

Jan Zabka

List of Publications by Year in descending order

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63
papers

1,341
citations

394421

19
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361022

35
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docs citations

63
times ranked

1401
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	Experimental study of the reaction of NO^+ ions with CO_2 molecules at temperatures and energies relevant to the Martian atmosphere. <i>Icarus</i> , 2020, 335, 113416.	2.5	3
4	State-Selected Reactivity of Carbon Dioxide Cations (CO_2^+) With Methane. <i>Frontiers in Chemistry</i> , 2019, 7, 537.	3.6	2
5	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
6	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
7	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
8	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
9	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
10	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
11	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
12	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
13	Reactions of State-Selected Atomic Oxygen Ions O^+ (O^4S , O^2D). <i>Tj ETQq1 1 0.784314 rgBT /Over</i> 2.5 24	2.5	24
14	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
15	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
16	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
17	Infrared spectroscopy of trapped molecular dications below 4K. <i>International Journal of Mass Spectrometry</i> , 2013, 354-355, 204-210.	1.5	127
18	CRITICAL REVIEW OF N , N^+ , N^2 , N^+ , N^+ , N^+ MAIN PRODUCTION PROCESSES AND REACTIONS OF RELEVANCE TO TITAN'S ATMOSPHERE. <i>Astrophysical Journal, Supplement Series</i> , 2013, 204, 20.	7.7	118

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19	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
20	The oxidation of natural flavonoid quercetin. <i>Chemical Communications</i> , 2012, 48, 3433.	4.1	108
21	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
22	Anion chemistry on Titan: A possible route to large N-bearing hydrocarbons. <i>Icarus</i> , 2012, 219, 161-167.	2.5	22
23	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
24	On the stability of the bioactive flavonoids quercetin and luteolin under oxygen-free conditions. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 975-982.	3.7	89
25	Double ionization of cycloheptatriene and the reactions of the resulting C ₇ H _n ²⁺ dications (n = 6, 8) with xenon. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18330.	2.8	20
26	Comparative Study of Mono- and Dinuclear Complexes of Late 3d-Metal Chlorides with N,N-Dimethylformamide in the Gas phase. <i>Inorganic Chemistry</i> , 2011, 50, 771-782.	4.0	28
27	Selected Ion Flow Tube Study of Ion-Molecule Reactions of N ³⁺ (N ³⁺ P) and Kr ²⁺ with C ₃ Hydrocarbons Propane, Propene, and Propyne. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7310-7315.	2.5	10
28	Energetics and rearrangements of the isomeric picoline dications. <i>International Journal of Mass Spectrometry</i> , 2011, 308, 81-88.	1.5	3
29	Formation of Organoxenon Dications in the Reactions of Xenon with Dications Derived from Toluene. <i>Chemistry - A European Journal</i> , 2011, 17, 4012-4020.	3.3	22
30	Reduction from copper(II) to copper(I) upon collisional activation of (pyridine) ₂ CuCl ²⁺ . <i>Journal of Mass Spectrometry</i> , 2010, 45, 1246-1252.	1.6	49
31	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
32	Dynamics of Formation of Products D ₂ CN ⁺ , 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
33	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. <i>Journal of Physical Chemistry A</i> , 2010, 114, 4818-4830.	2.5	88
34	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
35	Surface-induced dissociation and chemical reactions of C ₂ D 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
36	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

