

# Michael Gatchell

## List of Publications by Year in Descending Order

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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	Splashing of Large Helium Nanodroplets upon Surface Collisions.. <i>Physical Review Letters</i> , <b>2021</b> , 127, 263401	7.4	4
77	Survival of polycyclic aromatic hydrocarbon knockout fragments in the interstellar medium. <i>Nature Communications</i> , <b>2021</b> , 12, 6646	17.4	2
76	Multiply Charged Helium Droplet Anions. <i>Chemistry - A European Journal</i> , <b>2021</b> , 27, 7283-7287	4.8	7
75	Roadmap on dynamics of molecules and clusters in the gas phase. <i>European Physical Journal D</i> , <b>2021</b> , 75, 1	1.3	8
74	Ionization of large helium nanodroplets. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1412, 122019	0.3	
73	Non-statistical fragmentation of C60 and the formation of endohedral defect fullerenes. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1412, 202032	0.3	
72	Protonated and Cationic Helium Clusters. <i>Molecules</i> , <b>2020</b> , 25,	4.8	7
71	Hydrogenated gold clusters from helium nanodroplets: displacement of H2 by H2O. <i>European Physical Journal D</i> , <b>2020</b> , 74, 1	1.3	2
70	C60+ as a diffuse interstellar band carrier; a spectroscopic story in 6 acts. <i>Journal of Molecular Spectroscopy</i> , <b>2020</b> , 367, 111243	1.3	20
69	Mixed cationic clusters of nitrogen and hydrogen. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 014303	3.9	1
68	Radiative cooling of carbon cluster anions C <sub>2n+1</sub> <sup>-</sup> (n = 3B). <i>European Physical Journal D</i> , <b>2020</b> , 74, 1	1.3	9
67	Negative ion relaxation and reactions in a cryogenic storage ring. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1412, 062006	0.3	0
66	Isotope enrichment in neon clusters grown in helium nanodroplets. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 164305	3.9	5
65	Solvation of ions in helium. <i>International Reviews in Physical Chemistry</i> , <b>2020</b> , 39, 465-516	7	21
64	Spectroscopy of corannulene cations in helium nanodroplets. <i>Faraday Discussions</i> , <b>2019</b> , 217, 276-289	3.6	13
63	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> , <b>2019</b> , 30, 1906-1913	3.5	8
62	Going large(r): general discussion. <i>Faraday Discussions</i> , <b>2019</b> , 217, 476-513	3.6	1

61	Pushing resolution in frequency and time: general discussion. <i>Faraday Discussions</i> , <b>2019</b> , 217, 290-321	3.6	
60	Exotic systems: general discussion. <i>Faraday Discussions</i> , <b>2019</b> , 217, 601-622	3.6	
59	Highly Charged Droplets of Superfluid Helium. <i>Physical Review Letters</i> , <b>2019</b> , 123, 165301	7.4	34
58	Protonated Clusters of Neon and Krypton. <i>Journal of the American Society for Mass Spectrometry</i> , <b>2019</b> , 30, 2632-2636	3.5	7
57	Atomic Gold Ions Clustered with Noble Gases: Helium, Neon, Argon, Krypton, and Xenon. <i>Journal of Physical Chemistry A</i> , <b>2019</b> , 123, 9505-9513	2.8	7
56	Large expert-curated database for benchmarking document similarity detection in biomedical literature search. <i>Database: the Journal of Biological Databases and Curation</i> , <b>2019</b> , 2019,	5	4
55	Considerable matrix shift in the electronic transitions of helium-solvated cesium dimer cation CsHe. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 25362-25368	3.6	5
54	Isomeric Broadening of C Electronic Excitation in Helium Droplets: Experiments Meet Theory. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 1237-1242	6.4	23
53	Complexes of gold and imidazole formed in helium nanodroplets. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 7739-7745	3.6	7
52	Shock-driven formation of covalently bound carbon nanoparticles from ion collisions with clusters of C <sub>60</sub> fullerenes. <i>Carbon</i> , <b>2018</b> , 129, 766-774	10.4	8
51	Ion collision-induced chemistry in pure and mixed loosely bound clusters of coronene and C molecules. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 15052-15060	3.6	7
50	The adsorption of helium atoms on small cationic gold clusters. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 9554-9560	3.6	10
49	The threshold displacement energy of buckminsterfullerene C <sub>60</sub> and formation of the endohedral defect fullerene He@C <sub>59</sub> . <i>Carbon</i> , <b>2018</b> , 139, 906-912	10.4	4
48	DESIREE electrospray ion source test bench and setup for collision induced dissociation experiments. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 075102	1.7	5
47	Lithium ions solvated in helium. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 25569-25576	3.6	18
46	Formation of positive and negative clusters of gold atoms inside helium nanodroplets close to zero K. <i>International Journal of Mass Spectrometry</i> , <b>2018</b> , 434, 136-141	1.9	8
45	Magic sizes of cationic and protonated argon clusters. <i>Physical Review A</i> , <b>2018</b> , 98,	2.6	11
44	Decays of excited silver-cluster anions Ag <sub>n</sub> , n=4 to 7, in the Double ElectroStatic Ion Ring Experiment. <i>Physical Review A</i> , <b>2018</b> , 98,	2.6	9

