Friedrich Aumayr

List of Publications by Year
in descending order

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337 papers	7,710 citations	47004 47 h-index	88628 70 g-index
339 all docs	339 docs citations	339 times ranked	3053 citing authors

#	Article	IF	Citations
1	Interaction of slow multicharged ions with solid surfaces. Surface Science Reports, 1997, 27, 113-239.	7.2	361
2	Single ion induced surface nanostructures: a comparison between slow highly charged and swift heavy ions. Journal of Physics Condensed Matter, 2011, 23, 393001.	1.8	157
3	Emission of electrons from a clean gold surface induced by slow, very highly charged ions at the image charge acceleration limit. Physical Review Letters, 1993, 71, 1943-1946.	7.8	150
4	Hollow atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, R39-R65.	1.5	147
5	Threshold of ion-induced kinetic electron emission from a clean metal surface. Physical Review A, 1990, 42, 5780-5783.	2.5	142
6	Potential sputtering. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 77-102.	3.4	139
7	Statistics of ionâ€induced electron emission from a clean metal surface. Review of Scientific Instruments, 1989, 60, 3151-3159.	1.3	135
8	Potential Sputtering of CleanSiO2by Slow Highly Charged Ions. Physical Review Letters, 1997, 79, 945-948.	7.8	130
9	Ultrafast electronic response of graphene to a strong and localized electric field. Nature Communications, 2016, 7, 13948.	12.8	125
10	Creation of Nanohillocks on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>CaF</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Surfaces by Single Slow Highly Charged Ions. Physical Review Letters, 2008, 100, 237601.	7.8	122
11	Potential Sputtering of Lithium Fluoride by Slow Multicharged Ions. Physical Review Letters, 1995, 74, 5280-5283.	7.8	121
12	Electron emission from slow hollow atoms at a clean metal surface. Physical Review Letters, 1992, 69, 1140-1143.	7.8	115
13	Absence of a ``Threshold Effect'' in the Energy Loss of Slow Protons Traversing Large-Band-Gap Insulators. Physical Review Letters, 1997, 79, 4112-4115.	7.8	91
14	On the measurement of statistics for particle-induced electron emission from a clean metal surface. Applied Surface Science, 1991, 47, 139-147.	6.1	87
15	Transmission of 4.5keV <mml:math altimg="si14.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.4	78
16	Image acceleration of highly charged ions by metal surfaces. Physical Review A, 1996, 53, 880-885.	2.5	75
17	Plasmaâ€“wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification. Nuclear Fusion, 2017, 57, 116041.	3.5	75
18	Recent developments for plasma edge diagnostics using atomic beams. Journal of Nuclear Materials, 1989, 162-164, 574-581.	2.7	73

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19	Reconstruction of plasma edge density profiles from Li I (2s-2p) emission profiles. Plasma Physics and Controlled Fusion, 1992, 34, 1173-1183.	2.1	73
20	Electron emission and image-charge acceleration for the impact of very highly charged ions on clean gold. Physical Review A, 1994, 49, 4693-4702.	2.5	70
21	Kinetically Assisted Potential Sputtering of Insulators by Highly Charged Ions. Physical Review Letters, 2001, 86, 3530-3533.	7.8	70
22	Interaction of charged particles with insulating capillary targets â€“ The guiding effect. Progress in Surface Science, 2013, 88, 237-278.	8.3	70
23	Characterization of the Li-BES at ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2014, 56, 025008.	2.1	70
24	Interatomic Coulombic Decay: The Mechanism for Rapid Deexcitation of Hollow Atoms. Physical Review Letters, 2017, 119, 103401.	7.8	69
25	Do Hollow Atoms Exist in Front of an Insulating LiF(100) Surface?. Physical Review Letters, 1995, 75, 217-219.	7.8	66
26	Nano-sized surface modifications induced by the impact of slow highly charged ions â€“ A first review. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2729-2735.	1.4	66
27	Neutralization of slow multicharged ions at a clean gold surface: Total electron yields. Physical Review A, 1993, 48, 2182-2191.	2.5	64
28	A highly sensitive quartz-crystal microbalance for sputtering investigations in slow ionâ€“surface collisions. Review of Scientific Instruments, 1999, 70, 3696-3700.	1.3	63
29	Fast lithiumâ€beam spectroscopy of tokamak edge plasmas. Review of Scientific Instruments, 1993, 64, 2285-2292.	1.3	62
30	Charge Exchange and Energy Loss of Slow Highly Charged Ions in 1Ânm Thick Carbon Nanomembranes. Physical Review Letters, 2014, 112, 153201.	7.8	62
31	High frequency magnetic fluctuations correlated with the inter-ELM pedestal evolution in ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2016, 58, 065005.	2.1	57
32	DATABASE FOR INELASTIC COLLISIONS OF LITHIUM ATOMS WITH ELECTRONS, PROTONS, AND MULTIPLY CHARGED IONS. Atomic Data and Nuclear Data Tables, 1999, 72, 239-273.	2.4	56
33	Kinetic electron emission from clean polycrystalline gold induced by impact of slowC+,N+,O+,Ne+,Xe+,andAu+ions. Physical Review B, 2000, 62, 16116-16125.	3.2	56
34	Unexpected Behavior of the Stopping of Slow Ions in Ionic Crystals. Physical Review Letters, 2000, 84, 2124-2127.	7.8	56
35	Nanoscopic surface modification by slow ion bombardment. International Journal of Mass Spectrometry, 2003, 229, 27-34.	1.5	55
36	Electronic interaction of very slow light ions in Au: Electronic stopping and electron emission. Physical Review B, 2008, 78, .	3.2	55

