid chromatography, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- 11th Asilomar Conference on Mass Spectrometry, Highlights of, 505
- Empirical approach to estimation of critical energies by using a quadrupole ion trap, An, 1116
- End group determination, high resolution, of low molecular weight polymers by matrix-assisted laser desorption ionization of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, 449
- Energetic multiply charged proteins, Defect formation on surfaces bombarded by: implications for the conformation of gas-phase electrosprayed ions, 329
- Energies, critical, estimation of, An empirical approach to, by using a quadrupole ion trap, 1116
- Energy, channeling into dissociation: A photoionization study of the ion-neutral complexes [$CH_3CH^+_3 \cdot CH_2CH_3$] and [$CH_3CH_2CH^+CH_3 \cdot CH_3$] in the gas phase, 73
- Enhancement of ion intensity in time-of-flight secondary-ionization mass spectrometry, 467
- Enolate anion, Gas-phase base-catalyzed Claisen-Schmidt reactions of, with various para-substituted benzaldehydes, 82
- Enzymatic digestion of oxidized globin subunits, peptides derived by, Electrospray ionization–tandem mass spectrometry analysis of: an improved method to determine amino acid substitution in the hemoglobin “core,” 1040
- Errata, 758, 1177
- Esters and acids, gas-phase methylation and dissociation of, Effects of functional group interactions on, 565
- Estimation of the electron affinities of C_{60} , cirrannulene and coronene by using the kinetic method, 619
- Ether, ionized phytol methyl, $C_3H_9O^+$ formation from, The structure and mechanisms of, 205
- Ether, phenyl *n*-propyl and methyl substituted analogs, Chemical ionization of: propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring, 639
- Ether adducts, Phenylglycidyl, of 2'-deoxycytidine and 2'-deoxyadenosine: stability in solution and structure analysis by electrospray tandem mass spectrometry, 682
- Evaluating electron ionization mass spectral library search results, 313
- Evaluation of field desorption mass spectrometry for the analysis of polyethylene, 1070
- Evaluation of matrix-assisted laser desorption ionization mass spectrometry for polymer characterization, 11

- Evaluation of matrix-assisted laser desorption ionization–time of flight mass measurement accuracy by using delayed extraction, 995
- Evidence for a mechanism that involves secondary electron capture in the liquid secondary ionization mass spectrometry beam-induced dehalogenation of organic compounds, 1109
- Excitation, nonresonance, Application of, to ion trap tandem mass spectrometry and selected ejection chemical ionization, 668
- Explosives, Electron capture ionization of, with a microflow rate particle beam interface, 753
- External ion source Fourier transform ion cyclotron resonance mass spectrometer, matrix-assisted laser desorption ionization on, High resolution end group determination of low molecular weight polymers by, 449
- Extraction, delayed, Evaluation of matrix-assisted laser desorption ionization–time-of-flight mass measurement accuracy by, 995
- FACSS Meeting, 22nd annual, Mass Spectrometric Highlights of, 507
- Factors that influence the observed fast fragmentation of peptides in matrix-assisted laser desorption, 225
- Fast, very fast, and ultra-fast gas chromatography–mass spectrometry of thermally labile steroids, carbamates, and drugs in supersonic molecular beams, 737
- Fast-atom bombardment mass spectrometry, metal chelation of dinucleotide analogs in the gas phase by, A study of, 42
- Fast-atom bombardment tandem mass spectrometry, Analysis of phosphatidylcholine isolated from heart mitochondrial fractions by: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Fast-atom bombardment tandem mass spectrometry, Determination of the anomeric configuration of glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates by, 541
- Fatty acids, polyhydroxy unsaturated, Electrospray ionization and low energy tandem mass spectrometry of, 140
- Fatty acyl moieties, monohydroxylated, incorporation of, evidence of, Analysis by fast-atom bombardment tandem mass spectrometry of phosphatidylcholine isolated from heart mitochondrial fractions, 50
- Fe⁺. See Iron
- Fermentation broths, Rapid analysis of antibiotic-containing mixtures from, by using liquid chromatography–electrospray ionization–mass spectrometry matrix-assisted laser desorption ionization–time-of-flight-mass spectrometry, 1227
- Field desorption mass spectrometry for the analysis of polyethylene, Evaluation of, 1070
- F₂-isoprostanes, four regioisomers of, formed by free radical oxidation of arachidonic acid, Mass spectrometric analysis of, 490
- Flame-generated C₁₀ to C₁₆₀ polycyclic aromatic hydrocarbons Characterization of, by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276
- Fourier transform ion cyclotron resonance detection of multiphoton ionization spectroscopy, 1018
- Fourier transform ion cyclotron resonance–Internal glow discharge mass spectrometry, 923
- Fourier transform ion cyclotron resonance mass spectrometer, external ion source, matrix-assisted laser desorption ionization on, High resolution end group determination of low molecular weight polymers by, 449
- Fourier transform ion cyclotron resonance mass spectrometer, small, Characterization of long-chain carboxylic esters with CH₃OBOCH₃⁺ in, 1138
- Fourier transform ion cyclotron resonance mass spectrometer–low magnetic field internal electrospray, A high performance, 915
- Fourier transform ion cyclotron resonance mass spectrometry, –In-cell matrix-assisted laser desorption, 1026
- Fragmentation, of peptides, fast, observed, in matrix-assisted laser desorption, Factors that influence, 225
- Fragmentation of protonated O,O-diethyl O-aryl phosphorothionates in tandem mass spectral analysis, 189
- Free-electron laser, tunable mid-infrared, Infrared matrix-assisted laser desorption and ionization by using, 1187
- Free radical oxidation of arachidonic acid, four regioisomers of F₂-isoprostanes formed by, Mass spectrometric analysis of, 490
- Fullerenes, Matrix-assisted laser desorption/ionization tandem reflectron time-of-flight mass spectrometry of, 590
- Functional group interactions, Effects of, on the gas-phase methylation and dissociation of acids and esters, 565
- Fundamentals of the application of matrix-assisted laser desorption–ionization mass spectrometry to low mass poly(methylmethacrylate) polymers, 287
- Furan, Transition-metal mediated heteroatom removal by reactions of FeL⁺ [L=O, C₄H₆, *c*-C₅H₆, C₆H₆, C₅H₄(=CH₂)] with, in the gas phase, 938
- Gas chromatography, high-temperature/mass spectrometry with a polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, High-resolution triglycerol mixture analysis using, 350
- Gas chromatography–mass spectrometry, Fast, very fast, and ultra-fast, of thermally labile steroids, carbamates, and drugs in supersonic molecular beams, 737
- Gas phase, Complexes of iron(II) with cysteine-containing peptides in, 977
- Gas phase, dinucleotide analogs in, metal chelation of, by fast-atom bombardment mass spectrometry, A study of, 42
- Gas phase, Transition-metal mediated heteroatom removal by reactions of FeL⁺ [L=O, C₄H₆, *c*-C₅H₆, C₆H₆, C₅H₄(=CH₂)] with furan, thiophene and pyrrole in, 938
- Gas-phase, agostic effects in: SiCl₃⁺ and SiCl⁺ affinities for pyridines determined by using the kinetic method with multiple stage mass spectrometry, 198
- Gas-phase acidities, Apparent, of multiply protonated peptide ions: ubiquitin, insulin B, and renin substrate, 1211
- Gas-phase base-catalyzed Claisen–Schmidt reactions of the acetone enolate anion with various para-substituted benzaldehydes, 82
- Gas-phase basicities of histidine and lysine and their selected di- and tripeptides, 1203
- Gas-phase electrosprayed ions, implications for the conformation of: Defect formation on surfaces bombarded by energetic multiply charged proteins, 329
- Gas-phase ion molecule reactions, selective metal ion source for, Resonant laser ablation as, 664
- Gas-phase ionic species, generation and characterization of, Multiple stage pentaquadrupole mass spectrometry for. The case of the PyC₂H₅⁺ isomers, 1126
- Gas-phase methylation and dissociation of acids and esters, Effects of functional group interactions on, 565
- Gas-phase molecular dications formed from neutral organics in solution, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Gas-phase peptide ions, low energy decompositions of, Role of the site of protonation in, 522
- Gas-phase reactions of Sc⁺, Y⁺, and Lu⁺ with alcohols. Effects of the class and chain length of alcohols on the nature of primary products, 1157

- Gases, heavy, Effects of, on the tandem mass spectra of peptide ions in the quadrupole ion trap, 1194
- Globin subunits, oxidized, enzymatic digestion of, peptides derived by, Electrospray ionization-tandem mass spectrometry analysis of: an improved method to determine amino acid substitution in the hemoglobin "core," 1040
- Glucose disaccharide-glucosyl complexes-diastomeric cobalt, tandem mass spectrometry of: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Glucosyl-glucose disaccharide complexes-diastomeric cobalt, tandem mass spectrometry of: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Glycine-copper solutions, Electrospray ionization of, 25
