Hilkka I Kenttmaa

List of Publications by Year in Descending Order

207 papers	4,622 citations	34 h-index	56 g-index
211 ext. papers	5,203 ext. citations	6.6 avg, IF	5.57 L-index

#	Paper	IF	Citations
207	Determining the Composition of Carbonate Solvent Systems Used in Lithium-Ion Batteries without Salt Removal. *Energies*, **2022**, 15, 2805	3.1	
206	Spin-Spin Coupling Controls the Gas-Phase Reactivity of Aromatic -Type Triradicals. *Chemistry - A European Journal*, **2021**, 28, e202102968	4.8	0
205	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	7.8	2
204	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	1.9	1
203	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	4.1	1
202	Reactivity of para-benzynes in solution and in the gas phase. *Tetrahedron Letters*, **2021**, 74, 153161	2	1
201	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	10	3
200	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	9.4	5
199	Evaluation of process severity on the chemical composition of organosolv switchgrass lignins by using mass spectrometry. *Green Chemistry*, **2021**, 23, 4024-4033	10	2
198	Protonated Ground-State Singlet -Pyridynes React from an Excited Triplet State. *Journal of Organic Chemistry*, **2021**, 86, 3249-3260	4.2	0
197	Characterization of ionized lignin model compounds with -O-4 linkages by positive- and negative-ion mode electrospray ionization tandem mass spectrometry based on collision-activated dissociation. *Rapid Communications in Mass Spectrometry*, **2021**, 35, e9057	2.2	0
196	Study on the Gas-Phase Reactivity of Charged Pyridynes. *Journal of Organic Chemistry*, **2021**, 86, 9979-9993	4.2	1
195	Determination of the compound class and functional groups in protonated analytes via diagnostic gas-phase ion-molecule reactions. *Mass Spectrometry Reviews*, **2021**,	11	1
194	Fast Determination of the Lignin Monomer Compositions of Genetic Variants of Poplar Fast Pyrolysis/Atmospheric Pressure Chemical Ionization Mass Spectrometry. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 2546-2551	3.5	0
193	Factors Affecting the Limit of Detection for HPLC/Tandem Mass Spectrometry Experiments Based on Gas-Phase Ion-Molecule Reactions. *Analytical Chemistry*, **2020**, 92, 7471-7477	7.8	6
192	Fragmentation of Saturated Hydrocarbons upon Atmospheric Pressure Chemical Ionization Is Caused by Proton-Transfer Reactions. *Analytical Chemistry*, **2020**, 92, 8883-8892	7.8	7
191	Effects of the Distance between Radical Sites on the Reactivities of Aromatic Biradicals. *Journal of Organic Chemistry*, **2020**, 85, 8415-8428	4.2	4

190	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	3.5	1
189	A review of aviation turbine fuel chemical composition-property relations. *Fuel*, **2020**, 268, 117391	7.1	22
188	Measurement of the Proton Affinities of a Series of Mono- and Biradicals of Pyridine. *Journal of the American Chemical Society*, **2020**, 142, 8679-8687	16.4	6
187	Determination of jet fuel system icing inhibitor by GC□C-FID. *Talanta*, **2020**, 218, 121146	6.2	1
186	Analyzing and Tuning the Chalcogen-Amine-Thiol Complexes for Tailoring of Chalcogenide Syntheses. *Inorganic Chemistry*, **2020**, 59, 8240-8250	5.1	6
185	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	3.5	7
184	Bias, limit of detection, and limit of quantitation for the ASTM D2425 method updated in 2019. *Journal of Chromatography A*, **2020**, 1614, 460705	4.5	2
183	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	1.9	1
182	Graph-based machine learning interprets and predicts diagnostic isomer-selective ion-molecule reactions in tandem mass spectrometry. *Chemical Science*, **2020**, 11, 11849-11858	9.4	5
181	Studies of the Fragmentation Mechanisms of Deprotonated Lignin Model Compounds in Tandem Mass Spectrometry. *Analytical Chemistry*, **2020**, 92, 11895-11903	7.8	4
180	Direct functionalization of C-H bonds by electrophilic anions. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 23374-23379	11.5	9
179	Effects of Analyte Concentration on the Protonation Sites of 4-Aminobenzoic Acid upon Atmospheric Pressure Chemical Ionization As Revealed by Gas-Phase Ion-Molecule Reactions. *Journal of the American Society for Mass Spectrometry*, **2020**, 31, 2210-2217	3.5	1
178	Free-Radical-Mediated Glycan Isomer Differentiation. *Analytical Chemistry*, **2020**, 92, 13794-13802	7.8	9
177	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	4.5	0
176	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	3.5	5
175	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	2.8	9
174	Spin-Spin Coupling Between Two meta-Benzyne Moieties In a Quinolinium Tetraradical Cation Increases Their Reactivities. *Chemistry - A European Journal*, **2019**, 25, 4472-4477	4.8	5
173	Identification of Protonated Primary Carbamates by Using Gas-Phase Ion□Molecule Reactions Followed by Collision-Activated Dissociation in Tandem Mass Spectrometry Experiments. *Organic Process Research and Development*, **2019**, 23, 1159-1166	3.9	2

