

# Igor D Kaganovich

## List of Publications by Year in descending order

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237  
papers

5,594  
citations

94433

37  
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114465

63  
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244  
all docs

244  
docs citations

244  
times ranked

2929  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2017 Plasma Roadmap: Low temperature plasma science and technology. Journal Physics D: Applied Physics, 2017, 50, 323001.	2.8	710
2	Kinetic effects in a Hall thruster discharge. Physics of Plasmas, 2007, 14, 057104.	1.9	114
3	Modelling plasma discharges at high electronegativity. Plasma Sources Science and Technology, 1997, 6, 437-449.	3.1	108
4	A comparison of emissive probe techniques for electric potential measurements in a complex plasma. Physics of Plasmas, 2011, 18, .	1.9	104
5	The space-time-averaging procedure and modeling of the RF discharge II. Model of collisional low-pressure RF discharge. IEEE Transactions on Plasma Science, 1992, 20, 66-75.	1.3	102
6	Kinetic simulation of secondary electron emission effects in Hall thrusters. Physics of Plasmas, 2006, 13, 014501.	1.9	100
7	Stochastic electron heating in bounded radio-frequency plasmas. Applied Physics Letters, 1996, 69, 3818-3820.	3.3	97
8	Anomalous Capacitive Sheath with Deep Radio-Frequency Electric-Field Penetration. Physical Review Letters, 2002, 89, 265006.	7.8	94
9	Physics of $E \times B$ discharges relevant to plasma propulsion and similar technologies. Physics of Plasmas, 2020, 27, .	1.9	89
10	Breakdown of a Space Charge Limited Regime of a Sheath in a Weakly Collisional Plasma Bounded by Walls with Secondary Electron Emission. Physical Review Letters, 2009, 103, 145004.	7.8	88
11	Kinetic Theory of Plasma Sheaths Surrounding Electron-Emitting Surfaces. Physical Review Letters, 2013, 111, 075002.	7.8	85
12	Fluid theory and simulations of instabilities, turbulent transport and coherent structures in partially-magnetized plasmas of $E \times B$ discharges. Plasma Physics and Controlled Fusion, 2017, 59, 014041.	2.1	83
13	Nonlinear charge and current neutralization of an ion beam pulse in a pre-formed plasma. Physics of Plasmas, 2001, 8, 4180-4192.	1.9	81
14	Absence of Debye Sheaths due to Secondary Electron Emission. Physical Review Letters, 2012, 108, 255001.	7.8	80
15	Revisiting the anomalous RF field penetration into a warm plasma. IEEE Transactions on Plasma Science, 2006, 34, 696-717.	1.3	78
16	Effect of Secondary Electron Emission on Electron Cross-Field Current in $E \times B$ Discharges. IEEE Transactions on Plasma Science, 2011, 39, 995-1006.	1.3	72
17	2D axial-azimuthal particle-in-cell benchmark for low-temperature partially magnetized plasmas. Plasma Sources Science and Technology, 2019, 28, 105010.	3.1	72
18	Quasilinear theory of collisionless electron heating in radio frequency gas discharges. Physics of Plasmas, 1997, 4, 2413-2421.	1.9	71