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37	Electron Emission from Polycrystalline Lithium Fluoride Induced by Slow Multicharged Ions. Europhysics Letters, 1995, 29, 55-60.	2.0	54
38	Recent advances in understanding particle-induced electron emission from metal surfaces. Nuclear Instruments & Methods in Physics Research B, 1991, 58, 301-308.	1.4	52
39	Absolute concentrations of light impurity ions in tokamak discharges measured with lithium-beam-activated charge-exchange spectroscopy. Applied Physics B, Photophysics and Laser Chemistry, 1991, 52, 71-78.	1.5	52
40	Radial temperature distributions of C6+ions in the TEXTOR edge plasma measured with lithium beam activated charge exchange spectroscopy. Nuclear Fusion, 1992, 32, 351-359.	3.5	52
41	Temperature control of ion guiding through insulating capillaries. Physical Review A, 2012, 86, .	2.5	52
42	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
43	Sputter yields of insulators bombarded with hyperthermal multiply charged ions. Physica Scripta, 1997, T73, 307-310.	2.5	51
44	Multicharged Ion Impact on Clean Au(111): Suppression of Kinetic Electron Emission in Glancing Angle Scattering. Physical Review Letters, 1998, 81, 1965-1968.	7.8	51
45	Threshold for Potential Sputtering of LiF. Physical Review Letters, 1999, 83, 3948-3951.	7.8	49
46	Fabrication of nanopores in 1â€‰nm thick carbon nanomembranes with slow highly charged ions. Applied Physics Letters, 2013, 102, .	3.3	49
47	Potential energy threshold for nano-hillock formation by impact of slow highly charged ions on a CaF2(111) surface. Nuclear Instruments & Methods in Physics Research B, 2007, 258, 167-171.	1.4	48
48	Parameter dependences of small edge localized modes (ELMs). Nuclear Fusion, 2018, 58, 112001.	3.5	47
49	Inelastic H+-Li(2s) collisions (2-20 keV). I. Experimental methods and Li(2p) excitation. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, 4185-4199.	1.6	44
50	Electron capture inHe2+collisions with alignedNa*(3p) atoms. Physical Review Letters, 1992, 68, 3277-3280.	7.8	44
51	Ion-induced electron emission from metal surfaces â€" insights from the emission statistics. Surface Science, 1993, 281, 143-152.	1.9	44
52	On the nano-hillock formation induced by slow highly charged ions on insulator surfaces. Solid-State Electronics, 2007, 51, 1398-1404.	1.4	44
53	Singleâ€stage 5 GHz ECRâ€multicharged ion source with high magnetic mirror ratio and biased disk. Review of Scientific Instruments, 1994, 65, 1091-1093.	1.3	42
54	Phase Diagram for Nanostructuring<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>CaF</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Surfaces by Slow Highly Charged Ions. Physical Review Letters, 2012, 109, 117602.	7.8	42