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37	Reactivity of C ₂ H ₅ ⁺ with Benzene: Formation of Ethylbenzenium Ions and Implications for Titan's Ionospheric Chemistry. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11153-11160.	2.5	14
38	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
39	Scattering of very slow (3 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
40	Collisions of slow hydrocarbon ions CD ₄ ⁺ , CD ₅ ⁺ , C ₂ D ₄ ⁺ , and C ₂ H ₅ ⁺ with room temperature and heated tungsten surfaces. <i>International Journal of Mass Spectrometry</i> , 2008, 277, 229-235.	1.5	7
41	Competition of electron transfer, dissociation, and bond-forming processes in the reaction of the CO ₂ ²⁺ dication with neutral CO. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 5135.	2.8	27
42	Collisions of Slow Ions C ₃ H ⁺ and C ₃ D ⁺ (v _{rel} = 2 eV) 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
43	Scattering of Low-Energy (5-12 eV) C ₂ D ₄ ⁺ Ions from Room-Temperature Carbon Surfaces. <i>Collection of Czechoslovak Chemical Communications</i> , 2008, 73, 755-770.	1.0	5
44	Dissociative double photoionization of N ₂ using synchrotron radiation: Appearance energy of the N ₂ ²⁺ dication. <i>Journal of Chemical Physics</i> , 2007, 126, 134310.	3.0	25
45	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 . <i>Journal of Physical Chemistry A</i> , 2006, 110, 2898-2905.	2.5	36
46	Reactivity of the CHBr ₂ ⁺ Dication toward Molecular Hydrogen. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6447-6453.	2.5	19
47	Energetics of fragmentations of indene dication from photoionization experiments. <i>Chemical Physics Letters</i> , 2006, 423, 254-259.	2.6	19
48	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
49	Collisions of Slow Polyatomic Ions with Surfaces: Dissociation and Chemical Reactions of C ₂ H ₂ ⁺ , C ₂ H ₃ ⁺ , C ₂ H ₄ ⁺ , C ₂ H ₅ ⁺ , and Their Deuterated Variants C ₂ D ₂ ⁺ and C ₂ D ₄ ⁺ on Room-Temperature and Heated Carbon Surfaces. <i>Journal of Physical Chemistry A</i> , 2005, 109, 10208-10215.	2.5	18
50	¹⁵ N ²⁺ , CD ₄ ⁺ and O ²⁺ + ¹³ CO ₂ State-Selected Ion-Molecule Reactions Relevant to the Chemistry of Planetary Ionospheres. <i>Journal of Physical Chemistry A</i> , 2004, 108, 9998-10009.	2.5	49
51	Reactions of molecular dications: collision energy dependence of integral cross-sections of processes in CHCl ₂ ²⁺ + Ar, D ₂ systems from guided beam studies. <i>International Journal of Mass Spectrometry</i> , 2003, 228, 487-495.	1.5	20
52	Internal energy effects in the reactivity of CO ₂ ²⁺ doubly charged molecular ions with CO ₂ and CO. <i>International Journal of Mass Spectrometry</i> , 2003, 228, 507-516.	1.5	37
53	Dynamics of Chemical and Charge-Transfer Reactions of Molecular Dications. IV. Proton Transfer and Reactions of Dication Isomers in the CHCl ₂ ²⁺ D ₂ System. <i>Journal of Physical Chemistry A</i> , 2003, 107, 7347-7354.	2.5	20
54	Dynamics of chemical and charge-transfer reactions of molecular dications : Part V. An experimental and theoretical study of reactions between CHCl ₂ ²⁺ and Ar, Kr and Xe. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2988-2995.	2.8	13

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55	Charge Transfer Between CO ₂ ⁺ and Ar or Ne at Collision Energies 3-10 eV. Collection of Czechoslovak Chemical Communications, 2003, 68, 178-188.	1.0	5
56	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
57	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
58	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
59	A crossed beam scattering study of reactions in the system acetylene cation: acetylene: formation of C ₂ H ⁺ in C ₂ D ₂ ⁺ + C ₂ H ₂ and formation of C ₄ H ₃ ⁺ and C ₄ H ₂ ⁺ in C ₂ H ₂ ⁺ + C ₂ H ₂ collisions. International Journal of Mass Spectrometry, 1999, 185-187, 195-205.	1.5	4
60	Title is missing!. European Physical Journal D, 1999, 49, 373-382.	0.4	5
61	Dynamics of Protonated Acetonitrile Formation in CD ₃ CN ⁺ + CH ₃ CN Collisions: A Crossed-Beam Scattering Study. Collection of Czechoslovak Chemical Communications, 1998, 63, 1152-1160.	1.0	3
62	A DFT/HF study of the potential energy surface of protonated ethane C ₂ H ₇ ⁺ . International Journal of Mass Spectrometry and Ion Processes, 1997, 167-168, 675-687.	1.8	3
63	Dynamics of the Hydride Ion Transfer Reaction between CD ₃ ⁺ and CH ₄ : A Crossed Beam Scattering Study. The Journal of Physical Chemistry, 1995, 99, 15595-15601.	2.9	16