Paul M Mayer

List of Publications by Year
in descending order

95 papers	1,968 citations	411340 20 h-index	312153 41 g-index
97 all docs	97 docs citations	97 times ranked	1989 citing authors

#	Article	IF	Citations
1	VUV photoprocessing of oxygen-containing polycyclic aromatic hydrocarbons: iPEPICO study of the unimolecular dissociation of ionized benzofuran. Canadian Journal of Chemistry, 2022, 100, 729-736.	0.6	4
2	Probing the pyrolysis of methyl formate in the dilute gas phase by synchrotron radiation and theory. Journal of Mass Spectrometry, 2022, 57, .	0.7	5
3	VUV photoprocessing of oxygen-containing polycyclic aromatic hydrocarbons: Threshold photoelectron spectra. Journal of Molecular Spectroscopy, 2021, 377, 111446.	0.4	6
4	Fate of Protonated Formates in the Gas Phase. Journal of Physical Chemistry A, 2021, 125, 5096-5102.	1.1	4
5	How does successive hydrogen addition to PAH ions impact their unimolecular chemistry?. Molecular Astrophysics, 2020, 19, 100071.	1.7	3
6	Trifluoroacetic Acid and Trifluoroacetic Anhydride Radical Cations Dissociate near the Ionization Limit. Journal of Physical Chemistry A, 2019, 123, 6313-6318.	1.1	3
7	What Will Photo-Processing of Large, Ionized Amino-Substituted Polycyclic Aromatic Hydrocarbons Produce in the Interstellar Medium?. Journal of Physical Chemistry A, 2019, 123, 5027-5034.	1.1	4
8	Structure affecting dissociation energy in polycyclic aromatic hydrocarbon ions. Chemical Physics Letters, 2019, 726, 93-98.	1.2	2
9	Why Do Large Ionized Polycyclic Aromatic Hydrocarbons Not Lose C₂H₂?. Journal of Physical Chemistry A, 2019, 123, 3569-3574.	1.1	26
10	Ion Dissociation Dynamics of 1,2,3,4-Tetrahydronaphthalene: Tetralin as a Test Case For Hydrogenated Polycyclic Aromatic Hydrocarbons. Journal of Physical Chemistry A, 2019, 123, 10885-10892.	1.1	8
11	Hydroxy-Substituted Polycyclic Aromatic Hydrocarbon Ions as Sources of CO and HCO in the Interstellar Medium. Journal of Physical Chemistry A, 2019, 123, 10694-10699.	1.1	4
12	Unimolecular reaction energies for polycyclic aromatic hydrocarbon ions. Physical Chemistry Chemical Physics, 2018, 20, 7195-7205.	1.3	51
13	Unimolecular Dissociation of 1-Methylpyrene Cations: Why Are 1-Methylenepyrene Cations Formed and Not a Tropylium-Containing Ion?. Journal of Physical Chemistry A, 2018, 122, 4730-4735.	1.1	9
14	Dual-electrospray synthesis: A method of studying unique coordination complexes in the gas phase. International Journal of Mass Spectrometry, 2018, 429, 107-114.	0.7	1
15	Toward Point-of-Care Drug Quality Assurance in Developing Countries: Comparison of Liquid Chromatography and Infrared Spectroscopy Quantitation of a Small-Scale Random Sample of Amoxicillin. American Journal of Tropical Medicine and Hygiene, 2018, 99, 477-481.	0.6	5
16	What do we expect from the dissociation of ionized nitro-substituted polycyclic aromatic hydrocarbons in the interstellar medium?. International Journal of Mass Spectrometry, 2018, 434, 81-86.	0.7	3
17	Probing the hydrocarbon building blocks of astrochemical polycyclic aromatic hydrocarbons with 8 keV <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow><mml:mtext>He</mml:mtext></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>H</mml:mtext></mml:mrow><.	1.2	5
18	Dualâ€spray hydrogen/deuterium exchange (HDX) reactions: A new method of probing protein structure. Rapid Communications in Mass Spectrometry, 2016, 30, 1505-1512.	0.7	7

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19	VUV PHOTO-PROCESSING OF PAH CATIONS: QUANTITATIVE STUDY ON THE IONIZATION VERSUS FRAGMENTATION PROCESSES. Astrophysical Journal, 2016, 822, 113.	1.6	61
