

Marzio Rosi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3000552/publications.pdf>

Version: 2024-02-01

216
papers

4,521
citations

117453

34
h-index

149479

56
g-index

230
all docs

230
docs citations

230
times ranked

2712
citing authors

#	ARTICLE	IF	CITATIONS
1	Theoretical studies of the first- and second-row transition-metal mono- and dicarbonyl positive ions. <i>Journal of Chemical Physics</i> , 1990, 93, 609-624.	1.2	190
2	The binding energies of one and two water molecules to the first transition-row metal positive ions. <i>Journal of Chemical Physics</i> , 1989, 90, 7264-7272.	1.2	180
3	An ab initio study of $\text{Fe}(\text{CO})_n$, $n=1,5$, and $\text{Cr}(\text{CO})_6$. <i>Journal of Chemical Physics</i> , 1991, 94, 2031-2039.	1.2	140
4	The binding energies of one and two water molecules to the first transition-row metal positive ions. II. <i>Journal of Chemical Physics</i> , 1990, 92, 1876-1878.	1.2	119
5	pKa of zinc-bound water and nucleophilicity of hydroxo-containing species. Ab initio calculations on models for zinc enzymes. <i>Inorganic Chemistry</i> , 1990, 29, 1460-1463.	1.9	114
6	Theoretical Study of M^+CO_2 and $\text{OM}+\text{CO}$ Systems for First Transition Row Metal Atoms. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7854-7859.	1.1	112
7	Methane Activation by Metal-Free Radical Cations: Experimental Insight into the Reaction Intermediate. <i>Chemistry - A European Journal</i> , 2009, 15, 4248-4252.	1.7	108
8	Infrared Spectroscopy of Matrix-Isolated Polycyclic Aromatic Compounds and Their Ions. 6. Polycyclic Aromatic Nitrogen Heterocycles. <i>Journal of Physical Chemistry A</i> , 2003, 107, 1486-1498.	1.1	100
9	Combined Crossed Molecular Beam and Theoretical Studies of the $\text{N}(\text{D})_2 + \text{CH}_4$ Reaction and Implications for Atmospheric Models of Titan. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11138-11152.	1.1	90
10	Theoretical study of the bonding of the first- and second-row transition-metal positive ions to methylene. <i>The Journal of Physical Chemistry</i> , 1992, 96, 6969-6973.	2.9	80
11	Formation of nitriles and imines in the atmosphere of Titan: combined crossed-beam and theoretical studies on the reaction dynamics of excited nitrogen atoms $\text{N}(2\text{D})$ with ethane. <i>Faraday Discussions</i> , 2010, 147, 189.	1.6	79
12	Reactions of Laser-Ablated Scandium Atoms with Dioxygen. Infrared Spectra of ScO , OScO , $(\text{O}_2)\text{ScO}$, $(\text{ScO})_2$, and $\text{Sc}(\text{O}_2)_2$ in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9085-9091.	1.1	69
13	Gas-Phase Ion Chemistry of Borazine, an Inorganic Analogue of Benzene. <i>Journal of the American Chemical Society</i> , 1999, 121, 11204-11210.	6.6	63
14	COMPChem: Progress Towards GEMS a Grid Empowered Molecular Simulator and Beyond. <i>Journal of Grid Computing</i> , 2010, 8, 571-586.	2.5	63
15	Combined Crossed Beam and Theoretical Studies of the $\text{N}(\text{D})_2 + \text{C}_2\text{H}_4$ Reaction and Implications for Atmospheric Models of Titan. <i>Journal of Physical Chemistry A</i> , 2012, 116, 10467-10479.	1.1	58
16	On the binding energy of He_n^+ , for $n = 2-7$. <i>Chemical Physics Letters</i> , 1989, 159, 479-484.	1.2	51
17	A theoretical study of the low-lying states of Ti_2 and Zr_2 . <i>Journal of Chemical Physics</i> , 1991, 95, 1057-1063.	1.2	50
18	An ab initio study of the $\text{O}(1\text{D})+\text{HCl}$ reaction. <i>Journal of Chemical Physics</i> , 1996, 105, 2710-2718.	1.2	50