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55	Charge transfer and target excitation in H+-Na(3s) collisions (2-20 keV). Journal of Physics B: Atomic and Molecular Physics, 1987, 20, 2025-2030.	1.6	40
56	Production of a microbeam of slow highly charged ions with a single microscopic glass capillary. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2277-2279.	1.4	40
57	Improved chopping of a lithium beam for plasma edge diagnostic at ASDEX Upgrade. Review of Scientific Instruments, 2012, 83, 023501.	1.3	39
58	Search for projectile charge dependence of kinetic electron emission from clean polycrystalline gold. Nuclear Instruments & Methods in Physics Research B, 1999, 154, 185-193.	1.4	37
59	Inelastic H+-Li(2s) collisions (2-20 keV). II. Electron capture into H(2p) and H(3,l) subshells. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, 4201-4211.	1.6	35
60	Potential sputtering: desorption from insulator surfaces by impact of slow multicharged ions. International Journal of Mass Spectrometry, 1999, 192, 415-424.	1.5	35
61	Electron emission from clean gold bombarded by slow Auq+ (q=1â€“3) ions. Journal of Applied Physics, 2000, 87, 8198-8200.	2.5	35
62	Sputtering of Au and Al2O3 surfaces by slow highly charged ions. Nuclear Instruments & Methods in Physics Research B, 2001, 182, 143-147.	1.4	35
63	Electron capture by doubly charged ions from laser-excited alkali atoms: I. He2+-Na*(3p) collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 2137-2151.	1.5	34
64	Modelling of fast neutral Li beams for fusion edge plasma diagnostics. Plasma Physics and Controlled Fusion, 1999, 41, 471-484.	2.1	34
65	Enhanced photoelectric detection of NV magnetic resonances in diamond under dual-beam excitation. Physical Review B, 2017, 95, .	3.2	34
66	Nanostructure formation due to impact of highly charged ions on mica. Vacuum, 2010, 84, 1062-1065.	3.5	33
67	Plasmaâ€“wall interactions with nitrogen seeding in all-metal fusion devices: Formation of nitrides and ammonia. Fusion Engineering and Design, 2015, 98-99, 1371-1374.	1.9	33
68	Nearâ€threshold electron emission from impact of slow van der Waals clusters and fullerene ions on clean gold. Journal of Chemical Physics, 1993, 99, 8254-8261.	3.0	32
69	Secondary ion emission from lithium fluoride under impact of slow multicharged ions. Nuclear Instruments & Methods in Physics Research B, 1995, 98, 465-468.	1.4	32
70	Precise total electron yield measurements for impact of singly or multiply charged ions on clean solid surfaces. Review of Scientific Instruments, 1997, 68, 165-169.	1.3	31
71	Compact 14.5 GHz all-permanent magnet ECRIS for experiments with slow multicharged ions. Journal of Physics: Conference Series, 2007, 58, 395-398.	0.4	31
72	Highly charged ion induced nanostructures at surfaces by strong electronic excitations. Progress in Surface Science, 2015, 90, 377-395.	8.3	31

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73	Sputter yields of rough surfaces: Importance of the mean surface inclination angle from nano- to microscopic rough regimes. Applied Surface Science, 2021, 570, 151204.	6.1	31
74	Total single-electron-capture cross sections for impact ofH+,H2+,He+, andNe+(2â€“20 keV) on Li. Physical Review A, 1985, 31, 67-71.	2.5	30
75	Neutralization of slow multicharged ions at a clean gold surface: Electron-emission statistics. Physical Review A, 1993, 48, 2192-2197.	2.5	30
76	Separation of Potential and Kinetic Electron Emission for Grazing Impact of Multiply Charged Ar Ions on a LiF(001) Surface. Physical Review Letters, 2004, 93, 263201.	7.8	30
77	Surface nanostructures by single highly charged ions. Journal of Physics Condensed Matter, 2009, 21, 224012.	1.8	30
78	Solar wind sputtering of wollastonite as a lunar analogue material â€“ Comparisons between experiments and simulations. Icarus, 2018, 314, 98-105.	2.5	30
79	CROSS SECTIONS FOR COLLISION PROCESSES OF Li ATOMS INTERACTING WITH ELECTRONS, PROTONS, MULTIPLY CHARGED IONS, AND HYDROGEN MOLECULES. Atomic Data and Nuclear Data Tables, 1997, 65, 155-180.	2.4	29
80	Slow Highly Charged Ions -A New Tool For Surface Nanostructuring?-. E-Journal of Surface Science and Nanotechnology, 2003, 1, 171-174.	0.4	29
81	Pyramidal pits created by single highly charged ions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BaF</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m crystals. Physical Review B, 2010, 82, .	3.2	29
82	Tuning the Fabrication of Nanostructures by Low-Energy Highly Charged Ions. Physical Review Letters, 2016, 117, 126101.	7.8	29
83	Energy deposition by heavy ions: Additivity of kinetic and potential energy contributions in hillock formation on CaF2. Scientific Reports, 2014, 4, 5742.	3.3	28
84	Surface nanostructures induced by slow highly charged ions on CaF2 single crystals. Nuclear Instruments & Methods in Physics Research B, 2007, 256, 346-349.	1.4	27
85	Surface nanostructuring of SrTiO3 single crystals by slow highly charged ions and swift heavy ions. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1234-1237.	1.4	27
86	Particle transport analysis of the density build-up after the Lâ€“H transition in ASDEX Upgrade. Nuclear Fusion, 2013, 53, 093020.	3.5	27
87	Pulsed Photoelectric Coherent Manipulation and Detection of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:mtext>â^’</mml:mtext><mml:mi>V</mml:mi></mml:mrow></mml:math> Center Spins in Diamond. Physical Review Applied, 2017, 7, .	3.8	27
88	Pedestal structure and inter-ELM evolution for different main ion species in ASDEX Upgrade. Physics of Plasmas, 2017, 24, .	1.9	27
89	Potential and kinetic electron emission from clean gold induced by multicharged nitrogen ions. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 402-406.	1.4	26
90	Emission of low-energy electrons from slowN6+ions interacting with a Au surface. Physical Review A, 1997, 56, 4774-4780.	2.5	26

