# Hilkka I KenttÃ¤maa

List of Publications by Year
in descending order



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|---|---|---|---|
| 210 papers | 5,641 citations | 94269 37 h-index | 118652 62 g-index |
| 211 all docs | 211 docs citations | 211 times ranked | 4023 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Determination of the compound class and functional groups in protonated analytes via diagnostic gasâ€phase ionâ€molecule reactions. Mass Spectrometry Reviews, 2023, 42, 1508-1534. | 2.8 | 7 |
| 2 | Determining the Composition of Carbonate Solvent Systems Used in Lithium-Ion Batteries without Salt Removal. Energies, 2022, 15, 2805. | 1.6 | 0 |
| 3 | Gas-Phase Reactivity of Phenylcarbyne Anions. Journal of the American Chemical Society, 2022, 144, 8576-8590. | 6.6 | 10 |
| 4 | Compositional analysis of organosolv poplar lignin by using high-performance liquid chromatography/high-resolution multi-stage tandem mass spectrometry. Green Chemistry, 2021, 23, 983-1000. | 4.6 | 14 |
| 5 | Modulating the radical reactivity of phenyl radicals with the help of distonic charges: it is all about electrostatic catalysis. Chemical Science, 2021, 12, 4800-4809. | 3.7 | 13 |
| 6 | Evaluation of process severity on the chemical composition of organosolv switchgrass lignins by using mass spectrometry. Green Chemistry, 2021, 23, 4024-4033. | 4.6 | 3 |
| 7 | Protonated Ground-State Singlet meta-Pyridynes React from an Excited Triplet State. Journal of Organic Chemistry, 2021, 86, 3249-3260. | 1.7 | 3 |
| 8 | Characterization of ionized lignin model compounds with Î±â€Oâ€4 linkages by positiveâ€and negativeâ€ion mode electrospray ionization tandem mass spectrometry based on collisionâ€activated dissociation. Rapid Communications in Mass Spectrometry, 2021, 35, e9057. | 0.7 | 2 |
| 9 | Characterization of Protonated Substituted Ureas by Using Diagnostic Gas-Phase Ion-Molecule Reactions Followed by Collision-Activated Dissociation in Tandem Mass Spectrometry Experiments. Analytical Chemistry, 2021, 93, 7851-7859. | 3.2 | 6 |
| 10 | Identification of the carboxylic acid functionality in protonated drug metabolite model compounds by using tandem mass spectrometry based on ion-molecule reactions coupled with high performance liquid chromatography. International Journal of Mass Spectrometry, 2021, 463, 116551. | 0.7 | 3 |
| 11 | Determination of the Chemical Compositions of Condensate-like Oils with Different API Gravities by Using the Distillation, Precipitation, Fractionation Mass Spectrometry (DPF MS) Method. Energy & Fuels, 2021, 35, 8646-8656. | 2.5 | 6 |
| 12 | Reactivity of para-benzynes in solution and in the gas phase. Tetrahedron Letters, 2021, 74, 153161. | 0.7 | 3 |
| 13 | Study on the Gas-Phase Reactivity of Charged Pyridynes. Journal of Organic Chemistry, 2021, 86, 9979-9993. | 1.7 | 1 |
| 14 | Fast Determination of the Lignin Monomer Compositions of Genetic Variants of Poplar via Fast Pyrolysis/Atmospheric Pressure Chemical Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2546-2551. | 1.2 | 4 |
| 15 | Spinâ€spin Coupling Controls the Gasâ€phase Reactivity of Aromatic Ïƒâ€Type Triradicals. Chemistry - A European Journal, 2021, 28, e202102968. | 1.7 | 2 |
| 16 | Effects of Residual Water in a Linear Quadrupole Ion Trap on the Protonation Sites of 4-Aminobenzoic Acid. Journal of the American Society for Mass Spectrometry, 2020, 31, 124-131. | 1.2 | 18 |
| 17 | Bias, limit of detection, and limit of quantitation for the ASTM D2425 method updated in 2019. Journal of Chromatography A, 2020, 1614, 460705. | 1.8 | 4 |
| 18 | Losses of CO and CO2 upon collision-activated dissociation of substituted 2-methoxyphenoxides after methyl radical loss. International Journal of Mass Spectrometry, 2020, 456, 116397. | 0.7 | 2 |

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|---|---|---|---|
| 19 | Graph-based machine learning interprets and predicts diagnostic isomer-selective ionâ€“molecule reactions in tandem mass spectrometry. Chemical Science, 2020, 11, 11849-11858. | 3.7 | 12 |
| 20 | Studies of the Fragmentation Mechanisms of Deprotonated Lignin Model Compounds in Tandem Mass Spectrometry. Analytical Chemistry, 2020, 92, 11895-11903. | 3.2 | 9 |
| 21 | Direct functionalization of Câ^'H bonds by electrophilic anions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23374-23379. | 3.3 | 21 |
| 22 | Effects of Analyte Concentration on the Protonation Sites of 4-Aminobenzoic Acid upon Atmospheric Pressure Chemical Ionization As Revealed by Gas-Phase Ionâ€“Molecule Reactions. Journal of the American Society for Mass Spectrometry, 2020, 31, 2210-2217. | 1.2 | 7 |
| 23 | Free-Radical-Mediated Glycan Isomer Differentiation. Analytical Chemistry, 2020, 92, 13794-13802. | 3.2 | 18 |
| 24 | Comparison of three different analytical protocols for 2019 updated D2425 method for renewable jet fuel product certification analysis. Journal of Chromatography A, 2020, 1634, 461667. | 1.8 | 1 |
| 25 | Factors Affecting the Limit of Detection for HPLC/Tandem Mass Spectrometry Experiments Based on Gas-Phase Ionâ€“Molecule Reactions. Analytical Chemistry, 2020, 92, 7471-7477. | 3.2 | 10 |
