

Michael Gatchell

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

78
papers

976
citations

18
h-index

28
g-index

86
ext. papers

1,142
ext. citations

3.3
avg, IF

4.15
L-index

#	Paper	IF	Citations
78	First storage of ion beams in the Double Electrostatic Ion-Ring Experiment: DESIREE. <i>Review of Scientific Instruments</i> , 2013 , 84, 055115	1.7	92
77	Formations of dumbbell C118 and C119 inside clusters of C60 molecules by collision with H ⁺ particles. <i>Physical Review Letters</i> , 2013 , 110, 185501	7.4	54
76	Molecular Growth Inside of Polycyclic Aromatic Hydrocarbon Clusters Induced by Ion Collisions. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1536-42	6.4	51
75	Nonstatistical fragmentation of large molecules. <i>Physical Review A</i> , 2014 , 89,	2.6	49
74	Knockout driven reactions in complex molecules and their clusters. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016 , 49, 162001	1.3	43
73	Formation of H ₂ from internally heated polycyclic aromatic hydrocarbons: excitation energy dependence. <i>Journal of Chemical Physics</i> , 2015 , 142, 144305	3.9	37
72	Highly Charged Droplets of Superfluid Helium. <i>Physical Review Letters</i> , 2019 , 123, 165301	7.4	34
71	Non-statistical fragmentation of PAHs and fullerenes in collisions with atoms. <i>International Journal of Mass Spectrometry</i> , 2014 , 365-366, 260-265	1.9	32
70	Absolute fragmentation cross sections in atom-molecule collisions: scaling laws for non-statistical fragmentation of polycyclic aromatic hydrocarbon molecules. <i>Journal of Chemical Physics</i> , 2014 , 140, 224306	3.9	32
69	Failure of hydrogenation in protecting polycyclic aromatic hydrocarbons from fragmentation. <i>Physical Review A</i> , 2015 , 92,	2.6	30
68	Formation dynamics of fullerene dimers C118+, C119+, and C120+. <i>Physical Review A</i> , 2014 , 89,	2.6	26
67	Rotationally Cold OH ⁻ Ions in the Cryogenic Electrostatic Ion-Beam Storage Ring DESIREE. <i>Physical Review Letters</i> , 2017 , 119, 073001	7.4	25
66	Fragmentation of anthracene C ₁₀ H ₈ ⁺ , acridine C ₁₃ H ₉ ⁺ and phenazine C ₁₂ H ₈ ⁺ ions in collisions with atoms. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 21980-7	3.6	24
65	Isomeric Broadening of C Electronic Excitation in Helium Droplets: Experiments Meet Theory. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 1237-1242	6.4	23
64	Threshold energies for single-carbon knockout from polycyclic aromatic hydrocarbons. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 4504-9	6.4	23
63	Solvation of ions in helium. <i>International Reviews in Physical Chemistry</i> , 2020 , 39, 465-516	7	21
62	C60+ as a diffuse interstellar band carrier; a spectroscopic story in 6 acts. <i>Journal of Molecular Spectroscopy</i> , 2020 , 367, 111243	1.3	20