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91	Slow-ion induced electron emission from clean metal surfaces: â€œSubthreshold kinetic emissionâ€•and â€œpotential excitation of plasmonsâ€• Nuclear Instruments & Methods in Physics Research B, 2001, 182, 15-22.	1.4	26
92	AFM search for slow MCI-produced nanodefects on atomically clean monocrystalline insulator surfaces. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 751-757.	1.4	26
93	Ion-induced kinetic electron emission from HOPG with different surface orientation. Europhysics Letters, 2005, 70, 768-774.	2.0	26
94	Pit formation on poly(methyl methacrylate) due to ablation induced by individual slow highly charged ion impact. Europhysics Letters, 2012, 97, 13001.	2.0	26
95	Kinetic electron emission from the selvage of a free-electron-gas metal. Physical Review B, 2003, 67, .	3.2	25
96	Potential electron emission induced by multiply charged ions in thin film tunnel junctions. Physical Review B, 2008, 77, .	3.2	25
97	LÎ± emission from (0.1â€“20-keV)H+impact on Li, Na, and K. Physical Review A, 1991, 43, 127-133.	2.5	24
98	Statistics of ion-induced kinetic electron emission: A comparison between experimental and Monte Carloâ€“simulated results. Physical Review B, 1992, 46, 3101-3104.	3.2	24
99	Excitation of plasmons by impact of slow ions on clean mono- and polycrystalline aluminum. Surface Science, 2001, 472, 195-204.	1.9	24
100	Electron capture and target excitation in slow ion-alkali atom collisions. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1987, 6, 145-153.	1.0	23
101	Electron emission from polycrystalline lithium fluoride bombarded by slow multicharged ions. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 284-289.	1.4	23
102	Suppression of potential electron emission for impact of slow multicharged fullerenes on clean gold. Physical Review A, 1997, 56, 3007-3010.	2.5	23
103	Influence of the chemical state on the stopping of protons and He-ions in some oxides. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 103-108.	1.4	23
104	Creation of surface nanostructures by irradiation with slow, highly charged ions. Radiation Effects and Defects in Solids, 2007, 162, 467-472.	1.2	23
105	Electron Emission from Insulators Irradiated by Slow Highly Charged Ions. E-Journal of Surface Science and Nanotechnology, 2008, 6, 54-59.	0.4	23
106	Contribution of surface plasmon decay to secondary electron emission from an Al surface. Applied Physics Letters, 2011, 99, 184102.	3.3	23
107	An attempt to apply the inelastic thermal spike model to surface modifications of CaF₂induced by highly charged ions: comparison to swift heavy ions effects and extension to some others material. Journal of Physics Condensed Matter, 2017, 29, 095001.	1.8	23
108	Sputtering of nanostructured tungsten and comparison to modelling with TRI3DYN. Journal of Nuclear Materials, 2020, 532, 152019.	2.7	23