#	ARTICLE	IF	CITATIONS
19	Monocyclopentadienylchlorooxotitanium(IV) dimers, trimers and tetramers. <i>Journal of the Chemical Society Dalton Transactions</i> , 1992, , 1081.	1.1	49
20	Kinetic Energy Release in molecular dications fragmentation after VUV and EUV ionization and escape from planetary atmospheres. <i>Planetary and Space Science</i> , 2014, 99, 149-157.	0.9	49
21	Theoretical studies of the first- and second-row transition-metal dimethyls and their positive ions. <i>The Journal of Physical Chemistry</i> , 1990, 94, 8656-8663.	2.9	48
22	Molecular Batteries Based on Carbon-Carbon Bond Formation and Cleavage in Titanium and Vanadium Schiff Base Complexes. <i>Chemistry - A European Journal</i> , 1999, 5, 708-721.	1.7	48
23	Dimerization of methanimine and its charged species in the atmosphere of Titan and interstellar/cometary ice analogs. <i>Astronomy and Astrophysics</i> , 2015, 584, A76.	2.1	48
24	Interstellar dimethyl ether gas-phase formation: a quantum chemistry and kinetics study. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3567-3575.	1.6	48
25	Production of ions at high energy and its role in extraterrestrial environments. <i>Rendiconti Lincei</i> , 2013, 24, 53-65.	1.0	45
26	A high-level <i>ab initio</i> study of the $N_2 + N_2$ reaction channel. <i>Journal of Computational Chemistry</i> , 2013, 34, 2668-2676.	1.5	44
27	Silicon-bearing molecules in the shock L1157-B1: first detection of SiS around a Sun-like protostar. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 470, L16-L20.	1.2	44
28	Dissociative double photoionization of benzene molecules in the 26–33 eV energy range. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 8245.	1.3	41
29	Stereoselectivity in Autoionization Reactions of Hydrogenated Molecules by Metastable Noble Gas Atoms: The Role of Electronic Couplings. <i>Chemistry - A European Journal</i> , 2016, 22, 12518-12526.	1.7	41
30	Combined crossed beam and theoretical studies of the $C(1D) + CH_4$ reaction. <i>Journal of Chemical Physics</i> , 2013, 138, 024311.	1.2	40
31	On the bonding in Be^{2+} . <i>Chemical Physics Letters</i> , 1989, 159, 485-488.	1.2	39
32	Crossed-Beam Dynamics, Low-Temperature Kinetics, and Theoretical Studies of the Reaction $S(^1D) + C_2H_4$. <i>Journal of Physical Chemistry A</i> , 2009, 113, 15328-15345.	1.1	38
33	Experimental and Theoretical Approach to the Understanding of $TiCl_4$ Interacting with Arenes. Isolation of a d ⁰ -Metal-Arene Complex and Cyclotrimerization of But-2-yne Promoted by $TiCl_4$. <i>Inorganic Chemistry</i> , 1994, 33, 2018-2028.	1.9	35
34	Competitive solvation of K^+ by C_6H_6 and H_2O in the $K^+-(C_6H_6)_n-(H_2O)_m$ ($n=4$; $m=6$) aggregates. <i>European Physical Journal D</i> , 2013, 67, 1.	0.6	35
35	The intermolecular potential in NO^+N_2 and $(NO^+N_2)^+$ systems: implications for the neutralization of ionic molecular aggregates. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 5993.	1.3	34
36	Dissociative double photoionization of singly deuterated benzene molecules in the 26–33 eV energy range. <i>Journal of Chemical Physics</i> , 2011, 135, 144304.	1.2	34

#	ARTICLE	IF	CITATIONS
37	A Bond-Bond Portable Approach to Intermolecular Interactions: Simulations for N-methylacetamide and Carbon Dioxide Dimers. <i>Lecture Notes in Computer Science</i> , 2012, , 387-400.	1.0	34
38	Observation of organosulfur products (thiovinoyl, thioketene and thioformyl) in crossed-beam experiments and low temperature rate coefficients for the reaction S(1D) + C ₂ H ₄ . <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 4701.	1.3	33
39	Possible scenarios for SiS formation in the interstellar medium: Electronic structure calculations of the potential energy surfaces for the reactions of the SiH radical with atomic sulphur and S ₂ . <i>Chemical Physics Letters</i> , 2018, 695, 87-93.	1.2	33
40	Low temperature kinetics and theoretical studies of the reaction CN + CH ₃ NH ₂ : a potential source of cyanamide and methyl cyanamide in the interstellar medium. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5478-5489.	1.3	33
41	Modeling the Intermolecular Interactions and Characterization of the Dynamics of Collisional Autoionization Processes. <i>Lecture Notes in Computer Science</i> , 2013, , 69-83.	1.0	33
42	Ab initio calculations of the copper(2+)-O ₂ - interaction as a model for the mechanism of copper/zinc superoxide dismutase. <i>Inorganic Chemistry</i> , 1986, 25, 1005-1008.	1.9	32
43	Dissociative Ionization of Methyl Chloride and Methyl Bromide by Collision with Metastable Neon Atoms. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7505-7512.	1.1	32
44	Use of Norbornadiene in Solar Energy Storage: A Theoretical Study of a Copper(I) Photosensitizer for the Norbornadiene to Quadricyclane Transformation. <i>Inorganic Chemistry</i> , 1999, 38, 1520-1522.	1.9	32
45	Metal-Metal and Carbon-Carbon Bonds as Potential Components of Molecular Batteries. <i>Chemistry - A European Journal</i> , 2001, 7, 3052-3061.	1.7	32
46	Nanostructure Selectivity for Molecular Adsorption and Separation: the Case of Graphyne Layers. <i>Journal of Physical Chemistry C</i> , 2018, 122, 16195-16208.	1.5	32
47	On the bonding of La ⁺ and La ²⁺ to C ₂ H ₂ , C ₂ H ₄ , and C ₃ H ₆ . <i>Chemical Physics Letters</i> , 1990, 166, 189-194.	1.2	31
48	Changes in the Interaction Mode of Bridging μ_2 -C ₂ Units According to Transition Metal Parameters: A Theoretical Approach. <i>Organometallics</i> , 1996, 15, 4264-4273.	1.1	31
49	The vibrational frequencies of CaO ₂ , ScO ₂ , and TiO ₂ : a comparison of theoretical methods. <i>Theoretical Chemistry Accounts</i> , 1998, 99, 106-112.	0.5	31
50	Experimental Detection of Theoretically Predicted N ₂ CO. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 462-465.	7.2	31
51	Low temperature kinetics, crossed beam dynamics and theoretical studies of the reaction S(1D) + CH ₄ and low temperature kinetics of S(1D) + C ₂ H ₂ . <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 8485.	1.3	31
52	Second-Order Moeller-Plesset Perturbation Theory for Systems Involving First Transition Row Metals. <i>The Journal of Physical Chemistry</i> , 1994, 98, 9498-9502.	2.9	30
53	Crossed-Beam and Theoretical Studies of the S(¹ D) + C ₂ H ₂ Reaction. <i>Journal of Physical Chemistry A</i> , 2009, 113, 4330-4339.	1.1	28
54	On the electronic structure and bonding of the polynuclear aryl derivatives of the group IB metals Cu ₅ (C ₆ H ₅) ₅ , Ag ₄ (C ₆ H ₅) ₄ and Au ₅ (C ₆ H ₅) ₅ by density functional theory. <i>Chemical Physics Letters</i> , 1996, 257, 41-48.	1.2	27