172	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	4.2	6
171	Laser-induced acoustic desorption. *MRS Bulletin*, **2019**, 44, 372-381	3.2	8
170	Relative Reactivities of Three Isomeric Aromatic Biradicals with a 1,4-Biradical Topology Are Controlled by Polar Effects. *Chemistry - A European Journal*, **2019**, 25, 6355-6361	4.8	7
169	Impact of Alternative Fuel Blending Components on Fuel Composition and Properties in Blends with Jet A. *Energy & Fuels*, **2019**, 33, 3275-3289	4.1	14
168	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	2.8	20
167	Quinoline Triradicals: A Reactivity Study. *Journal of the American Chemical Society*, **2019**, 141, 6672-6679	16.4	4
166	How to obtain a detailed chemical composition for middle distillates via GC GC-FID without the need of GC GC-TOF/MS. *Fuel*, **2019**, 247, 368-377	7.1	14
165	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	7.1	15
164	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	7.1	5
163	Differentiation of Deprotonated Acyl-, -, and -Glucuronide Drug Metabolites by Using Tandem Mass Spectrometry Based on Gas-Phase Ion-Molecule Reactions Followed by Collision-Activated Dissociation. *Analytical Chemistry*, **2019**, 91, 11388-11396	7.8	5
162	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	7.8	6
161	Identification and Quantitation of Linear Alkanes in Lubricant Base Oils by Using GC GC/EI TOF Mass Spectrometry. *Journal of the American Society for Mass Spectrometry*, **2019**, 30, 2670-2677	3.5	9
160	Jet fuel density via GC GC-FID. *Fuel*, **2019**, 235, 1052-1060	7.1	24
159	The capability of organic compounds to swell acrylonitrile butadiene O-rings and their effects on O-ring mechanical properties. *Fuel*, **2019**, 238, 483-492	7.1	6
158	Recent Advances in Petroleum Analysis by Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 156-177	7.8	49
157	Reactivity of organic pentaradicals. *International Journal of Mass Spectrometry*, **2019**, 435, 280-290	1.9	4
156	Renewable thermoset polymers based on lignin and carbohydrate derived monomers. *Green Chemistry*, **2018**, 20, 1131-1138	10	46
155	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	1.9	3