- Glycoalkaloids, and their aglycons, Analysis of, Comparison of high-and low-energy collision-induced dissociation tandem mass spectrometry in, 173
- Glycopeptides, O-linked, Structural elucidation of, by high energy collision-induced dissociation, 319
- Glycosidic bond configuration, stereochemistry of, Differentiation of: tandem mass spectrometry of diastereomeric cobalt-glucosyl-glucose disaccharide complexes, 953
- Glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates, anomeric configuration of, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Ground state Cu^+ and Fe^+ , The reactions of, with the 20 common amino acids, 722
- Heart mitochondrial fractions, phosphatidylcholine isolated from, Analysis by fast-atom bombardment tandem mass spectrometry: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Heated nebulizer interface, liquid introduction with, atmospheric-pressure chemical ionization mass spectrometry, Characterization of flame-generated C_{10} to C_{160} polycyclic aromatic hydrocarbons by, 276
- Heavy gases, Effects of, on the tandem mass spectra of peptide ions in the quadrupole ion trap, 1194
- Hemoglobin, human, new variant of, characterization of, Use of combined mass spectrometry methods for: the double mutant hemoglobin Villeparisis B77(EF1) His \rightarrow Tyr, β 80 (EF4) Asn \rightarrow Ser, 163
- Hemoglobin "core," amino acid substitution in, an improved method to determine: Electrospray ionization-tandem mass spectrometry analysis of peptides derived by enzymatic digestion of oxidized globin subunits, 1040
- Hemoglobin Villeparisis, double mutant, B77(EF1) His \rightarrow Tyr, β 80 (EF4) Asn \rightarrow Ser: Use of combined mass spectrometry methods for the characterization of a new variant of human hemoglobin, 163
- Herbicides paraquat and diquat, Capillary electrophoresis-mass spectra of, 981
- Heteroatom removal, Transition-metal, by reactions of FeL^+ [$\text{L}=\text{O}$, C_4H_n , $c\text{-C}_5\text{H}_n$, C_6H_n , $\text{C}_5\text{H}_4(\text{=CH}_2)$] with furan, thiophene and pyrrole in the gas phase, 938
- Heterocyclic isomers, Characterization and differentiation of. Part 2.* Mass spectrometry and molecular orbital calculations on pyrrolo[1,2-a][1,4]benzodiazepin-4-one, -6-one, and -4,6-dione, 653
- 1,3-Hexadien-5-yne radical cation to the benzene structure and to nonclassical ion structures, isomerization of, Ab initio calculations of, 731
- High-energy collision-induced dissociation mass spectrometry of synthetic mannose-6-phosphate oligosaccharides, 182
- High-energy collision-induced dissociation spectra of peptides, uninterpreted, Search of, with sequence databases, 1089
- High energy collision-induced dissociation, Structural elucidation of O-linked glycopeptides by, 319
- High-performance liquid chromatography-mass spectrometry of porphyrins by using an atmospheric pressure interface, 965
- High-performance liquid chromatography mobile phase components, Effect of, on sensitivity in negative atmospheric pressure chemical ionization liquid chromatography-mass spectrometry, 1059
- High performance low magnetic field internal electrospray ionization-Fourier transform ion cyclotron resonance mass spectrometer, A, 915
- High resolution end group determination of low molecular weight polymers by matrix-assisted laser desorption ionization of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, 449
- High-resolution triacylglycerol mixture analysis using high-temperature gas chromatography/mass spectrometry with a polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, 350
- High-temperature gas chromatography/mass spectrometry with a polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, High-resolution triglycerol mixture analysis using, 350
- Histidine and lysine, Gas-phase basicities of, and their selected di- and tripeptides, 1203
- H-transfer, ring-opening, in ionized cyclopentanone, Ab initio characterization of: similarity to ion-neutral complex-mediated alkane eliminations, 1251
- H-transfer and C-C bond formation between partners, and channeling of energy into dissociation: A photoionization study of the ion-neutral complexes [$\text{CH}_3\text{CH}^+_3 \cdot \text{CH}_2\text{CH}_3$] and [$\text{CH}_3\text{CH}_2\text{CH}^+\text{CH}_3 \cdot \text{CH}_3$] in the gas phase, 73
- Human hemoglobin, new variant of, characterization of, Use of combined mass spectrometry methods for: the double mutant hemoglobin Villeparisis B77(EF1) His \rightarrow Tyr, β 80 (EF4) Asn \rightarrow Ser, 163
- Human plasma, SR 27417 in, Quantitation of, using electrospray liquid chromatography-tandem mass spectrometry: a study of ion suppression, 1099
- Hydrocarbon radical cations, polycyclic aromatic, Reactions with model biological nucleophiles, 628
- Hydrocarbons, polycyclic aromatic, C_{10} to C_{160} , flame-generated, Characterization of, by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276
- Hydrocarbons, polynuclear aromatic, nitro-substituted, in airborne particulate matter and soil, Sub-parts-per-billion determination by electron capture-tandem mass spectrometry, 1255
- Hydrogen protein exchange rates, changes in, that result from point mutations Mass spectrometric measurement of, 515
- Identification of phosphorylation sites in phosphopeptides by positive and negative mode electrospray ionization-tandem mass spectrometry, 243
- Importance of charge-separation reactions in tandem mass spectrometry of doubly protonated angiotensin II formed by electrospray ionization, The: experimental considerations and structural implications, 30
- In-cell matrix-assisted laser desorption-ionization Fourier transform ion cyclotron resonance mass spectrometry, 1026
- Increasing the dynamic range of a transient recorder by using two analog-to-digital converters, 107
- Infrared matrix-assisted laser desorption and ionization by using a tunable mid-infrared free-electron laser, 1187
- Infrared photodissociation of non-covalent adducts of electrosprayed nucleotide ions, 209

- Insulin B, Apparent gas-phase acidity of, 1211
- Interface, mass spectrometry, atmospheric pressure chemical ionization liquid chromatography, Optimization of, 69
- Interferences from spectra of unknowns, Software-based mass spectral enhancement to remove, 598
- Internal electrospray ionization, low magnetic field, -Fourier transform ion cyclotron resonance mass spectrometer, A high performance, 915
- Internal glow discharge-Fourier transform ion cyclotron resonance mass spectrometry, 923
- Investigation of the initial reactions of the calcote mechanism for soot formation, 559
- Ion cloud signals, individual, time-resolved measurements of, to investigate space-charge effects in plasma mass spectrometry, 362
- Ion cyclotron resonance, Fourier transform, detection of multiphoton ionization spectroscopy, 1018
- Ion cyclotron resonance, Fourier transform -Internal glow discharge mass spectrometry, 923
- Ion cyclotron resonance mass spectrometer, external ion source Fourier transform, matrix-assisted laser desorption ionization on, High resolution end group determination of low molecular weight polymers by, 449
- Ion cyclotron resonance mass spectrometer, Fourier transform, -low magnetic field internal electrospray, A high performance, 915
- Ion cyclotron resonance mass spectrometer, Fourier transform, small, Characterization of long-chain carboxylic esters with $\text{CH}_3\text{OBOCH}_3^+$ in, 1138
- Ion cyclotron resonance mass spectrometry, ionization Fourier transform, -In-cell matrix-assisted laser desorption, 1026
- Ion guide, Stacked-ring electrostatic, 101
- Ion intensity, Enhancement of, in time-of-flight secondary-ionization mass spectrometry, 467
- Ion-molecule reactions of oxygenated chemical ionization reagents with vincamine, 250
- Ion-molecule collisions in the vacuum chamber of an electrospray time-of-flight mass spectrometer, Effect of, on mass spectra of proteins, 342
- Ion-neutral complexes $[\text{CH}_3\text{CH}^+\text{CH}_3 \cdot \text{CH}_2\text{CH}_3]$ and $[\text{CH}_3\text{CH}_2\text{CH}^+\text{CH}_3 \cdot \text{CH}_3]$ in the gas phase, A photoionization study of: formation, H-transfer and C-C bond formation between partners, and channeling of energy into dissociation, 73
- Ion pairing and observed charge states of diquaternary ammonium salts in electrospray ionization mass spectrometry, Effects of solvent and counterion on, 1050
- Ion-spray mass spectrometry, a model investigation using: Observation of noncovalent complexes between margatoxin and the $\text{K}_{\nu}1.3$ peptide ligands, 1075
- Ion structures, nonclassical, and 1,3-hexadien-5-yne radical cation to the benzene structure, isomerization of, Ab initio calculations of, 731
- Ion suppression, a study of: Quantitation of SR 27417 in human plasma using electrospray liquid chromatography, 1099
- Ion trap, quadrupole, An empirical approach to estimation of critical energies by using, 1116
- Ion trap, quadrupole, Nano electrospray combined with, for the analysis of peptides and protein digests, 150
- Ion trap, quadrupole, peptide ions in, tandem mass spectra of, Effects of heavy gases on, 1194