| 26 | Fragmentation of Saturated Hydrocarbons upon Atmospheric Pressure Chemical Ionization Is Caused by Proton-Transfer Reactions. Analytical Chemistry, 2020, 92, 8883-8892. | 3.2 | 18 |
| 27 | Effects of the Distance between Radical Sites on the Reactivities of Aromatic Biradicals. Journal of Organic Chemistry, 2020, 85, 8415-8428. | 1.7 | 9 |
| 28 | Distinguishing Isomeric Aromatic Radical Cations by Using Energy-Resolved Ion Trap and Medium Energy Collision-Activated Dissociation Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 58-65. | 1.2 | 4 |
| 29 | A review of aviation turbine fuel chemical composition-property relations. Fuel, 2020, 268, 117391. | 3.4 | 45 |
| 30 | Measurement of the Proton Affinities of a Series of Mono- and Biradicals of Pyridine. Journal of the American Chemical Society, 2020, 142, 8679-8687. | 6.6 | 9 |
| 31 | Determination of jet fuel system icing inhibitor by GCÃ—GC-FID. Talanta, 2020, 218, 121146. | 2.9 | 3 |
| 32 | Analyzing and Tuning the Chalcogenâ€“Amineâ€“Thiol Complexes for Tailoring of Chalcogenide Syntheses. Inorganic Chemistry, 2020, 59, 8240-8250. | 1.9 | 14 |
| 33 | Determination of the chemical compositions of heavy, medium, and light crude oils by using the Distillation, Precipitation, Fractionation Mass Spectrometry (DPF MS) method. Fuel, 2019, 255, 115852. | 3.4 | 9 |
| 34 | Differentiation of Deprotonated Acyl-, N-, and O-Glucuronide Drug Metabolites by Using Tandem Mass Spectrometry Based on Gas-Phase Ionâ€“Molecule Reactions Followed by Collision-Activated Dissociation. Analytical Chemistry, 2019, 91, 11388-11396. | 3.2 | 14 |
| 35 | Integration of a Multichannel Pulsed-Valve Inlet System to a Linear Quadrupole Ion Trap Mass Spectrometer for the Rapid Consecutive Introduction of Nine Reagents for Diagnostic Ion/Molecule Reactions. Analytical Chemistry, 2019, 91, 15652-15660. | 3.2 | 10 |
| 36 | Identification and Quantitation of Linear Alkanes in Lubricant Base Oils by Using GCÃ—GC/EI TOF Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2019, 30, 2670-2677. | 1.2 | 12 |

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|---|---|---|---|
| 37 | An Automated Method for Chemical Composition Analysis of Lubricant Base Oils by Using Atmospheric Pressure Chemical Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2019, 30, 2014-2021. | 1.2 | 15 |
| 38 | Exploring the Reaction Mechanisms of Fast Pyrolysis of Xylan Model Compounds via Tandem Mass Spectrometry and Quantum Chemical Calculations. Journal of Physical Chemistry A, 2019, 123, 9149-9157. | 1.1 | 12 |
| 39 | Spinâ€“Spin Coupling Between Two meta â€Benzyne Moieties In a Quinolinium Tetraradical Cation Increases Their Reactivities. Chemistry - A European Journal, 2019, 25, 4472-4477. | 1.7 | 7 |
| 40 | Identification of Protonated Primary Carbamates by Using Gas-Phase Ionâ€“Molecule Reactions Followed by Collision-Activated Dissociation in Tandem Mass Spectrometry Experiments. Organic Process Research and Development, 2019, 23, 1159-1166. | 1.3 | 4 |
| 41 | Molecular-Level Understanding of the Major Fragmentation Mechanisms of Cellulose Fast Pyrolysis: An Experimental Approach Based on Isotopically Labeled Model Compounds. Journal of Organic Chemistry, 2019, 84, 7037-7050. | 1.7 | 9 |
| 42 | Laser-induced acoustic desorption. MRS Bulletin, 2019, 44, 372-381. | 1.7 | 11 |
| 43 | Relative Reactivities of Three Isomeric Aromatic Biradicals with a 1,4â€Biradical Topology Are Controlled by Polar Effects. Chemistry - A European Journal, 2019, 25, 6355-6361. | 1.7 | 10 |
| 44 | Impact of Alternative Fuel Blending Components on Fuel Composition and Properties in Blends with Jet A. Energy & Fuels, 2019, 33, 3275-3289. | 2.5 | 23 |
| 45 | Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5. Journal of Chemical & Engineering Data, 2019, 64, 1725-1745. | 1.0 | 27 |
| 46 | Quinoline Triradicals: A Reactivity Study. Journal of the American Chemical Society, 2019, 141, 6672-6679. | 6.6 | 6 |
| 47 | How to obtain a detailed chemical composition for middle distillates via GCâ€Ã—â€GC-FID without the need of GCâ€Ã—â€GC-TOF/MS. Fuel, 2019, 247, 368-377. | 3.4 | 27 |
| 48 | Investigation of the relative abundances of single-core and multicore compounds in asphaltenes by using high-resolution in-source collision-activated dissociation and medium-energy collision-activated dissociation mass spectrometry with statistical considerations. Fuel, 2019, 246, 126-132. | 3.4 | 25 |
| 49 | Jet fuel density via GCâ€Ã—â€GC-FID. Fuel, 2019, 235, 1052-1060. | 3.4 | 47 |
| 50 | The capability of organic compounds to swell acrylonitrile butadiene O-rings and their effects on O-ring mechanical properties. Fuel, 2019, 238, 483-492. | 3.4 | 22 |
| 51 | Recent Advances in Petroleum Analysis by Mass Spectrometry. Analytical Chemistry, 2019, 91, 156-177. | 3.2 | 73 |
| 52 | Reactivity of organic ï‚,ï‚,ï‚,ï‚,ï‚-pentaradicals. International Journal of Mass Spectrometry, 2019, 435, 280-290. | 0.7 | 7 |