154	Differentiating Isomeric Deprotonated Glucuronide Drug Metabolites via Ion/Molecule Reactions in Tandem Mass Spectrometry. *Analytical Chemistry*, **2018**, 90, 9426-9433	7.8	10
153	Middle distillates hydrogen content via GC□C-FID. *Talanta*, **2018**, 186, 140-146	6.2	25
152	Effects of hydrogen bonding on the gas-phase reactivity of didehydroisoquinolinium cation isomers. *Physical Chemistry Chemical Physics*, **2018**, 20, 21567-21572	3.6	1
151	Molecular profiling of crude oil by using Distillation Precipitation Fractionation Mass Spectrometry (DPF-MS). *Fuel*, **2018**, 234, 492-501	7.1	6
150	Substituent Effects on the Reactivity of the 2,4,6-Tridehydropyridinium Cation, an Aromatic □□Triradical. *European Journal of Organic Chemistry*, **2018**, 2018, 6582-6589	3.2	5
149	Impact of HEFA Feedstocks on Fuel Composition and Properties in Blends with Jet A. *Energy & Fuels*, **2018**, 32, 11595-11606	4.1	18
148	Dehydration Pathways for Glucose and Cellobiose During Fast Pyrolysis. *Journal of Physical Chemistry A*, **2018**, 122, 8071-8085	2.8	18
147	Polar Effects Control the Gas-Phase Reactivity of para-Benzyne Analogs. *ChemPhysChem*, **2018**, 19, 2839-2842	3.2	2
146	Tandem mass spectrometric evaluation of core structures of aromatic compounds after catalytic deoxygenation. *Fuel Processing Technology*, **2018**, 176, 119-123	7.2	35
145	Mechanism of Me-Re Bond Addition to Platinum(II) and Dioxygen Activation by the Resulting Pt-Re Bimetallic Center. *Inorganic Chemistry*, **2017**, 56, 2145-2152	5.1	9
144	Laser-Induced Acoustic Desorption/Electron Ionization of Amino Acids and Small Peptides. *Journal of the American Society for Mass Spectrometry*, **2017**, 28, 1091-1098	3.5	5
143	Identification of Protonated Sulfone and Aromatic Carboxylic Acid Functionalities in Organic Molecules by Using Ion-Molecule Reactions Followed by Collisionally Activated Dissociation in a Linear Quadrupole Ion Trap Mass Spectrometer. *Analytical Chemistry*, **2017**, 89, 7398-7405	7.8	10
142	An Oxygen-peri-Bridged Quinolinium Cation and Its Monoradical Counterpart. *European Journal of Organic Chemistry*, **2017**, 2017, 1407-1412	3.2	4
141	Initial Products and Reaction Mechanisms for Fast Pyrolysis of Synthetic G-Lignin Oligomers with □O-4 Linkages via On-Line Mass Spectrometry and Quantum Chemical Calculations. *ChemistrySelect*, **2017**, 2, 7185-7193	1.8	6
140	Identification of Carboxylate, Phosphate, and Phenoxide Functionalities in Deprotonated Molecules Related to Drug Metabolites via Ion-Molecule Reactions with water and Diethylhydroxyborane. *Journal of the American Society for Mass Spectrometry*, **2017**, 28, 2189-2200	3.5	7
139	Analysis of Catalytic Hydrothermal Conversion Jet Fuel and Surrogate Mixture Formulation: Components, Properties, and Combustion. *Energy & Fuels*, **2017**, 31, 13802-13814	4.1	28
138	Speciation of CuCl and CuCl Thiol-Amine Solutions and Characterization of Resulting Films: Implications for Semiconductor Device Fabrication. *Inorganic Chemistry*, **2017**, 56, 14396-14407	5.1	20
137	(-)ESI/CAD MS Procedure for Sequencing Lignin Oligomers Based on a Study of Synthetic Model Compounds with □O-4 and 5-5 Linkages. *Analytical Chemistry*, **2017**, 89, 13089-13096	7.8	15

136	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	3.5	1
135	Alkali Cation Chelation in Cold ?O-4 Tetralignol Complexes. *Journal of Physical Chemistry A*, **2016**, 120, 7152-66	2.8	3
134	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	10	86
133	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, 1435-41	2.2	8
132	Characterization of Asphaltene Deposits by Using Mass Spectrometry and Raman Spectroscopy. *Energy & Fuels*, **2016**, 30, 805-809	4.1	32
131	Identification of N-Oxide and Sulfoxide Functionalities in Protonated Drug Metabolites by Using Ion-Molecule Reactions Followed by Collisionally Activated Dissociation in a Linear Quadrupole Ion Trap Mass Spectrometer. *Journal of Organic Chemistry*, **2016**, 81, 575-86	4.2	17
130	Mechanistic investigation of the Zn/Pd/C catalyzed cleavage and hydrodeoxygenation of lignin. *Green Chemistry*, **2016**, 18, 2399-2405	10	86
129	Total Utilization of Miscanthus Biomass, Lignin and Carbohydrates, Using Earth Abundant Nickel Catalyst. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 2316-2322	8.3	138
128	Characterization of aromatic organosulfur model compounds relevant to fossil fuels by using atmospheric pressure chemical ionization with CS2 and high-resolution tandem mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2016**, 30, 953-62	2.2	13
127	Reactivity Controlling Factors for an Aromatic Carbon-Centered ??Triradical: The 4,5,8-Tridehydroisoquinolinium Ion. *Chemistry - A European Journal*, **2016**, 22, 809-15	4.8	5
126	A Fundamental Tandem Mass Spectrometry Study of the Collision-Activated Dissociation of Small Deprotonated Molecules Related to Lignin. *ChemSusChem*, **2016**, 9, 3513-3526	8.3	10
125	Comparison of Atmospheric Pressure Chemical Ionization and Field Ionization Mass Spectrometry for the Analysis of Large Saturated Hydrocarbons. *Analytical Chemistry*, **2016**, 88, 10592-10598	7.8	29
124	Identification of the Phenol Functionality in Deprotonated Monomeric and Dimeric Lignin Degradation Products via Tandem Mass Spectrometry Based on Ion-Molecule Reactions with Diethylmethoxyborane. *Journal of the American Society for Mass Spectrometry*, **2016**, 27, 1813-1823	3.5	10
123	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	1.9	3
122	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, 358-66	4	8
121	A Mimivirus Enzyme that Participates in Viral Entry. *Structure*, **2015**, 23, 1058-65	5.2	16
120	Speciation and kinetic study of iron promoted sugar conversion to 5-hydroxymethylfurfural (HMF) and levulinic acid (LA). *Organic Chemistry Frontiers*, **2015**, 2, 1388-1396	5.2	40
119	A synergistic biorefinery based on catalytic conversion of lignin prior to cellulose starting from lignocellulosic biomass. *Green Chemistry*, **2015**, 17, 1492-1499	10	299