- Ion trap mass spectrometric analysis, Tenax collection with jet-separator enrichment and, Air analysis using, 1172
- Ion trap mass spectrometry, Plasma source: Enhanced abundance sensitivity by resonant ejection of atomic ions, 1161
- Ion trap source for time-of-flight mass spectrometry, A segmented ring, cylindrical, 1009
- Ion trap tandem mass spectrometry and selected ejection chemical ionization, Application of nonresonance excitation to, 668
- Ion trapping mass spectrometers, A pulsed-leak valve for use with, 118
- Ionization, Chemical, of phenyl n-propyl ether and methyl substituted analogs: propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring, 639
- Ionization, Electron capture of explosives with a microflow rate particle beam interface, 753
- Ionization, Electrospray, and low energy tandem mass spectrometry of polyhydroxy unsaturated fatty acids, 140
- Ionization, electrospray, arginine-containing peptide ions formed by, Modeling the maximum charge state of, 972
- Ionization, Electrospray, of copper-glycine solutions, 25
- Ionization, electrospray, doubly protonated angiotensin II formed by, charge-separation reactions in tandem mass spectrometry of, The importance of: experimental considerations and structural implications, 30
- Ionization, electrospray, -mass spectrometry, of nucleobases and nucleosides, Processes that affect, 1106
- Ionization, electrospray, pneumatically assisted, microbore high-performance liquid chromatography-tandem mass spectrometry utilizing, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Ionization, Electrospray, -tandem mass spectrometry analysis of peptides derived by enzymatic digestion of oxidized globin subunits: an improved method to determine amino acid substitution in the hemoglobin "core," 1040
- Ionization, laser desorption, matrix-assisted, of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, High resolution end group determination of low molecular weight polymers by, 449
- Ionization, low magnetic field internal electrospray, -Fourier transform ion cyclotron resonance mass spectrometer, A high performance, 915
- Ionization, matrix-assisted laser desorption, employing a tandem double focusing magnetic-orthogonal acceleration time-of-flight mass spectrometer, Peptide sequence determination by, 1
- Ionization, matrix-assisted laser desorption, -time of flight mass measurement accuracy, Evaluation of, by using delayed extraction, 995
- Ionization, selected ejection chemical, and ion trap tandem mass spectrometry, Application of nonresonance excitation to, 668
- Ionization and infrared matrix-assisted laser desorption by using a tunable mid-infrared free-electron laser, 1187
- Ionization mass spectrometry, electrospray, improved signal intensity of oligonucleotides in, Charge-state reduction with, 697
- Ionization mass spectrometry, laser desorption, Matrix-assisted, for polymer characterization, Evaluation of, 11
- Ionization mass spectrometry, matrix-assisted laser desorption, and electrospray, Characterization of mouse switch variant antibodies by, 707
- Ionization mass spectrometry, Static secondary, detection of cyclohexamine on soil surfaces exposed to laboratory air, 168
- Ionization reagents, oxygenated chemical, with vincamine, Ion-molecule reactions of, 250
- Ionization spectroscopy, multiphoton, Fourier transform ion cyclotron resonance detection of, 1018
- Ionization tandem mass spectrometry, Desorption chemical, of polyprenyl and dolichyl phosphates, 958
- Ionization tandem reflectron time-of-flight mass spectrometry/matrix-assisted laser desorption of fullerenes, 590
- Ionized phytyl methyl ether, $\text{C}_3\text{H}_9\text{O}^+$ formation from, The structure and mechanisms of, 205

- Ions, 193-nm photodissociation of, from saturated and unsaturated aliphatic molecules, 114
- Iron, ground state and Fe^+ , The Reactions of, with the 20 common amino acids, 722
- Iron, Transition-metal mediated heteroatom removal by reactions of FeL^+ [$\text{L}=\text{O}, \text{C}_4\text{H}_6, \text{c-C}_5\text{H}_6, \text{C}_6\text{H}_6, \text{C}_5\text{H}_4(=\text{CH}_2)$] with furan, thiophene and pyrrole in the gas phase, 938
- Iron(II), Complexes of, with cysteine-containing peptides in the gas phase, 977
- Isomeric parent ions, Reactions from, in the dissociation of dimethylpyrroles, 930
- Isomerization of the 1,3-hexadien-5-yne radical cation to the benzene structure and to nonclassical ion structures, Ab initio calculations of, 731
- Isomerization proclivities and stabilities studied by dissociation and neutralization-reionization. The distonic ion $\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, 573
- Isoprostanes, F_2 , four regioisomers of, formed by free radical oxidation of arachidonic acid, Mass spectrometric analysis of, 490
- Jet-separator enrichment and ion trap mass spectrometric analysis, Tenax collection with, Air analysis using, 1172
- Kinetic method, Estimation of the electron affinities of C60, corannulene, and coronene by using, 619
- Kinetic method with multiple stage mass spectrometry, SiCl_3^+ and SiCl^+ affinities for pyridines determined by using: agostic effects in the gas-phase, 198
- K_v 1.3 peptide ligands and margatoxin, noncovalent complexes of, Observation of: a model investigation using ion-spray mass spectrometry, 1075
- Laboratory air, soil surfaces exposed to, cyclohexamine on, Static secondary ionization mass spectrometry detection of, 168
- Laboratory practices, good, mass spectrometry and, 211
- Lake Louise Workshop on Tandem Mass Spectrometry, The Eighth, 611
- Laser, tunable mid-infrared free-electron, Infrared matrix-assisted laser desorption and ionization by using, 1187
- Laser ablation, Resonant, as a selective metal ion source for gas-phase ion molecule reactions, 664
- Laser desorption, Infrared matrix-assisted, and ionization by using a tunable mid-infrared free-electron laser, 1187
- Laser desorption, matrix assisted-ionization mass spectrometry, application to low mass poly(methylmethacrylate) polymers, Fundamentals of, 287
- Laser desorption, matrix-assisted, observed fast fragmentation of peptides in, Factors that influence, 225
- Laser desorption, matrix-assisted/ionization tandem reflectron time-of-flight mass spectrometry of fullerenes, 590
- Laser desorption ionization, mass spectrometry, matrix-assisted, and electrospray ionization mass spectrometry, Characterization of mouse switch variant antibodies by, 707
- Laser desorption ionization, matrix-assisted, employing a tandem double focusing magnetic-orthogonal acceleration time-of-flight mass spectrometer, Peptide sequence determination by, 1
- Laser desorption ionization, matrix-assisted, of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, High resolution end group determination of low molecular weight polymers by, 449
- Laser desorption ionization, matrix-assisted, -time of flight mass measurement accuracy, Evaluation of, by using delayed extraction, 995
- Laser desorption ionization, matrix-assisted, -time-of-flight mass spectrometry, liquid chromatography-electrospray ionization, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Laser desorption-ionization Fourier transform ion cyclotron resonance mass spectrometry, In-cell matrix-assisted, 1026
- Laser desorption ionization mass spectrometry, Matrix-assisted, for polymer characterization, Evaluation of, 11
- Leukotriene B₄ (LTB₄) and LTB₄-derived metabolites, Negative ion electrospray tandem mass spectrometric characterization of, 129
- Library search results, electron ionization mass spectral, Evaluating, 313
- Liquid chromatography, chemical ionization, negative atmospheric pressure, -mass spectrometry, sensitivity in, Effect of high-performance liquid chromatography mobile phase components on, 1059
- Liquid chromatography-electrospray ionization-mass spectrometry matrix-assisted laser desorption ionization-time-of-flight-mass spectrometry, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Liquid chromatography, electrospray, -tandem mass spectrometry, Quantitation of SR 27417 in human plasma using: a study of ion suppression, 1099
- Liquid chromatography, high, performance, mobile phase components, Effect of, on sensitivity in negative atmospheric pressure chemical ionization liquid chromatography-mass spectrometry, 1059
- Liquid chromatography mass spectrometry interface, atmospheric pressure chemical ionization, Optimization of, 69
- Liquid chromatography-mass spectrometry, High performance, of porphyrins by using an atmospheric pressure interface, 965
- Liquid chromatography, microbore high-performance-tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Liquid chromatography particle beam-mass spectrometry with massive cluster impact, 293
- Liquid chromatography/tandem mass spectrometry analysis of peptide mixtures, Data-controlled automation of, 532
- Liquid flow-injection isotope ratio mass spectrometry, Direct analysis of carbon isotope variability in albumins by, 605
- Liquid introduction via heated nebulizer interface, atmospheric-pressure chemical ionization mass spectrometry with, Characterization of flame-generated C₁₀ to C₁₆₀ polycyclic aromatic hydrocarbons by, 276
- Liquid secondary ionization mass spectrometry beam-induced dehalogenation of organic compounds, secondary electron capture in, Evidence for a mechanism that involves, 1109
