

Jan Zabka

List of Publications by Year in descending order

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63
papers

1,341
citations

394421

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361022

35
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63
all docs

63
docs citations

63
times ranked

1401
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrared spectroscopy of trapped molecular dications below 4K. International Journal of Mass Spectrometry, 2013, 354-355, 204-210.	1.5	127
2	CRITICAL REVIEW OF N, N ⁺ , N ²⁺ , N ³⁺ , And N ²⁺ MAIN PRODUCTION PROCESSES AND REACTIONS OF RELEVANCE TO TITAN'S ATMOSPHERE. Astrophysical Journal, Supplement Series, 2013, 204, 20.	7.7	118
3	The oxidation of natural flavonoid quercetin. Chemical Communications, 2012, 48, 3433.	4.1	108
4	On the stability of the bioactive flavonoids quercetin and luteolin under oxygen-free conditions. Analytical and Bioanalytical Chemistry, 2012, 402, 975-982.	3.7	89
5	Threshold Photoelectron Spectroscopy of the Methyl Radical Isotopomers, CH ₃ , CH ₂ D, CHD ₂ and CD ₃ : Synergy between VUV Synchrotron Radiation Experiments and Explicitly Correlated Coupled Cluster Calculations. Journal of Physical Chemistry A, 2010, 114, 4818-4830.	2.5	88
6	15N ⁺ CD ₄ and O ⁺ 13CO ₂ State-Selected Ion-Molecule Reactions Relevant to the Chemistry of Planetary Ionospheres. Journal of Physical Chemistry A, 2004, 108, 9998-10009.	2.5	49
7	Reduction from copper(II) to copper(I) upon collisional activation of (pyridine) ₂ CuCl ⁺ . Journal of Mass Spectrometry, 2010, 45, 1246-1252.	1.6	49
8	Dynamics of Chemical and Charge-Transfer Reactions of Molecular Dications: III. Beam Scattering and Total Cross Section Data for Processes in the System CO ₂ ²⁺ D ₂ . Journal of Physical Chemistry A, 2000, 104, 7294-7303.	2.5	47
9	Internal energy effects in the reactivity of CO ₂ ²⁺ doubly charged molecular ions with CO ₂ and CO. International Journal of Mass Spectrometry, 2003, 228, 507-516.	1.5	37
10	Bond-Forming Reactions of Dications with Molecules: A Computational and Experimental Study of the Mechanisms for the Formation of HCF ₂ ⁺ from CF ₃ ²⁺ and H ₂ . Journal of Physical Chemistry A, 2006, 110, 2898-2905.	2.5	36
11	Energy Partitioning in Collisions of Slow Polyatomic Ions with Surfaces: Ethanol Molecular Ions on Surfaces Covered by Self-Assembled Monolayers (CF-SAM, CH-SAM, COOH-SAM). Journal of Physical Chemistry A, 2002, 106, 10861-10869.	2.5	35
12	Comparative Study of Mono- and Dinuclear Complexes of Late 3d-Metal Chlorides with N,N-Dimethylformamide in the Gas phase. Inorganic Chemistry, 2011, 50, 771-782.	4.0	28
13	Competition of electron transfer, dissociation, and bond-forming processes in the reaction of the CO ₂ ²⁺ dication with neutral CO ₂ . Physical Chemistry Chemical Physics, 2008, 10, 5135.	2.8	27
14	Dissociative double photoionization of N ₂ using synchrotron radiation: Appearance energy of the N ₂ ²⁺ dication. Journal of Chemical Physics, 2007, 126, 134310.	3.0	25
15	Collisions of Slow Polyatomic Ions with Surfaces: Dissociation and Chemical Reactions of CD ₅ ⁺ , CD ₄ ⁺ , CD ₃ ⁺ , and Their Isotopic Variants on Room-Temperature and Heated Carbon Surfaces. Journal of Physical Chemistry B, 2002, 106, 8293-8301.	2.6	24
16	Reactions of State-Selected Atomic Oxygen Ions O ⁺ (O ⁴⁺ S, O ²⁺ D), Tj ETQq0 0 0 rBT /Overlock 10 Tf	2.5	24
17	Formation of Organoxenon Dications in the Reactions of Xenon with Dications Derived from Toluene. Chemistry - A European Journal, 2011, 17, 4012-4020.	3.3	22
18	Anion chemistry on Titan: A possible route to large N-bearing hydrocarbons. Icarus, 2012, 219, 161-167.	2.5	22

