Thomas SchlathÃ¶lter

List of Publications by Year
in descending order

126 papers	2,505 citations	147801 31 h-index	243625 44 g-index
127 all docs	127 docs citations	127 times ranked	1448 citing authors

#	Article	IF	Citations
1	Mn₁₂â€Acetate Complexes Studied as Single Molecules. Chemistry - A European Journal, 2022, 28, .	3.3	3
2	Intramolecular hydrogen transfer in DNA induced by site-selective resonant core excitation. Physical Chemistry Chemical Physics, 2022, 24, 7815-7825.	2.8	2
3	Stacked-ring ion guide for cooling and bunching rare isotopes. International Journal of Mass Spectrometry, 2022, 477, 116856.	1.5	1
4	The NEXT Project: Towards Production and Investigation of Neutron-Rich Heavy Nuclides. Atoms, 2022, 10, 59.	1.6	4
5	Multiple valence electron detachment following Auger decay of inner-shell vacancies in gas-phase DNA. Chemical Science, 2021, 12, 13177-13186.	7.4	4
6	Site-selective soft X-ray absorption as a tool to study protonation and electronic structure of gas-phase DNA. Physical Chemistry Chemical Physics, 2021, 23, 11900-11906.	2.8	6
7	The electronic structure and deexcitation pathways of an isolated metalloporphyrin ion resolved by metal L-edge spectroscopy. Chemical Science, 2021, 12, 3966-3976.	7.4	3
8	Probing Structural Information of Gas-Phase Peptides by Near-Edge X-ray Absorption Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 670-684.	2.8	5
9	X-ray photoabsorption-induced processes within protonated rifamycin sodium salts in the gas phase. European Physical Journal D, 2021, 75, 1.	1.3	2
10	The influence of the methionine residue on the dissociation mechanisms of photoionized methionine-enkephalin probed by VUV action spectroscopy. European Physical Journal D, 2021, 75, 1.	1.3	2
11	Roadmap on dynamics of molecules and clusters in the gas phase. European Physical Journal D, 2021, 75, 1.	1.3	32
12	Ionization and Photofragmentation of Isolated Metalloporphyrin Cations Investigated by VUV Action Spectroscopy**. Chemistry - A European Journal, 2021, 27, 12371-12379.	3.3	1
13	Photoinduced Processes within Noncovalent Complexes Involved in Molecular Recognition. Chemistry - A European Journal, 2020, 26, 2243-2250.	3.3	7
14	Atomic hydrogen interactions with small polycyclic aromatic hydrocarbons cations. European Physical Journal D, 2020, 74, 1.	1.3	3
15	Mass Spectral Signatures of Complex Post-Translational Modifications in Proteins: A Proof-of-Principle Based on X-ray Irradiated Vancomycin. Journal of the American Society for Mass Spectrometry, 2020, 31, 1738-1743.	2.8	6
16	Roadmap on photonic, electronic and atomic collision physics: I. Lightâ€“matter interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 171001.	1.5	52
17	Hole Migration in Telomereâ€Based Oligonucleotide Anions and Gâ€Quadruplexes. Chemistry - A European Journal, 2019, 25, 16114-16119.	3.3	7
18	Direct Radiation Effects on the Structure and Stability of Collagen and Other Proteins. ChemBioChem, 2019, 20, 2972-2980.	2.6	17