- Long-chain carboxylic esters, Characterization of, with $\text{CH}_3\text{OBOCH}_3^+$ in a small Fourier-transform ion cyclotron resonance mass spectrometer, 1138
- Long-lived metallized tips for nanoliter electrospray mass spectrometry, 1270
- Low energy decompositions of gas-phase peptide ions, Role of the site of protonation in, 522
- Low energy tandem mass spectrometry and electrospray ionization of polyhydroxy unsaturated fatty acids, 140
- Low magnetic field internal electrospray ionization-Fourier transform ion cyclotron resonance mass spectrometer, A high performance, 915
- Low molecular weight polymers, High resolution end group determination of, by matrix-assisted laser desorption ionization of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, 449

- Lu⁺ Sc⁺, and Y⁺, Gas-phase reactions with alcohols. Effects of the class and chain length of alcohols on the nature of primary products, 1157
- Lysine and histidine, Gas-phase basicities of, and their selected di- and tripeptides, 1203
- Magnetic-orthogonal acceleration time-of-flight mass spectrometer, tandem double focusing, matrix-assisted laser desorption ionization employing, Peptide sequence determination by, 1
- Mannose-6-phosphate oligosaccharides, synthetic, High-energy collision-induced dissociation mass spectrometry of, 182
- Margatoxin and the K_{1.3} peptide ligands, noncovalent complexes of, Observation of: a model investigation using ion-spray mass spectrometry, 1075
- Mass measurement, time of flight, -Matrix-assisted laser desorption ionization, accuracy, Evaluation of, by using delayed extraction, 995
- Mass spectra, electrospray, -Capillary electrophoresis of herbicides paraquat and diquat, 981
- Mass spectra, tandem, of peptide ions in the quadrupole ion trap, Effects of heavy gases on, 1194
- Mass spectra of proteins, Effect of ion-molecule collisions in the vacuum chamber of an electrospray time-of-flight mass spectrometer on, 342
- Mass spectral analysis, tandem, Fragmentation of protonated O,O-diethyl O-aryphosphorothionates in, 189
- Mass spectral electron ionization library search results, Evaluating, 313
- Mass spectral enhancement, Software-based, to remove interferences from spectra of unknowns, 598
- Mass spectrometer, electrospray time-of-flight, vacuum chamber of, ion-molecule collisions in, Effect of, on mass spectra of proteins, 342
- Mass spectrometer, external ion source Fourier transform ion cyclotron resonance, matrix-assisted laser desorption ionization on, High resolution end group determination of low molecular weight polymers by, 449
- Mass spectrometer, Fourier transform ion cyclotron resonance, -low magnetic field internal electrospray ionization, A high performance, 915
- Mass spectrometer, Fourier transform ion cyclotron resonance, small, Characterization of long-chain carboxylic esters with CH₃OBOCH₃⁺ in, 1138
- Mass spectrometer, membrane inlet, Sample modulation at, A mathematical study of—potential application in analysis of mixtures, A, 93
- Mass spectrometer, multichannel plasma-source, Novel, 458
- Mass spectrometer, time-of-flight, magnetic-orthogonal acceleration, tandem double focusing, matrix-assisted laser desorption ionization employing, Peptide sequence determination by, 1
- Mass spectrometers, ion trapping, A pulsed-leak valve for use with, 118
- Mass spectrometric analysis, ion trap, Tenax collection with jet-separator enrichment and, Air analysis using, 1172
- Mass spectrometric analysis of four regioisomers of F₂-isoprostanes formed by free radical oxidation of arachidonic acid, 490
- Mass spectrometric measurement of changes in protein hydrogen exchange rates that result from point mutations, 515
- Mass spectrometric structural characterization, Negative ion electrospray tandem, of leukotriene B₄ (LTB₄) and LTB₄-derived metabolites, 129
- Mass spectrometry, Accurate base composition of double-strand DNA by, 1266
- Mass spectrometry, chemical ionization, atmospheric-pressure, with liquid introduction via heated nebulizer interface, Characterization of flame-generated C₁₀ to C₁₆₀ polycyclic aromatic hydrocarbons by, 276
- Mass spectrometry, Cluster chemical ionization and deuterium exchange, in supersonic molecular beams, 550
- Mass spectrometry, collision-induced dissociation, High-energy, of synthetic mannose-6-phosphate oligosaccharides, 182
- Mass spectrometry, electron capture, oxygen addition-induced dechlorination of PCBs and DDT metabolites in, Regioselectivity of, 66
- Mass spectrometry, electron capture-tandem, Sub-parts-per-billion determination of nitro-substituted polynuclear aromatic hydrocarbons in airborne particulate matter and soil by, 1255
- Mass spectrometry, Electrospray, nanoliter, Long-lived metal-lized tips for, 1270
- Mass spectrometry, electrospray ionization, improved signal intensity of oligonucleotides in, Charge-state reduction with, 697
- Mass spectrometry, fast-atom bombardment, metal chelation of dinucleotide analogs in the gas phase by, A study of, 42
- Mass spectrometry, field desorption, for the analysis of polyethylene, Evaluation of, 1070
- Mass spectrometry, Internal glow discharge-Fourier transform ion cyclotron resonance, 923
- Mass spectrometry, ionization, matrix-assisted desorption laser and electrospray, Characterization of mouse switch variant antibodies by, 707
- Mass spectrometry, ionization Fourier transform ion cyclotron resonance, -In-cell matrix-assisted laser desorption, 1026
- Mass spectrometry, ionization tandem reflectron time-of-flight/Matrix-assisted laser desorption of fullerenes, 590
- Mass spectrometry, liquid chromatography-electrospray ionization matrix-assisted laser desorption ionization-time-of-flight, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Mass spectrometry, liquid flow-injection isotope ratio, Direct analysis of carbon isotope variability in albumins by, 605
- Mass spectrometry, matrix-assisted laser desorption ionization, application to low mass poly(methylmethacrylate) polymers, Fundamentals of, 287
- Mass spectrometry, matrix-assisted laser desorption ionization, for polymer characterization, Evaluation of, 11
- Mass spectrometry, multiple stage, kinetic method combined with, SiCl₃⁺ and SiCl₄⁺ affinities for pyridines determined by using: agostic effects in the gas-phase, 198
- Mass spectrometry, multiple stage pentaquadropole, for generation and characterization of gas-phase ionic species. The case of the PyC₂H₅⁺ isomers, 1126
- Mass spectrometry, Plasma, space-charge effects in, Time-resolved measurements of individual ion cloud signals to investigate, 362
- Mass spectrometry, Plasma source ion trap: Enhanced abundance sensitivity by resonant ejection of atomic ions, 1161
- Mass spectrometry, Static secondary, detection of cyclohexamine on soil surfaces exposed to laboratory air, 168
- Mass spectrometry, tandem, collision-induced dissociation, high-and low-energy, in the analysis of glycoalkaloids and their aglycons, Comparison of, 173
- Mass spectrometry, tandem, Desorption chemical ionization, of polyprenyl and dolichyl phosphates, 958
- Mass spectrometry, tandem, electrospray, structure analysis of: Phenylglycidyl ether adducts of 2'-deoxycytidine and 2'-deoxyadenosine, 682
- Mass spectrometry, tandem, -Electrospray ionization analysis of peptides derived by enzymatic digestion of oxidized globin subunits: an improved method to determine amino acid substitution in the hemoglobin "core," 1040

- Mass spectrometry, tandem, –electrospray liquid chromatography, Quantitation of SR 27417 in human plasma using: a study of ion suppression, 1099
- Mass spectrometry, tandem, fast-atom bombardment, Analysis of phosphatidylcholine isolated from heart mitochondrial fractions by: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Mass spectrometry, tandem, fast-atom bombardment, Determination of the anomeric configuration of glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates by, 541
- Mass spectrometry, tandem, low- and high-energy collision-induced dissociation, Use of, in the identification of an unusual amino acid in a semisynthetic polypeptide, 1034
- Mass spectrometry, tandem, low energy, and electrospray ionization of polyhydroxy unsaturated fatty acids, 140
- Mass spectrometry, tandem, of diastereomeric cobalt–glucosyl–glucose disaccharide complexes: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Mass spectrometry, tandem, of doubly protonated angiotensin II formed by electrospray ionization, charge-separation reactions in, The importance of: experimental considerations and structural implications, 30
- Mass spectrometry, tandem–electrospray ionization, positive and negative mode, Identification of phosphorylation sites in phosphopeptides by, 243
- Mass spectrometry, tandem ion trap, and selected ejection chemical ionization, Application of nonresonance excitation to, 668
- Mass spectrometry, tandem/liquid chromatography analysis of peptide mixtures, Data-controlled automation of, 532
- Mass spectrometry, time-of-flight, ion trap source for, A segmented ring, cylindrical, 1009
- Mass spectrometry, time-of-flight secondary–ionization, ion intensity in, Enhancement of, 467
- Mass spectrometry and good laboratory practices, 211