#	ARTICLE	IF	CITATIONS
55	SSOH and HSSO Radicals: An Experimental and Theoretical Study of [S ₂ OH]O ₂ [±] Species. Journal of Physical Chemistry A, 2007, 111, 6526-6533.	1.1	27
56	The Proton Affinity and Gas-Phase Basicity of Sulfur Dioxide. ChemPhysChem, 2011, 12, 112-115.	1.0	27
57	The bis(methylcyclopentadienyl)titanium(IV) molybdate dimer: a titanium(IV)-molybdenum(VI) eight-membered metal-oxo ring. Inorganic Chemistry, 1991, 30, 3245-3246.	1.9	26
58	Anisotropy Effects in Methyl Chloride Ionization by Metastable Neon Atoms at Thermal Energies. Journal of Physical Chemistry A, 2000, 104, 1405-1415.	1.1	26
59	Interaction between iron(0) and heterocumulenes: "ab initio" calculations on the model compounds Fe(CO) ₂ (PH ₃) ₂ (.eta. ² -OCX) and Fe(CO) ₂ (PH ₃) ₂ (.eta. ² -SCX), with X = O, S, NH, CH ₂ . Inorganic Chemistry, 1987, 26, 3805-3811.	1.9	24
60	Electron momentum spectroscopy of trisubstituted amines: The valence shell orbitals of triethylamine. Chemical Physics, 1987, 116, 399-410.	0.9	24
61	A New Sulfur Oxide, OSOSO, and Its Cation, Likely Present in the Io's Atmosphere: Detection and Characterization by Mass Spectrometric and Theoretical Methods. Journal of the American Chemical Society, 2001, 123, 478-484.	6.6	24
62	A theoretical investigation of the reaction between the amidogen, NH, and the ethyl, C ₂ H ₅ , radicals: a possible gas-phase formation route of interstellar and planetary ethanimine. Molecular Astrophysics, 2018, 13, 30-37.	1.7	24
63	C-C Bond as Shuttle of Two Electrons in Intermolecular and Intramolecular Processes: A Theoretical Approach to Molecular Batteries. Chemistry - A European Journal, 1999, 5, 2914-2920.	1.7	23
64	Mechanisms for the incorporation of a nitrogen atom into polycyclic aromatic hydrocarbon cations. Chemical Physics Letters, 2001, 347, 473-480.	1.2	23
65	Water (H ₂ O) _m or Benzene (C ₆ H ₆) _n Aggregates to Solvate the K ⁺ and Na ⁺ Ions. Lecture Notes in Computer Science, 2013, , 1-15.	1.6	23
66	Orbital momentum distributions and binding energies for the complete valence shell of molecular chlorine by electron momentum spectroscopy. Chemical Physics, 1987, 113, 1-18.	1.0	23
67	Vanadium Hydroxide Cluster Ions in the Gas Phase: Bond-Forming Reactions of Doubly-Charged Negative Ions by SO ₂ -Promoted V=O Activation. Chemistry - A European Journal, 2017, 23, 11752-11756.	0.9	21
68	Ionization of fluoromethanes: CHF ₃ and CF ₄ . A Greens function study and an (e, 2e) spectroscopic investigation. Chemical Physics Letters, 1982, 90, 445-452.	1.7	21
69	A novel class of hexanuclear titanoxanes: synthesis, structure and electronic configuration. Journal of Organometallic Chemistry, 1995, 488, 141-154.	1.2	20
70	Mechanisms for the growth of polycyclic aromatic hydrocarbon (PAH) cations. Chemical Physics Letters, 2002, 355, 159-163.	0.8	20
71	Reactivity of C ₁₀ H ₇ ⁺ and C ₁₀ D ₇ ⁺ with H ₂ and D ₂ . Journal of Chemical Physics, 2004, 121, 6728-6737.	1.2	19
72			