| 53 | Renewable thermoset polymers based on lignin and carbohydrate derived monomers. Green Chemistry, 2018, 20, 1131-1138. | 4.6 | 65 |
| 54 | Ion/molecule reactions of dimethylamine with protonated analytes facilitate the identification of tertiary N-oxide functionalities in a linear quadrupole ion trap mass spectrometer. International Journal of Mass Spectrometry, 2018, 429, 142-150. | 0.7 | 3 |

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|---|---|---|---|
| 55 | Substituent Effects on the Reactivity of the 2,4,6â€Tridehydropyridinium Cation, an Aromatic Ïƒ,Ïƒ,Ïƒâ€Triradical. European Journal of Organic Chemistry, 2018, 2018, 6582-6589. | 1.2 | 5 |
| 56 | Impact of HEFA Feedstocks on Fuel Composition and Properties in Blends with Jet A. Energy & Fuels, 2018, 32, 11595-11606. | 2.5 | 30 |
| 57 | Dehydration Pathways for Glucose and Cellobiose During Fast Pyrolysis. Journal of Physical Chemistry A, 2018, 122, 8071-8085. | 1.1 | 31 |
| 58 | Polar Effects Control the Gasâ€Phase Reactivity of paraâ€Benzyne Analogs. ChemPhysChem, 2018, 19, 2839-2842. | 1.0 | 3 |
| 59 | Tandem mass spectrometric evaluation of core structures of aromatic compounds after catalytic deoxygenation. Fuel Processing Technology, 2018, 176, 119-123. | 3.7 | 40 |
| 60 | Differentiating Isomeric Deprotonated Glucuronide Drug Metabolites via Ion/Molecule Reactions in Tandem Mass Spectrometry. Analytical Chemistry, 2018, 90, 9426-9433. | 3.2 | 16 |
| 61 | Middle distillates hydrogen content via GCÃ—GC-FID. Talanta, 2018, 186, 140-146. | 2.9 | 36 |
| 62 | Effects of hydrogen bonding on the gas-phase reactivity of didehydroisoquinolinium cation isomers. Physical Chemistry Chemical Physics, 2018, 20, 21567-21572. | 1.3 | 2 |
| 63 | Molecular profiling of crude oil by using Distillation Precipitation Fractionation Mass Spectrometry (DPF-MS). Fuel, 2018, 234, 492-501. | 3.4 | 12 |
| 64 | Mechanism of Meâ€“Re Bond Addition to Platinum(II) and Dioxygen Activation by the Resulting Ptâ€“Re Bimetallic Center. Inorganic Chemistry, 2017, 56, 2145-2152. | 1.9 | 10 |
| 65 | Laser-Induced Acoustic Desorption/Electron Ionization of Amino Acids and Small Peptides. Journal of the American Society for Mass Spectrometry, 2017, 28, 1091-1098. | 1.2 | 7 |
| 66 | Identification of Protonated Sulfone and Aromatic Carboxylic Acid Functionalities in Organic Molecules by Using Ionâ€“Molecule Reactions Followed by Collisionally Activated Dissociation in a Linear Quadrupole Ion Trap Mass Spectrometer. Analytical Chemistry, 2017, 89, 7398-7405. | 3.2 | 15 |
| 67 | An Oxygenâ€•peri â€Bridged Quinolinium Cation and Its Monoradical Counterpart. European Journal of Organic Chemistry, 2017, 2017, 1407-1412. | 1.2 | 8 |
| 68 | Initial Products and Reaction Mechanisms for Fast Pyrolysis of Synthetic Gâ€Lignin Oligomers with Î²â€Oâ€4 Linkages via Onâ€Line Mass Spectrometry and Quantum Chemical Calculations. ChemistrySelect, 2017, 2, 7185-7193. | 0.7 | 12 |
| 69 | Identification of Carboxylate, Phosphate, and Phenoxide Functionalities in Deprotonated Molecules Related to Drug Metabolites via Ionâ€“Molecule Reactions with water and Diethylhydroxyborane. Journal of the American Society for Mass Spectrometry, 2017, 28, 2189-2200. | 1.2 | 10 |
| 70 | Analysis of Catalytic Hydrothermal Conversion Jet Fuel and Surrogate Mixture Formulation: Components, Properties, and Combustion. Energy & Fuels, 2017, 31, 13802-13814. | 2.5 | 35 |
| 71 | Speciation of CuCl and CuCl<sub>2</sub> Thiol-Amine Solutions and Characterization of Resulting Films: Implications for Semiconductor Device Fabrication. Inorganic Chemistry, 2017, 56, 14396-14407. | 1.9 | 30 |
| 72 | (â^')ESI/CAD MS<sup>n</sup> Procedure for Sequencing Lignin Oligomers Based on a Study of Synthetic Model Compounds with Î²-O-4 and 5-5 Linkages. Analytical Chemistry, 2017, 89, 13089-13096. | 3.2 | 22 |

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|---|---|---|---|
| 73 | Gas-phase Reactivity of meta-Benzyne Analogs Toward Small Oligonucleotides of Differing Lengths. Journal of the American Society for Mass Spectrometry, 2017, 28, 1392-1405. | 1.2 | 1 |
| 74 | Characterization of aromatic organosulfur model compounds relevant to fossil fuels by using atmospheric pressure chemical ionization with CS<sub>2</sub>and highâ€resolution tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2016, 30, 953-962. | 0.7 | 15 |
| 75 | Reactivity Controlling Factors for an Aromatic Carbonâ€Centered Ïƒ,Ïƒ,Ïƒâ€Triradical: The 4,5,8â€Tridehydroisoquinolinium Ion. Chemistry - A European Journal, 2016, 22, 809-815. | 1.7 | 5 |
| 76 | A Fundamental Tandem Mass Spectrometry Study of the Collisionâ€Activated Dissociation of Small Deprotonated Molecules Related to Lignin. ChemSusChem, 2016, 9, 3513-3526. | 3.6 | 15 |
| 77 | Comparison of Atmospheric Pressure Chemical Ionization and Field Ionization Mass Spectrometry for the Analysis of Large Saturated Hydrocarbons. Analytical Chemistry, 2016, 88, 10592-10598. | 3.2 | 44 |