- Mass spectrometry and molecular orbital calculations on pyrrolo[1,2-a][1,4]benzodiazepin-4-one, -6-one, and -4,6-dione. Part 2*. Characterization and differentiation of heterocyclic isomers, 653
- Mass spectrometry–electrospray ionization, Characterization of large, heterogeneous proteins by, 1219
- Mass spectrometry–electrospray ionization, of nucleobases and nucleosides, Processes that affect, 1106
- Mass spectrometry/gas chromatography, with a polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, High-resolution triglycerol mixture analysis using, 350
- Mass spectrometry interface, atmospheric pressure chemical ionization liquid chromatography, Optimization of, 69
- Mass spectrometry liquid secondary ionization, beam-induced dehalogenation of organic compounds, secondary electron capture in, Evidence for a mechanism that involves, 1109
- Mass spectrometry methods, combined, Use of, for the characterization of a new variant of human hemoglobin: the double mutant hemoglobin Villeparisis B77(EF1) His → Tyr, β80 (EF4) Asn → Ser, 163
- Mass spectrometry–particle beam liquid chromatography, with massive cluster impact, 293
- Massive cluster impact, Liquid chromatography particle beam–mass spectrometry with, 293
- Mass-resolved chromatography, negative ion chemical ionization, polarizable stationary phase, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Mathematical study of sample modulation at a membrane inlet mass spectrometer—potential application in analysis of mixtures, A, 93
- Matrix-assisted laser desorption, Infrared, and ionization by using a tunable mid-infrared free-electron laser, 1187
- Matrix-assisted laser desorption, observed fast fragmentation of peptides in, Factors that influence, 225
- Matrix-assisted laser desorption ionization employing a tandem double focusing magnetic–orthogonal acceleration time-of-flight mass spectrometer, Peptide sequence determination by, 1
- Matrix-assisted laser desorption–ionization Fourier transform ion cyclotron resonance mass spectrometry, In-cell, 1026
- Matrix-assisted laser desorption ionization mass spectrometry and electrospray ionization mass spectrometry, Characterization of mouse switch variant antibodies by, 707
- Matrix-assisted laser desorption ionization mass spectrometry for polymer characterization, Evaluation of, 11
- Matrix-assisted laser desorption ionization of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, High resolution end group determination of low molecular weight polymers by, 449
- Matrix-assisted laser desorption/ionization tandem reflectron time-of-flight mass spectrometry of fullerenes, 590
- Matrix-assisted laser desorption ionization–time of flight mass measurement accuracy, Evaluation of, by using delayed extraction, 995
- Matrix-assisted laser desorption ionization–time-of-flight mass spectrometry, liquid chromatography–electrospray ionization, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Matrix-assisted laser desorption–ionization mass spectrometry, application to low mass poly(methylmethacrylate) polymers, Fundamentals of, 287
- Mechanisms of single-electron capture by the dichlorocarbene dication, 266
- Membrane inlet mass spectrometer, Sample modulation at, A mathematical study of—potential application in analysis of mixtures, A, 93
- Metal chelation of dinucleotide analogs in the gas phase by fast-atom bombardment mass spectrometry, A study of, 42
- Metal ion source for gas-phase ion molecule reactions, selective, Resonant laser ablation as, 664
- Metal mediated heteroatom removal by reactions of FeL⁺ [L=O, C₄H₆, *c*-C₅H₆, C₆H₆, C₅H₄(=CH₂)] with furan, thiophene and pyrrole in the gas phase, 938
- Metallized tips, Long-lived, for nanoliter electrospray mass spectrometry, 1270
- Method for the design of broad energy range focusing reflectrons, 1002
- Methyl ether, ionized phytyl, C₃H₉O⁺ formation from, The structure and mechanisms of, 205
- Methyl propionate radical cation, 482
- Methyl substituted analogs, and phenyl *n*-propyl ether, Chemical ionization of: propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring, 639
- Methylation, gas-phase, and dissociation of acids and esters, Effects of functional group interactions on, 565
- Microbore high-performance liquid chromatography–tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Microflow rate particle beam interface, Electron capture ionization of explosives with, 753
- Mid-infrared, tunable, free-electron laser, Infrared matrix-assisted laser desorption and ionization by using, 1187

- Mitochondrial fractions, heart, phosphatidylcholine isolated from, Analysis by fast-atom bombardment tandem mass spectrometry: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Mixtures, potential application in analysis of—A mathematical study of sample modulation at a membrane inlet mass spectrometer, 93
- Mobile phase components, high performance liquid chromatography, Effect of, on sensitivity in negative atmospheric pressure chemical ionization liquid chromatography—mass spectrometry, 1059
- Modeling the maximum charge state of arginine-containing peptide ions formed by electrospray ionization, 972
- Molecular dications, gas-phase, formed from neutral organics in solution, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Molecular orbital calculations and mass spectrometry on pyrrolo[1,2-a][1,4]benzodiazepin-4-one, -6-one, and -4,6-dione. Part 2*. Characterization and differentiation of heterocyclic isomers, 653
- Molecule-ion collisions in the vacuum chamber of an electrospray time-of-flight mass spectrometer, Effect of, on mass spectra of proteins, 342
- Molecule-ion reactions of oxygenated chemical ionization reagents with vincamine, 250
- Monohydroxylated fatty acyl moieties, incorporation of, evidence of, Analysis by fast-atom bombardment tandem mass spectrometry of phosphatidylcholine isolated from heart mitochondrial fractions, 50
- Mouse switch variant antibodies, Characterization of, by matrix-assisted laser desorption ionization mass spectrometry and electrospray ionization mass spectrometry, 707
- Multichannel plasma-source mass spectrometer, Novel, 458
- Multiphoton ionization spectroscopy, Fourier transform ion cyclotron resonance detection, 1018
- Multiple stage mass spectrometry, kinetic method combined with, SiCl_3^+ and SiCl^+ affinities for pyridines determined by using: agostic effects in the gas-phase, 198
- Multiple stage pentaquadrupole mass spectrometry for generation and characterization of gas-phase ionic species. The case of the PyC_2H_5^+ isomers, 1126
- Mutant, double, hemoglobin Villeparisis B77(EF1) His → Tyr, $\beta 80$ (EF4) Asn → Ser: Use of combined mass spectrometry methods for the characterization of a new variant of human hemoglobin, 163
- Mutations, point, changes in protein hydrogen exchange rates that result from, Mass spectrometric measurement of, 515
- Nano electrospray combined with a quadrupole ion trap for the analysis of peptides and protein digests, 150
- Nanoliter electrospray mass spectrometry, Long-lived metalized tips for, 1270
- Nebulizer interface, heated, liquid introduction with, atmospheric-pressure chemical ionization mass spectrometry, Characterization of flame-generated C_{10} to C_{160} polycyclic aromatic hydrocarbons by, 276
- Negative atmospheric pressure chemical ionization liquid chromatography—mass spectrometry, sensitivity in, Effect of high-performance liquid chromatography mobile phase components on, 1059
- Negative ion chemical ionization, polarizable stationary phase, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Negative ion electrospray tandem mass spectrometric structural characterization of leukotriene B_4 (LTB_4) and LTB_4 -derived metabolites, 129
- Neutral organics in solution, gas-phase molecular dications formed from, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Neutralization-reionization, and dissociation. Stabilities and Isomerization proclivities studies by. The distonic ion $\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, 573
- Nitrogen- and oxygen-containing molecules, small, Reactions to the phenylium cation with, 473
- Nitro-substituted polynuclear aromatic hydrocarbons in airborne particulate matter and soil, Sub-parts-per-billion determination by electron capture—tandem mass spectrometry, 1255
- Non-covalent adducts of electrosprayed nucleotide ions, Infrared photodissociation of, 209
- Noncovalent complexes between margatoxin and the $\text{K}_v1.3$ peptide ligands, Observation of: a model investigation using ion-spray mass spectrometry, 1075
- Nonresonance excitation, Application of, to ion trap tandem mass spectrometry and selected ejection chemical ionization, 668
- Novel multichannel plasma-source mass spectrometer, 458
- Nucleobases, and nucleosides, electrospray ionization—mass spectrometry of, Processes that affect, 1106
- Nucleophiles, model biological, Reactions of polycyclic aromatic hydrocarbon radical cations with, 628
- Nucleoside pyrophosphates and polyisoprenyl phosphates, glycosyl esters of, anomeric configuration of, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Nucleosides, and nucleobases, electrospray ionization—mass spectrometry of, Processes that affect, 1106