#	ARTICLE	IF	CITATIONS
19	Long wavelength gradient drift instability in Hall plasma devices. I. Fluid theory. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	66
20	Charged species profiles in oxygen plasma. <i>Applied Physics Letters</i> , 2000, 77, 800-802.	3.3	64
21	Nonlinear structures and anomalous transport in partially magnetized E $\tilde{A}$ -B plasmas. <i>Physics of Plasmas</i> , 2018, 25, 011608.	1.9	62
22	How to patch active plasma and collisionless sheath: A practical guide. <i>Physics of Plasmas</i> , 2002, 9, 4788-4793.	1.9	58
23	Evolution of the electron cyclotron drift instability in two-dimensions. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	57
24	Scaling and formulary of cross-sections for ion-atom impact ionization. <i>New Journal of Physics</i> , 2006, 8, 278-278.	2.9	54
25	General Cause of Sheath Instability Identified for Low Collisionality Plasmas in Devices with Secondary Electron Emission. <i>Physical Review Letters</i> , 2012, 108, 235001.	7.8	54
26	Low-pressure RF discharge in the free-flight regime. <i>IEEE Transactions on Plasma Science</i> , 1992, 20, 86-92.	1.3	53
27	Recent US advances in ion-beam-driven high energy density physics and heavy ion fusion. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 1-7.	1.6	52
28	Plasma-sheath instability in Hall thrusters due to periodic modulation of the energy of secondary electrons in cyclotron motion. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	52
29	Theory and simulation of warm dense matter targets. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 275-283.	1.6	51
30	Effects of Collisions and Particle Trapping on Collisionless Heating. <i>Physical Review Letters</i> , 1999, 82, 327-330.	7.8	47
31	Multiple electron stripping of 3.4 MeV/amu Kr <sup>7+</sup> and Xe <sup>11+</sup> in nitrogen. <i>Physics of Plasmas</i> , 2001, 8, 1753-1756.	1.9	47
32	Nonlinear plasma waves excitation by intense ion beams in background plasma. <i>Physics of Plasmas</i> , 2004, 11, 3546-3552.	1.9	45
33	Beam dynamics of the Neutralized Drift Compression Experiment-II, a novel pulse-compressing ion accelerator. <i>Physics of Plasmas</i> , 2010, 17, 056704.	1.9	44
34	Modification of electron velocity distribution in bounded plasmas by secondary electron emission. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 815-824.	1.3	43
35	Collective instabilities and beam-plasma interactions in intense heavy ion beams. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2004, 7, .	1.8	42
36	Electron Boltzmann kinetic equation averaged over fast electron bouncing and pitch-angle scattering for fast modeling of electron cyclotron resonance discharge. <i>Physical Review E</i> , 2000, 61, 1875-1889.	2.1	39

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37	Investigation of the short argon arc with hot anode. I. Numerical simulations of non-equilibrium effects in the near-electrode regions. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	37
38	Transverse conductivity in a braided magnetic field. <i>Physics of Plasmas</i> , 1998, 5, 3901-3909.	1.9	36
39	Physics of neutralization of intense high-energy ion beam pulses by electrons. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	36
40	Modeling of reduced effective secondary electron emission yield from a velvet surface. <i>Journal of Applied Physics</i> , 2016, 120, 213302.	2.5	36
41	Investigation of the Paschen curve for helium in the 100â€“1000 kV range. <i>Physics of Plasmas</i> , 2017, 24, 093511.	1.9	36
42	Effects of non-Maxwellian electron velocity distribution function on two-stream instability in low-pressure discharges. <i>Physics of Plasmas</i> , 2007, 14, 013508.	1.9	35
43	Charge and Current Neutralization of an Ion-Beam Pulse Propagating in a Background Plasma along a Solenoidal Magnetic Field. <i>Physical Review Letters</i> , 2007, 99, 235002.	7.8	35
44	Sheath-Induced Instabilities in Plasmas with $\mathbf{E} \times \mathbf{B}$ Drift. <i>Physical Review Letters</i> , 2013, 111, 115002.	7.8	35
45	Scaling of spoke rotation frequency within a Penning discharge. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	35
46	Long wavelength gradient drift instability in Hall plasma devices. II. Applications. <i>Physics of Plasmas</i> , 2013, 20, 052108.	1.9	34
47	Modeling of reduced secondary electron emission yield from a foam or fuzz surface. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	33
48	Effects of emitted electron temperature on the plasma sheath. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	32
49	Spatiotemporal dynamics of charged species in the afterglow of plasmas containing negative ions. <i>Physical Review E</i> , 2001, 64, 036402.	2.1	31
50	Landau damping and anomalous skin effect in low-pressure gas discharges: Self-consistent treatment of collisionless heating. <i>Physics of Plasmas</i> , 2004, 11, 2399-2410.	1.9	31
51	Merging of Super-Alfvénic Current Filaments during Collisionless Weibel Instability of Relativistic Electron Beams. <i>Physical Review Letters</i> , 2008, 101, 175001.	7.8	31
52	Non-local electron energy probability function in a plasma expanding along a magnetic nozzle. <i>Frontiers in Physics</i> , 2015, 3, .	2.1	31
53	Self-consistent system of equations for a kinetic description of the low-pressure discharges accounting for the nonlocal and collisionless electron dynamics. <i>Physical Review E</i> , 2003, 68, 026411.	2.1	30
54	Validation and benchmarking of two particle-in-cell codes for a glow discharge. <i>Plasma Sources Science and Technology</i> , 2017, 26, 014003.	3.1	30