| 78 | Identification of the Phenol Functionality in Deprotonated Monomeric and Dimeric Lignin Degradation Products via Tandem Mass Spectrometry Based on Ionâ€“Molecule Reactions with Diethylmethoxyborane. Journal of the American Society for Mass Spectrometry, 2016, 27, 1813-1823. | 1.2 | 12 |
| 79 | Alkali Cation Chelation in Cold Î²-O-4 Tetralignol Complexes. Journal of Physical Chemistry A, 2016, 120, 7152-7166. | 1.1 | 6 |
| 80 | Maleic acid and aluminum chloride catalyzed conversion of glucose to 5-(hydroxymethyl) furfural and levulinic acid in aqueous media. Green Chemistry, 2016, 18, 5219-5229. | 4.6 | 110 |
| 81 | Gas-phase ion-molecule reactions for the identification of the sulfone functionality in protonated analytes in a linear quadrupole ion trap mass spectrometer. Rapid Communications in Mass Spectrometry, 2016, 30, 1435-1441. | 0.7 | 9 |
| 82 | Characterization of Asphaltene Deposits by Using Mass Spectrometry and Raman Spectroscopy. Energy & Fuels, 2016, 30, 805-809. | 2.5 | 47 |
| 83 | Identification of N-Oxide and Sulfoxide Functionalities in Protonated Drug Metabolites by Using Ionâ€“Molecule Reactions Followed by Collisionally Activated Dissociation in a Linear Quadrupole Ion Trap Mass Spectrometer. Journal of Organic Chemistry, 2016, 81, 575-586. | 1.7 | 22 |
| 84 | Mechanistic investigation of the Zn/Pd/C catalyzed cleavage and hydrodeoxygenation of lignin. Green Chemistry, 2016, 18, 2399-2405. | 4.6 | 119 |
| 85 | Total Utilization of Miscanthus Biomass, Lignin and Carbohydrates, Using Earth Abundant Nickel Catalyst. ACS Sustainable Chemistry and Engineering, 2016, 4, 2316-2322. | 3.2 | 182 |
| 86 | Mass Spectrometric Studies of Fast Pyrolysis of Cellulose. European Journal of Mass Spectrometry, 2015, 21, 321-326. | 0.5 | 10 |
| 87 | Mass spectrometric identification of the N â€monosubstituted N â€hydroxylamino functionality in protonated analytes via ion/molecule reactions in tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2015, 29, 730-734. | 0.7 | 13 |
| 88 | Structural Comparison of Asphaltenes of Different Origins Using Multi-stage Tandem Mass Spectrometry. Energy & Fuels, 2015, 29, 1309-1314. | 2.5 | 33 |
| 89 | Fast Pyrolysis of <sup>13</sup>C-Labeled Cellobioses: Gaining Insights into the Mechanisms of Fast Pyrolysis of Carbohydrates. Journal of Organic Chemistry, 2015, 80, 1909-1914. | 1.7 | 37 |
| 90 | Tandem mass spectrometric characterization of the conversion of xylose to furfural. Biomass and Bioenergy, 2015, 74, 1-5. | 2.9 | 10 |

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|---|---|---|---|
| 91 | Gas-phase reactions of a novel chemical ionization reagent, ClMn2+, with polar and nonpolar analytes in a linear quadrupole ion trap. International Journal of Mass Spectrometry, 2015, 378, 206-211. | 0.7 | 3 |
| 92 | Identification of 2-Aminothiazolobenzazepine Metabolites in Human, Rat, Dog, and Monkey Microsomes by Ion-Molecule Reactions in Linear Quadrupole Ion Trap Mass Spectrometry. Drug Metabolism and Disposition, 2015, 43, 358-366. | 1.7 | 10 |
| 93 | A Mimivirus Enzyme that Participates in Viral Entry. Structure, 2015, 23, 1058-1065. | 1.6 | 22 |
| 94 | Speciation and kinetic study of iron promoted sugar conversion to 5-hydroxymethylfurfural (HMF) and levulinic acid (LA). Organic Chemistry Frontiers, 2015, 2, 1388-1396. | 2.3 | 46 |
| 95 | A synergistic biorefinery based on catalytic conversion of lignin prior to cellulose starting from lignocellulosic biomass. Green Chemistry, 2015, 17, 1492-1499. | 4.6 | 370 |
| 96 | Polar effects control the gas-phase reactivity of charged para-benzyne analogs. International Journal of Mass Spectrometry, 2015, 377, 39-43. | 0.7 | 7 |
| 97 | Tailoring Biomass for Biochemical, Chemical or Thermochemical Catalytic Conversion. FASEB Journal, 2015, 29, 485.3. | 0.2 | 0 |
| 98 | On the factors that control the reactivity of meta-benzynes. Chemical Science, 2014, 5, 2205-2215. | 3.7 | 24 |
| 99 | Identification of the sulfoxide functionality in protonated analytes via ion/molecule reactions in linear quadrupole ion trap mass spectrometry. Analyst, The, 2014, 139, 4296-4302. | 1.7 | 12 |
| 100 | Characterization of organosolv switchgrass lignin by using high performance liquid chromatography/high resolution tandem mass spectrometry using hydroxide-doped negative-ion mode electrospray ionization. Green Chemistry, 2014, 16, 2713-2727. | 4.6 | 78 |
| 101 | Multiported Pulsed Valve Interface for a Linear Quadrupole Ion Trap Mass Spectrometer to Enable Rapid Screening of Multiple Functional-Group Selective Ionâ€“Molecule Reactions. Analytical Chemistry, 2014, 86, 6533-6539. | 3.2 | 13 |
| 102 | Elucidation of structural information achievable for asphaltenes via collision-activated dissociation of their molecular ions in MSn experiments: A model compound study. Fuel, 2014, 133, 106-114. | 3.4 | 36 |
| 103 | Identification of the Sulfone Functionality in Protonated Analytes via Ion/Molecule Reactions in a Linear Quadrupole Ion Trap Mass Spectrometer. Journal of Organic Chemistry, 2014, 79, 2883-2889. | 1.7 | 16 |
| 104 | Comparison of the Reactivity of the Three Distonic Isomers of the Pyridine Radical Cation Toward Tetrahydrofuran in Solution and in the Gas Phase. Journal of the American Society for Mass Spectrometry, 2013, 24, 469-480. | 1.2 | 9 |
