

# Christian Alcaraz

## List of Publications by Year in descending order

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96  
papers

2,159  
citations

236925

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docs citations

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times ranked

1569  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Elucidation of $C_6H_4^{+}$ Using Chemical Reaction Monitoring: Charge Transfer Versus Bond Forming Reactions. <i>ChemPhysChem</i> , 2022, 23, .	2.1	4
2	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
3	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
4	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
5	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
6	Study of the Reactivity of $CH_3COOH^+$ and $COOH^+$ Ions with $CH_3NH_2$ : Evidence of the Formation of New Peptide-like $C(O)N$ Bonds. <i>Journal of Physical Chemistry A</i> , 2021, 125, 10006-10020.	2.5	1
7	Photoelectron spectroscopy of boron-containing reactive intermediates using synchrotron radiation: $BH_2$ , $BH$ , and $BF$ . <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1027-1034.	2.8	11
8	State-selected ion-molecule reactions with VUV synchrotron radiation : the $O_2 + C_3H_6$ case. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 232009.	0.4	0
9	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
10	State-Selected Reactivity of Carbon Dioxide Cations ( $CO_2^+$ ) With Methane. <i>Frontiers in Chemistry</i> , 2019, 7, 537.	3.6	2
11	Valence shell threshold photoelectron spectroscopy of $C_3H_x$ ( $x = 1, 2$ ). <i>Journal of Chemical Physics</i> , 2018, 149, 224304.	2.8	22
12	Experimental and theoretical threshold photoelectron spectra of methylene. <i>Journal of Chemical Physics</i> , 2018, 149, 224304.	3.0	9
13	Diborene: Generation and Photoelectron Spectroscopy of an Inorganic Biradical. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5921-5925.	4.6	19
14	EXPERIMENTAL AND THEORETICAL INVESTIGATIONS OF THE THRESHOLD PHOTOELECTRON SPECTRUM OF THE $CH_2$ RADICAL. , 2018, , .		0
15	Communication: On the first ionization threshold of the $C_2H$ radical. <i>Journal of Chemical Physics</i> , 2017, 146, 011101.	3.0	8
16	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
17	Synchrotron-based valence shell photoionization of $CH$ radical. <i>Journal of Chemical Physics</i> , 2016, 144, 204307.	3.0	19
18	Experimental and ab initio 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