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109	Laser enhanced Lalphaemission from (50 eV-15 keV) H+-Na collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 4419-4429.	1.5	22
110	Coherent population trapping probed by charge exchange reactions. Physical Review Letters, 1992, 69, 3452-3454.	7.8	22
111	Electron emission from a clean gold surface bombarded by slow multiply charged fullerenes. International Journal of Mass Spectrometry and Ion Processes, 1998, 174, 317-328.	1.8	22
112	Edge plasma diagnostics on W7-AS and ASDEX-Upgrade using fast Li beams. Journal of Nuclear Materials, 1999, 266-269, 1279-1284.	2.7	22
113	Studies on electron emission during grazing impact of keV-hydrogen atoms on a LiF(001) surface via translational spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2001, 182, 23-28.	1.4	22
114	Charge exchange and ionization in N^{7 +}â€“, N^{6 +}â€“, C^{6 +}â€“H(<i>n</i>=) Tj ETQq0 0 0 rgBT /C Molecular and Optical Physics, 2012, 45, 065203.	1.5	22
115	Roadmap on photonic, electronic and atomic collision physics: III. Heavy particles: with zero to relativistic speeds. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 171003.	1.5	22
116	Roadmap on photonic, electronic and atomic collision physics: II. Electron and antimatter interactions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 171002.	1.5	22
117	Atomic-Scale Carving of Nanopores into a van der Waals Heterostructure with Slow Highly Charged Ions. ACS Nano, 2020, 14, 10536-10543.	14.6	22
118	Dynamic Potential Sputtering of Lunar Analog Material by Solar Wind Ions. Astrophysical Journal, 2020, 891, 100.	4.5	22
119	A versatile electron detector for studies on ion-surface scattering. Review of Scientific Instruments, 1999, 70, 1653-1657.	1.3	21
120	Database for inelastic collisions of sodium atoms with electrons, protons, and multiply charged ions. Atomic Data and Nuclear Data Tables, 2008, 94, 981-1014.	2.4	21
121	Nano-structure formation due to impact of highly charged ions on HOPG. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2897-2900.	1.4	21
122	Threshold and efficiency for perforation of 1 nm thick carbon nanomembranes with slow highly charged ions. 2D Materials, 2015, 2, 035009.	4.4	21
123	Surface-induced dissociation of singly and multiply charged fullerene ions. Journal of Chemical Physics, 2000, 113, 5053.	3.0	20
124	Excitation vs electron emission near the kinetic thresholds for grazing impact of hydrogen atoms on LiF(001). Physical Review B, 2002, 65, .	3.2	20
125	Charge-state-dependent energy loss of slow ions. I. Experimental results on the transmission of highly charged ions. Physical Review A, 2016, 93, .	2.5	20
126	Fluence dependent changes of surface morphology and sputtering yield of iron: Comparison of experiments with SDTrimSP-2D. Nuclear Instruments & Methods in Physics Research B, 2018, 430, 42-46.	1.4	20