| 105 | Analysis of xyloglucans by ambient chloride attachment ionization tandem mass spectrometry. Carbohydrate Polymers, 2013, 98, 1203-1213. | 5.1 | 21 |
| 106 | A Differentially Pumped Dual Linear Quadrupole Ion Trap (DLQIT) Mass Spectrometer: A Mass Spectrometer Capable of MS<sup>n</sup> Experiments Free From Interfering Reactions. Analytical Chemistry, 2013, 85, 11284-11290. | 3.2 | 12 |
| 107 | Properties and Reactivity of Gaseous Distonic Radical Ions with Aryl Radical Sites. Chemical Reviews, 2013, 113, 6949-6985. | 23.0 | 49 |
| 108 | Cleavage and hydrodeoxygenation (HDO) of Câ€“O bonds relevant to lignin conversion using Pd/Zn synergistic catalysis. Chemical Science, 2013, 4, 806-813. | 3.7 | 294 |

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|---|---|---|---|
| 109 | Mechanism of MTO-Catalyzed Deoxydehydration of Diols to Alkenes Using Sacrificial Alcohols. Organometallics, 2013, 32, 3210-3219. | 1.1 | 69 |
| 110 | Comparison of the Structures of Molecules in Coal and Petroleum Asphaltenes by Using Mass Spectrometry. Energy & Fuels, 2013, 27, 3653-3658. | 2.5 | 58 |
| 111 | Analysis of carbohydrates by atmospheric pressure chloride anion attachment tandem mass spectrometry. Fuel, 2013, 105, 235-246. | 3.4 | 18 |
| 112 | On-Line Mass Spectrometric Methods for the Determination of the Primary Products of Fast Pyrolysis of Carbohydrates and for Their Gas-Phase Manipulation. Analytical Chemistry, 2013, 85, 10927-10934. | 3.2 | 41 |
| 113 | Does the 2,6â€didehydropyridinium cation exist?. Journal of Physical Organic Chemistry, 2013, 26, 707-714. | 0.9 | 12 |
| 114 | Experimental and Computational Studies on the Formation of Three paraâ€Benzyne Analogues in the Gas Phase. Chemistry - A European Journal, 2013, 19, 9022-9033. | 1.7 | 14 |
| 115 | Substituent Effects on the Nonradical Reactivity of 4-Dehydropyridinium Cation. Journal of Physical Chemistry A, 2012, 116, 3089-3093. | 1.1 | 6 |
| 116 | Identification and Counting of Oxygen Functionalities and Alkyl Groups of Aromatic Analytes in Mixtures by Positive-Mode Atmospheric Pressure Chemical Ionization Tandem Mass Spectrometry Coupled with High-Performance Liquid Chromatography. Energy & Fuels, 2012, 26, 2975-2989. | 2.5 | 12 |
| 117 | High-Performance Liquid Chromatography/High-Resolution Multiple Stage Tandem Mass Spectrometry Using Negative-Ion-Mode Hydroxide-Doped Electrospray Ionization for the Characterization of Lignin Degradation Products. Analytical Chemistry, 2012, 84, 6000-6007. | 3.2 | 94 |
| 118 | Reactivity of a Ïƒ,Ïƒ,Ïƒ,Ïƒ-Tetraradical: The 2,4,6-Tridehydropyridine Radical Cation. Journal of the American Chemical Society, 2012, 134, 1926-1929. | 6.6 | 13 |
| 119 | Separation of Asphaltenes by Reversed-Phase Liquid Chromatography with Fraction Characterization. Energy & Fuels, 2012, 26, 2850-2857. | 2.5 | 21 |
| 120 | Ionâ€“molecule reactions for the differentiation of primary, secondary and tertiary hydroxyl functionalities in protonated analytes in a tandem mass spectrometer. Analyst, The, 2012, 137, 5720. | 1.7 | 11 |
| 121 | A novel chemical ionization reagent ion for organic analytes: the aquachloromanganese(II) cation [ClMn(H<sub>2</sub>O)<sup>+</sup>]. Rapid Communications in Mass Spectrometry, 2012, 26, 940-942. | 0.7 | 2 |
| 122 | Reactivity of the 4,5â€Didehydroisoquinolinium Cation. Chemistry - A European Journal, 2012, 18, 8692-8698. | 1.7 | 12 |
| 123 | HPLC/APCI Mass Spectrometry of Saturated and Unsaturated Hydrocarbons by Using Hydrocarbon Solvents as the APCI Reagent and HPLC Mobile Phase. Journal of the American Society for Mass Spectrometry, 2012, 23, 816-822. | 1.2 | 40 |
| 124 | Characterization of model compounds of processed lignin and the lignome by using atmospheric pressure ionization tandem mass spectrometry. Fuel, 2012, 95, 634-641. | 3.4 | 47 |
| 125 | Effects of a Hydroxyl Substituent on the Reactivity of the 2,4,6â€Tridehydropyridinium Cation, an Aromatic Ïƒ,Ïƒ,Ïƒâ€Triradical. Chemistry - A European Journal, 2012, 18, 969-974. | 1.7 | 10 |
| 126 | Identification of Epoxide Functionalities in Protonated Monofunctional Analytes by Using Ion/Molecule Reactions and Collision-Activated Dissociation in Different Ion Trap Tandem Mass Spectrometers. Journal of the American Society for Mass Spectrometry, 2012, 23, 12-22. | 1.2 | 22 |

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|---|---|---|---|
| 127 | Comparison of Functional Group Selective Ionâ€“Molecule Reactions of Trimethyl Borate in Different Ion Trap Mass Spectrometers. Journal of the American Society for Mass Spectrometry, 2011, 22, 520-530. | 1.2 | 20 |
| 128 | Differentiation of Regioisomeric Aromatic Ketocarboxylic Acids by Positive Mode Atmospheric Pressure Chemical Ionization Collision-Activated Dissociation Tandem Mass Spectrometry in a Linear Quadrupole Ion Trap Mass Spectrometer. Journal of the American Society for Mass Spectrometry, 2011, 22, 670-682. | 1.2 | 14 |