61	Ions colliding with clusters of fullerenes--decay pathways and covalent bond formations. <i>Journal of Chemical Physics</i> , 2013 , 139, 034309	3.9	19
60	Spontaneous decay of small copper-cluster anions $Cu_n^-(n=3-8)$, on long time scales. <i>Physical Review A</i> , 2017 , 95,	2.6	18
59	Lithium ions solvated in helium. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 25569-25576	3.6	18
58	Ions interacting with planar aromatic molecules: modeling electron transfer reactions. <i>Journal of Chemical Physics</i> , 2013 , 138, 054306	3.9	17
57	Ions colliding with mixed clusters of C60 and coronene: Fragmentation and bond formation. <i>Physical Review A</i> , 2014 , 90,	2.6	14
56	A precedent of van-der-Waals interactions outmatching Coulomb explosion. <i>Carbon</i> , 2016 , 109, 843-850	10.4	14
55	Spectroscopy of corannulene cations in helium nanodroplets. <i>Faraday Discussions</i> , 2019 , 217, 276-289	3.6	13
54	Isomer effects in fragmentation of Polycyclic Aromatic Hydrocarbons. <i>International Journal of Mass Spectrometry</i> , 2015 , 392, 58-62	1.9	13
53	Dimethylsilanone Generation from Pyrolysis of Polysiloxanes Filled with Nanosized Silica and Ceria/Silica. <i>ChemPlusChem</i> , 2016 , 81, 1003-1013	2.8	13
52	The structure of coronene cluster ions inferred from H uptake in the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27968-27973	3.6	11
51	Disc scalelengths out to redshift 5.8. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2012 , 423, L112-L116	4.3	11
50	Magic sizes of cationic and protonated argon clusters. <i>Physical Review A</i> , 2018 , 98,	2.6	11
49	The adsorption of helium atoms on small cationic gold clusters. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 9554-9560	3.6	10
48	Hydrogenated pyrene: Statistical single-carbon loss below the knockout threshold. <i>European Physical Journal D</i> , 2016 , 70, 1	1.3	10
47	Radiative cooling of carbon cluster anions $C_{2n+1}^-(n = 3-8)$. <i>European Physical Journal D</i> , 2020 , 74, 1	1.3	9
46	Decays of excited silver-cluster anions Ag_n^- , $n=4$ to 7, in the Double ElectroStatic Ion Ring Experiment. <i>Physical Review A</i> , 2018 , 98,	2.6	9
45	Hydrogenated Gold Clusters from Helium Nanodroplets: Cluster Ionization and Affinities for Protons and Hydrogen Molecules. <i>Journal of the American Society for Mass Spectrometry</i> , 2019 , 30, 1906-1913	3.5	8
44	Shock-driven formation of covalently bound carbon nanoparticles from ion collisions with clusters of C60 fullerenes. <i>Carbon</i> , 2018 , 129, 766-774	10.4	8

43	Roadmap on dynamics of molecules and clusters in the gas phase. <i>European Physical Journal D</i> , 2021 , 75, 1	1.3	8
42	Formation of positive and negative clusters of gold atoms inside helium nanodroplets close to zero K. <i>International Journal of Mass Spectrometry</i> , 2018 , 434, 136-141	1.9	8
41	Ion-induced molecular growth in clusters of small hydrocarbon chains. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 19665-19672	3.6	7
40	Protonated and Cationic Helium Clusters. <i>Molecules</i> , 2020 , 25,	4.8	7
39	Complexes of gold and imidazole formed in helium nanodroplets. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 7739-7745	3.6	7
38	Ion collision-induced chemistry in pure and mixed loosely bound clusters of coronene and C molecules. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 15052-15060	3.6	7
37	Protonated Clusters of Neon and Krypton. <i>Journal of the American Society for Mass Spectrometry</i> , 2019 , 30, 2632-2636	3.5	7
36	Atomic Gold Ions Clustered with Noble Gases: Helium, Neon, Argon, Krypton, and Xenon. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 9505-9513	2.8	7
35	Multiple electron capture, excitation, and fragmentation in C ₆₀ +C ₆₀ collisions. <i>Physical Review A</i> , 2014 , 90,	2.6	7
34	Multiply Charged Helium Droplet Anions. <i>Chemistry - A European Journal</i> , 2021 , 27, 7283-7287	4.8	7
33	DESIREE electrospray ion source test bench and setup for collision induced dissociation experiments. <i>Review of Scientific Instruments</i> , 2018 , 89, 075102	1.7	5
32	Isotope enrichment in neon clusters grown in helium nanodroplets. <i>Journal of Chemical Physics</i> , 2020 , 153, 164305	3.9	5
31	Considerable matrix shift in the electronic transitions of helium-solvated cesium dimer cation CsHe. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 25362-25368	3.6	5
30	The threshold displacement energy of buckminsterfullerene C ₆₀ and formation of the endohedral defect fullerene He@C ₅₉ . <i>Carbon</i> , 2018 , 139, 906-912	10.4	4
29	Spontaneous decay of small copper cluster anions, Cu _N ⁻ = 3-6. <i>Journal of Physics: Conference Series</i> , 2015 , 635, 072090	0.3	4
28	Ionization and fragmentation of cold clusters of PAH molecules collisions with keV ions. <i>Journal of Physics: Conference Series</i> , 2012 , 388, 012051	0.3	4
27	Splashing of Large Helium Nanodroplets upon Surface Collisions.. <i>Physical Review Letters</i> , 2021 , 127, 263401	7.4	4
26	Large expert-curated database for benchmarking document similarity detection in biomedical literature search. <i>Database: the Journal of Biological Databases and Curation</i> , 2019 , 2019,	5	4

