

Peter Sigmund

List of Publications by Year in descending order

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195
papers

13,747
citations

36303

51
h-index

20961

115
g-index

212
all docs

212
docs citations

212
times ranked

3301
citing authors

#	ARTICLE	IF	CITATIONS
1	Theory of Sputtering. I. Sputtering Yield of Amorphous and Polycrystalline Targets. Physical Review, 1969, 184, 383-416.	2.7	3,347
2	A mechanism of surface micro-roughening by ion bombardment. Journal of Materials Science, 1973, 8, 1545-1553.	3.7	515
3	Small-angle multiple scattering of ions in the screened Coulomb region. Nuclear Instruments & Methods, 1974, 119, 541-557.	1.2	498
4	Theoretical aspects of atomic mixing by ion beams. Nuclear Instruments & Methods, 1981, 182-183, 25-41.	1.2	498
5	Energy density and time constant of heavy-ion-induced elastic collision spikes in solids. Applied Physics Letters, 1974, 25, 169-171.	3.3	433
6	Influence of elastic and inelastic scattering on energy spectra of electrons emitted from solids. Physical Review B, 1982, 25, 4452-4466.	3.2	401
7	Sputtering by ion bombardment theoretical concepts. Topics in Applied Physics, 1981, , 9-71.	0.8	379
8	ON THE NUMBER OF ATOMS DISPLACED BY IMPLANTED IONS OR ENERGETIC RECOIL ATOMS. Applied Physics Letters, 1969, 14, 114-117.	3.3	334
9	Sputtering of chemisorbed gas (nitrogen on tungsten) by low-energy ions. Journal of Applied Physics, 1974, 45, 4760-4766.	2.5	314
10	Sputtering from elastic collision spikes in heavy-ion bombarded metals. Journal of Applied Physics, 1981, 52, 990-993.	2.5	300
11	Theory of Sputtering. I. Sputtering Yield of Amorphous and Polycrystalline Targets. Physical Review, 1969, 187, 768-768.	2.7	261
12	Mechanisms and theory of physical sputtering by particle impact. Nuclear Instruments & Methods in Physics Research B, 1987, 27, 1-20.	1.4	258
13	Kinetic theory of particle stopping in a medium with internal motion. Physical Review A, 1982, 26, 2497-2517.	2.5	239
14	Sputtering of multicomponent materials: Elements of a theory. Nuclear Instruments & Methods in Physics Research, 1982, 194, 541-548.	0.9	212
15	Distortion of depth profiles during sputtering. Nuclear Instruments & Methods, 1980, 168, 389-394.	1.2	196
16	Binary theory of electronic stopping. Nuclear Instruments & Methods in Physics Research B, 2002, 195, 64-90.	1.4	174
17	A note on integral equations of the kinchin-pease type. Radiation Effects, 1969, 1, 15-18.	0.4	150
18	On the Mechanism of Sputtering. Physica Status Solidi (B): Basic Research, 1966, 16, 507-511.	1.5	141