118	Polar Effects Control the Gas-phase Reactivity of Charged -Benzyne Analogs. *International Journal of Mass Spectrometry*, **2015**, 377, 39-43	1.9	6
117	Mass spectrometric studies of fast pyrolysis of cellulose. *European Journal of Mass Spectrometry*, **2015**, 21, 321-6	1.1	7
116	Mass spectrometric identification of the N-monosubstituted N-hydroxylamino functionality in protonated analytes via ion/molecule reactions in tandem mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2015**, 29, 730-4	2.2	9
115	Structural Comparison of Asphaltenes of Different Origins Using Multi-stage Tandem Mass Spectrometry. *Energy & Fuels*, **2015**, 29, 1309-1314	4.1	30
114	Fast pyrolysis of 13C-labeled cellobioses: gaining insights into the mechanisms of fast pyrolysis of carbohydrates. *Journal of Organic Chemistry*, **2015**, 80, 1909-14	4.2	31
113	Tandem mass spectrometric characterization of the conversion of xylose to furfural. *Biomass and Bioenergy*, **2015**, 74, 1-5	5.3	8
112	Tailoring Biomass for Biochemical, Chemical or Thermochemical Catalytic Conversion. *FASEB Journal*, **2015**, 29, 485.3	0.9	
111	On the factors that control the reactivity of meta-benzynes. *Chemical Science*, **2014**, 5, 2205-2215	9.4	21
110	Identification of the sulfoxide functionality in protonated analytes via ion/molecule reactions in linear quadrupole ion trap mass spectrometry. *Analyst, The*, **2014**, 139, 4296-302	5	9
109	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	10	69
108	Multiported pulsed valve interface for a linear quadrupole ion trap mass spectrometer to enable rapid screening of multiple functional-group selective ion-molecule reactions. *Analytical Chemistry*, **2014**, 86, 6533-9	7.8	10
107	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	7.1	30
106	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, 2883-9	4.2	14
105	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, 469-80	3.5	8
104	Analysis of xyloglucans by ambient chloride attachment ionization tandem mass spectrometry. *Carbohydrate Polymers*, **2013**, 98, 1203-13	10.3	16
103	A differentially pumped dual linear quadrupole ion trap (DLQIT) mass spectrometer: a mass spectrometer capable of MS(n) experiments free from interfering reactions. *Analytical Chemistry*, **2013**, 85, 11284-90	7.8	12
102	Properties and reactivity of gaseous distonic radical ions with aryl radical sites. *Chemical Reviews*, **2013**, 113, 6949-85	68.1	39
101	Cleavage and hydrodeoxygenation (HDO) of C□O bonds relevant to lignin conversion using Pd/Zn synergistic catalysis. *Chemical Science*, **2013**, 4, 806-813	9.4	262

100	Mechanism of MTO-Catalyzed Deoxydehydration of Diols to Alkenes Using Sacrificial Alcohols. *Organometallics*, **2013**, 32, 3210-3219	3.8	58
99	Comparison of the Structures of Molecules in Coal and Petroleum Asphaltenes by Using Mass Spectrometry. *Energy & Fuels*, **2013**, 27, 3653-3658	4.1	48
98	Analysis of carbohydrates by atmospheric pressure chloride anion attachment tandem mass spectrometry. *Fuel*, **2013**, 105, 235-246	7.1	15
97	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, 10927-34	7.8	33
96	Does the 2,6-didehydropyridinium cation exist?. *Journal of Physical Organic Chemistry*, **2013**, 26, 707-714	2.1	11
95	Experimental and computational studies on the formation of three para-benzyne analogues in the gas phase. *Chemistry - A European Journal*, **2013**, 19, 9022-33	4.8	12
94	Effects of a hydroxyl substituent on the reactivity of the 2,4,6-tridehydropyridinium cation, an aromatic triradical. *Chemistry - A European Journal*, **2012**, 18, 969-74	4.8	9
93	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	3.5	20
92	Substituent effects on the nonradical reactivity of 4-dehydropyridinium cation. *Journal of Physical Chemistry A*, **2012**, 116, 3089-93	2.8	6
91	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	4.1	11
90	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, 6000-7	7.8	85
89	Reactivity of a tetraradical: the 2,4,6-tridehydropyridine radical cation. *Journal of the American Chemical Society*, **2012**, 134, 1926-9	16.4	12
88	Separation of Asphaltenes by Reversed-Phase Liquid Chromatography with Fraction Characterization. *Energy & Fuels*, **2012**, 26, 2850-2857	4.1	21
87	Ion-molecule reactions for the differentiation of primary, secondary and tertiary hydroxyl functionalities in protonated analytes in a tandem mass spectrometer. *Analyst, The*, **2012**, 137, 5720-2	5	11
86	A novel chemical ionization reagent ion for organic analytes: the aquachloromanganese(II) cation [ClMn(H2O)+]. *Rapid Communications in Mass Spectrometry*, **2012**, 26, 940-2	2.2	2
85	Reactivity of the 4,5-didehydroisoquinolinium cation. *Chemistry - A European Journal*, **2012**, 18, 8692-8	4.8	11
84	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, 816-22	3.5	30
83	Characterization of model compounds of processed lignin and the lignome by using atmospheric pressure ionization tandem mass spectrometry. *Fuel*, **2012**, 95, 634-641	7.1	41

