

Christian Alcaraz

List of Publications by Year in descending order

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236925

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docs citations

99
times ranked

1569
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric Vacuum UV photolysis of the Amino Acid Leucine in the Solid State. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 5630-5634.	13.8	121
2	CRITICAL REVIEW OF N, N ⁺ , N ⁺ ₂ , N ⁺⁺ , And N ⁺⁺ ₂ MAIN PRODUCTION PROCESSES AND REACTIONS OF RELEVANCE TO TITAN'S ATMOSPHERE. <i>Astrophysical Journal, Supplement Series</i> , 2013, 204, 20.	7.7	118
3	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
4	SU5: a calibrated variable-polarization synchrotron radiation beam line in the vacuum-ultraviolet range. <i>Applied Optics</i> , 2004, 43, 1024.	2.1	86
5	Prediction of a CO ₂ layer in the atmosphere of Mars. <i>Geophysical Research Letters</i> , 2002, 29, 104-1-104-4.	4.0	83
6	Complete description of linear molecule photoionization achieved by vector correlations using the light of a single circular polarization. <i>Journal of Chemical Physics</i> , 2003, 118, 9653-9663.	3.0	76
7	Very high spectral resolution obtained with SU5: A vacuum ultraviolet undulator-based beamline at Super-ACO. <i>Review of Scientific Instruments</i> , 2001, 72, 1320.	1.3	70
8	Growth of Larger Hydrocarbons in the Ionosphere of Titan. <i>Chemistry - A European Journal</i> , 2008, 14, 4779-4783.	3.3	57
9	Sensitivity of a Titan ionospheric model to the ion-molecule reaction parameters. <i>Planetary and Space Science</i> , 2008, 56, 1644-1657.	1.7	56
10	Determination of the Absolute Photoionization Cross Sections of CH ₃ and I Produced from a Pyrolysis Source, by Combined Synchrotron and Vacuum Ultraviolet Laser Studies. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3237-3246.	2.5	56
11	Prediction of a N ₂ ⁺⁺ layer in the upper atmosphere of Titan. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	51
12	15N ⁺⁺ CD ₄ and O ⁺⁺ 13CO 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
13	A state-selected study of charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques. <i>Chemical Physics</i> , 1996, 209, 177-194.	1.9	46
14	The vacuum ultraviolet photochemistry of the allyl radical investigated using synchrotron radiation. <i>Journal of Chemical Physics</i> , 2003, 118, 9077-9080.	3.0	46
15	Prediction and modelling of doubly-charged ions in the Earth's upper atmosphere. <i>Annales Geophysicae</i> , 2005, 23, 781-797.	1.6	44
16	The VUV photochemistry of radicals: C ₃ H ₃ and C ₂ H ₅ . <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 819-825.	2.8	41
17	Photoionization of Propargyl and Bromopropargyl Radicals: A Threshold Photoelectron Spectroscopic Study. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2225-2230.	2.5	40
18	A versatile electromagnetic planar/helical crossed undulator optimized for the SU5 low energy/high resolution beamline at Super-ACO. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1997, 396, 237-250.	1.6	38