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19	Small-angle multiple scattering of ions in the screened Coulomb region. Nuclear Instruments & Methods, 1975, 126, 317-323.	1.2	135
20	On the reflection coefficient of keV heavy-ion beams from solid targets. Radiation Effects, 1971, 11, 69-78.	0.4	126
21	Sputtering and backscattering of keV light ions bombarding random targets. Radiation Effects, 1973, 19, 7-14.	0.4	122
22	Distortion of depth profiles during ion bombardment II. Mixing mechanisms. Nuclear Instruments & Methods, 1981, 180, 211-219.	1.2	115
23	Depth of origin of sputtered atoms. Applied Physics Berlin, 1981, 25, 307-310.	1.4	111
24	Recoil implantation and ion-beam-induced composition changes in alloys and compounds. Journal of Applied Physics, 1979, 50, 7261-7263.	2.5	103
25	Binary stopping theory for swift heavy ions. European Physical Journal D, 2000, 12, 425-434.	1.3	103
26	Barkas effect in electronic stopping power: Rigorous evaluation for the harmonic oscillator. Physical Review A, 1989, 40, 101-116.	2.5	100
27	Energy loss spectrum of swift charged particles penetrating a layer of material. Nuclear Instruments & Methods in Physics Research B, 1985, 12, 1-16.	1.4	98
28	Bethe stopping theory for a harmonic oscillator and Bohr's oscillator model of atomic stopping. Physical Review A, 1986, 34, 892-910.	2.5	97
29	Charge-dependent electronic stopping of swift nonrelativistic heavy ions. Physical Review A, 1997, 56, 3781-3793.	2.5	93
30	Statistical theory of charged-particle stopping and straggling in the presence of charge exchange. Nuclear Instruments & Methods in Physics Research B, 1992, 69, 113-122.	1.4	87
31	Temperature-dependent sputtering of metals and insulators. Applied Physics A: Solids and Surfaces, 1984, 33, 141-152.	1.4	86
32	Penetration of slow gold clusters through silicon. Nuclear Instruments & Methods in Physics Research B, 1990, 47, 236-242.	1.4	86
33	Stopping power in perspective. Nuclear Instruments & Methods in Physics Research B, 1998, 135, 1-15.	1.4	86
34	Round Robin computer simulation of ejection probability in sputtering. Nuclear Instruments & Methods in Physics Research B, 1989, 36, 110-123.	1.4	84
35	Barkas effect in a dense medium: Stopping power and wake field. Annals of Physics, 1990, 201, 152-192.	2.8	78
36	Sputtering efficiency of amorphous substances. Canadian Journal of Physics, 1968, 46, 731-737.	1.1	77

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37	Sputtering of single and multiple component materials. Journal of Vacuum Science and Technology, 1980, 17, 396-399.	1.9	77
38	Mechanism of ion beam induced mixing of layered solids. Applied Physics A: Solids and Surfaces, 1983, 30, 43-46.	1.4	77
39	Depth of origin and angular spectrum of sputtered atoms. Nuclear Instruments & Methods in Physics Research B, 1989, 36, 124-136.	1.4	77
40	Particle Penetration and Radiation Effects Volume 2. Springer Series in Solid-state Sciences, 2014, , .	0.3	76
41	Energy deposition and penetration depth of heavy ions in the electronic stopping region. Radiation Effects, 1971, 11, 39-49.	0.4	72
42	Deduction of Heavy-Ion X-Ray Production Cross Sections from Thick-Target Yields. Physical Review A, 1972, 5, 1285-1289.	2.5	72
43	Defect distributions in channeling experiments. Nuclear Instruments & Methods, 1965, 38, 238-240.	1.2	70
44	Correlation functions in the theory of atomic collision cascades: Ion location and the distribution in depth and size of damage clusters. Radiation Effects, 1970, 6, 187-197.	0.4	67
45	Direct and recoil-induced electron emission from ion-bombarded solids. Physical Review B, 1979, 20, 2247-2254.	3.2	65
46	Molecule and cluster bombardment: energy loss, trajectories, and collision cascades. Nuclear Instruments & Methods in Physics Research B, 1996, 112, 1-11.	1.4	60
47	Tracks of heavy ions in muscovite mica: Analysis of the rate of production of radiation defects. Physical Review B, 1985, 32, 5429-5431.	3.2	59
48	Total backscattering of keV light ions from solid targets in single-collision approximation. Applied Physics Berlin, 1976, 11, 265-272.	1.4	58
49	Energy loss of charged particles to molecular gas targets. Physical Review A, 1976, 14, 996-1005.	2.5	52
50	Low-speed limit of Bohr's stopping-power formula. Physical Review A, 1996, 54, 3113-3117.	2.5	51
51	Momentum deposition by heavy-ion bombardment and an application to sputtering. Journal Physics D: Applied Physics, 1975, 8, 241-245.	2.8	48
52	Impact parameter dependence of electronic energy loss: Oscillator model. Nuclear Instruments & Methods in Physics Research B, 1987, 27, 266-275.	1.4	46
53	STOPPING OF IONS HEAVIER THAN HELIUM. Journal of the ICRU, 2005, 5, 0-0.	15.5	45
54	Reciprocity in the electronic stopping of slow ions in matter. European Physical Journal D, 2008, 47, 45-54.	1.3	44