20	Structure and Stability of Carbohydrateâ€“Lipid Interactions. Methylmannose Polysaccharideâ€“Fatty Acid Complexes. ChemBioChem, 2016, 17, 1571-1578.	1.3	5
21	Modeling collision energy transfer in APCI/CID mass spectra of PAHs using thermal-like post-collision internal energy distributions. Journal of Chemical Physics, 2016, 145, 164311.	1.2	3
22	Halide anions are formed from reactions between atomic metal anions and halogenated aromatic molecules. Journal of Mass Spectrometry, 2016, 51, 586-590.	0.7	0
23	Effect of ripening stage on aliphatic alcohol, 4â€monomethylsterol and 4,4â€dimethylsterol compositions of Pistacia lentiscus fruit (lentisc). European Journal of Lipid Science and Technology, 2016, 118, 770-776.	1.0	0
24	Dehydrogenation of Alcohols and Hydrocarbons by Atomic Metal Anions. European Journal of Mass Spectrometry, 2015, 21, 487-495.	0.5	2
25	A complete map of the ion chemistry of the naphthalene radical cation? DFT and RRKM modeling of a complex potential energy surface. Journal of Chemical Physics, 2015, 143, 104305.	1.2	46
26	Advances and applications in physical organic chemistry. Papers from the 22nd IUPAC International Conference on Physical Organic Chemistry, Ottawa, Canada, 10â€“15 August 2014. Canadian Journal of Chemistry, 2015, 93, v-v.	0.6	0
27	Utilizing ion mobility and tandem mass spectrometry to evaluate the structure and behaviour of multimeric cyclodextrin complexes. Canadian Journal of Chemistry, 2015, 93, 1313-1319.	0.6	6
28	22nd IUPAC International Conference on Physical Organic Chemistry (ICPOC-22). Pure and Applied Chemistry, 2015, 87, 339-339.	0.9	0
29	Triacylglycerols and aliphatic alcohols from fruits of three Tunisian Pistacia lentiscus populations. Journal of the Science of Food and Agriculture, 2015, 95, 2028-2032.	1.7	10
30	Dissociative Photoionization and Threshold Photoelectron Spectra of Polycyclic Aromatic Hydrocarbon Fragments: An Imaging Photoelectron Photoion Coincidence (iPEPICO) Study of Four Substituted Benzene Radical Cations. Journal of Physical Chemistry A, 2014, 118, 11226-11234.	1.1	13
31	Dissociation of the Anthracene Radical Cation: A Comparative Look at iPEPICO and Collision-Induced Dissociation Mass Spectrometry Results. Journal of Physical Chemistry A, 2014, 118, 9870-9878.	1.1	24
32	Photodissociation of Pyrene Cations: Structure and Energetics from C₁₆H₁₀⁺ to C₁₄⁺ and Almost Everything in Between. Journal of Physical Chemistry A, 2014, 118, 7824-7831.	1.1	60
33	Triacylglycerol and Glycerophospholipid Identification and Accumulation During Ripening of Pistacia lentiscus L. (Lentisc) Fruit. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 1189-1196.	0.8	1
34	Dynamics of Hydrogen and Methyl Radical Loss from Ionized Dihydro-Polycyclic Aromatic Hydrocarbons: A Tandem Mass Spectrometry and Imaging Photoelectronâ€“Photoion Coincidence (iPEPICO) Study of Dihydronaphthalene and Dihydrophenanthrene. Journal of Physical Chemistry A, 2014, 118, 1807-1816.	1.1	19
35	LCâ€“ESIâ€“QTOFâ€“MS, MS/MS Analysis of Glycerophospholipid Species in Three Tunisian Pistacia lentiscus Fruit Populations. JAOCS, Journal of the American Oil Chemists' Society, 2013, 90, 611-618.	0.8	7
36	Energy and entropy at play in competitive dissociations: The case of uneven positional dissociation of ionized triacylglycerides. International Journal of Mass Spectrometry, 2013, 352, 77-86.	0.7	16

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37	Comparing Femtosecond Multiphoton Dissociative Ionization of Tetrathiafulvene with Imaging Photoelectron Photoion Coincidence Spectroscopy. Journal of Physical Chemistry A, 2013, 117, 2753-2759.	1.1	2
