

# Takuya Majima

## List of Publications by Year in descending order

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78  
papers

647  
citations

567144

15  
h-index

642610

23  
g-index

80  
all docs

80  
docs citations

80  
times ranked

520  
citing authors

#	ARTICLE	IF	CITATIONS
1	Binding Dynamics of Photoexcited $C_6$ and $C_6^+$ Ions $C_6$ and $C_6^+$ Ions Ionization and fragmentation of $C_6$ in charge-transfer collisions of 2-MeV lithium ions. Physical Review A, 1999, 59, 4428-4437.	2.9	62
2	Photoelectron diffraction from laser-aligned molecules with X-ray free-electron laser pulses. Scientific Reports, 2015, 5, 14065.	1.0	46
3	Photon-trap spectroscopy of mass-selected ions in an ion trap: Optical absorption and magneto-optical effects. Journal of Chemical Physics, 2007, 127, 231101.	1.6	44
4	Structure determination of molecules in an alignment laser field by femtosecond photoelectron diffraction using an X-ray free-electron laser. Scientific Reports, 2016, 6, 38654.	1.2	39
5	Ionization cross sections of $C_6$ by fast electron impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 277-286.	1.6	31
6	Photon-trap spectroscopy of size-selected free cluster ions: $\text{Ag}^+$ measurement of optical absorption of $\text{Ag}^+$ . European Physical Journal D, 2009, 52, 43-46.	0.6	25
7	Correlation between multiple ionization and fragmentation of $C_6$ in 2-MeV $\text{Si}^{2+}$ collisions: Evidence for fragmentation induced by internal excitation. Physical Review A, 2004, 69, .	0.6	22
8	Damage and polymerization of $C_6$ films irradiated by fast light and heavy ions. Nuclear Instruments & Methods in Physics Research B, 2002, 193, 299-304.	1.0	21
9	Direct measurement of recurrent fluorescence emission from naphthalene ions. Physical Review A, 2020, 102, .	0.6	20
10	A cryogenic electrostatic storage ring project at RIKEN. Journal of Physics: Conference Series, 2012, 388, 142027.	1.0	20
11	Secondary electron emission from Au by medium energy atomic and molecular ions. Nuclear Instruments & Methods in Physics Research B, 2002, 193, 626-631.	0.3	18
12	Fragment ion distribution in charge-changing collisions of 2-MeV Si ions with $C_6$ . Physical Review A, 2001, 64, .	0.6	17
13	Spatial distribution of ions in a linear octopole radio-frequency ion trap in the space-charge limit. Physical Review A, 2012, 85, .	1.0	16
14	Correlation between multiple ionization and fragmentation of $C_6$ in charge-changing collisions with $H^+$ ions $C_6$ in charge-changing collisions with $H^+$ ions	1.0	15
15	Multifragmentation of $C_6$ by fast Li atoms and $\text{Li}^{3+}$ ions in electron loss and capture collisions. Physical Review A, 1999, 61, .	1.0	15
16	Equilibrium charge distributions of lithium ions emerging from a carbon foil. Nuclear Instruments & Methods in Physics Research B, 1999, 159, 22-27.	1.0	14
17	ERD measurement of depth profiles of H and Li in Pt-coated $\text{LiCoO}_2$ thin films. Nuclear Instruments & Methods in Physics Research B, 2013, 315, 341-344.	0.6	14
18		0.6	12

