Hilkka I Kenttmaa

List of Publications by Citations

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	A synergistic biorefinery based on catalytic conversion of lignin prior to cellulose starting from lignocellulosic biomass. *Green Chemistry*, **2015**, 17, 1492-1499	10	299
206	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
205	Ion-molecule reactions of distonic radical cations. *Chemical Reviews*, **1992**, 92, 1649-1665	68.1	244
204	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
203	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
202	Mechanistic investigation of the Zn/Pd/C catalyzed cleavage and hydrodeoxygenation of lignin. *Green Chemistry*, **2016**, 18, 2399-2405	10	86
201	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
200	Energy deposition in [Fe(CO)5]+□upon collision with a metal surface. *Organic Mass Spectrometry*, **1986**, 21, 193-195		81
199	An Experimental and Computational Study of the Gas-Phase Structures of Five-Carbon Monosaccharides. *Journal of Physical Chemistry A*, **2002**, 106, 6754-6764	2.8	76
198	Charged Phenyl Radicals. *Journal of the American Chemical Society*, **1996**, 118, 8669-8676	16.4	71
197	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
196	Long-lived distonic radical cations. *Organic Mass Spectrometry*, **1994**, 29, 1-10		61
195	Mechanism of MTO-Catalyzed Deoxydehydration of Diols to Alkenes Using Sacrificial Alcohols. *Organometallics*, **2013**, 32, 3210-3219	3.8	58
194	Polar Effects Control Hydrogen-Abstraction Reactions of Charged, Substituted Phenyl Radicals. *Journal of Physical Chemistry A*, **2001**, 105, 7875-7884	2.8	54
193	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	16.4	54
192	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
191	Reactivity of a Substituted m-Benzyne Biradical. *Journal of the American Chemical Society*, **1999**, 121, 800-805	16.4	49

190	Recent Advances in Petroleum Analysis by Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 156-177	7.8	49
189	Comparison of the Structures of Molecules in Coal and Petroleum Asphaltenes by Using Mass Spectrometry. *Energy & Fuels*, **2013**, 27, 3653-3658	4.1	48
188	Renewable thermoset polymers based on lignin and carbohydrate derived monomers. *Green Chemistry*, **2018**, 20, 1131-1138	10	46
187	Fluorine Substitution Enhances the Reactivity of Substituted Phenyl Radicals toward Organic Hydrogen Atom Donors. *Journal of the American Chemical Society*, **1996**, 118, 5056-5061	16.4	46
186	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	2.8	44
185	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
184	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
183	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	2.8	40
182	Properties and reactivity of gaseous distonic radical ions with aryl radical sites. *Chemical Reviews*, **2013**, 113, 6949-85	68.1	39
181	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
180	Ion-molecule reactions for the characterization of polyols and polyol mixtures by ESI/FT-ICR mass spectrometry. *Analytical Chemistry*, **2005**, 77, 1385-92	7.8	38
179	Ion-molecule reactions for mass spectrometric identification of functional groups in protonated oxygen-containing monofunctional compounds. *Analytical Chemistry*, **2004**, 76, 964-76	7.8	37
178	Chemical properties of a para-benzyne. *Journal of the American Chemical Society*, **2002**, 124, 12066-7	16.4	37
177	Polarity of the transition state controls the reactivity of related charged phenyl radicals toward atom and group donors. *Journal of Organic Chemistry*, **2001**, 66, 2726-33	4.2	37
176	Synthesis and Characterization of Aromatic Biradicals in the Gas Phase: A meta-Benzyne with an Inert Positively Charged Substituent and Its ortho- and para-Isomers. *Journal of the American Chemical Society*, **1997**, 119, 3832-3833	16.4	35
175	Laser desorption in transmission geometry inside a Fourier-transform ion cyclotron resonance mass spectrometer. *Journal of the American Society for Mass Spectrometry*, **1999**, 10, 1105-10	3.5	35
174	Tandem mass spectrometric evaluation of core structures of aromatic compounds after catalytic deoxygenation. *Fuel Processing Technology*, **2018**, 176, 119-123	7.2	35
173	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