25	Hydrogenated gold clusters from helium nanodroplets: displacement of H ₂ by H ₂ O. <i>European Physical Journal D</i> , 2020 , 74, 1	1.3	2
24	Knockout driven fragmentation of porphyrins. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 19750-19756	5.6	2
23	Survival of polycyclic aromatic hydrocarbon knockout fragments in the interstellar medium. <i>Nature Communications</i> , 2021 , 12, 6646	17.4	2
22	Going large(r): general discussion. <i>Faraday Discussions</i> , 2019 , 217, 476-513	3.6	1
21	First results from the Double ElectroStatic Ion-Ring ExpERiment, DESIREE. <i>Journal of Physics: Conference Series</i> , 2014 , 488, 092003	0.3	1
20	Commissioning of the DESIREE storage rings in a new facility for cold ion-ion collisions. <i>Journal of Physics: Conference Series</i> , 2014 , 488, 012040	0.3	1
19	Rotationally cold (> 99% J = 0) OH ⁺ molecular ions in a cryogenic storage ring. <i>Journal of Physics: Conference Series</i> , 2017 , 875, 012016	0.3	1
18	DESIREE: Physics with cold stored ion beams. <i>EPJ Web of Conferences</i> , 2015 , 84, 01004	0.3	1
17	Ion-Induced Reactivity in Pyrene Clusters. <i>Journal of Physics: Conference Series</i> , 2015 , 583, 012011	0.3	1
16	Non-statistical fragmentation of large molecules in collisions with atoms. <i>Journal of Physics: Conference Series</i> , 2015 , 635, 012036	0.3	1
15	Molecular dynamics studies of impulse driven reactions in molecules and molecular clusters. <i>Journal of Physics: Conference Series</i> , 2015 , 635, 032043	0.3	1
14	H ₂ formation from Polycyclic Aromatic Hydrocarbon molecules. <i>Journal of Physics: Conference Series</i> , 2015 , 635, 032081	0.3	1
13	Mixed cationic clusters of nitrogen and hydrogen. <i>Journal of Chemical Physics</i> , 2020 , 152, 014303	3.9	1
12	Ions colliding with polycyclic aromatic hydrocarbon clusters. <i>Physica Scripta</i> , 2013 , T156, 014062	2.6	0
11	Negative ion relaxation and reactions in a cryogenic storage ring. <i>Journal of Physics: Conference Series</i> , 2020 , 1412, 062006	0.3	0
10	Ionization of large helium nanodroplets. <i>Journal of Physics: Conference Series</i> , 2020 , 1412, 122019	0.3	
9	Non-statistical fragmentation of C ₆₀ and the formation of endohedral defect fullerenes. <i>Journal of Physics: Conference Series</i> , 2020 , 1412, 202032	0.3	
8	Pushing resolution in frequency and time: general discussion. <i>Faraday Discussions</i> , 2019 , 217, 290-321	3.6	

- 7 Exotic systems: general discussion. *Faraday Discussions*, **2019**, 217, 601-622 3.6
- 6 Modeling electron and energy transfer processes in collisions between ions and Polycyclic Aromatic Hydrocarbon molecules. *Journal of Physics: Conference Series*, **2014**, 488, 102015 0.3
- 5 Bond formation in C+59 C₆₀ collisions. *Journal of Physics: Conference Series*, **2014**, 488, 012028 0.3
- 4 Fragmentation studies of Hydrogenated-Pyrene Polycyclic Aromatic Hydrocarbons in collisions with He. *Journal of Physics: Conference Series*, **2015**, 635, 022020 0.3
- 3 Radiative cooling of hot C_n and C_nH_m molecules. *Journal of Physics: Conference Series*, **2015**, 635, 112124 0.3
- 2 Collision Induced Dissociation of PAHs and Biomolecules. *Journal of Physics: Conference Series*, **2015**, 635, 022045 0.3
- 1 Fusion reaction dynamics of fullerene molecules. *Journal of Physics: Conference Series*, **2015**, 635, 032093 0.3