- Nucleotide ions, electrosprayed, non-covalent adducts of, Infrared photodissociation of, 209
- O-linked glycopeptides, Structural elucidation of, by high energy collision-induced dissociation, 319
- Observation of gas-phase molecular dications formed from neutral organics in solution via the controlled-current electrolytic process inherent to electrospray, 157
- Observation of noncovalent complexes between margatoxin and the $\text{K}_v1.3$ peptide ligands: a model investigation using ion-spray mass spectrometry, 1075
- Oligonucleotides, improved signal intensity of, in electrospray ionization mass spectrometry, Charge-state reduction with, 697
- Oligosaccharides, synthetic mannose-6-phosphate, High-energy collision-induced dissociation mass spectrometry of, 182
- 193-nm photodissociation of ions from saturated and unsaturated aliphatic molecules, 114
- O,O-diethyl O-aryl phosphorothionates protonated, Fragmentation of, in tandem mass spectral analysis, 189
- Optimization of the atmospheric pressure chemical ionization liquid chromatography mass spectrometry interface, 69
- Organic compounds, liquid secondary ionization mass spectrometry beam-induced dehalogenation of, mechanism that involves secondary electron capture in, Evidence for, 1109
- Organics, neutral, in solution, gas-phase molecular dications formed from, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Orthogonal-magnetic acceleration time-of-flight mass spectrometer, tandem double focusing, matrix-assisted laser desorption ionization employing, Peptide sequence determination by, 1
- Oxidation of arachidonic acid, free-radical, four regioisomers of F_2 -isoprostanes formed by, Mass spectrometric analysis of, 490

- Oxidized globin subunits, enzymatic digestion of, peptides derived by, Electrospray ionization–tandem mass spectrometry analysis of: an improved method to determine amino acid substitution in the hemoglobin “core,” 1040
- Oxygen addition-induced dechlorination of PCBs and DDT metabolites in electron capture mass spectrometry, Regioselectivity of, 66
- Oxygen addition to chloroaromatic compounds, Collision-induced, 1144
- Oxygen- and nitrogen-containing molecules, small, Reactions to the phenylium cation with, 473
- Oxygen atom and the aromatic ring, competing proton transfer to, propene loss initiated by: Chemical ionization of phenyl *n*-propyl ether and methyl substituted analogs, 639
- Oxygenated chemical ionization reagents with vincamine, Ion-molecule reactions of, 250
- Paraquat, Capillary electrophoresis–mass spectra of, 981
- Para-substituted benzaldehydes, Gas-phase base-catalyzed Claisen-Schmidt reactions of the acetone enolate anion with various, 82
- Parent ions, isomeric, Reactions from, in the dissociation of dimethylpyrroles, 930
- Particle beam interface, microflow rate, Electron capture ionization of explosives with, 753
- Particle beam liquid chromatography–mass spectrometry with massive cluster impact, 293
- Partners, H-transfer and C–C bond formation between: A photoionization study of the ion-neutral complexes $[\text{CH}_3\text{CH}^+\text{CH}_3 \cdot \text{CH}_2\text{CH}_3]$ and $[\text{CH}_3\text{CH}_2\text{CH}^+\text{CH}_3 \cdot \text{CH}_3]$ in the gas phase, 73
- PCBs and DDT metabolites, oxygen addition-induced dechlorination of, in electron capture mass spectrometry, Regioselectivity of, 66
- Pentaquadrupole mass spectrometry, Multiple stage, for generation and characterization of gas-phase ionic species. The case of the PyC_2H_5^+ isomers, 1126
- Peptide ions, arginine-containing, formed by electrospray ionization, Modeling the maximum charge state of, 972
- Peptide ions, gas-phase, low energy decompositions of, Role of the site of protonation in, 522
- Peptide ions, multiply protonated, ubiquitin, insulin B, and renin substrate, Apparent gas-phase acidities of, 1211
- Peptide ions in the quadrupole ion trap, tandem mass spectra of, Effects of heavy gases on, 1194
- Peptide ligands, $K_{1,3}$, noncovalent complexes of, Observation of: a model investigation using ion-spray mass spectrometry, 1075
- Peptide mixtures, liquid chromatography/tandem mass spectrometry analysis of, Data-controlled automation of, 532
- Peptide sequence determination by matrix-assisted laser desorption ionization employing a tandem double focusing magnetic –orthogonal acceleration time-of-flight mass spectrometer, 1
- Peptide spectra, B_n ($n \geq 3$) ions in, The structure and fragmentation of, 233
- Peptides, analysis of, Nano electrospray combined with a quadrupole ion trap for, 150
- Peptides, Collision induced decomposition of. Choice of collision parameters, 677
- Peptides, cysteine-containing, Complexes of iron(II) with, in the gas phase, 977
- Peptides, dissociation of, uninterpreted high-energy collision-induced, Search of, with sequence databases, 1089
- Peptides, fragmentation of, fast, observed, in matrix-assisted laser desorption, Factors that influence, 225
- Peptides derived by enzymatic digestion of oxidized globin subunits, Electrospray ionization–tandem mass spectrometry analysis of: an improved method to determine amino acid substitution in the hemoglobin “core,” 1040
- Phenyl *n*-propyl ether and methyl substituted analogs, Chemical ionization of: propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring, 639
- Phenylglycidyl ether adducts of 2'-deoxycytidine and 2'-deoxyadenosine: stability in solution and structure analysis by electrospray tandem mass spectrometry, 682
- Phenylium cation, Reactions of, with small oxygen- and nitrogen-containing molecules, 473
- Phosphates, polyisoprenyl, and nucleoside pyrophosphates, glycosyl esters of, anomeric configuration of, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Phosphates, polypropenyl and dolichyl, Desorption chemical ionization tandem mass spectrometry of, 958
- Phosphatidylcholine isolated from heart mitochondrial fractions, Analysis by fast-atom bombardment tandem mass spectrometry: evidence of incorporation of monohydroxylated fatty acyl moieties, 50
- Phosphopeptides in phosphorylation sites, Identification of, by positive and negative mode electrospray ionization–tandem mass spectrometry, 243
- Phosphorothionates, protonated O,O-diethyl O-aryl, Fragmentation of, in tandem mass spectral analysis, 189
- Phosphorylation sites in phosphopeptides, Identification of, by positive and negative mode electrospray ionization–tandem mass spectrometry, 243
- Photodissociation, Infrared, of non-covalent adducts of electrosprayed nucleotide ions, 209
- Photodissociation, 193-nm, of ions, from saturated and unsaturated aliphatic molecules, 114
- Photoionization study of the ion-neutral complexes $[\text{CH}_3\text{CH}^+\text{CH}_3 \cdot \text{CH}_2\text{CH}_3]$ and $[\text{CH}_3\text{CH}_2\text{CH}^+\text{CH}_3 \cdot \text{CH}_3]$ in the gas phase, A: formation, H-transfer and C–C bond formation between partners, and channeling of energy into dissociation, 73
- Phytyl methyl ether, ionized, $\text{C}_3\text{H}_9\text{O}^+$ formation from, The structure and mechanisms of, 205
- Plasma, dog, nonpeptide antithrombotic in, Quantitative determination of, by microbore high-performance liquid chromatography–tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, 1238
- Plasma, human, SR 27417 in, Quantitation of, using electrospray liquid chromatography–tandem mass spectrometry: a study of ion suppression, 1099
- Plasma mass spectrometry, space-charge effects in, Time-resolved measurements of individual ion cloud signals to investigate, 362
- Plasma source ion trap mass spectrometry: Enhanced abundance sensitivity by resonant ejection of atomic ions, 1161
- Plasma-source mass spectrometer, multichannel, Novel, 458
- Pneumatically assisted electrospray ionization, microbore high-performance liquid chromatography–tandem mass spectrometry utilizing, Quantitative determination of a non-peptide antithrombotic in dog plasma by, 1238
- Point mutations, changes in protein hydrogen exchange rates that result from, Mass spectrometric measurement of, 515
- Polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Polycyclic aromatic hydrocarbon radical cations, Reactions with model biological nucleophiles, 628
- Polycyclic aromatic hydrocarbons, C_{10} to C_{160} , flame-generated, Characterization of, by atmospheric-pressure chemical ionization mass spectrometry with liquid introduction via heated nebulizer interface, 276

- Polyethylene, analysis of, Evaluation of field desorption mass spectrometry for, 1070
- Polyhydroxy unsaturated fatty acids, Electrospray ionization and low energy tandem mass spectrometry of, 140
- Polyisoprenyl phosphates and nucleoside pyrophosphates, glycosyl esters of, anomeric configuration of, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Polymers, low molecular weight, High resolution end group determination of, by matrix-assisted laser desorption ionization of an external ion source Fourier transform ion cyclotron resonance mass spectrometer, 449
- Polymers, poly(methylmethacrylate), low mass, application of matrix-assisted laser desorption-mass spectrometry to, Fundamentals of, 287
- Poly(methylmethacrylate) polymers, low mass, application of matrix-assisted laser desorption-mass spectrometry to, Fundamentals of, 287