82	Comparison of functional group selective ion-molecule reactions of trimethyl borate in different ion trap mass spectrometers. *Journal of the American Society for Mass Spectrometry*, **2011**, 22, 520-30	3.5	18
81	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, 670-82	3.5	12
80	Carbon disulfide reagent allows the characterization of nonpolar analytes by atmospheric pressure chemical ionization mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2011**, 25, 1924-8	2.2	24
79	Influence of hydrogen bonding on hydrogen-atom abstraction reactions of dehydropyridinium cations in the gas phase. *Journal of Physical Chemistry A*, **2010**, 114, 12851-7	2.8	4
78	Differentiation of Isomeric Hydrocarbons by Using [ClMn(H2O)]+ Chemical Ionization and Collision-Activated Dissociation in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer. *Energy & Fuels*, **2010**, 24, 3119-3124	4.1	3
77	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, 773-84	3.5	12
76	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, 805-11	3.5	10
75	Ion□olecule 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	1.9	14
74	An ion/molecule reaction for the identification of analytes with two basic functional groups. *Journal of the American Society for Mass Spectrometry*, **2009**, 20, 1251-62	3.5	10
73	Gas-phase reactivity of protonated 2-, 3-, and 4-dehydropyridine radicals toward organic reagents. *Journal of Physical Chemistry A*, **2009**, 113, 13663-74	2.8	20
72	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, 1114-23	4.2	19
71	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, 17697-709	16.4	38
70	Regioselective ion-molecule reactions for the mass spectrometric differentiation of protonated isomeric aromatic diamines. *Analyst, The*, **2008**, 133, 452-4	5	22
69	Identification of the carboxylic acid functionality by using electrospray ionization and ion-molecule reactions in a modified linear quadrupole ion trap mass spectrometer. *Analytical Chemistry*, **2008**, 80, 3416-21	7.8	49
68	Analysis of base oil fractions by ClMn(H2O)+ chemical ionization combined with laser-induced acoustic desorption/fourier transform ion cyclotron resonance mass spectrometry. *Analytical Chemistry*, **2008**, 80, 1847-53	7.8	32
67	Identification of the aromatic tertiary N-oxide functionality in protonated analytes via ion/molecule reactions in mass spectrometers. *Journal of Organic Chemistry*, **2008**, 73, 4888-94	4.2	19
66	Quantum chemical characterization of the structures, thermochemical properties, and doublet-quartet splittings of tridehydropyridinium cations. *Journal of Physical Chemistry A*, **2008**, 112, 5542-53	2.8	9
65	Reactivity of the 3,4,5-tridehydropyridinium cation--an aromatic sigma,sigma,sigma-triradical. *Angewandte Chemie - International Edition*, **2008**, 47, 9860-5	16.4	34

64	Reactivity of an aromatic sigma,sigma,sigma-triradical: the 2,4,6-tridehydropyridinium cation. *Angewandte Chemie - International Edition*, **2007**, 46, 9198-201	16.4	26
63	Ion–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	1.9	12
62	Functional group selective ion/molecule reactions: mass spectrometric identification of the amido functionality in protonated monofunctional compounds. *Journal of Organic Chemistry*, **2007**, 72, 3159-65	4.2	27
61	Quantum chemical characterization of the vertical electron affinities of didehydroquinolinium and didehydroisoquinolinium cations. *Journal of Physical Chemistry A*, **2006**, 110, 10309-15	2.8	10
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