#	ARTICLE	IF	CITATIONS
73	Theoretical Study of Reactions Relevant for Atmospheric Models of Titan: Interaction of Excited Nitrogen Atoms with Small Hydrocarbons. <i>Lecture Notes in Computer Science</i> , 2012, , 331-344.	1.0	19
74	Ionization potentials and electron momentum distributions for SiF ₄ valence-shell orbitals: an (e,2e) spectroscopic investigation and Green's function study. <i>Chemical Physics Letters</i> , 1986, 128, 67-75.	1.2	18
75	Study of the interaction between iron(0) and carbon dioxide, carbonyl sulphide and carbon disulphide: <i>ab initio</i> calculations on the model compounds Fe(CO) ₂ (PH ₃) ₂ (<i>η</i> -2-CO ₂), Fe(CO) ₂ (PH ₃) ₂ (<i>η</i> -2-COS), Fe(CO) ₂ (PH ₃) ₂ (<i>η</i> -2-CS ₂), and Fe(PH ₃) ₄ (<i>η</i> -2-CO ₂). <i>Journal of Organometallic Chemistry</i> , 1987, 332, 153-164.	0.8	18
76	A Theoretical Study of Dinitrogen Activation by Vanadium(II) and Vanadium(III): <i>Ab Initio</i> Calculations on Various Model Compounds. <i>Inorganic Chemistry</i> , 1994, 33, 4390-4397.	1.9	17
77	Charged and Neutral NO ₃ Isomers from the Ionization of NO _x and O ₃ Mixtures. <i>Chemistry - A European Journal</i> , 2002, 8, 5684-5693.	1.7	17
78	Potential energy surfaces in hyperspherical coordinates: <i>AB initio</i> kinetic paths for the O(3P)+H ₂ reaction. <i>Chemical Physics Letters</i> , 1989, 162, 179-184.	1.2	16
79	Gas-Phase Chemistry of NH _x Cl _y ⁺ . 1. Structure, Stability, and Reactivity of Protonated Monochloramine. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10189-10194.	1.1	16
80	A Theoretical Study of Formation Routes and Dimerization of Methanimine and Implications for the Aerosols Formation in the Upper Atmosphere of Titan. <i>Lecture Notes in Computer Science</i> , 2013, , 47-56.	1.0	16
81	Electronic Structure, Heisenberg Coupling Constants, and Metal~Metal Bond in Dimeric Iron(II) Organometallics with the Metal Centers at Variable Distances: A Density Functional Approach. <i>Inorganic Chemistry</i> , 1996, 35, 7776-7785.	1.9	15
82	Gaseous [H ₃ C~Cl~Cl] ⁺ Ions from the Reaction of Methane with Cl ₃ ⁺ , the First Example of a New Dihalogenation Process: Formation and Characterization of CH ₃ Cl ₂ ⁺ Isomers by Experimental and Theoretical Methods. <i>Chemistry - A European Journal</i> , 1999, 5, 2750-2756.	1.7	15
83	Ionization of Ozone/Chlorofluorocarbon Mixtures in Atmospheric Gases: Formation and Remarkable Dissociation of [CHXYO ₃] ⁺ Complexes (X= H, Cl, F; Y= Cl, F). <i>Chemistry - A European Journal</i> , 2000, 6, 2572-2581.	1.7	15
84	Formation of O ₃ ⁺ upon Ionization of O ₂ : The Role of Isomeric O ₄ ⁺ Complexes. <i>Chemistry - A European Journal</i> , 2002, 8, 3653.	1.7	15
85	Carbon Tetraoxide: Theoretically Predicted and Experimentally Detected. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 2985-2990.	7.2	15
86	Reactions of phenylum ions C ₆ (H,D) ₅ ⁺ with D ₂ . <i>Journal of Chemical Physics</i> , 2003, 119, 8366-8372.	1.2	15
87	A theoretical investigation of the copper-super-oxide system. A model for the mechanism of copper-zinc superoxide dismutase. <i>Inorganica Chimica Acta</i> , 1985, 107, L21-L22.	1.2	14
88	S ₃ O, a new sulfur oxide identified in the gas phase. <i>Chemical Communications</i> , 2001, , 2086-2087.	2.2	14
89	Sulfur hexafluoride corona discharge decomposition: gas-phase ion chemistry of SO _F ⁺ (x=1~3) ions. <i>Chemical Physics Letters</i> , 2003, 381, 168-176.	1.2	14
90	Experimental and theoretical investigation of the production of cations containing C~N bonds in the reaction of benzene with atomic nitrogen ions. <i>Journal of Chemical Physics</i> , 2003, 119, 1978-1985.	1.2	14

#	ARTICLE	IF	CITATIONS
91	Molecular Dynamics of CH ₄ /N ₂ Mixtures on a Flexible Graphene Layer: Adsorption and Selectivity Case Study. <i>Frontiers in Chemistry</i> , 2019, 7, 386.	1.8	14
92	Theoretical investigation of the energy dependence of photoionization cross-sections and angular distributions of photoemission of CH ₄ and CF ₄ . <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1986, 41, 439-452.	0.8	13
93	Theoretical Study of Dinitrogen Activation in Dinuclear V(II) and V(III) Hexacoordinated Complexes: Ab Initio Calculations on Various Model Compounds. <i>Inorganic Chemistry</i> , 1995, 34, 3410-3417.	1.9	13
94	Angular and energy distributions of fragment ions in dissociative double photoionization of acetylene molecules in the 31.9-50.0 eV photon energy range. <i>Journal of Chemical Physics</i> , 2016, 145, 114308.	1.2	13
95	Unsaturated Dinitriles Formation Routes in Extraterrestrial Environments: A Combined Experimental and Theoretical Investigation of the Reaction between Cyano Radicals and Cyanoethene (C ₂ H ₃ CN). <i>Journal of Physical Chemistry A</i> , 2022, 126, 3569-3582.	1.1	13
96	Addendum to σ on the bonding in Be ₂ . <i>Chemical Physics Letters</i> , 1990, 165, 501-502.	1.2	12
97	Theoretical study of the metathesis-like reaction between tungsten hexaalkoxides and alkynes. <i>Journal of the Chemical Society Dalton Transactions</i> , 1997, , 3845-3852.	1.1	12
98	Ionization of O ₃ in Excess N ₂ : A New Route to N ₂ O via Intermediate N ₂ O ₃ ⁺ Complexes. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 1938-1941.	7.2	12
99	Thionyl Fluoride from Sulfur Hexafluoride Corona Discharge Decomposition: σ Gas-Phase Chemistry of [SOF ₂] ⁺ H ⁺ Ions. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9261-9266.	1.1	12
100	The HSSS Radical and the HSSS ⁻ Anion. <i>Journal of Physical Chemistry A</i> , 2008, 112, 8471-8477.	1.1	12
101	An Experimental and Theoretical Investigation of 1-Butanol Pyrolysis. <i>Frontiers in Chemistry</i> , 2019, 7, 326.	1.8	12
102	A crossed molecular beam investigation of the N(² D) ⁺ Pyridine reaction and implications for prebiotic chemistry. <i>Chemical Physics Letters</i> , 2021, 779, 138852.	1.2	12
103	The Reaction N(² D) + CH ₃ CCH (Methylacetylene): A Combined Crossed Molecular Beams and Theoretical Investigation and Implications for the Atmosphere of Titan. <i>Journal of Physical Chemistry A</i> , 2021, 125, 8846-8859.	1.1	12
104	Structure of copper(II) complexes with L-leucyl-D- or L-leucyl-L-phenylalanine and molecular orbital calculations on their stabilization. <i>Journal of the Chemical Society Dalton Transactions</i> , 1996, , 3449.	1.1	11
105	An σ ab initio investigation of the electronic structure of ion-pair enolates NH ₂ COCH ₂ Li, PH ₂ COCH ₂ Li, C ₆ H ₅ COCH ₂ Li, C ₆ H ₅ SOCH ₂ Li: the influence of the heteroatom. <i>Computational and Theoretical Chemistry</i> , 1998, 431, 33-46.	1.5	11
106	Elemental Chlorine and Chlorine Fluoride: σ Theoretical and Experimental Proton Affinity and the Gas Phase Chemistry of Cl ₂ H ⁺ and FClH ⁺ Ions. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10560-10567.	1.1	11
107	Isotope Exchange in Ionized O ₃ /O ₂ Mixtures: The Role of O ₅ ⁺ , a Unique On ⁺ Complex. <i>Inorganic Chemistry</i> , 1998, 37, 1398-1400.	1.9	11
108	Ionization of Ozone/Chlorofluorocarbon Mixtures in Atmospheric Gases: Formation and Dissociation of [CHX ₂ O ₃] ⁺ Complexes (X=Cl, F). <i>Angewandte Chemie - International Edition</i> , 1999, 38, 2408-2410.	7.2	11