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19	Fragmentation processes of C <sub>60</sub> in multiple electron loss and capture collisions of 2 MeV Si <sup>2+</sup> . Physical Review A, 2006, 74, .	1.0	10
20	Molecular orientation effects in CO fragmentation induced by charge-changing collisions of 6 MeV O <sup>4+</sup> ions. Journal of Physics: Conference Series, 2007, 58, 173-176.	0.3	9
21	Laser-induced thermal detachment of hot, large molecular ions under multiphoton-absorption conditions. Physical Review A, 2013, 87, .	1.0	9
22	Dynamic measurements of Li depth profiles in a Li-ion battery system under charging condition by means of ERD and RBS techniques. Surface and Interface Analysis, 2014, 46, 1187-1191.	0.8	9
23	Dissociation of biomolecules in liquid environments during fast heavy-ion irradiation. Journal of Chemical Physics, 2017, 147, 225103.	1.2	9
24	Kinetic energy distributions of product ions from singly and multiply ionized C <sub>2</sub> H <sub>2</sub> molecules induced by 0.8 MeV C <sup>+</sup> collisions. Nuclear Instruments & Methods in Physics Research B, 2017, 408, 203-208.	0.6	8
25	Ar photoelectron sideband spectra in two-color XUV + NIR laser fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 075601.	0.6	8
26	Effects of radical scavengers on aqueous solutions exposed to heavy-ion irradiation using the liquid microjet technique. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 611-615.	0.6	7
27	Time-resolved photoelectron angular distributions from nonadiabatically aligned CO <sub>2</sub> molecules with SX-FEL at SACLA. Journal of Physics Communications, 2018, 2, 115015.	0.5	7
28	Secondary electron-induced biomolecular fragmentation in fast heavy-ion irradiation of microdroplets of glycine solution. Journal of Chemical Physics, 2019, 150, 095102.	1.2	7
29	Electrochemical control and protonation of the strontium iron oxide SrFeO <sub>y</sub> by using proton-conducting electrolyte. Applied Physics Letters, 2022, 120, .	1.5	7
30	Secondary ion emission from ethanol microdroplets induced by fast heavy ions. Journal of Physics: Conference Series, 2015, 635, 012021.	0.3	6
31	Fast heavy-ion radiation damage of glycine in aqueous solution. Nuclear Instruments & Methods in Physics Research B, 2016, 389-390, 28-32.	0.6	6
32	Mass spectrometric study of the negative and positive secondary ions emitted from ethanol microdroplets by MeV-energy heavy ion impact. Nuclear Instruments & Methods in Physics Research B, 2018, 424, 10-16.	0.6	6
33	Cooling dynamics of photo-excited negative carbon cluster ions stored in an ion storage ring. Nuclear Instruments & Methods in Physics Research B, 2015, 354, 192-196.	0.6	5
34	Radiative lifetime measurements of 2P <sub>3/2</sub> and 2P <sub>1/2</sub> metastable levels in triply charged xenon using electrostatic ion beam trap. Nuclear Instruments & Methods in Physics Research B, 2018, 414, 68-73.	0.6	5
35	Two- and three-photon double ionization of helium by soft x-ray free-electron laser pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 065602.	0.6	5
36	The role of nuclear stopping power in fast heavy ion collision with C <sub>60</sub> . Nuclear Instruments & Methods in Physics Research B, 2002, 193, 209-213.	0.6	4

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37	Impact-parameter-dependent multifragmentation of C <sub>60</sub> in charge-changing collisions with 2 MeV C <sup>n+</sup> ions. <i>Physical Review A</i> , 2007, 75, .	1.0	4
38	Photodissociation spectroscopy of the chromium trimer ion. <i>European Physical Journal D</i> , 2007, 43, 23-26.	0.6	4
39	Optical pumping by a laser pulse traveling in a cavity. <i>Physical Review A</i> , 2008, 77, .	1.0	4
40	Fragmentation of multiply ionized C <sub>2</sub> F <sub>4</sub> induced by charge-changing collisions with fast carbon ions. <i>International Journal of Mass Spectrometry</i> , 2017, 421, 25-32.	0.7	4
41	A cryogenic linear ion trap beamline for providing keV ion bunches. <i>Review of Scientific Instruments</i> , 2018, 89, 113110.	0.6	4
42	Effect of structure and orientation of incident carbon-cluster ions $C_n^{m+}$ on secondary-ion emission induced by electronic excitation. <i>Physical Review A</i> , 2021, 103, .	1.0	4
43	Electronic stopping and velocity effect on multiple ionization and fragmentation of C <sub>60</sub> in swift heavy ion impacts. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2007, 256, 101-104.	0.6	3
44	Transmission properties of C <sub>60</sub> ions through micro- and nano-capillaries. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2013, 315, 336-340.	0.6	3
45	Cooling dynamics of carbon cluster anions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 012035.	0.3	3
46	The impact of solar radiation on polar mesospheric ice particle formation. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 4311-4322.	1.9	3
47	Kinetic energy distributions of the fragment ions from multiply ionized C <sub>2</sub> H <sub>6</sub> as functions of the charge state of the intermediate states. <i>X-Ray Spectrometry</i> , 2020, 49, 177-183.	0.9	3
48	Energy and angular distributions of secondary ions from a C <sub>60</sub> surface induced by fast heavy ion impacts. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 203, 141-145.	0.6	2
49	Electron emission and fragmentation of C <sub>60</sub> in collisions with energetic particles. <i>Vacuum</i> , 2004, 73, 53-58.	1.6	2
50	Multiple ionization of C <sub>60</sub> by fast Si <sup>q+</sup> ions. <i>Physical Review A</i> , 2008, 78, .	1.0	2
51	Cross-section measurements of $^{14}\text{N}^{\pm}$ elastic scattering for He beam TOF-ERDA. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 343, 1-4.	0.6	2
52	Radiative lifetime measurement of 1 S 0 metastable state of Ar <sup>2+</sup> using electrostatic ion beam trap. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2017, 408, 194-197.	0.6	2
53	Radiative lifetime measurements of metastable levels in Kr <sup>3+</sup> using electrostatic ion beam trap. <i>X-Ray Spectrometry</i> , 2020, 49, 37-41.	0.9	2
54	Relation between biomolecular dissociation and energy of secondary electrons generated in liquid water by fast heavy ions. <i>European Physical Journal D</i> , 2020, 74, 1.	0.6	2