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19	The Sequence of Coronene Hydrogenation Revealed by Gas-phase IR Spectroscopy. Astrophysical Journal, 2019, 875, 27.	4.5	20
20	Soft Xâ€ray Spectroscopy as a Probe for Gasâ€Phase Protein Structure: Electron Impact Ionization from Within. Chemistry - A European Journal, 2018, 24, 7631-7636.	3.3	23
21	Irradiation of isolated collagen mimetic peptides by x rays and carbon ions at the Bragg-peak energy. Physical Review A, 2018, 98, .	2.5	6
22	Near-Edge Soft X-ray Absorption Mass Spectrometry of Protonated Melittin. Journal of the American Society for Mass Spectrometry, 2018, 29, 2138-2151.	2.8	6
23	Atomic hydrogen interactions with gas-phase coronene cations: hydrogenation versus fragmentation. Physical Chemistry Chemical Physics, 2018, 20, 22427-22438.	2.8	22
24	Single-photon absorption of isolated collagen mimetic peptides and triple-helix models in the VUV-X energy range. Physical Chemistry Chemical Physics, 2017, 19, 18321-18329.	2.8	11
25	Radical-driven processes within a peptidic sequence of type I collagen upon single-photon ionisation in the gas phase. Physical Chemistry Chemical Physics, 2017, 19, 22895-22904.	2.8	17
26	A comparative VUV absorption mass-spectroscopy study on protonated peptides of different size. Physical Chemistry Chemical Physics, 2017, 19, 20608-20618.	2.8	14
27	Improving proton therapy by metal-containing nanoparticles: nanoscale insights. International Journal of Nanomedicine, 2016, 11, 1549.	6.7	50
28	The sequence to hydrogenate coronene cations: A journey guided by magic numbers. Scientific Reports, 2016, 6, 19835.	3.3	46
29	Multiple Ionization of Free Ubiquitin Molecular Ions in Extreme Ultraviolet Freeâ€Electron Laser Pulses. Angewandte Chemie, 2016, 128, 10899-10903.	2.0	0
30	Multiple Ionization of Free Ubiquitin Molecular Ions in Extreme Ultraviolet Freeâ€Electron Laser Pulses. Angewandte Chemie - International Edition, 2016, 55, 10741-10745.	13.8	13
31	Near edge X-ray absorption mass spectrometry of gas phase proteins: the influence of protein size. Physical Chemistry Chemical Physics, 2016, 18, 26213-26223.	2.8	34
32	An intense electrospray ionization source for soft X-ray photoionization of gas phase protein ions. Journal of Physics: Conference Series, 2015, 635, 112083.	0.4	2
33	H₂formation on PAHs in photodissociation regions: a high-temperature pathway to molecular hydrogen. Astronomy and Astrophysics, 2015, 579, A72.	5.1	46
34	Near edge X-ray absorption mass spectrometry on coronene. Journal of Chemical Physics, 2015, 142, 024308.	3.0	15
35	Electron capture and deprotonation processes observed in collisions between Xe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow /><mml:mrow><mml:mn>8</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math>and multiply protonated cytochrome-C. Physical Review A, 2014, 89, .	2.5	9
36	Deexcitation Dynamics of Superhydrogenated Polycyclic Aromatic Hydrocarbon Cations after Soft-x-Ray Absorption. Physical Review Letters, 2014, 113, 053002.	7.8	47

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37	Absolute fragmentation cross sections in atom-molecule collisions: Scaling laws for non-statistical fragmentation of polycyclic aromatic hydrocarbon molecules. Journal of Chemical Physics, 2014, 140, 224306.	3.0	35
38	Cross sections for energetic heavy-ion impact on protonated water clusters. Applied Physics B: Lasers and Optics, 2014, 114, 251-255.	2.2	1
39	A MOLECULAR DYNAMICS STUDY ON SLOW ION INTERACTIONS WITH THE POLYCYCLIC AROMATIC HYDROCARBON MOLECULE ANTHRACENE. Astrophysical Journal, 2014, 783, 61.	4.5	24
40	Femtosecond laser induced ionization and dissociation of gas-phase protonated leucine enkephalin. International Journal of Mass Spectrometry, 2014, 365-366, 365-371.	1.5	11
41	New process observed in collisions between highly charged protonated protein and Xe8+ Xe5+ He2+ ions. Journal of Physics: Conference Series, 2014, 488, 102004.	0.4	0
42	Coulomb explosion of diatomic molecules in intense XUV fields mapped by partial covariance. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 164028.	1.5	31
43	Fragmentation of protonated oligonucleotides by energetic photons and C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mrow><mml:mi>q</mml:mi><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math>ions. Physical Review A, 2013, 87, .	2.5	33
44	Ionâ€“polycyclic aromatic hydrocarbon collisions: kinetic energy releases for specific fragmentation channels. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 245201.	1.5	22
45	Towards imaging of ultrafast molecular dynamics using FELs. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 164029.	1.5	22
46	Action Spectroscopy of Gas-Phase Peptide Ions with Energetic Photons. Physical Chemistry in Action, 2013, , 209-226.	0.6	1
47	Influence of the environment on the fragmentation of amino acids provoked by low-energy ions. Journal of Physics: Conference Series, 2012, 388, 102052.	0.4	0
48	Interaction of nucleobase clusters with multiply charged ions: Insight into base pairing. Journal of Physics: Conference Series, 2012, 388, 102050.	0.4	0
49	Length effects in VUV photofragmentation of protonated peptides. Physical Chemistry Chemical Physics, 2012, 14, 4351.	2.8	21
50	Near-Edge X-ray Absorption Mass Spectrometry of a Gas-Phase Peptide. Journal of Physical Chemistry A, 2012, 116, 10745-10751.	2.5	44
51	HYDROGENATION OF PAH CATIONS: A FIRST STEP TOWARD H ₂ FORMATION. Astrophysical Journal Letters, 2012, 761, L33.	8.3	36
52	Activation energies for fragmentation channels of anthracene dicationsâ€”experiment and theory. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 215201.	1.5	20
53	Statistical fragmentation of doubly charged anthracene induced by fluorine-beam impact at 3 keV. Physical Review A, 2012, 85, .	2.5	37
54	Ion-Induced Radiation Damage in Biomolecular Systems. Biological and Medical Physics Series, 2012, , 177-190.	0.4	1