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55	Fast modelling of low-pressure radio-frequency collisional capacitively coupled discharge and investigation of the formation of a non-Maxwellian electron distribution function. <i>Plasma Sources Science and Technology</i> , 1998, 7, 268-281.	3.1	29
56	Investigation of the short argon arc with hot anode. II. Analytical model. <i>Physics of Plasmas</i> , 2018, 25, 013522.	1.9	29
57	Negative ion density fronts. <i>Physics of Plasmas</i> , 2001, 8, 2540-2548.	1.9	28
58	Instability, collapse, and oscillation of sheaths caused by secondary electron emission. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	28
59	Negative Ion Density Fronts during Ignition and Extinction of Plasmas in Electronegative Gases. <i>Physical Review Letters</i> , 2000, 84, 1918-1921.	7.8	27
60	Overview of US heavy ion fusion research. <i>Nuclear Fusion</i> , 2005, 45, 131-137.	3.5	27
61	Optimized simultaneous transverse and longitudinal focusing of intense ion beam pulses for warm dense matter applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 289-297.	1.6	27
62	Non-local collisionless and collisional electron transport in low-temperature plasma. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 124003.	2.1	27
63	Effect of electron energy distribution function on power deposition and plasma density in an inductively coupled discharge at very low pressures. <i>Plasma Sources Science and Technology</i> , 2003, 12, 302-312.	3.1	25
64	Plans for longitudinal and transverse neutralized beam compression experiments, and initial results from solenoid transport experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 215-222.	1.6	25
65	Nonlinear evolution of the Weibel instability of relativistic electron beams. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	25
66	Spatial symmetry breaking in single-frequency CCP discharge with transverse magnetic field. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	25
67	Integrated simulation of an ion-driven warm dense matter experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 231-237.	1.6	24
68	Benchmarking and validation of global model code for negative hydrogen ion sources. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	24
69	Particle-in-cell simulations of anomalous transport in a Penning discharge. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	24
70	Neutralized transport experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 544, 225-235.	1.6	23
71	Enhanced collisionless heating in a nonuniform plasma at the bounce resonance condition. <i>Physics of Plasmas</i> , 2005, 12, 080704.	1.9	23
72	Band structure of the growth rate of the two-stream instability of an electron beam propagating in a bounded plasma. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	23

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73	Simulations of ion velocity distribution functions taking into account both elastic and charge exchange collisions. <i>Plasma Sources Science and Technology</i> , 2017, 26, 024001.	3.1	23
74	Effect of non-local electron conductivity on power absorption and plasma density profiles in low pressure inductively coupled discharges. <i>Plasma Sources Science and Technology</i> , 2003, 12, 170-181.	3.1	22
75	Survey of collective instabilities and beam-plasma interactions in intense heavy ion beams. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 606, 11-21.	1.6	22
76	Measurements of low-energy electron reflection at a plasma boundary. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	22
77	Structure of nonlocal gradient-drift instabilities in Hall $E \times B$ discharges. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	22
78	On limitations of laser-induced fluorescence diagnostics for xenon ion velocity distribution function measurements in Hall thrusters. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	21
79	Current flow instability and nonlinear structures in dissipative two-fluid plasmas. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	21
80	Synthesis of nanoparticles in carbon arc: measurements and modeling. <i>MRS Communications</i> , 2018, 8, 842-849.	1.8	21
81	Self-Organization, Structures, and Anomalous Transport in Turbulent Partially Magnetized Plasmas with Crossed Electric and Magnetic Fields. <i>Physical Review Letters</i> , 2019, 122, 185001.	7.8	21
82	Analytical and numerical studies of heavy ion beam transport in the fusion chamber. <i>Laser and Particle Beams</i> , 2002, 20, 497-502.	1.0	20
83	Effects of finite pulse length, magnetic field, and gas ionization on ion beam pulse neutralization by background plasma. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 93-102.	1.6	20
84	Electron bounce-cyclotron resonance in capacitive discharges at low magnetic fields. <i>Physical Review Research</i> , 2022, 4, .	3.6	20
85	Self-trapping of negative ions due to electron detachment in the afterglow of electronegative gas plasmas. <i>Applied Physics Letters</i> , 2000, 76, 2844-2846.	3.3	19
86	Multiple electron stripping of heavy ion beams. <i>Laser and Particle Beams</i> , 2002, 20, 551-554.	1.0	19
87	Enhanced Self-Focusing of an Ion Beam Pulse Propagating through a Background Plasma along a Solenoidal Magnetic Field. <i>Physical Review Letters</i> , 2009, 103, 075003.	7.8	19
88	Electron scattering in helium for Monte Carlo simulations. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	19
89	Observation of non-Maxwellian electron distributions in the NSTX divertor. <i>Journal of Nuclear Materials</i> , 2013, 438, S384-S387.	2.7	19
90	Modification of the loss cone for energetic particles. <i>Geophysical Research Letters</i> , 2014, 41, 8107-8113.	4.0	19