172	meta-Benzyne Reacts as an Electrophile. *Journal of Physical Chemistry A*, **2001**, 105, 10155-10168	2.8	34
171	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
170	Low-energy collisional activation of polyatomic ions with different target gases. *International Journal of Mass Spectrometry and Ion Processes*, **1989**, 90, 71-83		33
169	Characterization of Asphaltene Deposits by Using Mass Spectrometry and Raman Spectroscopy. *Energy & Fuels*, **2016**, 30, 805-809	4.1	32
168	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
167	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
166	Charge-Site Effects on the Radical Reactivity of Distonic Ions*Journal of Physical Chemistry A*, **2002**, 106, 9767-9775	2.8	31
165	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
164	Structural Comparison of Asphaltenes of Different Origins Using Multi-stage Tandem Mass Spectrometry. *Energy & Fuels*, **2015**, 29, 1309-1314	4.1	30
163	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
162	Characterization of Two Chloro-Substituted m-Benzyne Isomers: Effect of Substitution on Reaction Efficiencies and Products. *Journal of Physical Chemistry A*, **2003**, 107, 8985-8995	2.8	30
161	Polar Effects on Iodine Atom Abstraction by Charged Phenyl Radicals. *Journal of Organic Chemistry*, **2000**, 65, 645-651	4.2	30
160	N-terminal derivatization and fragmentation of neutral peptides via ion--molecule reactions with acylium ions: toward gas-phase Edman degradation?. *Journal of the American Chemical Society*, **2001**, 123, 1184-92	16.4	30
159	Heat of formation of the radical cation of dimethyl disulfide. *Organic Mass Spectrometry*, **1994**, 29, 106-107		30
158	Radical-type reactivity of the methylenedimethylsulfonium ion, (CH3)2S+?CH2*Organic Mass Spectrometry*, **1993**, 28, 1623-1631		30
157	Analysis of natural products by tandem mass spectrometry employing reactive collisions with ethyl vinyl ether. *Organic Mass Spectrometry*, **1988**, 23, 10-15		30
156	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
155	Analysis of Catalytic Hydrothermal Conversion Jet Fuel and Surrogate Mixture Formulation: Components, Properties, and Combustion. *Energy & Fuels*, **2017**, 31, 13802-13814	4.1	28

154	Demonstration of tunable reactivity for meta-benzynes. *Journal of the American Chemical Society*, **2005**, 127, 5760-1	16.4	28
153	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
152	Bimolecular reactions involving the radical site of the distonic ion □CH2CH2CH2C?O+. *Rapid Communications in Mass Spectrometry*, **1993**, 7, 392-399	2.2	27
151	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
150	Middle distillates hydrogen content via GC□C-FID. *Talanta*, **2018**, 186, 140-146	6.2	25
149	m-Benzyne Reacts as an Electrophile. *Journal of the American Chemical Society*, **2000**, 122, 8781-8782	16.4	25
148	Homolytic Se□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		25
147	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
146	Pulsed gas introduction into quadrupole ion traps. *Journal of the American Society for Mass Spectrometry*, **1990**, 1, 308-11	3.5	24
145	Jet fuel density via GC □C-FID. *Fuel*, **2019**, 235, 1052-1060	7.1	24
144	A review of aviation turbine fuel chemical composition-property relations. *Fuel*, **2020**, 268, 117391	7.1	22
143	Regioselective ion-molecule reactions for the mass spectrometric differentiation of protonated isomeric aromatic diamines. *Analyst, The*, **2008**, 133, 452-4	5	22
142	On the factors that control the reactivity of meta-benzynes. *Chemical Science*, **2014**, 5, 2205-2215	9.4	21
141	Separation of Asphaltenes by Reversed-Phase Liquid Chromatography with Fraction Characterization. *Energy & Fuels*, **2012**, 26, 2850-2857	4.1	21
140	A new reagent for structure-specific ion□olecule reactions. Dimethyl diselenide. *Journal of Mass Spectrometry*, **1995**, 30, 384-385	2.2	21
139	Bimolecular reactions of the .beta.-distonic isomer of the ethanol radical cation: .bul.CH2CH2OH2+. *The Journal of Physical Chemistry*, **1992**, 96, 5272-5276		21
138	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
137	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

136	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
135	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
134	Hydrogen atom abstraction reactions of charged polyaromatic sigma-radicals related to the active intermediates of the enediyne antitumor drugs. *Journal of the American Chemical Society*, **2002**, 124, 4108-15	16.4	20
133	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
132	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
131	Compound screening for the presence of the primary N-oxide functionality via ion-molecule reactions in a mass spectrometer. *Analytical Chemistry*, **2005**, 77, 5311-6	7.8	19
130	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
129	Diastereoselectivity in Gas-Phase Hydride Reduction Reactions of Ketones. *Journal of the American Chemical Society*, **1999**, 121, 7130-7137	16.4	18
128	Gas-phase reactions of the 4-dehydroanilinium ion and its isomers. *Journal of Mass Spectrometry*, **1995**, 30, 81-87	2.2	18
127	Impact of HEFA Feedstocks on Fuel Composition and Properties in Blends with Jet A. *Energy & Fuels*, **2018**, 32, 11595-11606	4.1	18
126	Dehydration Pathways for Glucose and Cellobiose During Fast Pyrolysis. *Journal of Physical Chemistry A*, **2018**, 122, 8071-8085	2.8	18
125	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
124	Radical reactions of didehydroarenes with a 1,4-relationship. *Journal of the American Chemical Society*, **2003**, 125, 14256-7	16.4	17
123	A Mimivirus Enzyme that Participates in Viral Entry. *Structure*, **2015**, 23, 1058-65	5.2	16
122	Analysis of xyloglucans by ambient chloride attachment ionization tandem mass spectrometry. *Carbohydrate Polymers*, **2013**, 98, 1203-13	10.3	16
121	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
120	(-)ESI/CAD MS Procedure for Sequencing Lignin Oligomers Based on a Study of Synthetic Model Compounds with ß-O-4 and 5-5 Linkages. *Analytical Chemistry*, **2017**, 89, 13089-13096	7.8	15
119	Analysis of carbohydrates by atmospheric pressure chloride anion attachment tandem mass spectrometry. *Fuel*, **2013**, 105, 235-246	7.1	15