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19	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
20	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
21	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
22	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
23	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
24	Effect of the Vibrational Excitation of $CH_3^+$ cations on their reactivity with $CH_4$ . <i>Journal of Physics: Conference Series</i> , 2015, 635, 032110.	0.4	0
25	Photoionization spectroscopy of $CH_3C_3N$ in the vacuum-ultraviolet range. <i>Journal of Molecular Spectroscopy</i> , 2015, 315, 206-216.	1.2	7
26	Reactions of State-Selected Atomic Oxygen Ions $O^+(^4S, ^2D)$ . <i>Journal of Physics: Conference Series</i> , 2015, 635, 032111.	2.5	24
27	Threshold photoelectron spectroscopy of unstable N-containing compounds: Resolution of $\hat{K}$ subbands in $HNCO^+$ and vibrational resolution in $NCO^+$ . <i>Journal of Chemical Physics</i> , 2015, 142, 184306.	3.0	9
28	Vibronic structure of the $^2\hat{u}$ 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
29	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
30	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
31	CRITICAL REVIEW OF $N_2^+$ , $N_2^+$ , $N_2^+$ , $N_2^+$ , $N_2^+$ , $N_2^+$ MAIN PRODUCTION PROCESSES AND REACTIONS OF RELEVANCE TO TITAN'S ATMOSPHERE. <i>Astrophysical Journal, Supplement Series</i> , 2013, 204, 20.	7.7	118
32	The effect of autoionization on the $N_2^+X^+$ state vibrationally resolved photoelectron anisotropy parameters and branching ratios. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 095102.	1.5	8
33	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
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	Anion chemistry on Titan: A possible route to large N-bearing hydrocarbons. <i>Icarus</i> , 2012, 219, 161-167.	2.5	22
36	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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37	The photoionisation of propargylene and diazopropyne. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 17956.	2.8	15
38	Double ionization of cycloheptatriene and the reactions of the resulting C <sub>7</sub> Hn <sup>2+</sup> dications (n = 6, 8) with xenon. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18330.	2.8	20
39	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
40	Selected Ion Flow Tube Study of Ion-Molecule Reactions of N <sup>+</sup> ( <sup>3</sup> P) and Kr <sup>+</sup> with C <sub>3</sub> Hydrocarbons Propane, Propene, and Propyne. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7310-7315.	2.5	10
41	Energetics and rearrangements of the isomeric picoline dications. <i>International Journal of Mass Spectrometry</i> , 2011, 308, 81-88.	1.5	3
42	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
43	Determination of the Absolute Photoionization Cross Sections of CH <sub>3</sub> 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
44	Threshold Photoelectron Spectroscopy of Cyclopropenylidene, Chlorocyclopropenylidene, and Their Deuterated Isotopomers. <i>Journal of Physical Chemistry A</i> , 2010, 114, 11269-11276.	2.5	25
45	Threshold Photoelectron Spectroscopy of the Methyl Radical Isotopomers, CH <sub>3</sub> , CH <sub>2</sub> D, CHD <sub>2</sub> and CD <sub>3</sub> : 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
46	State-specific reactions and autoionization dynamics of Ar <sup>2+</sup> produced by synchrotron radiation. <i>International Journal of Mass Spectrometry</i> , 2009, 280, 119-127.	1.5	5
47	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
48	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
49	Une ligne VUV au Serveur Laser du Centre Laser de l'Université Paris-Sud. , 2009, , .		1
50	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
51	Growth of Larger Hydrocarbons in the Ionosphere of Titan. <i>Chemistry - A European Journal</i> , 2008, 14, 4779-4783.	3.3	57
52	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
53	O O C O + cation I: Characterization of its isomers and lowest electronic states. <i>Journal of Chemical Physics</i> , 2007, 127, 064312.	3.0	9
54	O O C O + cation. II. Its role during the atmospheric ion-molecule reactions. <i>Journal of Chemical Physics</i> , 2007, 127, 064313.	3.0	9

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55	Femtosecond Dynamics of the tert-Butyl Radical, t-C <sub>4</sub> H <sub>9</sub> . Journal of Physical Chemistry A, 2007, 111, 1771-1779.	2.5	24
56	Modelling dications in the diurnal ionosphere of Venus. Astronomy and Astrophysics, 2007, 465, 641-645.	5.1	35
57	Photoionization and dissociative photoionization of the allyl radical, C <sub>3</sub> H <sub>5</sub> . International Journal of Mass Spectrometry, 2007, 261, 227-233.	1.5	28
58	State-selected C <sub>2</sub> H <sub>2</sub> <sup>++</sup> +C <sub>2</sub> H <sub>4</sub> reaction: Controlled by dynamics or statistics?. International Journal of Mass Spectrometry, 2006, 249-250, 31-44.	1.5	6
59	Asymmetric Vacuum UV photolysis of the Amino Acid Leucine in the Solid State. Angewandte Chemie - International Edition, 2005, 44, 5630-5634.	13.8	121
60	A fast computation of the diurnal secondary ion production in the ionosphere of Titan. Icarus, 2005, 174, 285-288.	2.5	26
61	Prediction and modelling of doubly-charged ions in the Earth's upper atmosphere. Annales Geophysicae, 2005, 23, 781-797.	1.6	44
62	The VUV photochemistry of radicals: C <sub>3</sub> H <sub>3</sub> and C <sub>2</sub> H <sub>5</sub> . Physical Chemistry Chemical Physics, 2005, 7, 819-825.	2.8	41
63	Prediction of a N <sub>2</sub> <sup>++</sup> layer in the upper atmosphere of Titan. Geophysical Research Letters, 2005, 32, .	4.0	51
64	15N <sup>++</sup> CD <sub>4</sub> and O <sup>++</sup> +13CO <sub>2</sub> State-Selected Ion-Molecule Reactions Relevant to the Chemistry of Planetary Ionospheres. Journal of Physical Chemistry A, 2004, 108, 9998-10009.	2.5	49
65	SU5: a calibrated variable-polarization synchrotron radiation beam line in the vacuum-ultraviolet range. Applied Optics, 2004, 43, 1024.	2.1	86
66	Correction to "Prediction of a CO <sub>2</sub> <sup>++</sup> layer in the atmosphere of Mars". Geophysical Research Letters, 2003, 30, .	4.0	22
67	The vacuum ultraviolet photochemistry of the allyl radical investigated using synchrotron radiation. Journal of Chemical Physics, 2003, 118, 9077-9080.	3.0	46
68	Complete description of linear molecule photoionization achieved by vector correlations using the light of a single circular polarization. Journal of Chemical Physics, 2003, 118, 9653-9663.	3.0	76
69	Dissociative photoionization of N <sub>2</sub> in the 24-32 eV photon energy range. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 2239-2251.	1.5	37
70	Prediction of a CO <sub>2</sub> <sup>++</sup> layer in the atmosphere of Mars. Geophysical Research Letters, 2002, 29, 104-1-104-4.	4.0	83
71	State-selected dissociation of dehydrovincamine alkaloid stereo-isomers. Physical Chemistry Chemical Physics, 2002, 4, 661-667.	2.8	7
72	Effects of ion excitation on charge transfer reactions of the Mars, Venus, and Earth ionospheres. Planetary and Space Science, 2002, 50, 877-887.	1.7	30