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55	Photoelectron angular distribution studies for two spin-orbit-split components of Xe 3d subshell: a critical comparison between theory and experiment. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 105003.	0.6	2
56	Fast-ion-induced secondary ion emission from submicron droplet surfaces studied using a new coincidence technique with forward-scattered projectiles. <i>Journal of Chemical Physics</i> , 2020, 153, 224201.	1.2	2
57	Basic studies toward ultrafast soft x-ray photoelectron diffraction; its application to probing local structure in iodobenzene molecules. <i>Structural Dynamics</i> , 2022, 9, 024303.	0.9	2
58	Charge-State Dependence of C <sub>60</sub> Multifragmentation in Collisions of 30 MeV Ne <sup>29+</sup> Ions. <i>Physica Scripta</i> , 2001, T92, 176-178.	1.2	1
59	High-Resolution Measurements of Initial Kinetic Energy of Fragment Ions Produced in Fast Heavy Ions ? C <sub>60</sub> . <i>Physica Scripta</i> , 2001, T92, 179-181.	1.2	1
60	Multiple ionization and fragmentation of polyatomic molecules by fast heavy ions. <i>Journal of Physics: Conference Series</i> , 2011, 288, 012027.	0.3	1
61	Microhydration of the methylene blue cation in an electrospray ion source. <i>European Physical Journal D</i> , 2011, 63, 189-194.	0.6	1
62	C <sub>60</sub> fragmentation in charge-changing collisions with slow Au <sup>+</sup> ions. <i>Physical Review A</i> , 2011, 83, .	1.0	1
63	Charge-state distributions of fast diatomic carbon ions and dissociated fragments passing through microcapillaries. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 115201.	0.6	1
64	Single-electron-capture cross-section scaling for low- <i>q</i> heavy ions at low energy. <i>Journal of Physics: Conference Series</i> , 2014, 488, 082010.	0.3	1
65	Dynamic Measurements of Hydrogen and Lithium Distributions in Lithium-Cobalt-Oxide Films with Charging and Heating Using Elastic Recoil Detection Techniques. <i>Physics Procedia</i> , 2015, 66, 292-297.	1.2	1
66	Incident Energy Dependence of the Molecular Orientation Effect of MeV (ext{C}_{2}^{+}) Projectiles in Secondary-Ion Emission Processes. <i>Journal of the Physical Society of Japan</i> , 2022, 91, .	0.7	1
67	Lifetime measurement of the <i>a</i> <sup>4</sup> Î <sub>u</sub> metastable state of O <sub>2</sub> <sup>+</sup> using an electrostatic ion storage ring. <i>Journal of Physics: Conference Series</i> , 2009, 194, 022099.	0.3	0
68	Internal energy of stored large molecular anions deduced from laser-induced electron detachment yield. <i>Journal of Physics: Conference Series</i> , 2009, 194, 022092.	0.3	0
69	Detection of the metastable chain hydrocarbon anions by an electrostatic ion storage ring. <i>Journal of Physics: Conference Series</i> , 2009, 194, 152024.	0.3	0
70	Zeeman splitting and Faraday rotation associated with Mn <sup>+</sup> 7P <sub>1/2</sub> 3s absorption: Photon-trap spectroscopy and quantum-theory analysis. <i>Journal of Physics: Conference Series</i> , 2009, 185, 012045.	0.3	0
71	Photoabsorption and Magneto-Optical Spectroscopy of Mass-Selected Atomic and Cluster Ions Stored in an Ion Trap. , 2009, , .		0
72	Laser spectroscopy of the methylene blue cation in an electrostatic ion storage ring. <i>Journal of Physics: Conference Series</i> , 2012, 388, 022048.	0.3	0

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73	Coincidence measurements between fragment ions and the number of emitted electrons in heavy ion collisions with polyatomic molecules. <i>Journal of Physics: Conference Series</i> , 2012, 388, 102022.	0.3	0
74	Difference in cooling dynamics between photo-excited $\text{C}_6\text{H}^+$ and $\text{C}_6\text{H}_2^+$ . <i>Journal of Physics: Conference Series</i> , 2014, 488, 022036.	0.3	0
75	Correlation between multiple ionization and fragmentation of small hydrocarbon molecules induced by fast heavy ions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 032066.	0.3	0
76	Positive and negative ion emission from microdroplets by MeV energy ions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 032018.	0.3	0
77	Fragmentation of multiply ionized biomolecules induced by MeV heavy ions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 032062.	0.3	0
78	Photoelectron spectroscopy of Rydberg excited states in singly charged molecular ions $\text{CS}_2^+$ by NIR laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 225601.	0.6	0