43	Ion-induced molecular growth in clusters of small hydrocarbon chains. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 19665-19672	3.6	7
42	The structure of coronene cluster ions inferred from H uptake in the gas phase. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 27968-27973	3.6	11
41	Spontaneous decay of small copper-cluster anions $Cu_n^-(n=3-8)$ , on long time scales. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	18
40	Knockout driven fragmentation of porphyrins. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 19750-19756	3.6	2
39	Rotationally Cold $OH^+$ Ions in the Cryogenic Electrostatic Ion-Beam Storage Ring DESIREE. <i>Physical Review Letters</i> , <b>2017</b> , 119, 073001	7.4	25
38	Rotationally cold ( $> 99\% J = 0$ ) $OH^+$ molecular ions in a cryogenic storage ring. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 875, 012016	0.3	1
37	Hydrogenated pyrene: Statistical single-carbon loss below the knockout threshold. <i>European Physical Journal D</i> , <b>2016</b> , 70, 1	1.3	10
36	Dimethylsilanone Generation from Pyrolysis of Polysiloxanes Filled with Nanosized Silica and Ceria/Silica. <i>ChemPlusChem</i> , <b>2016</b> , 81, 1003-1013	2.8	13
35	A precedent of van-der-Waals interactions outmatching Coulomb explosion. <i>Carbon</i> , <b>2016</b> , 109, 843-850	10.4	14
34	Knockout driven reactions in complex molecules and their clusters. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2016</b> , 49, 162001	1.3	43
33	Molecular Growth Inside of Polycyclic Aromatic Hydrocarbon Clusters Induced by Ion Collisions. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1536-42	6.4	51
32	Formation of $H_2$ from internally heated polycyclic aromatic hydrocarbons: excitation energy dependence. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 144305	3.9	37
31	Failure of hydrogenation in protecting polycyclic aromatic hydrocarbons from fragmentation. <i>Physical Review A</i> , <b>2015</b> , 92,	2.6	30
30	Fragmentation studies of Hydrogenated-Pyrene Polycyclic Aromatic Hydrocarbons in collisions with He. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 022020	0.3	
29	Threshold energies for single-carbon knockout from polycyclic aromatic hydrocarbons. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4504-9	6.4	23
28	DESIREE: Physics with cold stored ion beams. <i>EPJ Web of Conferences</i> , <b>2015</b> , 84, 01004	0.3	1
27	Ion-Induced Reactivity in Pyrene Clusters. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 583, 012011	0.3	1
26	Non-statistical fragmentation of large molecules in collisions with atoms. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 012036	0.3	1

25	Radiative cooling of hot C <sub>n</sub> and C <sub>n</sub> H molecules. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 112124	0.3	
24	Molecular dynamics studies of impulse driven reactions in molecules and molecular clusters. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 032043	0.3	1
23	Spontaneous decay of small copper cluster anions, Cu <sub>n</sub> <sup>-</sup> = 3-6. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 072090	0.3	4
22	Collision Induced Dissociation of PAHs and Biomolecules. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 022045	0.3	
21	Fusion reaction dynamics of fullerene molecules. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 032093	0.3	
20	H <sub>2</sub> formation from Polycyclic Aromatic Hydrocarbon molecules. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 635, 032081	0.3	1
19	Isomer effects in fragmentation of Polycyclic Aromatic Hydrocarbons. <i>International Journal of Mass Spectrometry</i> , <b>2015</b> , 392, 58-62	1.9	13
18	Fragmentation of anthracene, acridine and phenazine cations in collisions with atoms. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 21980-7	3.6	24
17	Modeling electron and energy transfer processes in collisions between ions and Polycyclic Aromatic Hydrocarbon molecules. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 488, 102015	0.3	
16	Multiple electron capture, excitation, and fragmentation in C <sub>6</sub> +C <sub>60</sub> collisions. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	7
15	Ions colliding with mixed clusters of C <sub>60</sub> and coronene: Fragmentation and bond formation. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	14
14	Non-statistical fragmentation of PAHs and fullerenes in collisions with atoms. <i>International Journal of Mass Spectrometry</i> , <b>2014</b> , 365-366, 260-265	1.9	32
13	Nonstatistical fragmentation of large molecules. <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	49
12	Formation dynamics of fullerene dimers C <sub>118</sub> <sup>+</sup> , C <sub>119</sub> <sup>+</sup> , and C <sub>120</sub> <sup>+</sup> . <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	26
11	First results from the Double ElectroStatic Ion-Ring Experiment, DESIREE. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 488, 092003	0.3	1
10	Bond formation in C <sup>+</sup> +C <sub>60</sub> collisions. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 488, 012028	0.3	
9	Commissioning of the DESIREE storage rings in a new facility for cold ion-ion collisions. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 488, 012040	0.3	1
8	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> , <b>2014</b> , 140, 224306	3.9	32

7	Ions colliding with polycyclic aromatic hydrocarbon clusters. <i>Physica Scripta</i> , <b>2013</b> , T156, 014062	2.6	0
6	Ions interacting with planar aromatic molecules: modeling electron transfer reactions. <i>Journal of Chemical Physics</i> , <b>2013</b> , 138, 054306	3.9	17
5	First storage of ion beams in the Double Electrostatic Ion-Ring Experiment: DESIREE. <i>Review of Scientific Instruments</i> , <b>2013</b> , 84, 055115	1.7	92
4	Ions colliding with clusters of fullerenes--decay pathways and covalent bond formations. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 034309	3.9	19
3	Formations of dumbbell C118 and C119 inside clusters of C60 molecules by collision with $\text{H}^+$ particles. <i>Physical Review Letters</i> , <b>2013</b> , 110, 185501	7.4	54
2	Disc scalelengths out to redshift 5.8. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , <b>2012</b> , 423, L112-L116	4.3	11
1	Ionization and fragmentation of cold clusters of PAH molecules [collisions with keV ions. <i>Journal of Physics: Conference Series</i> , <b>2012</b> , 388, 012051	0.3	4