118	Quantum chemical characterization of the structures, thermochemical properties, and singlet-triplet splittings of didehydroquinolinium and didehydroisoquinolinium ions. *Journal of Physical Chemistry A*, **2005**, 109, 10348-56	2.8	15
117	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, 913-9	3.5	15
116	Gas-phase reactivity of charged pi-type biradicals. *Journal of the American Chemical Society*, **2004**, 126, 12957-67	16.4	15
115	Experimental and theoretical characterization of the 3,5-didehydrobenzoate anion: a negatively charged meta-benzyne. *Journal of the American Chemical Society*, **2003**, 125, 131-40	16.4	15
114	A Fourier-transform ion cyclotron resonance study of the 3,5-didehydrophenyl cation. *Journal of the American Society for Mass Spectrometry*, **2001**, 12, 258-67	3.5	15
113	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
112	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
111	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
110	Ion 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	1.9	14
109	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, 1135-40	3.5	14
108	Multiple-stage mass spectrometry in structural characterization of organophosphorus compounds. *Journal of the American Society for Mass Spectrometry*, **1993**, 4, 125-34	3.5	14
107	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
106	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
105	Reactivity of a tetraradical: the 2,4,6-tridehydropyridine radical cation. *Journal of the American Chemical Society*, **2012**, 134, 1926-9	16.4	12
104	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
103	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*,	3.5	12
102	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
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100	Distinguishing conventional and distonic radical cations by using dimethyl diselenide. *Journal of the American Society for Mass Spectrometry*, **1996**, 7, 1245-50	3.5	12
99	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
98	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
97	Reactivity of the 4,5-didehydroisoquinolinium cation. *Chemistry - A European Journal*, **2012**, 18, 8692-8	4.8	11
96	Does the 2,6-didehydropyridinium cation exist?. *Journal of Physical Organic Chemistry*, **2013**, 26, 707-714	2.1	11
95	Characterization of long-chain carboxylic esters with CH3OBOCH 3 (+) in a small fourier-transform ion cyclotron resonance mass spectrometer. *Journal of the American Society for Mass Spectrometry*, **1996**, 7, 1138-43	3.5	11
94	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
93	Differentiating Isomeric Deprotonated Glucuronide Drug Metabolites via Ion/Molecule Reactions in Tandem Mass Spectrometry. *Analytical Chemistry*, **2018**, 90, 9426-9433	7.8	10
92	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
91	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
90	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
89	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
88	Methyl propionate radical cation. *Journal of the American Society for Mass Spectrometry*, **1996**, 7, 482-9	3.5	10
87	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
86	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
85	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
84	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
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82	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
81	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
80	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
79	Reactions of alkyl halides with distonic acylium radical cations. *International Journal of Mass Spectrometry and Ion Processes*, **1997**, 165-166, 315-325		9
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77	Reactivity of the N-methylene-5,8-didehydroisoquinolinium triradical ion. *Journal of the American Chemical Society*, **2005**, 127, 13152-3	16.4	9
76	Reaction of O 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		9
75	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
74	Free-Radical-Mediated Glycan Isomer Differentiation. *Analytical Chemistry*, **2020**, 92, 13794-13802	7.8	9
73	Laser-induced acoustic desorption. *MRS Bulletin*, **2019**, 44, 372-381	3.2	8
72	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
71	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
70	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
69	Tandem mass spectrometric characterization of the conversion of xylose to furfural. *Biomass and Bioenergy*, **2015**, 74, 1-5	5.3	8
68	Synthesis and characterization of a distonic nitrene ion: gas-phase reactivity of singlet and triplet N-phenyl-3-nitrenopyridinium ion. *Journal of the American Chemical Society*, **2001**, 123, 7923-4	16.4	8
67	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
66	Fragmentation of Saturated Hydrocarbons upon Atmospheric Pressure Chemical Ionization Is Caused by Proton-Transfer Reactions. *Analytical Chemistry*, **2020**, 92, 8883-8892	7.8	7
65	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

64	Mass spectrometric studies of fast pyrolysis of cellulose. *European Journal of Mass Spectrometry*, **2015**, 21, 321-6	1.1	7
63	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
62	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
61	Polar Effects Control the Gas-phase Reactivity of Charged -Benzyne Analogs. *International Journal of Mass Spectrometry*, **2015**, 377, 39-43	1.9	6
60	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
59	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
58	Molecular profiling of crude oil by using Distillation Precipitation Fractionation Mass Spectrometry (DPF-MS). *Fuel*, **2018**, 234, 492-501	7.1	6
57	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
56	Initial Products and Reaction Mechanisms for Fast Pyrolysis of Synthetic G-Lignin Oligomers with ß-O-4 Linkages via On-Line Mass Spectrometry and Quantum Chemical Calculations. *ChemistrySelect*, **2017**, 2, 7185-7193	1.8	6
55	Substituent effects on the nonradical reactivity of 4-dehydropyridinium cation. *Journal of Physical Chemistry A*, **2012**, 116, 3089-93	2.8	6
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