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19	Reactions of molecular dications: collision energy dependence of integral cross-sections of processes in $\text{CHCl}_2^+ + \text{Ar}$, D_2 systems from guided beam studies. <i>International Journal of Mass Spectrometry</i> , 2003, 228, 487-495.	1.5	20
20	Dynamics of Chemical and Charge-Transfer Reactions of Molecular Dications. IV. Proton Transfer and Reactions of Dication Isomers in the CHCl_2^{++} D_2 System. <i>Journal of Physical Chemistry A</i> , 2003, 107, 7347-7354.	2.5	20
21	Double ionization of cycloheptatriene and the reactions of the resulting $\text{C}_7\text{H}_n^{2+}$ dications ($n = 6, 8$) with xenon. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18330.	2.8	20
22	Reactivity of the CHBr_2^+ Dication toward Molecular Hydrogen. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6447-6453.	2.5	19
23	Energetics of fragmentations of indene dication from photoionization experiments. <i>Chemical Physics Letters</i> , 2006, 423, 254-259.	2.6	19
24	Collisions of Slow Polyatomic Ions with Surfaces: Dissociation and Chemical Reactions of C_2H_2^+ , C_2H_3^+ , C_2H_4^+ , C_2H_5^+ , and Their Deuterated Variants C_2D_2^+ and C_2D_4^+ on Room-Temperature and Heated Carbon Surfaces. <i>Journal of Physical Chemistry A</i> , 2005, 109, 10208-10215.	2.5	18
25	Dynamics of the Hydride Ion Transfer Reaction between CD_3^+ and CH_4 : A Crossed Beam Scattering Study. <i>The Journal of Physical Chemistry</i> , 1995, 99, 15595-15601.	2.9	16
26	Selected ion flow tube study of the reactions of H_3O^+ and NO^+ with a series of primary alcohols in the presence of water vapour in support of selected ion flow tube mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 437-446.	1.5	16
27	Reactivity of C_2H_5^+ with Benzene: Formation of Ethylbenzenium Ions and Implications for Titan Ionospheric Chemistry. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11153-11160.	2.5	14
28	Dynamics of chemical and charge-transfer reactions of molecular dications: Part V. An experimental and theoretical study of reactions between CHCl_2^+ and Ar, Kr and Xe. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2988-2995.	2.8	13
29	Unimolecular dissociation of doubly ionized toluene and electron transfer between neutral toluene and its dication. <i>Chemical Physics Letters</i> , 2012, 534, 8-12.	2.6	12
30	Dynamics of chemical and charge transfer reactions of molecular dications: VI. <i>International Journal of Mass Spectrometry</i> , 2006, 255-256, 150-163.	1.5	11
31	An experimental study of the reactivity of CN^- and C_3N^- anions with cyanoacetylene (HC_3N). <i>Icarus</i> , 2016, 268, 242-252.	2.5	11
32	Crossed-Beam Scattering Studies of Electron-Transfer Processes between the Dication CO_2^{2+} and Neutral CO_2 : Electronic States of Reactants and Products Involved. <i>Journal of Physical Chemistry A</i> , 2010, 114, 6463-6471.	2.5	10
33	Selected Ion Flow Tube Study of Ion-Molecule Reactions of $\text{N}^+(3P)$ and Kr^+ with C_3 Hydrocarbons Propane, Propene, and Propyne. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7310-7315.	2.5	10
34	Reactions of Doubly Ionized Benzene with Nitrogen and Water: A Nitrogen-Mediated Entry into Superacid Chemistry. <i>ChemPhysChem</i> , 2012, 13, 2688-2698.	2.1	10
35	Scattering of very slow (3×10 eV) hydrocarbon ions CD_3^+ , CD_4^+ , and CD_5^+ from room-temperature carbon (HOPG) surfaces. <i>International Journal of Mass Spectrometry</i> , 2008, 273, 35-47.	1.5	9
36	Collisions of Slow Ions C_3H_n^+ and C_3D_n^+ ($n = 2-8$) with Room Temperature Carbon Surfaces: Mass Spectra of Product Ions and the Ion Survival Probability. <i>European Journal of Mass Spectrometry</i> , 2008, 14, 335-343.	1.0	9