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55	Photodissociation of protonated leucine-enkephalin in the VUV range of 8â€“40 eV. Journal of Chemical Physics, 2011, 134, 024314.	3.0	77
56	Heavy ion induced damage to plasmid DNA: plateau region vs. spread out Bragg-peak. European Physical Journal D, 2011, 63, 359-367.	1.3	18
57	IonCCD Detector for Miniature Sector-Field Mass Spectrometer: Investigation of Peak Shape and Detector Surface Artifacts Induced by keV Ion Detection. Journal of the American Society for Mass Spectrometry, 2011, 22, 1872-84.	2.8	11
58	Ionâ€Induced Fragmentation of Amino Acids: Effect of the Environment. ChemPhysChem, 2011, 12, 930-936.	2.1	44
59	Fast side-chain losses in keV ion-induced dissociation of protonated peptides. International Journal of Mass Spectrometry, 2011, 299, 64-70.	1.5	24
60	IONIZATION AND FRAGMENTATION OF ANTHRACENE UPON INTERACTION WITH keV PROTONS AND Î± PARTICLES. Astrophysical Journal, 2010, 708, 435-444.	4.5	61
61	Plasmid DNA damage by heavy ions at spread-out Bragg peak energies. European Physical Journal D, 2010, 60, 51-58.	1.3	9
62	Peptide fragmentation by keV ion-induced dissociation. Physical Chemistry Chemical Physics, 2010, 12, 3376.	2.8	39
63	Kinetic energy releases of small amino acids upon interaction with keV ions. European Physical Journal D, 2009, 51, 81-87.	1.3	26
64	Interactions of multiply charged ions with trapped complex biomolecular ions. Journal of Physics: Conference Series, 2009, 194, 102006.	0.4	0
65	Ion induced fragmentation of biomolecular systems at low collision energies. Journal of Physics: Conference Series, 2009, 194, 012048.	0.4	3
66	Fragmentation and ionization dynamics of polycyclic aromatic hydrocarbons. Journal of Physics: Conference Series, 2009, 194, 102003.	0.4	0
67	Collisions of Ar17+ions with gaseous and solid targets at a few tens of keV/q probed by X-ray spectroscopy. Journal of Physics: Conference Series, 2009, 194, 132005.	0.4	0
68	Precise Determination of 2â€Deoxyâ€<scp>D</scp>â€Ribose Internal Energies after keV Proton Collisions. ChemPhysChem, 2008, 9, 1254-1258.	2.1	35
69	Collision induced fragmentation of free sulfur clusters. International Journal of Mass Spectrometry, 2008, 277, 197-205.	1.5	7
70	Fragmentation of isolated and nanosolvated biomolecular systems. , 2008, , .		2
71	Fragmentation of Î±- and Î²-alanine molecules by ions at Bragg-peak energies. Journal of Chemical Physics, 2008, 128, 074306.	3.0	41
72	Isomeric effects in ion-induced fragmentation of Î±- and Î²-alanine. Journal of Physics: Conference Series, 2008, 101, 012006.	0.4	3