#	ARTICLE	IF	CITATIONS
109	Gas-phase reactions of protonated chlorine, Cl ₂ H ⁺ , with H ₂ (D ₂) and CH ₄ . A mass spectrometric and theoretical study. <i>Chemical Physics Letters</i> , 1999, 304, 191-196.	1.2	10
110	Gaseous Trihalogen Cations. Formation, Structure and Reactivity of Cl ₃ ⁺ and Cl ₂ F ⁺ Ions from a Joint ab Initio and FT-ICR Study. <i>Journal of Physical Chemistry A</i> , 1999, 103, 2128-2133.	1.1	10
111	Gas Phase Chemistry of NH _x Cl _y +Ions. II. Structure, Stability and Reactivity of Protonated Dichloramine. <i>Journal of Physical Chemistry A</i> , 2000, 104, 5617-5624.	1.1	10
112	Gas phase protonation of trifluoromethyl sulfur pentafluoride. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 1181.	1.3	10
113	The functionalization of (5, 5), (9, 0), and (10, 0) single wall carbon nanotubes by CH _n fragments. <i>Chemical Physics Letters</i> , 2007, 437, 99-103.	1.2	10
114	The Oxidation of Sulfur Dioxide by Single and Double Oxygen Transfer Paths. <i>ChemPhysChem</i> , 2014, 15, 2723-2731.	1.0	10
115	A Theoretical Investigation of the Reaction N(2D) ⁺ +C ₆ H ₆ and Implications for the Upper Atmosphere of Titan. <i>Lecture Notes in Computer Science</i> , 2018, , 763-772.	1.0	10
116	A Computational Study of the Reaction N(2D) ⁺ +C ₆ H ₆ Leading to Pyridine and Phenylnitrene. <i>Lecture Notes in Computer Science</i> , 2019, , 316-324.	1.0	10
117	Base-Assisted Conversion of Protonated D-Fructose to 5-HMF: Searching for Gas-Phase Green Models. <i>ChemistryOpen</i> , 2019, 8, 1190-1198.	0.9	10
118	Effective redox reactions by chromium oxide anions: Sulfur dioxide oxidation in the gas phase. <i>International Journal of Mass Spectrometry</i> , 2019, 436, 18-22.	0.7	10
119	The Italian National Project of Astrobiology "Life in Space" Origin, Presence, Persistence of Life in Space, from Molecules to Extremophiles. <i>Astrobiology</i> , 2020, 20, 580-582.	1.5	10
120	A theoretical study on the co-ordination of dinitrogen and related molecules to nickel(0): ab initio™ calculations on the model compounds [Ni(PH ₃) ₂ (N ₂)], [Ni(PH ₃) ₂ (N ₂ CH ₂)], and [Ni(PH ₃) ₂ (N ₂ H ₂)]. <i>Journal of the Chemical Society Dalton Transactions</i> , 1989, , 33-38.	1.1	9
121	On the relative stability of side-on and end-on coordination of dinitrogen to nickel (0): ab initio™ calculations on the model compounds [NiN ₂] and [Ni(PH ₃) ₂ N ₂]. <i>Chemical Physics Letters</i> , 1991, 185, 522-528.	1.2	9
122	Reactivity of Gaseous XeF ⁺ Ions with Acetonitrile. A Joint Mass Spectrometric and Theoretical Study of Isomeric C ₂ H ₃ NF ⁺ and C ₂ H ₃ NXe ⁺ Cations. <i>Journal of Physical Chemistry A</i> , 2000, 104, 7574-7579.	1.1	9
123	Reactions of N ⁺ ions with benzene: a theoretical study on the C ₆ NH ₆ ⁺ potential energy surface. <i>Chemical Physics</i> , 2004, 302, 295-308.	0.9	9
124	Gas-phase Ion Chemistry of BF ₃ /HN ₃ Mixtures: The First Observation of [BF _n N _x H _{n-1}] ⁺ (n= 1, 2;x= 1, 3) Ions. <i>Journal of Physical Chemistry B</i> , 2006, 110, 4492-4499.	1.2	9
125	Production and Characterization of Molecular Dications: Experimental and Theoretical Efforts. <i>Molecules</i> , 2020, 25, 4157.	1.7	9
126	Combined crossed molecular beams and computational study on the N(² D) ⁺ +HCCCN(X ¹ Σ ⁺) reaction and implications for extra-terrestrial environments. <i>Molecular Physics</i> , 2022, 120, .	0.8	9