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37	Correlations between Survival Probabilities and Ionization Energies of Slow Ions Colliding with Room-Temperature and Heated Surfaces of Carbon, Tungsten, and Beryllium. <i>Journal of Physical Chemistry A</i> , 2009, 113, 14838-14844.	2.5	9
38	Selective Generation of the Radical Cation Isomers $[CH_3CN]^+$ and $[CH_2CNH]^+$ via VUV Photoionization of Different Neutral Precursors and Their Reactivity with C_2H_4 . <i>Journal of Physical Chemistry A</i> , 2016, 120, 5041-5052.	2.5	9
39	First and second ionization energies of 1,3,5-trimethylbenzene and 2,4,6-trimethylpyridine. <i>Collection of Czechoslovak Chemical Communications</i> , 2009, 74, 101-114.	1.0	9
40	Collisions of slow hydrocarbon ions CD_4^+ , CD_5^+ , $C_2D_4^+$, and $C_2H_5^+$ with room temperature and heated tungsten surfaces. <i>International Journal of Mass Spectrometry</i> , 2008, 277, 229-235.	1.5	7
41	Experimental and theoretical study of the mechanism of formation of astrochemically important $C_{2n+1}N^+$ anions via ion/molecule reactions. <i>International Journal of Mass Spectrometry</i> , 2014, 367, 1-9.	1.5	7
42	Is the Reaction of C_3N^+ with C_2H_2 a Possible Process for Chain Elongation in Titan's Ionosphere?. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5337-5347.	2.5	7
43	Surface-induced dissociation and chemical reactions of $C_2D_4^+$ on stainless steel, carbon (HOPG), and two different diamond surfaces. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 927-938.	2.8	6
44	Dynamics of Formation of Products D_2CN^+ , DCN^+ , and CD_3^+ in the Reaction of N^+ with CD_4 : A Crossed-Beam and Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2010, 114, 1384-1391.	2.5	6
45	Title is missing!. <i>European Physical Journal D</i> , 1999, 49, 373-382.	0.4	5
46	State-specific reactions and autoionization dynamics of Ar_2^+ produced by synchrotron radiation. <i>International Journal of Mass Spectrometry</i> , 2009, 280, 119-127.	1.5	5
47	Reactivity and properties of dications generated by photoionization of 2,5-norbornadiene. <i>International Journal of Mass Spectrometry</i> , 2013, 336, 17-26.	1.5	5
48	Effects of collision energy and vibrational excitation of CH_3^+ cations on its reactivity with hydrocarbons: But-2-yne CH_3CCCH_3 as reagent partner. <i>Journal of Chemical Physics</i> , 2017, 147, 154302.	3.0	5
49	Charge Transfer Between CO_2^+ and Ar or Ne at Collision Energies 3-10 eV. <i>Collection of Czechoslovak Chemical Communications</i> , 2003, 68, 178-188.	1.0	5
50	Scattering of Low-Energy (5-12 eV) $C_2D_4^+$ Ions from Room-Temperature Carbon Surfaces. <i>Collection of Czechoslovak Chemical Communications</i> , 2008, 73, 755-770.	1.0	5
51	A crossed beam scattering study of reactions in the system acetylene cation: formation of C_2HD^+ in $C_2D_2^+ + C_2H_2$ and formation of $C_4H_3^+$ and $C_4H_2^+$ in $C_2H_2^+ + C_2H_2$ collisions. <i>International Journal of Mass Spectrometry</i> , 1999, 185-187, 195-205.	1.5	4
52	Survival probability of slow ions colliding with room-temperature and heated surfaces of beryllium. <i>Molecular Physics</i> , 2012, 110, 1669-1673.	1.7	4
53	The Unimolecular Chemistry of Protonated and Deprotonated 2,2-Dinitroethene-1,1-Diamine (FOX-7) Studied by Tandem Mass Spectrometry and Computational Chemistry. <i>European Journal of Mass Spectrometry</i> , 2014, 20, 233-247.	1.0	4
54	The reaction of C_5N^+ with acetylene as a possible intermediate step to produce large anions in Titan's ionosphere. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5377-5388.	2.8	4

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55	Experimental and Computational Studies on the Reactivity of Methanimine Radical Cation (H_2CNH^+) and its Isomer Aminomethylene (HCNH_2^+) With C_2H_2 . <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 8, .	2.8	4
56	A DFT/HF study of the potential energy surface of protonated ethane C_2H_7^+ . <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 167-168, 675-687.	1.8	3
57	Energetics and rearrangements of the isomeric picoline dications. <i>International Journal of Mass Spectrometry</i> , 2011, 308, 81-88.	1.5	3
58	A Pilot Study of Ion - Molecule Reactions at Temperatures Relevant to the Atmosphere of Titan. <i>Origins of Life and Evolution of Biospheres</i> , 2016, 46, 533-538.	1.9	3
59	Experimental study of the reaction of NO_2^+ ions with CO_2 molecules at temperatures and energies relevant to the Martian atmosphere. <i>Icarus</i> , 2020, 335, 113416.	2.5	3
60	Dynamics of Protonated Acetonitrile Formation in $\text{CD}_3\text{CN}^+ + \text{CH}_3\text{CN}$ Collisions: A Crossed-Beam Scattering Study. <i>Collection of Czechoslovak Chemical Communications</i> , 1998, 63, 1152-1160.	1.0	3
61	Anion Chemistry on Titan: systematic studies of the growth and stability of large negative ions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 032086.	0.4	2
62	State-Selected Reactivity of Carbon Dioxide Cations (CO_2^+) With Methane. <i>Frontiers in Chemistry</i> , 2019, 7, 537.	3.6	2
63	Experimental study of the reaction of O^+ ions with CO_2 molecules with different ternary gases at temperatures relevant to the martian ionosphere. <i>Icarus</i> , 2021, 354, 114057.	2.5	0