- Polynuclear aromatic hydrocarbons, nitro-substituted, in airborne particulate matter and soil, Sub-parts-per-billion determination by electron capture-tandem mass spectrometry, 1255
- Polypeptide, semisynthetic, unusual amino acid in, Use of high- and low-energy collision-induced dissociation tandem mass spectrometry in the identification of, 1034
- Polyprenyl and dolichyl phosphates, Desorption chemical ionization tandem mass spectrometry of, 958
- Porphyrins, High-performance liquid chromatography-mass spectrometry of, by using an atmospheric pressure interface, 965
- Primary products, nature of, Effects of the class and chain length of alcohols on, Gas phase reactions of Sc^+ , Y^+ and Lu^+ with alcohols, 1157
- Processes that affect electrospray ionization-mass spectrometry of nucleobases and nucleosides, 1106
- Propene loss initiated by competing proton transfer to the oxygen atom and the aromatic ring: Chemical ionization of phenyl *n*-propyl ether and methyl substituted analogs, 639
- Protein digests, analysis of, Nano electrospray combined with a quadrupole ion trap for, 150
- Protein hydrogen exchange rates, changes in, that result from point mutations Mass spectrometric measurement of, 515
- Proteins, energetic multiply charged, Defect formation on surfaces bombarded by: implications for the conformation of gas-phase electrosprayed ions, 329
- Proteins, large, heterogeneous characterization of, by electrospray ionization-mass spectrometry, 1219
- Proteins, mass spectra of, Effect of ion-molecule collisions in the vacuum chamber of an electrospray time-of-flight mass spectrometer on, 342
- Proton transfer, competing, to the oxygen atom and the aromatic ring, propene loss initiated by: Chemical ionization of phenyl *n*-propyl ether and methyl substituted analogs, 639
- Protonated angiotensin II, doubly, formed by electrospray ionization, charge-separation reactions in tandem mass spectrometry of, The importance of: experimental considerations and structural implications, 30
- Protonated O,O-diethyl O-aryl phosphorothionates, Fragmentation of, in tandem mass spectral analysis, 189
- Protonated peptide ions, multiply, ubiquitin, insulin B, and renin substrate, Apparent gas-phase acidities of, 1211
- Protonation, site of, Role of, in the low energy decompositions of gas-phase peptide ions, 522
- Pulsed-leak valve for use with ion trapping mass spectrometers, A, 118
- PyC_2H_5^+ isomers, The case of, Multiple stage pentaquadrupole mass spectrometry for generation and characterization of gas-phase ionic species, 1126
- Pyridines, SiCl_3^+ and SiCl^+ affinities for, determined by using the kinetic method with multiple stage mass spectrometry: agostic effects in the gas-phase, 198
- Pyrophosphates, nucleoside, and polyisoprenyl phosphates, glycosyl esters of, anomeric configuration of, Determination of, by fast-atom bombardment tandem mass spectrometry, 541
- Pyrrole, Transition-metal mediated heteroatom removal by reactions of FeL^+ [$\text{L}=\text{O}$, C_4H_6 , $c\text{-C}_5\text{H}_6$, C_6H_6 , $\text{C}_5\text{H}_4(=\text{CH}_2)$] with, in the gas phase, 938
- Pyrrolo[1,2-a][1,4]benzodiazepin-4-one,-6-one, and -4,6-dione, Mass spectrometry and molecular orbital calculations on. Part 2*. Characterization and differentiation of heterocyclic isomers, 653
- Quadrupole ion trap, An empirical approach to estimation of critical energies by using, 1116
- Quadrupole ion trap, Nano electrospray combined with, for the analysis of peptides and protein digests, 150
- Quadrupole ion trap, peptide ions in, tandem mass spectra of, Effects of heavy gases on, 1194
- Quantitation of SR 27417 in human plasma using electrospray liquid chromatography-tandem mass spectrometry: a study of ion suppression, 1099
- Quantitative determination of a nonpeptide antithrombotic in dog plasma by microbore high-performance liquid chromatography-tandem mass spectrometry utilizing pneumatically assisted electrospray ionization, 1238
- Radical cation, Methyl proprionate, 482
- Radical cation, to the benzene structure, 1,3-hexadien-5-yne, and to nonclassical ion structures, isomerization of, Ab initio calculations of, 731
- Radical cations, conventional and distonic, Distinguishing, by using dimethyl diselenide, 1245
- Rapid analysis of antibiotic-containing mixtures from fermentation broths by using liquid chromatography-electrospray ionization-mass spectrometry matrix-assisted laser desorption ionization-time-of-flight-mass spectrometry, 1227
- Reaction from isomeric parent ions in the dissociation of dimethylpyrroles, 930
- Reactions of ground state Cu^+ and Fe^+ with the 20 common amino acids, The, 722
- Reactions of polycyclic aromatic hydrocarbon radical cations with model biological nucleophiles, 628
- Reactions of the phenylium cation with small oxygen- and nitrogen-containing molecules, 473
- Recorder, transient, dynamic range of, Increasing the, by using two analog-to-digital converters, 107
- Reflectrons, broad energy range focusing, design of, Method for, 1002
- Regioisomers of F_2 -isoprostanes, four, formed by free radical oxidation of arachidonic acid, Mass spectrometric analysis of, 490
- Regioselectivity of the oxygen addition-induced dechlorination of PCBs and DDT metabolites in electron capture mass spectrometry, 66
- Reionization-neutralization, and dissociation. Stabilities and isomerization proclivities studied by, The distonic ion $\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, 573
- Renin substrate, Apparent gas-phase acidity of, 1211
- Resonance, Fourier transform ion cyclotron, multiphoton ionization spectroscopy detection of, 1018
- Resonant ejection of atomic ions, enhanced abundance sensitivity by: Plasma source ion trap mass spectrometry, 1161
- Resonant laser ablation as a selective metal ion source for gas-phase ion molecule reactions, 664

- Ring-opening H-transfer in ionized cyclopentanone, Ab initio characterization of: similarity to ion–neutral complex-mediated alkane eliminations, 1251
- Role of the site of protonation in the low-energy decompositions of gas-phase peptide ions, 522
- Sample modulation at a membrane inlet mass spectrometer, A mathematical study of—potential application in analysis of mixtures, A, 93
- Saturated and unsaturated aliphatic molecules, 193-nm photodissociation of ions from, 114
- Sc⁺, Y⁺, and Lu⁺, Gas-phase reactions with alcohols. Effects of the class and chain length of alcohols on the nature of primary products, 1157
- Search of sequence databases with uninterpreted high-energy collision-induced dissociation spectra of peptides, 1089
- Secondary electron capture in the liquid secondary ionization mass spectrometry beam-induced dehalogenation of organic compounds, Evidence for a mechanism that involves, 1109
- Secondary ionization mass spectrometry, Static, detection of cyclohexamine on soil surfaces exposed to laboratory air, 168
- Secondary-ionization mass spectrometry, time-of-flight, ion intensity in, Enhancement of, 467
- Segmented ring, cylindrical ion trap source for time-of-flight mass spectrometry, A, 1009
- Sensitivity in negative atmospheric pressure chemical ionization liquid chromatography–mass spectrometry, Effect of high-performance liquid chromatography mobile phase components on, 1059
- Separation-charge reactions in tandem mass spectrometry of doubly protonated angiotensin II formed by electrospray ionization, The importance of: experimental considerations and structural implications, 30
- Sequence databases, with uninterpreted high-energy collision-induced dissociation spectra of peptides, Search of, 1089
- SiCl₃⁺ and SiCl⁺ affinities for pyridines determined by using the kinetic method with multiple stage mass spectrometry: agostic effects in the gas-phase, 198
- Signal intensity of oligonucleotides in electrospray ionization mass spectrometry, improved, Charge-state reduction with, 697
- Software-based mass spectral enhancement to remove interferences from spectra of unknowns, 598
- Soil, nitro-substituted polynuclear aromatic hydrocarbons in, Sub-parts-per-billion determination of, by electron capture–tandem mass spectrometry, 1255
- Soil surfaces exposed to laboratory air, cyclohexamine on, Static secondary ionization mass spectrometry detection of, 168
- Solution, neutral organics in, gas-phase molecular dications formed from, Observation of, via the controlled-current electrolytic process inherent to electrospray, 157
- Solution, stability in: Phenylglycidyl ether adducts of 2′-deoxycytidine and 2′-deoxyadenosine, 682
- Solvent and counterion, Effects of, on ion pairing and observed charge states of diquaternary ammonium salts in electrospray ionization mass spectrometry, 1050
- Soot formation, calcote mechanism for, initial reaction of, Investigation of, 559
- Space-charge effects in plasma mass spectrometry, Time-resolved measurements of individual ion cloud signals to investigate, 362
- Spectroscopy, multiphoton ionization, multiphoton, Fourier transform ion cyclotron resonance detection of, 1018
- SR 27417 in human plasma, Quantitation of, using electrospray liquid chromatography–tandem mass spectrometry: a study of ion suppression, 1099