38	The Applicability of the Kinetic Method for Measuring Relative Affinities of Macromolecules for Polyatomic Substrates. European Journal of Mass Spectrometry, 2012, 18, 223-234.	0.5	2
39	The collaborative role of molecular conformation and energetics in the binding of gas-phase non-covalent polymer/amine complexes. Physical Chemistry Chemical Physics, 2012, 14, 165-172.	1.3	15
40	On the Dissociation of the Naphthalene Radical Cation: New iPEPICO and Tandem Mass Spectrometry Results. Journal of Physical Chemistry A, 2012, 116, 10999-11007.	1.1	69
41	Experiment and theory combine to produce a practical negative ion calibration set for collision crossâ€section determinations by travellingâ€wave ionâ€mobility mass spectrometry. Rapid Communications in Mass Spectrometry, 2012, 26, 1591-1595.	0.7	23
42	Fatty acids, 4-desmethylsterols, and triterpene alcohols from Tunisian lentisc (Pistacia lentiscus) fruits. European Journal of Lipid Science and Technology, 2012, 114, 968-973.	1.0	10
43	Comparative Study of Three Methods for Affinity Measurements: Capillary Electrophoresis Coupled with UV Detection and Mass Spectrometry, and Direct Infusion Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2012, 23, 1232-1240.	1.2	18
44	Investigating the relationship between the gas-phase conformations and dissociation energetics of peptideâ€“saccharide complexes. International Journal of Mass Spectrometry, 2012, 316-318, 31-39.	0.7	4
45	Gas-phase binding energies for non-covalent AÎ²-40 peptide/small molecule complexes from CID mass spectrometry and RRKM theory. Physical Chemistry Chemical Physics, 2011, 13, 5178.	1.3	16
46	Fluorescence from the A 2Î£+ state suggests a non-Franckâ€“Condon N2O+â€¢ vibrational state population after keV collisional activation with helium. Canadian Journal of Chemistry, 2011, 89, 303-309.	0.6	1
47	Reactions of Atomic Metal Anions in the Gas phase: Competition between Electron Transfer, Proton Abstraction and Bond Activation. Journal of Physical Chemistry A, 2011, 115, 14006-14012.	1.1	23
48	Do the O2 Schumannâ€“Runge Bands Participate in keV Collision-Induced Dissociation Experiments?. Journal of the American Society for Mass Spectrometry, 2011, 22, 75-80.	1.2	2
49	Triacylglycerols and Phospholipids Composition of Caper Seeds (Capparis spinosa). JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 1787-1793.	0.8	8
50	A neutralizationâ€“reionization and reactivity mass spectrometry study of the generation of neutral hydroxymethylene. Journal of Mass Spectrometry, 2011, 46, 546-552.	0.7	1
51	Threshold photoelectron study of naphthalene, anthracene, pyrene, 1,2-dihydronaphthalene, and 9,10-dihydroanthracene. Journal of Chemical Physics, 2011, 134, 244312.	1.2	42
52	Investigation of the noncovalent interactions between anti-amyloid agents and amyloid Î² peptides by ESI-MS. Journal of the American Society for Mass Spectrometry, 2010, 21, 1506-1514.	1.2	28
53	Old acid, new chemistry. Negative metal anions generated from alkali metal oxalates and others. Journal of the American Society for Mass Spectrometry, 2010, 21, 1944-1946.	1.2	14
54	Threshold ionization and dissociation oft-butylamine. Canadian Journal of Chemistry, 2010, 88, 142-149.	0.6	3

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55	Long Bonds and Short Barriers: Ionization and Isomerization of Alkyl Nitriles. Journal of Physical Chemistry A, 2010, 114, 867-878.	1.1	6
56	Comparing the fragmentation chemistry of gas-phase adducts of poly(dimethylsiloxane) oligomers with metal and organic ions. Canadian Journal of Chemistry, 2009, 87, 453-459.	0.6	16
57	The mechanisms of collisional activation of ions in mass spectrometry. Mass Spectrometry Reviews, 2009, 28, 608-639.	2.8	83