#	ARTICLE	IF	CITATIONS
145	Reactivity of transition metal dioxide anions $MO_2^{\cdot-}$ ($M = Co, Ni, Cu, Zn$) with sulfur dioxide in the gas phase: An experimental and theoretical study. <i>Chemical Physics Letters</i> , 2021, 776, 138555.	1.2	7
146	A Computational Study on the Insertion of N(2D) into a C-H or C-C Bond: The Reactions of N(2D) with Benzene and Toluene and Their Implications on the Chemistry of Titan. <i>Lecture Notes in Computer Science</i> , 2020, , 744-755.	1.0	7
147	X ²⁺ studies on C 1s level photoionization cross sections and angular distributions for fluoromethanes. <i>Journal of Structural Chemistry</i> , 1989, 30, 147-148.	0.3	6
148	The σ - and π -bonding modes of a tetraanionic porphyrinogen ligand in zirconium(IV) complexes: a theoretical investigation. <i>Journal of the Chemical Society Dalton Transactions</i> , 1993, , 3759-3766.	1.1	6
149	Isotope Exchange in Ionised CO ₂ /CO Mixtures: The Role of Asymmetrical C ₂ O ₃ ⁺ Ions. <i>Chemistry - A European Journal</i> , 2004, 10, 6411-6421.	1.7	6
150	Reactions of N ⁺ ions with ethylene: a theoretical study on the addition mechanism into the olefin double bond. <i>Chemical Physics</i> , 2004, 297, 121-131.	0.9	6
151	Ionization of carbon disulfide/ozone mixtures in atmospheric gases. <i>Chemical Physics Letters</i> , 2005, 410, 377-383.	1.2	6
152	S ₃ O and S ₃ O ⁺ in the gas phase: ring and open-chain structures. <i>Chemical Communications</i> , 2006, , 4416.	2.2	6
153	Linking Ion and Neutral Chemistry in C ₂ H Bond Electrophilic Activation: Generation and Detection of HO ₂ [•] Reactive Radicals in the Gas Phase. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1455-1458.	7.2	6
154	Angular Distribution of Ion Products in the Double Photoionization of Propylene Oxide. <i>Frontiers in Chemistry</i> , 2019, 7, 621.	1.8	6
155	A Computational Study on the Attack of Nitrogen and Oxygen Atoms to Toluene. <i>Lecture Notes in Computer Science</i> , 2021, , 620-631.	1.0	6
156	Gas-Phase TiO ₂ Photosensitized Mineralization of Some VOCs: Mechanistic Suggestions through a Langmuir-Hinshelwood Kinetic Approach. <i>Catalysts</i> , 2021, 11, 20.	1.6	6
157	Gaseous Cl ₃ ⁺ and Cl ₂ F ⁺ cations. a joint mass spectrometric and theoretical study. <i>Rapid Communications in Mass Spectrometry</i> , 1998, 12, 1911-1913.	0.7	5
158	An 'ab initio' investigation of the electronic structure of ion-pair enolates NH ₂ COCH ₂ CuPH ₃ , PH ₂ COCH ₂ CuPH ₃ , C ₆ H ₅ COCH ₂ CuPH ₃ , C ₆ H ₅ SOCH ₂ CuPH ₃ : the influence of the heteroatom. Part III. <i>Computational and Theoretical Chemistry</i> , 1999, 459, 57-65.	1.5	5
159	The Diphosphate Monoanion in the Gas Phase: A Joint Mass Spectrometric and Theoretical Study. <i>Chemistry - A European Journal</i> , 2004, 10, 840-850.	1.7	5
160	Gas-Phase Ion Chemistry of BF ₃ /NH ₃ Mixtures. <i>Journal of Physical Chemistry A</i> , 2006, 110, 12427-12433.	1.1	5
161	Effect of Alkali Metal Coordination on Gas-Phase Chemistry of the Diphosphate Ion: The MH ₂ P ₂ O ₇ ⁻ Ions. <i>Chemistry - A European Journal</i> , 2006, 12, 2787-2797.	1.7	5
162	The Oxidative Mechanism in Electrophilic C ₂ H Activation: The Case of CH ₂ F ₂ and CH ₂ Cl ₂ . <i>Chemistry - an Asian Journal</i> , 2013, 8, 588-595.	1.7	5