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55	Recollections of fifty years with sputtering. <i>Thin Solid Films</i> , 2012, 520, 6031-6049.	1.8	44
56	A note on rotational and vibrational motion of sputtered or desorbed diatomic molecules. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1986, 14, 495-499.	1.4	42
57	Pronounced nonlinear behavior of atomic collision sequences induced by keV-energy heavy ions in solids and molecules. <i>Physical Review A</i> , 1989, 39, 3360-3372.	2.5	41
58	Effective charge and related/unrelated quantities in heavy-ion stopping. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001, 174, 535-540.	1.4	39
59	Analysis of the primary process in isotope sputtering. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1996, 119, 359-374.	1.4	38
60	Accelerated deuterons in cluster-fusion experiments. <i>Physical Review A</i> , 1991, 44, 7428-7438.	2.5	37
61	Statistics of energy loss and charge exchange of penetrating particles: Higher moments and transients. <i>Physical Review A</i> , 1994, 49, 4709-4715.	2.5	36
62	Predicted Z ² Structure and Gas-Solid Difference in Low-Velocity Stopping Power of Light Ions. <i>Physical Review Letters</i> , 1983, 51, 1332-1335.	7.8	33
63	Preferential sputtering from isotopic mixtures and alloys of near-neighbor elements. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1986, 18, 375-387.	1.4	33
64	Impact parameter dependence of light-ion electronic energy loss. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1991, 61, 139-148.	1.4	33
65	Binary theory of light-ion stopping. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002, 193, 49-55.	1.4	33
66	Progress in understanding heavy-ion stopping. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 382, 15-25.	1.4	33
67	A note on evaporation from heated spikes. <i>Applied Physics A: Solids and Surfaces</i> , 1984, 35, 19-25.	1.4	31
68	Collision cascades as fractals. <i>Physica Scripta</i> , 1987, 36, 689-692.	2.5	31
69	LSS and the Integral Equations of Transport Theory. <i>Physica Scripta</i> , 1983, 28, 257-267.	2.5	30
70	Analysis of charge-dependent stopping of swift ions. <i>Physical Review A</i> , 1994, 50, 3197-3201.	2.5	30
71	Electronic stopping of swift partially stripped molecules and clusters. <i>Physical Review A</i> , 2000, 61, .	2.5	30
72	Barkas effect, shell correction, screening and correlation in collisional energy-loss straggling of an ion beam. <i>European Physical Journal D</i> , 2003, 23, 201-209.	1.3	30