58	Ionized o-, m-, and p-difluorobenzene dissociate through ring-opened intermediates: A TPEPICO investigation. Journal of the American Society for Mass Spectrometry, 2009, 20, 20-24.	1.2	7
59	Protonating polymer oligomers in the gas phase to change fragmentation pathways. Journal of the American Society for Mass Spectrometry, 2009, 20, 60-66.	1.2	19
60	Does Tetrahydrofuran Ring Open upon Ionization and Dissociation? A TPES and TPEPICO Investigation. Journal of Physical Chemistry A, 2009, 113, 10923-10932.	1.1	14
61	Three Products Are Better than Two: Entropic Advantages in the Competing Dissociation Reactions of Ionized Azo-t-butane. Journal of Physical Chemistry A, 2009, 113, 1518-1522.	1.1	5
62	Methyl t-Butyl Ether and Methyl Trimethylsilyl Ether Ions Dissociate near Their Ionization Thresholds: A TPES, TPEPICO, RRKM, and G3 Investigation. Journal of Physical Chemistry A, 2009, 113, 5823-5831.	1.1	7
63	Nitroâ€“Nitrite Isomerization and Transition State Switching in the Dissociation of Ionized Nitromethane: A Threshold Photoelectronâ€“Photoion Coincidence Spectroscopy Study. European Journal of Mass Spectrometry, 2009, 15, 157-166.	0.5	8
64	Should a franck-condon or a curve-crossing picture be applied to ion-target collisional activation? A study of keV CO₂^{+Â·}/He collisions by emission spectroscopy. Journal of the American Society for Mass Spectrometry, 2008, 19, 1551-1558.	1.2	9
65	Comparison of keV N₂^{+â€¢}/He and N₂^{+â€¢}/Ar Collisions by Emission Spectroscopy and Theory. Journal of Physical Chemistry A, 2008, 112, 7761-7767.	1.1	5
66	Thermochemistry of Nâ¯N Containing Ions:â€‰ A Threshold Photoelectron Photoion Coincidence Spectroscopy Study of Ionized Methyl- and Tetramethylhydrazine. Journal of Physical Chemistry A, 2008, 112, 866-879.	1.1	13
67	Entropy Effects in the Fragmentation of 1,1-Dimethylhydrazine Ions. Journal of Physical Chemistry A, 2007, 111, 5388-5398.	1.1	15
68	Experimental Evidence for the Curve Crossing Mechanism for Collisional Excitation in keV N2+â€¢/He Collisions by Emission Spectroscopy. Journal of Physical Chemistry A, 2007, 111, 777-782.	1.1	10
69	Can the CH2BH2 and CH3BH radicals, cations and anions be observed by experiment?. Computational and Theoretical Chemistry, 2007, 811, 303-312.	1.5	2
70	Matrix effects on copolymer quantitation by matrixâ€assisted laser desorption/ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2007, 21, 3392-3394.	0.7	3
71	A Photoelectron and TPEPICO Investigation of the Acetone Radical Cation. Journal of Physical Chemistry A, 2006, 110, 8663-8675.	1.1	30
72	Threshold-Photoelectron Spectroscopic Study of Methyl-Substituted Hydrazine Compoundsâ€. Journal of Physical Chemistry A, 2006, 110, 8563-8571.	1.1	19

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73	A Comparison of Electrospray Ionization and Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry with Nuclear Magnetic Resonance Spectroscopy for the Characterization of Synthetic Co-Polymers. European Journal of Mass Spectrometry, 2006, 12, 301-310.	0.5	8
74	Competing rearrangement reactions in small gas-phase ionic complexes: The internal SN2 and nitro-nitrite rearrangements in nitroalkane proton-bound pairs. International Journal of Mass Spectrometry, 2006, 255-256, 93-101.	0.7	5
75	Conformation Effects on the Dissociation of Ionized Polymers. European Journal of Mass Spectrometry, 2005, 11, 557-563.	0.5	7
76	Predicting ion rearrangement reactions Â— The energetics of the internal SN2 reaction in gas-phase proton-bound molecular pairs. Canadian Journal of Chemistry, 2005, 83, 1864-1870.	0.6	3