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127	Electron capture by doubly charged ions from laser-excited alkali atoms: II. He2+-Li*(2p) collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 2153-2164.	1.5	19
128	Near-Threshold Electron Emission from Slow Cluster Impact on Clean Gold. Europhysics Letters, 1993, 22, 597-602.	2.0	19
129	Structure and dynamics of hollow Ne atoms formed near a C and Al surface. Nuclear Instruments & Methods in Physics Research B, 1997, 124, 303-313.	1.4	19
130	Sputtering of tungsten by N⁺and N₂⁺ions: investigations of molecular effects. Physica Scripta, 2011, T145, 014017.	2.5	19
131	Graphical user interface for SDTrimSP to simulate sputtering, ion implantation and the dynamic effects of ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2022, 522, 47-53.	1.4	19
132	Plasmadiagnostik mit Lithiumatomstrahl-aktivierter Umladungsspektroskopie. Annalen Der Physik, 1985, 497, 228-238.	2.4	18
133	Charging and discharging of nano-capillaries during ion-guiding of multiply charged projectiles. Journal of Physics: Conference Series, 2007, 58, 319-322.	0.4	18
134	Statistics of electron and exciton production for grazing impact of keV hydrogen atoms on a LiF(001) surface. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 3315-3325.	1.5	17
135	Electronic processes during impact of fast hydrogen atoms on a LiF() surface. Nuclear Instruments & Methods in Physics Research B, 2003, 212, 45-50.	1.4	17
136	Inelastic interactions of slow ions and atoms with surfaces. Nuclear Instruments & Methods in Physics Research B, 2005, 233, 111-124.	1.4	17
137	A quartz-crystal-microbalance technique to investigate ion-induced erosion of fusion relevant surfaces. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 695-699.	1.4	17
138	Swift heavy ion irradiation of CaF₂â€" from grooves to hillocks in a single ion track. Journal of Physics Condensed Matter, 2016, 28, 405001.	1.8	17
139	Charge-Exchange-Driven Low-Energy Electron Splash Induced by Heavy Ion Impact on Condensed Matter. Journal of Physical Chemistry Letters, 2019, 10, 4805-4811.	4.6	17
140	State-selective electron capture in He2+-Li collisions studied jointly by photon and translational energy spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, 1027-1034.	1.5	16
141	Electronic Effects in Slow Heavy-Particle-Induced Electron Emission from a Clean Metal Surface. Europhysics Letters, 1989, 10, 679-685.	2.0	16
142	Ion-induced electron emission from solid surfaces: information content of the electron number statistics. International Journal of Mass Spectrometry and Ion Processes, 1995, 149-150, 45-57.	1.8	16
143	Final vibrational state resolved single-electron capture for impact of on and CO. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 5009-5024.	1.5	16
144	Edge plasma-relevant ionâ€"surface collision processes. International Journal of Mass Spectrometry, 2003, 223-224, 21-36.	1.5	16

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145	Kinetic electron emission for planar versus axial surface channeling of He atoms and ions. Physical Review B, 2004, 69, .	3.2	16
146	Charge exchange in Be⁴⁺â€“H(<i>n</i>= 1, 2) collisions studied systematically by atomic-orbital close-coupling calculations. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 235206.	1.5	16
147	Experiments and simulations of 4.5-keV<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Ar</mml:mi></mml:mrow><mml:mrow>< through a conical glass macrocapillary. Physical Review A, 2015, 91, .	2.5	16
148	Measurement of the stopping cross section for protons in copper by backscattering using various methods for foil-thickness determination. Nuclear Instruments & Methods in Physics Research B, 1984, 1, 1-8.	1.4	15
149	On the formation of hollow atoms in front of an insulating LiF surface. Nuclear Instruments & Methods in Physics Research B, 1996, 115, 237-241.	1.4	15
150	Distinction between multicharged fullerene ions and their fragment ions with equal charge-to-mass. International Journal of Mass Spectrometry and Ion Processes, 1997, 163, 9-14.	1.8	15
151	excitation by impact of slow ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 2585-2599.	1.5	15
152	Electron emission during grazingH0â^'LiF(001)collisions. Physical Review A, 2000, 62, .	2.5	15
153	Slow multicharged ions hitting a solid surface: From hollow atoms to novel applications. Europhysics News, 2002, 33, 215-217.	0.3	15
154	Vanishing influence of the band gap on the charge exchange of slow highly charged ions in freestanding single-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn Physical Review B, 2020, 102, .	3.2	15
155	Potential Electron Emission from Metal and Insulator Surfaces. , 2007, , 79-112.		15
156	Experimental Insights Into Space Weathering of Phobos: Laboratory Investigation of Sputtering by Atomic and Molecular Planetary Ions. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006583.	3.6	15
157	Search for an influence of the measuring method on stopping cross section data near the maximum. Nuclear Instruments & Methods in Physics Research, 1983, 218, 811-816.	0.9	14
158	Tokamak edge plasma densities measured by means of active lithium beam diagnostics. Journal of Nuclear Materials, 1992, 196-198, 928-932.	2.7	14
159	Electron emission induced by cluster impact on a clean metal surface. Nuclear Instruments & Methods in Physics Research B, 1994, 88, 44-48.	1.4	14
160	Novel aspects on the irradiation of HOPG surfaces with slow highly charged ions. Nuclear Instruments & Methods in Physics Research B, 2013, 315, 252-256.	1.4	14
161	A versatile ion beam spectrometer for studies of ion interaction with 2D materials. Review of Scientific Instruments, 2018, 89, 085101.	1.3	14
162	Accuracy of stopping cross section determination from RBS-spectra by Warters' method. Nuclear Instruments & Methods in Physics Research, 1983, 212, 529-532.	0.9	13

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