#	ARTICLE	IF	CITATIONS
163	Iron-formaldehyde interaction: \tilde{ab} initio calculations on the model compounds $[\text{Fe}(\text{CO})_4(\text{i-2-CH}_2\text{O})_n]$ ($n = 0, 2, \text{ or } 4$). <i>Journal of the Chemical Society Dalton Transactions</i> , 1988, , 321-327.	1.1	4
164	A theoretical study of C-H activation by LCu^+ and LCu_2^+ complexes. <i>Computational and Theoretical Chemistry</i> , 1993, 284, 95-106.	1.5	4
165	Oligomerization of the $\text{PH}_3\text{Cu-Cu-PH}_3$ Acetylide toward the Formation of $(\text{PH}_3\text{Cu})_n$ ($n = 4, 6, 8$) Metal Carbides: A Theoretical Study Based on Density Functional Theory. <i>Inorganic Chemistry</i> , 1997, 36, 2018-2022.	1.9	4
166	An ab initio investigation of the electronic structure of ion-pair enolates $\text{NH}_2\text{COCH}_2\text{TiF}_3$, $\text{PH}_2\text{COCH}_2\text{TiF}_3$, $\text{C}_6\text{H}_5\text{COCH}_2\text{TiF}_3$, $\text{C}_6\text{H}_5\text{SOCH}_2\text{TiF}_3$: the influence of the heteroatom. Part II. <i>Computational and Theoretical Chemistry</i> , 1999, 459, 47-55.	1.5	4
167	Ionization of O_3 in Excess N_2 : A New Route to N_2O via Intermediate N_2O_3^+ Complexes. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2947-2947.	7.2	4
168	Using hydrogen and chlorine on $\text{Si}(111)$ to store data, an improved model. <i>Chemical Physics Letters</i> , 2001, 347, 291-296.	1.2	4
169	A theoretical analysis of $[\text{M}(\text{tmtaa})]$ and $[\text{M}(\text{acacen})]$ fragments employed in the organometallic chemistry of early transition metals. <i>Journal of Organometallic Chemistry</i> , 2002, 648, 14-26.	0.8	4
170	Carbon Tetraoxide: Theoretically Predicted and Experimentally Detected. <i>Angewandte Chemie</i> , 2003, 115, 3093-3098.	1.6	4
171	All the 2p-block elements in a molecule: experimental and theoretical studies of FBNCO and FBNCO^+ . <i>Chemical Communications</i> , 2014, 50, 13900-13903.	2.2	4
172	Angular Distributions of Fragment Ions Produced by Coulomb Explosion of Simple Molecular Dications of Astrochemical Interest. <i>Lecture Notes in Computer Science</i> , 2015, , 291-307.	1.0	4
173	Electronic Structure and Kinetics Calculations for the $\text{Si}+\text{SH}$ Reaction, a Possible Route of SiS Formation in Star-Forming Regions. <i>Lecture Notes in Computer Science</i> , 2019, , 306-315.	1.0	4
174	Study of relative stabilities of the intermediates in catalytic carbon monoxide hydrogenation reactions: ab initio calculations on the model compounds $[\text{Fe}(\text{CO})_2(\text{PH}_3)_2\text{H}_2]$, $[\text{Fe}(\text{CO})_2(\text{PH}_3)_2(\text{CHO})\text{H}]$, $[\text{Fe}(\text{CO})_2(\text{PH}_3)_2(\text{CH}_2\text{O})]$, and $[\text{Fe}(\text{CO})(\text{PH}_3)_2(\text{CHO})_2]$. <i>Journal of the Chemical Society Dalton Transactions</i> , 1988, , 249.	1.1	3
175	Theoretical study of the spectroscopy of Al_2^+ . <i>Chemical Physics</i> , 1991, 151, 1-9.	0.9	3
176	A density functional investigation on the structural and electronic properties of niobium-silsesquioxane and niobium-2,2-thiobisphenolic frameworks as models of an oxo surface. <i>Computational and Theoretical Chemistry</i> , 2002, 579, 181-189.	1.5	3
177	Formation of Nitrogen-Bearing Organic Molecules in the Reaction $\text{NH}+\text{C}_2\text{H}_5$: A Theoretical Investigation and Main Implications for Prebiotic Chemistry in Space. <i>Lecture Notes in Computer Science</i> , 2018, , 773-782.	1.0	3
178	The Fragmentation Dynamics of Simple Organic Molecules of Astrochemical Interest Interacting with VUV Photons. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1862-1872.	1.2	3
179	A Computational Study of the Reaction Cyanoacetylene and Cyano Radical Leading to 2-Butynedinitrile and Hydrogen Radical. <i>Lecture Notes in Computer Science</i> , 2020, , 707-716.	1.0	3
180	A Theoretical Investigation of the Reactions of $\text{N}(2\text{D})$ with Small Alkynes and Implications for the Prebiotic Chemistry of Titan. <i>Lecture Notes in Computer Science</i> , 2020, , 717-729.	1.0	3