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73	Small-angle multiple scattering of ions in the screened-coulomb region. III. Combined angular and lateral spread. Nuclear Instruments & Methods, 1978, 150, 221-231.	1.2	29
74	Binary theory of antiproton stopping. European Physical Journal D, 2001, 15, 165-172.	1.3	29
75	Electronic stopping of swift lithium and carbon ions. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 212-219.	1.4	27
76	Alloy sputtering at high fluence: preferential sputtering and competing effects. Nuclear Instruments & Methods in Physics Research B, 1993, 82, 269-282.	1.4	26
77	Anatomy of the Barkas effect. Nuclear Instruments & Methods in Physics Research B, 2003, 212, 110-117.	1.4	26
78	Interplay between computer simulation and transport theory in the analysis of ion-beam-induced collision processes in solids. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 585-597.	2.1	25
79	Stopping of swift ions in compounds. Nuclear Instruments & Methods in Physics Research B, 2004, 218, 19-28.	1.4	25
80	Six decades of atomic collisions in solids. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 391-412.	1.4	25
81	Light-ion stopping near the maximum. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 541-550.	1.4	24
82	Electron Emission from Solids During Ion Bombardment. Theoretical Aspects. Springer Series in Chemical Physics, 1981, , 2-37.	0.2	23
83	Energy loss straggling of a point charge penetrating a free-electron gas. Physical Review A, 1982, 25, 1450-1455.	2.5	23
84	On the proton stopping power maximum in gases and vapours. Nuclear Instruments & Methods in Physics Research B, 1985, 12, 80-83.	1.4	23
85	Polarization effect in stopping of swift partially screened heavy ions: Perturbative theory. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 220-229.	1.4	23
86	The Energy Dependence of Lattice Disorder in Ion-Implanted Silicon. Physica Status Solidi (B): Basic Research, 1969, 35, 269-275.	1.5	22
87	Interaction of slow (100 eV/atom) carbon clusters with gold: Penetration properties and collision cascades. Nuclear Instruments & Methods in Physics Research B, 1990, 51, 344-353.	1.4	22
88	Scaling law for electronically elastic ion-molecule collisions in the sudden approximation. Journal of Physics B: Atomic and Molecular Physics, 1978, 11, L145-L148.	1.6	21
89	Interaction of slow (100 eV/atom) copper clusters with thin gold films: reflection, transmission, and sputtering at normal and oblique incidence. Nuclear Instruments & Methods in Physics Research B, 1991, 62, 23-34.	1.4	20
90	Energy loss and charge exchange: Statistics and atomistics. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 47-54.	1.4	20

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91	Damage Clusters in Molecular-Ion-Bombarded Gold Observed by Transmission Electron Microscopy. Physical Review Letters, 1976, 36, 1148-1151.	7.8	19
92	Shell correction in Bohr stopping theory. European Physical Journal D, 2000, 12, 111-116.	1.3	19
93	Nuclear stopping in transmission experiments. Nuclear Instruments & Methods in Physics Research B, 2003, 207, 240-256.	1.4	19
94	Stopping of ions based on semiclassical phase shifts. Physical Review A, 2007, 76, .	2.5	19
95	Effect of channelling on displacement cascade theory. Physics Letters, 1963, 6, 251-253.	2.1	18
96	Generalised scaling law for electronically elastic ion-molecule collisions in the sudden approximation. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, L321-L323.	1.6	18
97	Recoil numbers, particle densities and reaction yields in linear atomic collision cascades. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1985, 52, 753-785.	0.6	18
98	Stopping power and energy loss spectrum of a dense medium of bound electrons. Nuclear Instruments & Methods in Physics Research B, 1990, 48, 29-33.	1.4	18
99	Impact-parameter-dependent stopping of swift ions. European Physical Journal D, 2010, 58, 105-116.	1.3	18
100	Higher moments of the energy loss spectrum of swift charged particles penetrating a thin layer of material. Nuclear Instruments & Methods in Physics Research B, 1985, 6, 486-495.	1.4	17
101	Momentum asymmetry and the isotope puzzle in sputtering by ion bombardment. Nuclear Instruments & Methods in Physics Research B, 1993, 82, 242-254.	1.4	17
102	Simulation of energy-dependent isotope sputtering. Nuclear Instruments & Methods in Physics Research B, 1995, 103, 383-386.	1.4	17
103	Resolution of the Frozen-Charge Paradox in Stopping of Channeled Heavy Ions. Physical Review Letters, 2001, 86, 1486-1489.	7.8	17
104	Material dependence of electronic stopping. Nuclear Instruments & Methods in Physics Research B, 2003, 209, 19-25.	1.4	17
105	Effect of molecular geometry on multiple scattering of heavy energetic particles. Nuclear Instruments & Methods, 1976, 134, 597-599.	1.2	15
106	Preferential recoil implantation in polyatomic targets. Nuclear Instruments & Methods in Physics Research B, 1988, 34, 15-21.	1.4	15
107	Scattering and stopping of swift diatomic molecules under coulomb explosion. Nuclear Instruments & Methods in Physics Research B, 1992, 67, 11-16.	1.4	15
108	Stopping of high-Z ions at intermediate velocities. Nuclear Instruments & Methods in Physics Research B, 2006, 245, 22-27.	1.4	15