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73	Interactions of neutral and singly charged keV atomic particles with gas-phase adenine molecules. Journal of Chemical Physics, 2007, 127, 034301.	3.0	42
74	Quantification of ion-induced molecular fragmentation of isolated 2-deoxy-d-ribose molecules. Physical Chemistry Chemical Physics, 2006, 8, 1922-1928.	2.8	64
75	Ion-induced ionization and fragmentation of DNA building blocks. Physica Scripta, 2006, 73, C113-C117.	2.5	27
76	Ion-Induced Biomolecular Radiation Damage: From Isolated Nucleobases to Nucleobase Clusters. ChemPhysChem, 2006, 7, 2339-2345.	2.1	82
77	CLUSTERS AND CLUSTERS OF CLUSTERS IN COLLISIONS. , 2006, , .		1
78	Experimental observation of reduced electronic stopping in photo-excited C60. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, L55-L62.	1.5	2
79	Ionâ€“biomolecule interactions and radiation damage. Nuclear Instruments & Methods in Physics Research B, 2005, 233, 62-69.	1.4	36
80	Response of Polyatomic Molecules to Ultrastrong Laser- and Ion-Induced Fields. Physical Review Letters, 2005, 94, 233001.	7.8	22
81	Dissociation of water molecules upon keV H+- and Heq+-induced ionization. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 4085-4094.	1.5	52
82	Charge driven fragmentation of biologically relevant molecules. International Journal of Mass Spectrometry, 2004, 233, 173-179.	1.5	45
83	Ionization and Fragmentation Modes of Nucleobases after Collisions with Multiply Charged Ions. Physica Scripta, 2004, 110, 336.	2.5	25
84	Multiple ionization and fragmentation of the DNA base thymine by interaction with C q+ ions. European Physical Journal D, 2003, 24, 161-164.	1.3	42
85	Charge Driven Fragmentation of Nucleobases. Physical Review Letters, 2003, 91, 053401.	7.8	121
86	Charge Localization in Collision-Induced Multiple Ionization of van der Waals Clusters with Highly Charged Ions. Physical Review Letters, 2002, 88, 143401.	7.8	35
87	CqÂ-induced excitation and fragmentation of uracil: effects of the projectile electronic structure. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4373-4381.	1.5	67
88	Projectile atomic-number effect on ion-induced fragmentation and ionization of fullerenes. Physical Review A, 2001, 63, .	2.5	40
89	Electronic stopping in ionâ€“fullerene collisions. Applied Physics A: Materials Science and Processing, 2001, 72, 281-287.	2.3	9
90	Molecule dissociation at low energies on Pt(110). Nuclear Instruments & Methods in Physics Research B, 2001, 182, 162-166.	1.4	1