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91	Short intense ion pulses for materials and warm dense matter research. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 800, 98-103.	1.6	19
92	Effect of collisions on the two-stream instability in a finite length plasma. Physics of Plasmas, 2016, 23, .	1.9	19
93	Root-growth of boron nitride nanotubes: experiments and <i>ab initio</i> simulations. Nanoscale, 2018, 10, 22223-22230.	5.6	19
94	Heavy ion fusion (HIF) driver point designs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 294-299.	1.6	18
95	Ion beam heated target simulations for warm dense matter physics and inertial fusion energy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 134-138.	1.6	18
96	Generation of anomalously energetic suprathermal electrons by an electron beam interacting with a nonuniform plasma. Physics of Plasmas, 2015, 22, 123510.	1.9	18
97	Structure of the velocity distribution of sheath-accelerated secondary electrons in an asymmetric RF-dc discharge. Plasma Sources Science and Technology, 2015, 24, 054003.	3.1	18
98	Progress in heavy ion fusion research. Physics of Plasmas, 2003, 10, 2064-2070.	1.9	17
99	Boundary-induced effect on the spoke-like activity in $E \times B$ plasma. Physics of Plasmas, 2019, 26, .	1.9	17
100	Overview of US heavy-ion fusion progress and plans. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 1-8.	1.6	16
101	Computationally efficient description of relativistic electron beam transport in collisionless plasma. Physics of Plasmas, 2007, 14, 043103.	1.9	16
102	Active electron energy distribution function control in direct current discharge using an auxiliary electrode. Physics of Plasmas, 2013, 20, 101606.	1.9	16
103	Defocusing of an ion beam propagating in background plasma due to two-stream instability. Physics of Plasmas, 2015, 22, 040701.	1.9	16
104	Self-consistent modeling of nonlocal inductively coupled plasmas. IEEE Transactions on Plasma Science, 2006, 34, 767-785.	1.3	15
105	Heavy-ion-fusion-science: summary of US progress. Nuclear Fusion, 2007, 47, 721-727.	3.5	15
106	Simulations and experiments of intense ion beam current density compression in space and time. Physics of Plasmas, 2009, 16, 056701.	1.9	15
107	Ion sound instability driven by the ion flows. Physics of Plasmas, 2015, 22, 052113.	1.9	15
108	Comment on "Generation of Electromagnetic Pulses from Plasma Channels Induced by Femtosecond Light Strings". Physical Review Letters, 2002, 89, 139301; author reply 139302.	7.8	14