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109	Antiproton and proton energy loss straggling at keV energies. European Physical Journal D, 2008, 46, 89-92.	1.3	15
110	Interplay of charge exchange and projectile excitation in the stopping of swift heavy ions. European Physical Journal D, 2003, 23, 211-215.	1.3	14
111	COLLISION CASCADES AND SPUTTERING INDUCED BY LARGER CLUSTER IONS. Journal De Physique Colloque, 1989, 50, C2-175-C2-182.	0.2	13
112	The Z3I contribution to the stopping power of protons and antiprotons in silicon: Two theoretical predictions. Nuclear Instruments & Methods in Physics Research B, 1990, 48, 8-9.	1.4	13
113	Forces on swift ions near plane surfaces. Nuclear Instruments & Methods in Physics Research B, 1997, 125, 77-96.	1.4	13
114	Valence structure effects in the stopping of swift ions. Nuclear Instruments & Methods in Physics Research B, 2005, 230, 1-6.	1.4	13
115	Charge-exchange straggling in equilibrium. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 804-809.	1.4	13
116	Energy-loss straggling of 2×10 MeV/u Kr ions in gases. European Physical Journal D, 2013, 67, 1.	1.3	13
117	Statistics of projectile states and correlated phenomena for penetrating ions. Nuclear Instruments & Methods in Physics Research B, 1996, 115, 111-124.	1.4	12
118	Energy-loss spectra of charged particles in the presence of charge exchange. Nuclear Instruments & Methods in Physics Research B, 1997, 125, 110-115.	1.4	12
119	Stopping of slow ions. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 569-578.	0.6	12
120	Impact-parameter-dependent electronic stopping of swift ions. European Physical Journal D, 2010, 56, 41-50.	1.3	12
121	Scaling laws governing the multiple scattering of diatomic molecules under Coulomb explosion. Physical Review A, 1992, 46, 2596-2606.	2.5	11
122	Charge evolution of swift-heavy-ion beams explored by matrix method. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 813-816.	1.4	11
123	Intercomparison of atomic models for computing stopping parameters from the Bethe theory: Atomic hydrogen. Physical Review A, 1992, 46, 7012-7018.	2.5	10
124	Compositional changes in alloys during ion bombardment at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 1998, 140, 75-90.	1.4	10
125	A general expression for the width of a charged-particle track. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 401-407.	1.4	10
126	Stopping of swift hydrogen diclusters: oscillator model. European Physical Journal D, 2011, 61, 39-50.	1.3	10

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127	Notes on Barkas-Andersen effect. European Physical Journal D, 2014, 68, 1.	1.3	10
128	Pressure relaxation in atomic mixing and preferential sputtering. Journal of Applied Physics, 1992, 72, 1993-1995.	2.5	9
129	Oriental dependence of electronic stopping of molecule and cluster ions. Nuclear Instruments & Methods in Physics Research B, 1994, 88, 191-195.	1.4	9
130	Ion-beam induced compositional changes in alloys at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 1996, 120, 221-225.	1.4	9
131	Effect of composition gradients in alloys on differential sputter parameters. Nuclear Instruments & Methods in Physics Research B, 1998, 140, 61-69.	1.4	9
132	Primary electron spectra from swift heavy-ion impact. European Physical Journal D, 2006, 39, 209-221.	1.3	9
133	Momentum in atomic collision cascades. Nuclear Instruments & Methods in Physics Research B, 1995, 102, 86-92.	1.4	8
134	Energy-loss spectra of charged particles in the presence of charge exchange: Addendum on spectra. Nuclear Instruments & Methods in Physics Research B, 2000, 170, 39-44.	1.4	8
135	Elements of Sputtering Theory. , 2012, , 1-40.		8
136	Stopping of slow recoil atoms in gases. Zeitschrift für Physik A, 1981, 301, 101-107.	1.4	7
137	Magnitude and mechanism of collisional mixing. Nuclear Instruments & Methods in Physics Research B, 1987, 19-20, 85-91.	1.4	7
138	Scattering of swift diatomic molecular ions from planar surfaces at grazing incidence. Nuclear Instruments & Methods in Physics Research B, 1994, 88, 97-106.	1.4	7
139	Charge-exchange and energy-loss statistics of swift penetrating ions. Laser and Particle Beams, 1995, 13, 281-292.	1.0	7
140	Pronounced composition gradients in alloys under low-energy ion implantation at high fluence. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 453-459.	1.4	7
141	Stopping of heavy ions. Nuclear Instruments & Methods in Physics Research B, 2002, 195, 1-2.	1.4	7
142	Shell correction in stopping theory. Nuclear Instruments & Methods in Physics Research B, 2006, 243, 457-460.	1.4	7
143	Exploring reciprocity as a tool in low-energy electronic stopping. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 817-823.	1.4	7
144	Velocity dependence of heavy-ion stopping below the maximum. Nuclear Instruments & Methods in Physics Research B, 2015, 342, 292-299.	1.4	7