| 129 | Carbon disulfide reagent allows the characterization of nonpolar analytes by atmospheric pressure chemical ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2011, 25, 1924-1928. | 0.7 | 29 |
| 130 | Identification and counting of carbonyl and hydroxyl functionalities in protonated bifunctional analytes by using solution derivatization prior to mass spectrometric analysis via ion-molecule reactions. Journal of the American Society for Mass Spectrometry, 2010, 21, 773-784. | 1.2 | 14 |
| 131 | Liquid chromatography/tandem mass spectrometry utilizing ion-molecule reactions and collision-activated dissociation for the identification of N-oxide drug metabolites. Journal of Pharmaceutical and Biomedical Analysis, 2010, 51, 805-811. | 1.4 | 13 |
| 132 | Influence of Hydrogen Bonding on Hydrogen-Atom Abstraction Reactions of Dehydropyridinium Cations in the Gas Phase. Journal of Physical Chemistry A, 2010, 114, 12851-12857. | 1.1 | 4 |
| 133 | Differentiation of Isomeric Hydrocarbons by Using [ClMn(H<sub>2</sub>O)]<sup>+</sup>Chemical Ionization and Collision-Activated Dissociation in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer. Energy & Fuels, 2010, 24, 3119-3124. | 2.5 | 5 |
| 134 | Ionâ€“molecule reactions facilitate the identification and differentiation of primary, secondary and tertiary amino functionalities in protonated monofunctional analytes in mass spectrometry. International Journal of Mass Spectrometry, 2009, 282, 77-84. | 0.7 | 16 |
| 135 | An ion/molecule reaction for the identification of analytes with two basic functional groups. Journal of the American Society for Mass Spectrometry, 2009, 20, 1251-1262. | 1.2 | 12 |
| 136 | Gas-Phase Reactivity of Protonated 2-, 3-, and 4-Dehydropyridine Radicals Toward Organic Reagents. Journal of Physical Chemistry A, 2009, 113, 13663-13674. | 1.1 | 22 |
| 137 | Identification of Aliphatic and Aromatic Tertiary N-Oxide Functionalities in Protonated Analytes via Ion/Molecule and Dissociation Reactions in an FT-ICR Mass Spectrometer. Journal of Organic Chemistry, 2009, 74, 1114-1123. | 1.7 | 25 |
| 138 | Reactivity of the 3,4,5â€Tridehydropyridinium Cationâ€”An Aromatic Ïƒ,Ïƒ,Ïƒâ€Triradical. Angewandte Chemie - International Edition, 2008, 47, 9860-9865. | 7.2 | 36 |
| 139 | Correlation of Hydrogen-Atom Abstraction Reaction Efficiencies for Aryl Radicals with their Vertical Electron Affinities and the Vertical Ionization Energies of the Hydrogen-Atom Donors. Journal of the American Chemical Society, 2008, 130, 17697-17709. | 6.6 | 46 |
| 140 | Regioselective ionâ€“molecule reactions for the mass spectrometric differentiation of protonated isomeric aromatic diamines. Analyst, The, 2008, 133, 452. | 1.7 | 23 |
| 141 | Identification of the Carboxylic Acid Functionality by Using Electrospray Ionization and Ionâˆ’Molecule Reactions in a Modified Linear Quadrupole Ion Trap Mass Spectrometer. Analytical Chemistry, 2008, 80, 3416-3421. | 3.2 | 60 |
| 142 | Analysis of Base Oil Fractions by ClMn(H<sub>2</sub>O)<sup>+</sup> Chemical Ionization Combined with Laser-Induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2008, 80, 1847-1853. | 3.2 | 35 |
| 143 | Identification of the Aromatic Tertiary N-Oxide Functionality in Protonated Analytes via Ion/Molecule Reactions in Mass Spectrometers. Journal of Organic Chemistry, 2008, 73, 4888-4894. | 1.7 | 22 |
| 144 | Quantum Chemical Characterization of the Structures, Thermochemical Properties, and Doubletâˆ’Quartet Splittings of Tridehydropyridinium Cations. Journal of Physical Chemistry A, 2008, 112, 5542-5553. | 1.1 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Functional Group Selective Ion/Molecule Reactions:Â Mass Spectrometric Identification of the Amido Functionality in Protonated Monofunctional Compounds. Journal of Organic Chemistry, 2007, 72, 3159-3165. | 1.7 | 30 |
| 146 | Reactivity of an Aromatic Ïƒ,Ïƒ,Ïƒâ€¬Triradical: The 2,4,6â€¬Tridehydropyridinium Cation. Angewandte Chemie - International Edition, 2007, 46, 9198-9201. | 7.2 | 28 |
| 147 | Ionâ€“molecule reactions of trimethylborate allow the mass spectrometric identification and counting of functional groups in protonated bifunctional oxygen-containing compounds and polyols. International Journal of Mass Spectrometry, 2007, 265, 359-371. | 0.7 | 13 |
| 148 | Quantum Chemical Characterization of the Vertical Electron Affinities of Didehydroquinolinium and Didehydroisoquinolinium Cations. Journal of Physical Chemistry A, 2006, 110, 10309-10315. | 1.1 | 10 |
| 149 | Rearrangement of phenylcarbene radical cation to dehydrotropylium cation. International Journal of Mass Spectrometry, 2006, 249-250, 1-7. | 0.7 | 6 |
| 150 | Ionâ˜Molecule Reactions for the Characterization of Polyols and Polyol Mixtures by ESI/FT-ICR Mass Spectrometry. Analytical Chemistry, 2005, 77, 1385-1392. | 3.2 | 40 |
| 151 | Compound Screening for the Presence of the PrimaryN-Oxide Functionality via Ionâ˜Molecule Reactions in a Mass Spectrometer. Analytical Chemistry, 2005, 77, 5311-5316. | 3.2 | 19 |