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19	Dissociative photoionization of N ₂ in the 24–32 eV photon energy range. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003, 36, 2239-2251.	1.5	37
20	Modelling dications in the diurnal ionosphere of Venus. <i>Astronomy and Astrophysics</i> , 2007, 465, 641-645.	5.1	35
21	Unimolecular Chemistry of the Gaseous Cyclopropylamine Radical Cation. <i>Journal of the American Chemical Society</i> , 1998, 120, 152-160.	13.7	33
22	Effects of ion excitation on charge transfer reactions of the Mars, Venus, and Earth ionospheres. <i>Planetary and Space Science</i> , 2002, 50, 877-887.	1.7	30
23	Photoionization and dissociative photoionization of the allyl radical, C ₃ H ₅ . <i>International Journal of Mass Spectrometry</i> , 2007, 261, 227-233.	1.5	28
24	State specific reactions of Ba(1S0) and Ba(1D2) with water and methanol. <i>Journal of Chemical Physics</i> , 1993, 98, 9595-9609.	3.0	27
25	Efficiency of High-nRydberg-State Stabilization in Pulsed-Field Ionization Zero-Kinetic-Energy Photoelectron Spectroscopy. <i>Journal of Physical Chemistry A</i> , 1997, 101, 6728-6735.	2.5	26
26	A fast computation of the diurnal secondary ion production in the ionosphere of Titan. <i>Icarus</i> , 2005, 174, 285-288.	2.5	26
27	Threshold Photoelectron Spectroscopy of Cyclopropenylidene, Chlorocyclopropenylidene, and Their Deuterated Isotopomers. <i>Journal of Physical Chemistry A</i> , 2010, 114, 11269-11276.	2.5	25
28	Threshold Photoionization Study of Fe(CO) ₅ versus ab Initio Calculations. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7907-7913.	2.5	24
29	Femtosecond Dynamics of the tert-Butyl Radical, t-C ₄ H ₉ . <i>Journal of Physical Chemistry A</i> , 2007, 111, 1771-1779.	2.5	24
30	Reactions of State-Selected Atomic Oxygen Ions O ⁺ (S, D, Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.5	24
31	Correction to "Prediction of a CO ₂ layer in the atmosphere of Mars". <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	22
32	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
33	Anion chemistry on Titan: A possible route to large N-bearing hydrocarbons. <i>Icarus</i> , 2012, 219, 161-167.	2.5	22
34	Valence shell threshold photoelectron spectroscopy of C ₃ H _x (x = 1-5) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.8	22
35	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
36	Comprehensive vacuum ultraviolet photoionization study of the CF ₃ trifluoromethyl radical using synchrotron radiation. <i>Journal of Chemical Physics</i> , 2012, 136, 204304.	3.0	20

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37	Synchrotron-based valence shell photoionization of CH radical. <i>Journal of Chemical Physics</i> , 2016, 144, 204307.	3.0	19
38	Diborene: Generation and Photoelectron Spectroscopy of an Inorganic Biradical. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5921-5925.	4.6	19
39	Chemiluminescent channels in reactions of Ba(1P1) with water, alcohols, and ethers. <i>Journal of Chemical Physics</i> , 1993, 99, 2533-2540.	3.0	18
40	A new VUV high resolution undulator-based beamline at Super-ACO. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1998, 404, 418-429.	1.6	18
41	Proton Tunneling in the Loss of Hydrogen Bromide from Energy-Selected Gas-Phase 2-Bromobutane Cations. <i>Journal of Physical Chemistry A</i> , 1998, 102, 1090-1097.	2.5	18
42	Growth Of Doubly Ionized C,H,N Compounds in the Presence of Methane. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11204-11210.	2.5	17
43	Complete characterization of SU5:. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001, 467-468, 453-457.	1.6	16
44	Reaction of barium atoms with N2O clusters. <i>Journal of Chemical Physics</i> , 1988, 88, 3081-3085.	3.0	15
45	Commissioning of OPHELIE in the DC mode: an electromagnetic planar/helical crossed VUV undulator at Super-ACO. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000, 447, 569-586.	1.6	15
46	The photoionisation of propargylene and diazopropyne. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 17956.	2.8	15
47	Dissociative photoionisation of acetylene-ethane van der Waals clusters. <i>International Journal of Mass Spectrometry</i> , 2000, 199, 201-209.	1.5	14
48	The luminescent channels of the reactions of Ba(1P1) and Ba(1D2) with water. <i>Chemical Physics Letters</i> , 1989, 156, 191-196.	2.6	13
49	State-Selected C2H2+ Reactions with Methane at High Internal Energies. H+ and H- Transfer Reactions, Two New Channels in the C2H2+ A State Region. <i>The Journal of Physical Chemistry</i> , 1995, 99, 15523-15531.	2.9	13
50	Circular polarization of light by planet Mercury and enantiomorphism of its surface minerals. <i>Origins of Life and Evolution of Biospheres</i> , 2002, 32, 181-190.	1.9	13
51	The photoionisation of two phenylcarbenes and their diazirine precursors investigated using synchrotron radiation. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 5384.	2.8	13
52	Energy dependence of the chemiluminescent Ba(6s5d 1D2)+O2 \hat{a} \dagger BaO*+O reaction. <i>Chemical Physics Letters</i> , 1989, 164, 5-11.	2.6	12
53	Chemiluminescent reactions of electronically excited alkaline earth atoms. II. Energy dependence in Ba*+O2 \hat{a} \dagger BaO*+O. <i>Journal of Chemical Physics</i> , 1991, 94, 4913-4920.	3.0	12
54	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