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145	Non-binary atomic collisions in crystals. <i>Physics Letters</i> , 1965, 15, 237-238.	2.1	6
146	Lateral distributions of multiply scattered ions: sensitivity to atomic interaction, Z1-oscillations, molecular effects, double-differential distributions, and implications for surface scattering. <i>Nuclear Instruments & Methods</i> , 1976, 132, 703-705.	1.2	6
147	Inelastic background signal in x-ray photoelectron spectroscopy. <i>Physical Review B</i> , 1988, 38, 11140-11146.	3.2	6
148	Note on isotope sputtering. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1993, 82, 192-193.	1.4	6
149	Z2 structure and gas-solid effect in the stopping of slow ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007, 263, 349-356.	1.4	6
150	Impact-parameter-dependent stopping of swift ions. <i>European Physical Journal D</i> , 2010, 56, 51-60.	1.3	6
151	The Bloch correction, key to heavy-ion stopping. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	6
152	Effect of impact-parameter-dependent electronic energy loss on reflected-ion spectra. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020, 467, 91-96.	1.4	6
153	Inversion of total cross sections for repulsive ion-atom scattering in the classical regime. <i>Physica</i> , 1974, 71, 258-265.	0.9	5
154	Note on stopping power and statistics of particle penetration. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1995, 95, 477-479.	1.4	5
155	Exact solutions of balance equation governing ion-beam-induced composition changes and sputtering. <i>Applied Physics Letters</i> , 1995, 66, 433-435.	3.3	5
156	Nonperturbative Theory of Charge-Dependent Heavy-Ion Stopping. <i>Physica Scripta</i> , 2001, T92, 222-224.	2.5	5
157	Statistics of heavy-ion stopping. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002, 195, 183-187.	1.4	5
158	Anatomy of charge-exchange straggling. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 338, 101-107.	1.4	5
159	Is electronic stopping of ions velocity-proportional in the velocity-proportional regime?. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 440, 41-47.	1.4	5
160	Momentum in atomic collision cascades. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1995, 102, 86-92.	1.4	5
161	Stopping power at intermediate velocities. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1985, 10-11, 241-246.	1.4	4
162	Evaluation by citation: An imperfect system. <i>Physics Today</i> , 2009, 62, 10-11.	0.3	4