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109	Overview of theory and modeling in the heavy ion fusion virtual national laboratory. <i>Laser and Particle Beams</i> , 2002, 20, 377-384.	1.0	14
110	Dynamics of ion beam charge neutralization by ferroelectric plasma sources. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	14
111	Ion velocity distribution functions in argon and helium discharges: detailed comparison of numerical simulation results and experimental data. <i>Plasma Sources Science and Technology</i> , 2017, 26, 024002.	3.1	14
112	Irradiation of materials with short, intense ion pulses at NDCX-II. <i>Laser and Particle Beams</i> , 2017, 35, 373-378.	1.0	14
113	“Feathered” fractal surfaces to minimize secondary electron emission for a wide range of incident angles. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	14
114	Nano-size effects in graphite/graphene structure exposed to cesium vapor. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	14
115	Investigating the effects of electron bounce-cyclotron resonance on plasma dynamics in capacitive discharges operated in the presence of a weak transverse magnetic field. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	14
116	Comparison of quantum-mechanical and classical trajectory calculations of cross sections for ion-atom impact ionization of negative and positive ions for heavy-ion fusion applications. <i>Physical Review A</i> , 2003, 68, .	2.5	13
117	Scaling cross sections for ion-atom impact ionization. <i>Physics of Plasmas</i> , 2004, 11, 1229-1232.	1.9	13
118	Effects of beam-plasma instabilities on neutralized propagation of intense ion beams in background plasma. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 733, 80-85.	1.6	13
119	Emissive sheath measurements in the afterglow of a radio frequency plasma. <i>Physics of Plasmas</i> , 2014, 21, 013510.	1.9	13
120	Relativistic Particle Beams as a Resource to Solve Outstanding Problems in Space Physics. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, .	2.8	13
121	Fast modeling of the low-pressure capacitively coupled radio-frequency discharge based on the nonlocal approach. <i>Applied Physics Letters</i> , 1996, 69, 2341-2343.	3.3	12
122	Anomalous skin effect for anisotropic electron velocity distribution function. <i>Physics of Plasmas</i> , 2004, 11, 3328-3330.	1.9	12
123	Multispecies Weibel instability for intense charged particle beam propagation through neutralizing background plasma. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 577, 70-78.	1.6	12
124	Controlling charge and current neutralization of an ion beam pulse in a background plasma by application of a solenoidal magnetic field: Weak magnetic field limit. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	12
125	Modeling a short dc discharge with thermionic cathode and auxiliary anode. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	12
126	Evolution of a Relativistic Electron Beam for Tracing Magnetospheric Field Lines. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, .	2.8	12



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127	Numerical benchmark of transient pressure-driven metallic melt flows. Nuclear Materials and Energy, 2020, 25, 100826.	1.3	12
128	Three regimes of high-voltage breakdown in helium. Plasma Sources Science and Technology, 2018, 27, 104004.	3.1	12
129	Neutralized drift compression experiments with a high-intensity ion beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 223-230.	1.6	11
130	Whistler wave excitation and effects of self-focusing on ion beam propagation through a background plasma along a solenoidal magnetic field. Physics of Plasmas, 2010, 17, .	1.9	11
131	Intense ion beam neutralization using underdense background plasma. Physics of Plasmas, 2015, 22, .	1.9	11
132	Migration of a carbon adatom on a charged single-walled carbon nanotube. Carbon, 2017, 116, 174-180.	10.3	11
133	Quantitative imaging of carbon dimer precursor for nanomaterial synthesis in the carbon arc. Plasma Sources Science and Technology, 2018, 27, 025008.	3.1	11
134	<i>In situ</i> diagnostics for nanomaterial synthesis in carbon arc plasma. Plasma Sources Science and Technology, 2018, 27, 084001.	3.1	11
135	Highly Compressed Ion Beams for High Energy Density Science. , 0, , .		10
136	Amplification due to two-stream instability of self-electric and magnetic fields of an ion beam propagating in background plasma. Physics of Plasmas, 2018, 25, .	1.9	10
137	Neutralization of ion beam by electron injection: Excitation and propagation of electrostatic solitary waves. Physics of Plasmas, 2020, 27, .	1.9	10
138	Review of the gas breakdown physics and nanomaterial-based ionization gas sensors and their applications. Plasma Sources Science and Technology, 2022, 31, 033001.	3.1	10
139	Fast expansion of a plasma beam controlled by short-circuiting effects in a longitudinal magnetic field. Plasma Sources Science and Technology, 1996, 5, 743-747.	3.1	9
140	Two-stream sausage and hollowing instabilities in high-intensity particle beams. Physics of Plasmas, 2001, 8, 4637-4646.	1.9	9
141	Analytical and Numerical Studies of the Complex Interaction of a Fast Ion Beam Pulse with a Background Plasma. Physica Scripta, 2004, T107, 54.	2.5	9
142	Ion beam pulse neutralization by a background plasma in a solenoidal magnetic field. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 383-388.	1.6	9
143	Effectiveness of electron-cyclotron and transmission resonance heating in inductively coupled plasmas. Physics of Plasmas, 2005, 12, 104505.	1.9	9
144	Effect of asymmetric secondary emission in bounded low-collisional $E \times B$ plasma on sheath and plasma properties. Journal Physics D: Applied Physics, 2014, 47, 405204.	2.8	9