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91	Electron-correlation effects in appearance-potential spectra of Ni. Physical Review B, 2001, 63, .	3.2	4
92	HCI-Induced Ionization and Fragmentation of Fullerenes and Organic Molecules. Physica Scripta, 2001, T92, 51-56.	2.5	0
93	Molecular fragmentation by slow highly charged ion impact. Europhysics Letters, 2000, 49, 41-47.	2.0	16
94	Hydrogenated carbon clusters produced by highly charged ion impact on solid. European Physical Journal D, 2000, 12, 323-327.	1.3	12
95	Collisions of slow multicharged ions with atoms, molecules, clusters and surfaces. AIP Conference Proceedings, 2000, , .	0.4	0
96	Dissociation of fast N2 molecules scattered from different fcc(110) surfaces. Journal of Chemical Physics, 2000, 113, 2456-2469.	3.0	4
97	ZOscillations in Ion-Induced Fullerene Fragmentation. Physical Review Letters, 2000, 84, 4076-4079.	7.8	37
98	Influence of hydrogen on the stability of positively charged silicon dioxide clusters. Journal of Chemical Physics, 2000, 113, 2419-2422.	3.0	19
99	Sputtering of hollow atoms from carbon surfaces. Physical Review A, 2000, 62, .	2.5	8
100	Strong Velocity Effects in Collisions ofHe+with Fullerenes. Physical Review Letters, 1999, 82, 73-76.	7.8	73
101	Five-body calculations ofD2fragmentation byXe19+impact. Physical Review A, 1999, 60, 2112-2117.	2.5	13
102	Electronic versus vibrational excitation in Heq+ collisions with fullerenes. International Journal of Mass Spectrometry, 1999, 192, 245-257.	1.5	34
103	Hollow atom dynamics on thin-film covered surfaces. Nuclear Instruments & Methods in Physics Research B, 1999, 157, 304-308.	1.4	3
104	L-shell filling ofN6+andO7+ions from a clean and LiF-covered Au(111) surface. Physical Review A, 1999, 60, 3800-3808.	2.5	4
105	Dissociation of fast N2 molecules at a Pd(110) surface. Surface Science, 1998, 402-404, 215-218.	1.9	3
106	Energy loss of keV He2+ scattered off an A1(110) surface. Surface Science, 1998, 409, 541-552.	1.9	5
107	Hollow Atom Dynamics on LiF Covered Au(111): Role of the Surface Electronic Structure. Physical Review Letters, 1998, 81, 1219-1222.	7.8	30
108	Collisions of with neutral : Charge transfer and fragmentation. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 1321-1331.	1.5	42

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109	Dissociation of CO induced by ions: II. Dissociation pathways and states. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 5849-5860.	1.5	23
110	Scattering of fast N2from Pd(111): Orientational influences on the interaction dynamics. Radiation Effects and Defects in Solids, 1997, 141, 175-184.	1.2	0
111	Inelastic energy loss of fast N₂scattered from Pd(111). Radiation Effects and Defects in Solids, 1997, 142, 163-171.	1.2	3
112	Kinetic energy release of dissociating CO3+ions produced in collisions of multiply charged ions with CO. Physica Scripta, 1997, T73, 267-269.	2.5	0
113	Scattering of fast N2 from Pd(111): A classical trajectory study. Journal of Chemical Physics, 1997, 106, 4723-4733.	3.0	11
114	Electron capture and loss in the scattering of oxygen atoms and ions on Mg, Al and Ag surfaces. Nuclear Instruments & Methods in Physics Research B, 1997, 125, 283-287.	1.4	35
115	Molecule scattering from solid surfaces: Orientation and surface corrugation effects. Nuclear Instruments & Methods in Physics Research B, 1997, 125, 194-200.	1.4	7
116	Interactions of fast N2 molecules with palladium surfaces. Surface Science, 1996, 352-354, 195-200.	1.9	9
117	The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV. Surface Science, 1996, 363, 79-84.	1.9	11
118	Energy loss of light ions scattered off Al(110) single crystal surfaces at low energy. Nuclear Instruments & Methods in Physics Research B, 1996, 115, 31-33.	1.4	8
119	Scattering of fast H2 molecules from Pd surfaces: classical trajectory simulations. Nuclear Instruments & Methods in Physics Research B, 1996, 115, 206-210.	1.4	9
120	Scattering of Small Molecules at Surfaces. Physica Status Solidi (B): Basic Research, 1995, 192, 301-311.	1.5	8
121	Charge exchange of swift molecules H2+, H2, CO2+ and CO2, at Pd(111) surfaces. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 352-355.	1.4	5
122	Scattering of carbon dioxide molecules from Pd(111) surfaces. Surface Science, 1995, 323, 207-218.	1.9	15
123	Low energy carbon dioxide scattering from Pd(111) surfaces. Surface Science, 1995, 331-333, 311-316.	1.9	4
124	Scattering of swift molecules, H2 and CO2, from metal surfaces. Surface Science, 1994, 301, 326-336.	1.9	28
125	Dissociative scattering of hydrogen from Pd(110) and Pd(110) + K. Chemical Physics Letters, 1992, 200, 465-468.	2.6	19
126	Molecular hydrogen formation on interstellar PAHs through Eley-Rideal abstraction reactions. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	13