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55	Collision energy dependence of the chemiluminescent reaction: Ba+N ₂ O ⁺ →BaO+N ₂ . Journal of Chemical Physics, 1988, 89, 1945-1949.	3.0	11
56	An experimental study of the reactivity of CN ⁻ and C ₃ N ⁻ anions with cyanoacetylene (HC ₃ N). Icarus, 2016, 268, 242-252.	2.5	11
57	Photoelectron spectroscopy of boron-containing reactive intermediates using synchrotron radiation: BH ₂ , BH, and BF. Physical Chemistry Chemical Physics, 2020, 22, 1027-1034.	2.8	11
58	Selected Ion Flow Tube Study of Ion-Molecule Reactions of N ⁺ (³ P) and Kr ⁺ with C ₃ Hydrocarbons Propane, Propene, and Propyne. Journal of Physical Chemistry A, 2011, 115, 7310-7315.	2.5	10
59	Reactions of Doubly Ionized Benzene with Nitrogen and Water: A Nitrogen-Mediated Entry into Superacid Chemistry. ChemPhysChem, 2012, 13, 2688-2698.	2.1	10
60	O O C O + cation I: Characterization of its isomers and lowest electronic states. Journal of Chemical Physics, 2007, 127, 064312.	3.0	9
61	O O C O + cation. II. Its role during the atmospheric ion-molecule reactions. Journal of Chemical Physics, 2007, 127, 064313.	3.0	9
62	Threshold photoelectron spectroscopy of unstable N-containing compounds: Resolution of ¹ K subbands in HNCO ⁺ and vibrational resolution in NCO ⁺ . Journal of Chemical Physics, 2015, 142, 184306.	3.0	9
63	Selective Generation of the Radical Cation Isomers [CH ₃ CN] ⁺ and [CH ₂ CNH] ⁺ via VUV Photoionization of Different Neutral Precursors and Their Reactivity with C ₂ H ₄ . Journal of Physical Chemistry A, 2016, 120, 5041-5052.	2.5	9
64	Experimental and theoretical threshold photoelectron spectra of methylene. Journal of Chemical Physics, 2018, 149, 224304.	3.0	9
65	First and second ionization energies of 1,3,5-trimethylbenzene and 2,4,6-trimethylpyridine. Collection of Czechoslovak Chemical Communications, 2009, 74, 101-114.	1.0	9
66	The effect of autoionization on the N ₂ ⁺ X ² state vibrationally resolved photoelectron anisotropy parameters and branching ratios. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 095102.	1.5	8
67	Communication: On the first ionization threshold of the C ₂ H radical. Journal of Chemical Physics, 2017, 146, 011101.	3.0	8
68	A Hidden Hydrogen Transfer in the Unimolecular Reaction of 1,2-Dimethoxyethane ⁺ . Journal of Physical Chemistry A, 1999, 103, 5049-5054.	2.5	7
69	First polarization measurements of OPHELIE: a versatile polarization VUV undulator at Super-ACO. , 1999, 3773, 250.		7
70	State-selected dissociation of dehydrovincamine alkaloid stereo-isomers. Physical Chemistry Chemical Physics, 2002, 4, 661-667.	2.8	7
71	Experimental and theoretical study of the mechanism of formation of astrochemically important C ₂ n+1N ⁻ anions via ion/molecule reactions. International Journal of Mass Spectrometry, 2014, 367, 1-9.	1.5	7
72	Photoionization spectroscopy of CH ₃ C ₃ N in the vacuum-ultraviolet range. Journal of Molecular Spectroscopy, 2015, 315, 206-216.	1.2	7