77	What Ion Is Generated When Ionizing Acetonitrile?. Journal of Physical Chemistry A, 2005, 109, 4425-4427.	1.1	13
78	Confirmation of the â€œlong-livedâ€•tetra-nitrogen (N4) molecule using neutralization-reionization mass spectrometry and ab initio calculations. Journal of Chemical Physics, 2004, 120, 10561-10578.	1.2	46
79	Entropy Changes in the Dissociation of Proton-Bound Complexes:Â A Variational RRKM Studyâ€. Journal of Physical Chemistry A, 2004, 108, 9726-9732.	1.1	9
80	Evidence for the Participation of Excited Electronic States in the Unimolecular Dissociation Reactions of Ionic Complexes between NO and Aromatic Compounds. European Journal of Mass Spectrometry, 2004, 10, 899-907.	0.5	4
81	Electron-spin conservation and methyl-substitution effects on bonds in closed- and open-shell systems Â— A G3 ab initio study of small boron-containing molecules and radicals. Canadian Journal of Chemistry, 2002, 80, 25-30.	0.6	11
82	Bond Dissociation Energies and Radical Stabilization Energies Associated with Substituted Methyl Radicals. Journal of Physical Chemistry A, 2001, 105, 6750-6756.	1.1	265
83	Ion Rearrangement at the Beginning of Cluster Formation: Methyl Substitution Effects on the Internal SN2 Reaction in the Proton-Bound Dimers of Acetonitrile and Alcohols. European Journal of Mass Spectrometry, 2001, 7, 267-277.	0.5	12
84	Unimolecular Reactions of Proton-Bound Cluster Ions:â€‰ Competition between Dissociation and Isomerization in the Ethanolâ^'Acetonitrile Dimer. Journal of Physical Chemistry A, 2000, 104, 8505-8511.	1.1	15
85	Benchmark enthalpies of formation and binding energies of proton-bound pairs between HCN and HCN, NH3, H2O, and HF. Journal of Chemical Physics, 1999, 110, 7779-7788.	1.2	16
86	Cyanovinyl radical: an illustration of the poor performance of unrestricted perturbation theory and density functional theory procedures in calculating radical stabilization energies. Theoretical Chemistry Accounts, 1999, 102, 92-96.	0.5	60
87	An assessment of theoretical procedures for the calculation of reliable radical stabilization energiesâ€Šâ€â€¡. Journal of the Chemical Society Perkin Transactions II, 1999, , 2305-2313.	0.9	121
88	Proton Affinities of Primary Alkanols:â€‰ An Appraisal of the Kinetic Method. Journal of Physical Chemistry A, 1999, 103, 705-709.	1.1	39
89	Unimolecular Reactions of Proton-Bound Cluster Ions:Â Competition between Dissociation and Isomerization in the Methanolâ^'Acetonitrile Dimer. Journal of Physical Chemistry A, 1999, 103, 3687-3692.	1.1	20
90	Structures and Binding Energies of Proton-Bound Pairs of HCN and CH3CN with NH3, H2O, HF, CH3NH2, CH3OH, and CH3F. Journal of Physical Chemistry A, 1999, 103, 5905-5909.	1.1	17

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91	An assessment of theoretical procedures for the calculation of reliable free radical thermochemistry: A recommended new procedure. Journal of Chemical Physics, 1998, 108, 604-615.	1.2	206
92	Deprotonating Molecules and Free Radicals to Form Carbon-Centered Anions:Â A G2 ab Initio Study of Molecular and Free Radical Acidity. Journal of Physical Chemistry A, 1998, 102, 4918-4924.	1.1	27
93	Dimethylcarbene, Its Radical Cation and Dication. Journal of the American Chemical Society, 1997, 119, 9039-9041.	6.6	13
94	A photoionization study of vibrational cooling in molecular beams. International Journal of Mass Spectrometry and Ion Processes, 1996, 156, 133-139.	1.9	20
95	The collision-induced emission of radiation: Lifetimes of excited states formed in the collision-induced dissociation (CID) process and excitation target gas molecules. Organic Mass Spectrometry, 1992, 27, 537-539.	1.3	5