- Stabilities and isomerization proclivities studied by dissociation and neutralization–reionization. The distonic ion $\text{CH}_2\text{CH}_2\text{CH}^+\text{OH}$, keto ion $\text{CH}_3\text{CH}_2\text{CH}=\text{O}^+$, enol ion $\text{CH}_3\text{CH}=\text{CHOH}^+$, and related $\text{C}_3\text{H}_6\text{O}^+$ radical cations, 573
- Stacked-ring electrostatic ion guide, 101
- Static secondary ionization mass spectrometry detection of cyclohexamine on soil surfaces exposed to laboratory air, 168
- Stationary phase, polarizable, negative ion chemical ionization, and mass-resolved chromatography, high-temperature gas chromatography/mass spectrometry with, High-resolution triglycerol mixture analysis using, 350
- Stereochemistry of glycosidic bond configuration, Differentiation of: tandem mass spectrometry of diastereomeric cobalt–glucosyl–glucose disaccharide complexes, 953
- Steroids, thermally-labile, in supersonic molecular beams, Fast, very fast and ultra-fast gas chromatography–mass spectrometry of, 737
- Structural elucidation of O-linked glycopeptides by high energy collision-induced dissociation, 319
- Structure analysis by electrospray tandem mass spectrometry: Phenylglycidyl ether adducts of 2′-deoxycytidine and 2′-deoxyadenosine, 682
- Structure and fragmentation of B_n (n ≥ 3) ions in peptide spectra, The, 233
- Structure and mechanism of formation of C₃H₉O⁺ from ionized phytol methyl ether, The, 205
- Study of metal chelation of dinucleotide analogs in the gas phase by fast-atom bombardment mass spectrometry, A, 42
- Sub-parts-per billion determination of nitro-substituted polynuclear aromatic hydrocarbons in airborne particulate matter and soil by electron capture–tandem mass spectrometry, 1255
- Supersonic molecular beams, Cluster chemical ionization and deuterium exchange mass spectrometry in, 550
- Supersonic molecular beams, thermally labile steroids, carbamates, and drugs in, Fast, very fast and ultra-fast gas chromatography–mass spectrometry of, 737
- Tandem double focusing magnetic –orthogonal acceleration time-of-flight mass spectrometer, matrix-assisted laser desorption ionization employing, Peptide sequence determination by, 1
- Tandem mass spectra of peptide ions in the quadrupole ion trap, Effects of heavy gases on, 1194
- Tandem mass spectral analysis, Fragmentation of protonated O,O-diethyl O-arylphosphorothionates in, 189
- Tandem mass spectrometric structural characterization, Negative ion electrospray, of leukotriene B₄ (LTB₄) and LTB₄-derived metabolites, 129
- Tandem mass spectrometry, collision-induced dissociation, high- and low-energy, in the analysis of glycoalkaloids and their aglycons, Comparison of, 173
- Tandem mass spectrometry, Desorption chemical ionization, of polyprenyl and dolichyl phosphates, 958
- Tandem mass spectrometry, –electron capture, Sub-parts-per-billion determination of nitro-substituted polynuclear aromatic hydrocarbons in airborne particulate matter and soil by, 1255
- Tandem mass spectrometry, electrospray, structure analysis of: Phenylglycidyl ether adducts of 2′-deoxycytidine and 2′-deoxyadenosine, 682
- Tandem mass spectrometry, fast-atom bombardment, Analysis of phosphatidylcholine isolated from heart mitochondrial fractions by: evidence of incorporation of monohydroxylated fatty acyl moieties, 50

- Tandem mass spectrometry, fast-atom bombardment, Determination of the anomeric configuration of glycosyl esters of nucleoside pyrophosphates and polyisoprenyl phosphates by, 541
- Tandem mass spectrometry, ion trap, and selected ejection chemical ionization, Application of nonresonance excitation to, 668
- Tandem mass spectrometry, low- and high-energy collision-induced dissociation, Use of, in the identification of an unusual amino acid in a semisynthetic polypeptide, 1034
- Tandem mass spectrometry, low energy, and Electrospray ionization of polyhydroxy unsaturated fatty acids, 140
- Tandem mass spectrometry, of doubly protonated angiotensin II formed by electrospray ionization, charge-separation reactions in, The importance of: experimental considerations and structural implications, 30
- Tandem mass spectrometry–Electrospray ionization analysis of peptides derived by enzymatic digestion of oxidized globin subunits: an improved method to determine amino acid substitution in the hemoglobin “core,” 1040
- Tandem mass spectrometry–electrospray ionization, positive and negative mode, Identification of phosphorylation sites in phosphopeptides by, 243
- Tandem mass spectrometry–electrospray liquid chromatography, Quantitation of SR 27417 in human plasma using: a study of ion suppression, 1099
- Tandem mass spectrometry/liquid chromatography analysis of peptide mixtures, Data-controlled automation of, 532
- Tandem mass spectrometry–microbore high-performanceliquid chromatography utilizing pneumatically assisted electrospray ionization, Quantitative determination of a nonpeptide antithrombotic in dog plasma by, 1238
- Tandem mass spectrometry of diastereomeric cobalt–glucosylglucose disaccharide complexes: Differentiation of stereochemistry of glycosidic bond configuration, 953
- Tandem reflectron time-of-flight mass spectrometry, ionization/Matrix-assisted laser desorption of fullerenes, 590
- Tenax collection with jet-separator enrichment and ion trap mass spectrometric analysis, Air analysis using, 1172
- Thermally labile steroids, carbamates, and drugs in supersonic molecular beams, Fast, very fast and ultra-fast gas chromatography–mass spectrometry of, 737
- Thiophene, Transition-metal mediated heteroatom removal by reactions of FeL^+ [$\text{L}=\text{O}$, C_4H_6 , $c\text{-C}_5\text{H}_6$, C_6H_6 , $\text{C}_5\text{H}_4(=\text{CH}_2)$] with, in the gas phase, 938
- Time of flight mass measurement, –Matrix-assisted laser desorption ionization, accuracy, Evaluation of, by using delayed extraction, 995
- Time-of-flight mass spectrometer, electrospray, vacuum chamber of, ion–molecule collisions in, Effect of, on mass spectra of proteins, 342
- Time-of-flight mass spectrometer, magnetic–orthogonal acceleration, tandem double focusing, matrix-assisted laser desorption ionization employing, Peptide sequence determination by, 1
- Time-of-flight mass spectrometry, ion trap source for, A segmented ring, cylindrical, 1009
- Time-of-flight mass spectrometry, ionization tandem/Matrix-assisted laser desorption of fullerenes, 590
- Time-of-flight secondary–ionization mass spectrometry, ion intensity in, Enhancement of, 467
- Time-of-flight–matrix-assisted laser desorption ionization mass spectrometry, liquid chromatography–electrospray ionization, Rapid analysis of antibiotic-containing mixtures from fermentation broths by using, 1227
- Time-resolved measurements of individual ion cloud signals to investigate space–charge effects in plasma mass spectrometry, 362
- Tips, metallized, Long-lived, for nanoliter electrospray mass spectrometry, 1270
- Transient recorder, dynamic range of, Increasing the, by using two analog-to-digital converters, 107
- Transition-metal mediated heteroatom removal by reactions of FeL^+ [$\text{L}=\text{O}$, C_4H_6 , $c\text{-C}_5\text{H}_6$, C_6H_6 , $\text{C}_5\text{H}_4(=\text{CH}_2)$] with furan, thiophene and pyrrole in the gas phase, 938
- Triacylglycerol mixture analysis, High-resolution, using high-temperature gas chromatography/mass spectrometry with a polarizable stationary phase, negative ion chemical ionization, and mass-resolved chromatography, 350
- Tripeptides, selected, Gas-phase basicities of histidine and lysine and their, 1203
- Tunable mid-infrared free-electron laser, Infrared matrix-assisted laser desorption and ionization by using, 1187
- 12th Asilomar Conference on Mass Spectrometry: Elemental Mass Spectrometry, The, 613, 693, 760, 987
- 22nd Annual FACSS Meeting, Mass Spectrometric Highlights of, 507
- Ubiquitin, Apparent gas-phase acidity of, 1211
- Uninterpreted high-energy collision-induced dissociation spectra of peptides, Search of, with sequence databases, 1089
- Unknowns, spectra of, interferences from, Software-based mass spectral enhancement to remove, 598
- Unsaturated and saturated aliphatic molecules, 193-nm photodissociation of ions from, 114
- Unsaturated fatty acids, polyhydroxy, Electrospray ionization and low energy tandem mass spectrometry of, 140
- Use of combined mass spectrometry methods for the characterization of a new variant of human hemoglobin: the double mutant hemoglobin Villeparisis B77(EF1) His \rightarrow Tyr, β 80 (EF4) Asn \rightarrow Ser, 163
- Use of low- and high-energy collision-induced dissociation tandem mass spectrometry in the identification of an unusual amino acid in a semisynthetic polypeptide, 1034
- Vacuum chamber of an electrospray time-of-flight mass spectrometer, ion–molecule collisions in, Effect of, on mass spectra of proteins, 342
- Valve, A pulsed-leak, for use with ion trapping mass spectrometers, 118
- Villeparisis, double mutant hemoglobin, B77(EF1) His \rightarrow Tyr, β 80 (EF4) Asn \rightarrow Ser: Use of combined mass spectrometry methods for the characterization of a new variant of human hemoglobin, 163
- Vincamine, oxygenated chemical ionization reagents with, Ion–molecule reactions of, 250
- Y^+ , Sc^+ , and Lu^+ , Gas-phase reactions with alcohols. Effects of the class and chain length of alcohols on the nature of primary products, 1157