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73	Vibronic structure of the $2^1\hat{u}$ ground electronic state of dicyanoacetylene cation revisited by PFI-ZEKE photoelectron spectroscopy and <i>ab initio</i> calculations. <i>Molecular Physics</i> , 2015, 113, 3946-3954.	1.7	7
74	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
75	The reactivity of methanimine radical cation (H_2CNH^+) and its isomer aminomethylene ($HCNH_2^+$) with methane. <i>Chemical Physics Letters</i> , 2021, 775, 138611.	2.6	7
76	State-selected $C_2H_2^+ + C_2H_4$ reaction: Controlled by dynamics or statistics?. <i>International Journal of Mass Spectrometry</i> , 2006, 249-250, 31-44.	1.5	6
77	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
78	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
79	Experimental and <i>ab initio</i> characterization of HC_3N^+ vibronic structure. I. Synchrotron-based threshold photo-electron spectroscopy. <i>Journal of Chemical Physics</i> , 2016, 145, 234310.	3.0	5
80	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
81	Characterisation of the first electronically excited state of protonated acetylene $C_2H_3^+$ by coincident imaging photoelectron spectroscopy. <i>Molecular Physics</i> , 2021, 119, e1825851.	1.7	4
82	The reactivity of methanimine radical cation (H_2CNH^+) and its isomer aminomethylene ($HCNH_2^+$) with C_2H_4 . <i>Chemical Physics Letters</i> , 2021, 777, 138677.	2.6	4
83	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
84	Structural Elucidation of $C_6H_4^+$ Using Chemical Reaction Monitoring: Charge Transfer Versus Bond Forming Reactions. <i>ChemPhysChem</i> , 2022, 23, .	2.1	4
85	Energetics and rearrangements of the isomeric picoline dications. <i>International Journal of Mass Spectrometry</i> , 2011, 308, 81-88.	1.5	3
86	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
87	State-Selected Reactivity of Carbon Dioxide Cations (CO_2^+) With Methane. <i>Frontiers in Chemistry</i> , 2019, 7, 537.	3.6	2
88	High-flux and high-resolution spectroscopic facility in the VUV region at Super-ACO. <i>Journal of Synchrotron Radiation</i> , 1998, 5, 839-841.	2.4	1
89	FT-ICR studies of anionic reactions for the chemistry of planetary ionospheres. <i>Journal of Physics: Conference Series</i> , 2015, 635, 032112.	0.4	1
90	Vibronic structure of the cyanobutadiyne cation. I. VUV photoionization study of HC_5N . <i>Journal of Chemical Physics</i> , 2019, 150, 244304.	3.0	1

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91	Une ligne VUV au Serveur Laser du Centre Laser de l'Université Paris-Sud. , 2009, , .		1
92	Study of the Reactivity of CH ₃ COOH ⁺ and COOH ⁺ Ions with CH ₃ NH ₂ : Evidence of the Formation of New Peptide-like C(O)-N Bonds. Journal of Physical Chemistry A, 2021, 125, 10006-10020.	2.5	1
93	OPH ₂ LIE: a variable-polarization electromagnetic undulator optimized for a VUV beamline at Super-ACO. Journal of Synchrotron Radiation, 1998, 5, 428-430.	2.4	0
94	Effect of the Vibrational Excitation of CH ₃ ⁺ cations on their reactivity with CH ₄ . Journal of Physics: Conference Series, 2015, 635, 032110.	0.4	0
95	State-selected ion-molecule reactions with VUV synchrotron radiation : the O ₂ + C ₃ H ₆ case. Journal of Physics: Conference Series, 2020, 1412, 232009.	0.4	0
96	EXPERIMENTAL AND THEORETICAL INVESTIGATIONS OF THE THRESHOLD PHOTOELECTRON SPECTRUM OF THE CH ₂ RADICAL. , 2018, , .		0