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145	Self-amplification of electrons emitted from surfaces in plasmas with E-fields. Plasma Sources Science and Technology, 2015, 24, 034010.	3.1	9
146	Generation of forerunner electron beam during interaction of ion beam pulse with plasma. Physics of Plasmas, 2018, 25, 011609.	1.9	9
147	Effect of Field-Line Curvature on the Ionospheric Accessibility of Relativistic Electron Beam Experiments. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	9
148	Semianalytical description of nonlocal secondary electrons in a radio frequency capacitively coupled plasma at intermediate pressures. IEEE Transactions on Plasma Science, 1999, 27, 1339-1347.	1.3	8
149	Ionization cross-sections for ion-atom collisions in high-energy ion beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 91-97.	1.6	8
150	Collective focusing of intense ion beam pulses for high-energy density physics applications. Physics of Plasmas, 2011, 18, .	1.9	8
151	Determining the gas composition for the growth of BNNTs using a thermodynamic approach. Physical Chemistry Chemical Physics, 2019, 21, 13268-13286.	2.8	8
152	Analytical model of low and high ablation regimes in carbon arcs. Journal of Applied Physics, 2020, 128, .	2.5	8
153	Validated two-dimensional modeling of short carbon arcs: Anode and cathode spots. Physics of Plasmas, 2020, 27, .	1.9	8
154	Neutralization of ion beam by electron injection: Accumulation of cold electrons. Physics of Plasmas, 2020, 27, .	1.9	8
155	Signal propagation in collisional plasma with negative ions. Physics of Plasmas, 2001, 8, 719-725.	1.9	7
156	Ion-beam plasma neutralization interaction images. IEEE Transactions on Plasma Science, 2002, 30, 12-13.	1.3	7
157	A final focus model for heavy-ion fusion driver system codes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 243-254.	1.6	7
158	US heavy ion beam research for high energy density physics applications and fusion. European Physical Journal Special Topics, 2006, 133, 731-741.	0.2	7
159	Effects of errors in velocity tilt on maximum longitudinal compression during neutralized drift compression of intense beam pulses: I. general description. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 678, 48-63.	1.6	7
160	Short-pulse, compressed ion beams at the Neutralized Drift Compression Experiment. Journal of Physics: Conference Series, 2016, 717, 012079.	0.4	7
161	Nonlinear structures of lower-hybrid waves driven by the ion beam. Physics of Plasmas, 2018, 25, .	1.9	7
162	Optimizing beam transport in rapidly compressing beams on the neutralized drift compression experiment-II. Matter and Radiation at Extremes, 2018, 3, 78-84.	3.9	7



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181	Collisionless Electron Heating in RF Gas Discharges: I. Quasilinear Theory. , 2002, , 257-281.		3
182	Nonlinear effects of beam-plasma instabilities on neutralized propagation of intense ion beams in background plasma. EPJ Web of Conferences, 2013, 59, 09003.	0.3	3
183	Hyperdiffusion of dust particles in a turbulent tokamak plasma. Physics of Plasmas, 2021, 28, .	1.9	3
184	Boron nitride nanotube precursor formation during high-temperature synthesis: kinetic and thermodynamic modelling. Nanotechnology, 2021, 32, 475604.	2.6	3
185	Principles of Transport in Multicomponent Plasmas. Springer Series on Atomic, Optical, and Plasma Physics, 2010, , 17-39.	0.2	3
186	Kinetic Modeling of Solitary and Surface Waves in 3D Beam Neutralization. , 2022, , .		3
187	Towards a Modular Point Design for Heavy Ion Fusion. Fusion Science and Technology, 2005, 47, 621-625.	1.1	2
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