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163	Polarization wake of penetrating ions: oscillator model. European Physical Journal D, 2012, 66, 1.	1.3	4
164	Possibility of anisotropic disordering of f. c. c. A3B alloys by irradiation with fast electrons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1967, 24, 104-105.	2.1	3
165	Nonlinear transmission sputtering. Nuclear Instruments & Methods in Physics Research B, 1996, 112, 12-15.	1.4	3
166	Panel discussion on stopping of heavy ions. Nuclear Instruments & Methods in Physics Research B, 2002, 195, 224-231.	1.4	3
167	Interplay of Classical and Quantum Mechanics in the Theory of Charged-Particle Stopping. Advances in Quantum Chemistry, 2005, 48, 91-110.	0.8	3
168	Energy-loss spectra of light relativistic ions. Nuclear Instruments & Methods in Physics Research B, 2007, 256, 50-56.	1.4	3
169	Systematics of heavy-ion charge-exchange straggling. Nuclear Instruments & Methods in Physics Research B, 2016, 384, 30-36.	1.4	3
170	Particle-Induced Electron Emission: Open Questions, Pitfalls, and a Few Attempts at Answers. NATO ASI Series Series B: Physics, 1993, , 59-78.	0.2	3
171	Deduction of Heavy-Ion X-Ray Production Cross Sections from Thick-Target Yields,. Physical Review A, 1972, 6, 1257-1257.	2.5	2
172	Elastic and inelastic scattering of electrons emitted from solids: effects on energy spectra and depth profiling in xps/aes. Surface and Interface Analysis, 1986, 9, 130-130.	1.8	2
173	Electron ejection in collisions between swift heavy ions and atoms. Nuclear Instruments & Methods in Physics Research B, 2007, 258, 116-120.	1.4	2
174	Threshold behavior and isotope effect in low-energy electronic stopping of light ions. Journal of Applied Physics, 2021, 129, 185304.	2.5	2
175	Comment on the Energy Distribution of Excited Recoil Atoms. Springer Series in Chemical Physics, 1981, , 251-257.	0.2	2
176	Stopping of Slow Ions. Springer Series in Solid-state Sciences, 2014, , 343-415.	0.3	2
177	Fourth International Workshop on Inelastic Ion-Surface Collisions. Physica Scripta, 1983, T6, 3-3.	2.5	1
178	A Time-Dependent Analog of the Ritz Variational Principle in Nonrelativistic Quantum Mechanics. Physica Scripta, 1985, 32, 482-485.	2.5	1
179	Binary theory of electronic stopping, a powerful update to Bohr's classic from 1913. AIP Conference Proceedings, 2003, , .	0.4	1
180	Height and position of the Bragg peak in the stopping of charged particles. Journal of Applied Physics, 2020, 127, 164302.	2.5	1

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181	Penetration of Molecules and Clusters. Springer Series in Solid-state Sciences, 2014, , 481-546.	0.3	1
182	Statistics of Particle Penetration. Springer Tracts in Modern Physics, 0, , 99-108.	0.1	1
183	Stopping. Springer Series in Solid-state Sciences, 2014, , 149-195.	0.3	1
184	Magnetismus des freien Elektronengases. European Physical Journal A, 1963, 171, 515-526.	2.5	0
185	Comment on Biological Effect of Elastic Nuclear Collisions. Radiation Research, 1977, 71, 481.	1.5	0
186	Scaling law for electronically elastic ion - molecule collisions in the sudden approximation. Journal of Physics B: Atomic and Molecular Physics, 1978, 11, 2779-2779.	1.6	0
187	Fifteen Ways to Get Your Audience to Leave You. Physics Today, 1998, 51, 86-86.	0.3	0
188	Bohr did not make an elementary blunder. Radiation Effects and Defects in Solids, 2003, 158, 551-552.	1.2	0
189	Electronic Stopping of Point Charges. Springer Tracts in Modern Physics, 0, , 29-44.	0.1	0
190	ICACS 25: An anniversary. Nuclear Instruments & Methods in Physics Research B, 2013, 315, 6-8.	1.4	0
191	Interatomic Potentials, Scattering and Nuclear Stopping. Springer Series in Solid-state Sciences, 2014, , 235-280.	0.3	0
192	Multiple Scattering. Springer Series in Solid-state Sciences, 2014, , 281-339.	0.3	0
193	Range and Energy Deposition. Springer Series in Solid-state Sciences, 2014, , 417-477.	0.3	0
194	Charge Exchange: Statistics and Energetics. Springer Series in Solid-state Sciences, 2014, , 97-146.	0.3	0
195	Straggling. Springer Series in Solid-state Sciences, 2014, , 197-231.	0.3	0