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73	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
74	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
75	Complete characterization of SU5: Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 453-457.	1.6	16
76	Dissociative photoionisation of acetylene-ethane van der Waals clusters. <i>International Journal of Mass Spectrometry</i> , 2000, 199, 201-209.	1.5	14
77	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
78	A Hidden Hydrogen Transfer in the Unimolecular Reaction of 1,2-Dimethoxyethane $\text{C}^+$ . <i>Journal of Physical Chemistry A</i> , 1999, 103, 5049-5054.	2.5	7
79	First polarization measurements of OPHELIE: a versatile polarization VUV undulator at Super-ACO. , 1999, 3773, 250.		7
80	OPHELIE: a variable-polarization electromagnetic undulator optimized for a VUV beamline at Super-ACO. <i>Journal of Synchrotron Radiation</i> , 1998, 5, 428-430.	2.4	0
81	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
82	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
83	Unimolecular Chemistry of the Gaseous Cyclopropylamine Radical Cation. <i>Journal of the American Chemical Society</i> , 1998, 120, 152-160.	13.7	33
84	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
85	Threshold Photoionization Study of $\text{Fe}(\text{CO})_5$ versus ab Initio Calculations. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7907-7913.	2.5	24
86	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
87	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
88	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
89	State-Selected $\text{C}_2\text{H}_2^+$ Reactions with Methane at High Internal Energies. $\text{H}^+$ and $\text{H}^-$ Transfer Reactions, Two New Channels in the $\text{C}_2\text{H}_2^+ \text{A}$ State Region. <i>The Journal of Physical Chemistry</i> , 1995, 99, 15523-15531.	2.9	13
90	State specific reactions of $\text{Ba}(1\text{S}0)$ and $\text{Ba}(1\text{D}2)$ with water and methanol. <i>Journal of Chemical Physics</i> , 1993, 98, 9595-9609.	3.0	27

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91	Chemiluminescent channels in reactions of Ba(1P1) with water, alcohols, and ethers. Journal of Chemical Physics, 1993, 99, 2533-2540.	3.0	18
92	Chemiluminescent reactions of electronically excited alkaline earth atoms. II. Energy dependence in Ba*+O2→BaO*+O. Journal of Chemical Physics, 1991, 94, 4913-4920.	3.0	12
93	Energy dependence of the chemiluminescent Ba(6s5d 1D2)+O2→BaO*+O reaction. Chemical Physics Letters, 1989, 164, 5-11.	2.6	12
94	The luminescent channels of the reactions of Ba(1P1) and Ba(1D2) with water. Chemical Physics Letters, 1989, 156, 191-196.	2.6	13
95	Collision energy dependence of the chemiluminescent reaction: Ba+N2O→BaO+N2. Journal of Chemical Physics, 1988, 89, 1945-1949.	3.0	11
96	Reaction of barium atoms with N2O clusters. Journal of Chemical Physics, 1988, 88, 3081-3085.	3.0	15