| 152 | Demonstration of Tunable Reactivity for meta-Benzynes. Journal of the American Chemical Society, 2005, 127, 5760-5761. | 6.6 | 30 |
| 153 | Reactivity of theN-Methylene-5,8-didehydroisoquinolinium Triradical Ion. Journal of the American Chemical Society, 2005, 127, 13152-13153. | 6.6 | 9 |
| 154 | Quantum Chemical Characterization of the Structures, Thermochemical Properties, and Singletâ˜Triplet Splittings of Didehydroquinolinium and Didehydroisoquinolinium Ions. Journal of Physical Chemistry A, 2005, 109, 10348-10356. | 1.1 | 17 |
| 155 | Quantitative determination of the selectivities of five different phenyl radicals in hydrogen atom abstraction from ethanol. Journal of the American Society for Mass Spectrometry, 2004, 15, 913-919. | 1.2 | 16 |
| 156 | Ionâ˜Molecule Reactions for Mass Spectrometric Identification of Functional Groups in Protonated Oxygen-Containing Monofunctional Compounds. Analytical Chemistry, 2004, 76, 964-976. | 3.2 | 39 |
| 157 | Gas-Phase Acidities of cis- and trans-2-tert-Butyl-1,3-dithian-5-ol. Journal of Physical Chemistry A, 2004, 108, 7379-7385. | 1.1 | 2 |
| 158 | Gas-Phase Reactivity of Charged Ï€-Type Biradicals. Journal of the American Chemical Society, 2004, 126, 12957-12967. | 6.6 | 16 |
| 159 | Theoretical Estimations of the 298 K Gas-Phase Acidities of the Purine-Based Nucleobases Adenine and Guanine. Journal of Physical Chemistry A, 2004, 108, 4485-4490. | 1.1 | 40 |
| 160 | Reply to â€œComments on â€˜Theoretical Estimations of the 298 K Gas-Phase Acidities of the Pyrimidine-Based Nucleobases Uracil, Thymine and Cytosine'â€• Journal of Physical Chemistry A, 2004, 108, 1102-1102. | 1.1 | 1 |
| 161 | Experimental and Theoretical Characterization of the 3,5-Didehydrobenzoate Anion:Â A Negatively Chargedmeta-Benzyne. Journal of the American Chemical Society, 2003, 125, 131-140. | 6.6 | 16 |
| 162 | Radical Reactions of Didehydroarenes with a 1,4-Relationship. Journal of the American Chemical Society, 2003, 125, 14256-14257. | 6.6 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Characterization of Two Chloro-Substituted m-Benzyne Isomers:â€‰ Effect of Substitution on Reaction Efficiencies and Products. Journal of Physical Chemistry A, 2003, 107, 8985-8995. | 1.1 | 30 |
| 164 | Theoretical Estimations of the 298 K Gas-Phase Acidities of the Pyrimidine-Based Nucleobases Uracil, Thymine, and Cytosine. Journal of Physical Chemistry A, 2003, 107, 4893-4897. | 1.1 | 45 |
| 165 | Charge-Site Effects on the Radical Reactivity of Distonic Ionsâ€. Journal of Physical Chemistry A, 2002, 106, 9767-9775. | 1.1 | 35 |
| 166 | An Experimental and Computational Study of the Gas-Phase Structures of Five-Carbon Monosaccharides. Journal of Physical Chemistry A, 2002, 106, 6754-6764. | 1.1 | 78 |
| 167 | Chemical Properties of apara-Benzyne. Journal of the American Chemical Society, 2002, 124, 12066-12067. | 6.6 | 42 |
| 168 | Hydrogen Atom Abstraction Reactions of Charged Polyaromatic Ïƒ-Radicals Related to the Active Intermediates of the Enediyne Antitumor Drugs. Journal of the American Chemical Society, 2002, 124, 4108-4115. | 6.6 | 21 |
| 169 | Photodechlorination of 3,3â€²-dichlorobenzidine in water. Environmental Toxicology and Chemistry, 2002, 21, 500-506. | 2.2 | 6 |
| 170 | Photodechlorination of 3,3â€²-dichlorobenzidine in water. , 2002, 21, 500. | | 1 |
| 171 | Polar Effects Control Hydrogen-Abstraction Reactions of Charged, Substituted Phenyl Radicals. Journal of Physical Chemistry A, 2001, 105, 7875-7884. | 1.1 | 58 |
| 172 | N-Terminal Derivatization and Fragmentation of Neutral Peptides via Ionâ^'Molecule Reactions with Acylium Ions:Â Toward Gas-Phase Edman Degradation?. Journal of the American Chemical Society, 2001, 123, 1184-1192. | 6.6 | 32 |
| 173 | meta-Benzyne Reacts as an Electrophile. Journal of Physical Chemistry A, 2001, 105, 10155-10168. | 1.1 | 36 |
| 174 | Synthesis and Characterization of a Distonic Nitrene Ion:Â Gas-Phase Reactivity of Singlet and TripletN-Phenyl-3-Nitrenopyridinium Ion. Journal of the American Chemical Society, 2001, 123, 7923-7924. | 6.6 | 10 |
| 175 | Polarity of the Transition State Controls the Reactivity of Related Charged Phenyl Radicals Toward Atom and Group Donors. Journal of Organic Chemistry, 2001, 66, 2726-2733. | 1.7 | 40 |
| 176 | A Fourier-transform ion cyclotron resonance study of the 3,5-didehydrophenyl cation. Journal of the American Society for Mass Spectrometry, 2001, 12, 258-267. | 1.2 | 18 |
| 177 | Polar Effects on Iodine Atom Abstraction by Charged Phenyl Radicals. Journal of Organic Chemistry, 2000, 65, 645-651. | 1.7 | 31 |
| 178 | m-Benzyne Reacts as an Electrophile. Journal of the American Chemical Society, 2000, 122, 8781-8782. | 6.6 | 26 |
| 179 | Laser desorption in transmission geometry inside a Fourier-transform ion cyclotron resonance mass spectrometer. Journal of the American Society for Mass Spectrometry, 1999, 10, 1105-1110. | 1.2 | 36 |
| 180 | Reactivity of a Substitutedm-Benzyne Biradical. Journal of the American Chemical Society, 1999, 121, 800-805. | 6.6 | 55 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Diastereoselectivity in Gas-Phase Hydride Reduction Reactions of Ketones. Journal of the American Chemical Society, 1999, 121, 7130-7137. | 6.6 | 23 |