#	ARTICLE	IF	CITATIONS
181	Theoretical and Experimental Study of the Energy and Structure of Fragment Ions Produced by Double Photoionization of Benzene Molecules. <i>Lecture Notes in Computer Science</i> , 2012, , 316-330.	1.0	3
182	Semiempirical Potential in Kinetics Calculations on the HC ₃ N + CN Reaction. <i>Molecules</i> , 2022, 27, 2297.	1.7	3
183	Correlation effects and the metal–ligand bond length in Cr(NO) ₄ . <i>Journal of the Chemical Society Chemical Communications</i> , 1986, , 438-439.	2.0	2
184	Study of the interaction between iron(0) and dinitrogen: <i>ab initio</i> calculations on the model compound Fe(PH ₃) ₄ (N ₂). <i>Journal of Organometallic Chemistry</i> , 1988, 348, C27-C32.	0.8	2
185	Phenylum and naphylum cations in the interstellar medium: a density functional study on their reactivity towards D ₂ molecules. <i>Future Generation Computer Systems</i> , 2004, 20, 807-819.	4.9	2
186	Direct Experimental Observation of CS ₂ OH. <i>ChemPhysChem</i> , 2006, 7, 2352-2357.	1.0	2
187	Experimental and Theoretical Evidence for HS ₄ . <i>Journal of Physical Chemistry A</i> , 2009, 113, 14420-14423.	1.1	2
188	A Theoretical and Computational Approach to a Semi-classical Model for Electron Spectroscopy Calculations in Collisional Autoionization Processes. <i>Lecture Notes in Computer Science</i> , 2016, , 258-272.	1.0	2
189	A Theoretical Investigation of the Reaction H+SiS ₂ and Implications for the Chemistry of Silicon in the Interstellar Medium. <i>Lecture Notes in Computer Science</i> , 2018, , 719-729.	1.0	2
190	Long-Range Complex in the HC ₃ N + CN Potential Energy Surface: Ab Initio Calculations and Intermolecular Potential. <i>Lecture Notes in Computer Science</i> , 2021, , 413-425.	1.0	2
191	Double Photoionization of Simple Molecules of Astrochemical Interest. <i>Lecture Notes in Computer Science</i> , 2018, , 746-762.	1.0	2
192	A density functional investigation on d ⁰ -Zr(IV) organometallic fragments. <i>Chemical Physics Letters</i> , 2001, 344, 536-542.	1.2	1
193	A theoretical approach to a chemical system convertible into a storage cell: carbon-carbon bonds functioning as electron donor and electron acceptor units. <i>Journal of Molecular Catalysis A</i> , 2003, 204-205, 787-792.	4.8	1
194	Discovery of the New Metastable HONF. Radical. <i>ChemPhysChem</i> , 2004, 5, 503-508.	1.0	1
195	CS ₂ O ⁺ and CS ₂ O in the gas phase: An experimental and computational study. <i>Journal of Chemical Physics</i> , 2005, 123, 164307.	1.2	1
196	Quantum vs Semiclassical Dynamics Approaches from highly symmetric to asymmetric reactions. , 2007, , .		1
197	A Theoretical Investigation of 1-Butanol Unimolecular Decomposition. <i>Lecture Notes in Computer Science</i> , 2015, , 384-393.	1.0	1
198	Monocyclic and bicyclic CO ₄ : how stable are they?. <i>RSC Advances</i> , 2015, 5, 91581-91586.	1.7	1

#	ARTICLE	IF	CITATIONS
199	Isomerization Pathways of ONCNO: Unstable or Metastable?. Journal of Physical Chemistry A, 2016, 120, 4812-4817.	1.1	1
200	Analytical Potential Energy Formulation for a New Theoretical Approach in Penning Ionization. Lecture Notes in Computer Science, 2019, , 291-305.	1.0	1
201	Methane Production from H ₂ + CO ₂ Reaction: An Open Molecular Science Case for Computational and Experimental Studies. Physchem, 2021, 1, 82-94.	0.5	1
202	Theoretical Investigations on the Reactions of C ₆ H ₅ + and C ₁₀ H ₇ + with D ₂ . Lecture Notes in Computer Science, 2003, , 366-375.	1.0	1
203	Theoretical and Computational Analysis at a Quantum State Level of Autoionization Processes in Astrochemistry. Lecture Notes in Computer Science, 2020, , 693-706.	1.0	1
204	A Theoretical Study on the Relevance of Protonated and Ionized Species of Methanimine and Methanol in Astrochemistry. Lecture Notes in Computer Science, 2016, , 296-308.	1.0	1
205	Theoretical study of fluoromethane photoionization cross sections and angular distributions. Journal of Structural Chemistry, 1989, 30, 66-71.	0.3	0
206	"Ab initio" calculations on a novel mode for storing and releasing electrons via carbon-carbon bond formation and cleavage. Inorganic Chemistry, 1992, 31, 5364-5367.	1.9	0
207	On the design of a planar oxo matrix for binding transition metals: a density functional approach. Computational and Theoretical Chemistry, 2002, 583, 73-79.	1.5	0
208	C ₆ NH ₆ ⁺ Ions as Intermediates in the Reaction between Benzene and Na ⁺ Ions. Lecture Notes in Computer Science, 2004, , 412-421.	1.0	0
209	A theoretical approach to molecular batteries: C ₁ -C bonds functioning as electron shuttles. Future Generation Computer Systems, 2004, 20, 793-805.	4.9	0
210	Theoretical Investigations of Atmospheric Species Relevant for the Search of High-Energy Density Materials. Lecture Notes in Computer Science, 2005, , 1101-1110.	1.0	0
211	Ionization of carbonyl sulphide/disulphur monoxide mixtures in atmospheric gases: A theoretical study of the formation of S ₃ O ⁺ ions. Computational and Theoretical Chemistry, 2007, 822, 153-157.	1.5	0
212	The azido oxide N ₃ O. Chemical Physics, 2012, 398, 129-133.	0.9	0
213	Editorial: Reaction Dynamics Involving Ions, Radicals, Neutral and Excited Species. Frontiers in Chemistry, 2019, 7, 859.	1.8	0
214	Free-Methane - from the Ionosphere of Mars Towards a Prototype Methanation Reactor: A Project Producing Fuels via Plasma Assisted Carbon Dioxide Hydrogenation. Lecture Notes in Computer Science, 2021, , 594-607.	1.0	0
215	Density Functional Investigations on the C-C Bond Formation and Cleavage in Molecular Batteries. Lecture Notes in Computer Science, 2003, , 376-385.	1.0	0
216	A Theoretical Investigation of the Reaction Between Glycolaldehyde and H ⁺ and Implications for the Organic Chemistry of Star Forming Regions. Lecture Notes in Computer Science, 2020, , 730-743.	1.0	0