| 182 | Synthesis of charged phenyl radicals and biradicals by laser photolysis in a Fourier-transform ion cyclotron resonance mass spectrometer. Journal of the American Society for Mass Spectrometry, 1998, 9, 1135-1140. | 1.2 | 15 |
| 183 | The Dimethylene Ketene Radical Cation. Journal of Organic Chemistry, 1998, 63, 4470-4474. | 1.7 | 3 |
| 184 | Synthesis and Characterization of Aromatic Biradicals in the Gas Phase:Â Ameta-Benzyne with an Inert Positively Charged Substituent and Itsortho- andpara-Isomers. Journal of the American Chemical Society, 1997, 119, 3832-3833. | 6.6 | 38 |
| 185 | Reactions of alkyl halides with distonic acylium radical cations. International Journal of Mass Spectrometry and Ion Processes, 1997, 165-166, 315-325. | 1.9 | 9 |
| 186 | Charged Phenyl Radicals. Journal of the American Chemical Society, 1996, 118, 8669-8676. | 6.6 | 73 |
| 187 | Homolytic Seâ^'H Bond Energy and Ionization Energy of Benzeneselenol and the Acidity of the Corresponding Radical Cation. The Journal of Physical Chemistry, 1996, 100, 6608-6611. | 2.9 | 29 |
| 188 | Fluorine Substitution Enhances the Reactivity of Substituted Phenyl Radicals toward Organic Hydrogen Atom Donors. Journal of the American Chemical Society, 1996, 118, 5056-5061. | 6.6 | 49 |
| 189 | Methyl propionate radical cation. Journal of the American Society for Mass Spectrometry, 1996, 7, 482-489. | 1.2 | 10 |
| 190 | Characterization of long-chain carboxylic esters with CH3OBOCH3+ in a small fourier-transform ion cyclotron resonance mass spectrometer. Journal of the American Society for Mass Spectrometry, 1996, 7, 1138-1143. | 1.2 | 11 |
| 191 | Distinguishing conventional and distonic radical cations by using dimethyl diselenide. Journal of the American Society for Mass Spectrometry, 1996, 7, 1245-1250. | 1.2 | 13 |
| 192 | Gas-phase reactions of the 4-dehydroanilinium ion and its isomers. Journal of Mass Spectrometry, 1995, 30, 81-87. | 0.7 | 21 |
| 193 | A new reagent for structure-specific ion-molecule reactions. Dimethyl diselenide. Journal of Mass Spectrometry, 1995, 30, 384-385. | 0.7 | 22 |
| 194 | Long-lived distonic radical cations. Organic Mass Spectrometry, 1994, 29, 1-10. | 1.3 | 67 |
| 195 | Heat of formation of the radical cation of dimethyl disulfide. Organic Mass Spectrometry, 1994, 29, 106-107. | 1.3 | 30 |
| 196 | The Long-Lived Radical Cations of Simple Carbon Esters Isomerize to the Lowest-Energy Structure. Journal of the American Chemical Society, 1994, 116, 3028-3038. | 6.6 | 56 |
| 197 | Radical-type reactivity of the methylenedimethylsulfonium ion, (CH3)2S+ï£¿CH2Ë™. Organic Mass Spectrometry, 1993, 28, 1623-1631. | 1.3 | 32 |
| 198 | Multiple-stage mass spectrometry in structural characterization of organophosphorus compounds. Journal of the American Society for Mass Spectrometry, 1993, 4, 125-134. | 1.2 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Bimolecular reactions involving the radical site of the distonic ion Â·CH2CH2CH2Cï£½O+. Rapid Communications in Mass Spectrometry, 1993, 7, 392-399. | 0.7 | 28 |
| 200 | Bimolecular reactions of the .beta.-distonic isomer of the ethanol radical cation: .bul.CH2CH2OH2+. The Journal of Physical Chemistry, 1992, 96, 5272-5276. | 2.9 | 22 |
| 201 | Ion-molecule reactions of distonic radical cations. Chemical Reviews, 1992, 92, 1649-1665. | 23.0 | 265 |
| 202 | Bimolecular reactions ofË™CH2CH2OCH2+: A comparison with the chemical properties of CH3CH2OCH2+ and ionized trimethylene oxide. Rapid Communications in Mass Spectrometry, 1992, 6, 734-740. | 0.7 | 6 |
| 203 | Protonated propylene oxide is stable towards isomerization in the gas phase. Journal of Physical Organic Chemistry, 1992, 5, 201-208. | 0.9 | 5 |
| 204 | Reaction of O2+Ë™ with CH4: A study of ion energies in a dual-cell fourier transform ion cyclotron resonance mass spectrometer. Organic Mass Spectrometry, 1992, 27, 1155-1156. | 1.3 | 10 |
| 205 | Pulsed gas introduction into quadrupole ion traps. Journal of the American Society for Mass Spectrometry, 1990, 1, 308-311. | 1.2 | 26 |
| 206 | Low-energy collisional activation of polyatomic ions with different target gases. International Journal of Mass Spectrometry and Ion Processes, 1989, 90, 71-83. | 1.9 | 34 |
| 207 | Analysis of natural products by tandem mass spectrometry employing reactive collisions with ethyl vinyl ether. Organic Mass Spectrometry, 1988, 23, 10-15. | 1.3 | 31 |
| 208 | Energy deposition in [Fe(CO)5]+Ë™ upon collision with a metal surface. Organic Mass Spectrometry, 1986, 21, 193-195. | 1.3 | 87 |
| 209 | Differentiation of Protonated Sulfonate Esters from Isomeric Sulfite Esters and Sulfones by Gas-Phase Ionâ€“Molecule Reactions Followed by Diagnostic Collision-Activated Dissociation in Tandem Mass Spectrometry Experiments. Analytical Chemistry, 0, , . | 3.2 | 1 |
| 210 | Characterization of the Compounds in Crude Oil That Preferentially Bind to Kaolinite. Energy & Fuels, 0, , . | 2.5 | 0 |