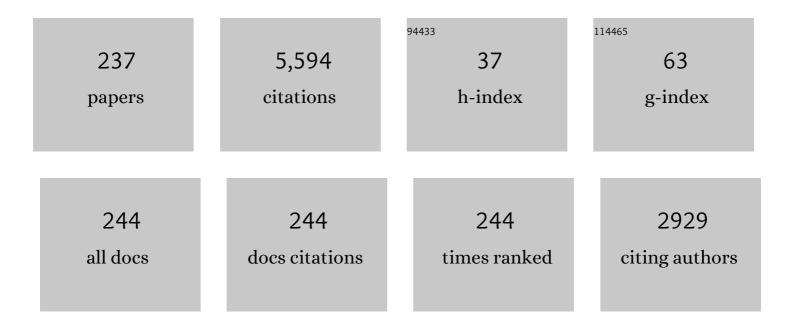
Igor D Kaganovich

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Electron bounce-cyclotron resonance in capacitive discharges at low magnetic fields. Physical Review Research, 2022, 4, .	3.6	20
2	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
3	Investigating the effects of electron bounce-cyclotron resonance on plasma dynamics in capacitive discharges operated in the presence of a weak transverse magnetic field. Physics of Plasmas, 2022, 29, .	1.9	14
4	Kinetic Modeling of Solitary and Surface Waves in 3D Beam Neutralization. , 2022, , .		3
5	Hyperdiffusion of dust particles in a turbulent tokamak plasma. Physics of Plasmas, 2021, 28, .	1.9	3
6	Boron nitride nanotube precursor formation during high-temperature synthesis: kinetic and thermodynamic modelling. Nanotechnology, 2021, 32, 475604.	2.6	3
7	Analytical model of low and high ablation regimes in carbon arcs. Journal of Applied Physics, 2020, 128, .	2.5	8
8	Convenient analytical formula for cluster mean diameter and diameter dispersion after nucleation burst. Physical Review E, 2020, 102, 022116.	2.1	2
9	Self-acceleration and energy channeling in the saturation of the ion-sound instability in a bounded plasma. Physics of Plasmas, 2020, 27, 080702.	1.9	2
10	Validated two-dimensional modeling of short carbon arcs: Anode and cathode spots. Physics of Plasmas, 2020, 27, .	1.9	8
11	Numerical benchmark of transient pressure-driven metallic melt flows. Nuclear Materials and Energy, 2020, 25, 100826.	1.3	12
12	Physics of E × B discharges relevant to plasma propulsion and similar technologies. Physics of Plasmas, 2020, 27, .	1.9	89
13	Neutralization of ion beam by electron injection: Excitation and propagation of electrostatic solitary waves. Physics of Plasmas, 2020, 27, .	1.9	10
14	Neutralization of ion beam by electron injection: Accumulation of cold electrons. Physics of Plasmas, 2020, 27, .	1.9	8
15	Collisionless adiabatic afterglow. Physics of Plasmas, 2020, 27, .	1.9	2
16	Theory and Modelling of Axial Mode Oscillations in Hall Thruster. , 2019, , .		6
17	Convenient analytical solution for vibrational distribution function of molecules colliding with a wall. Plasma Sources Science and Technology, 2019, 28, 10LT01.	3.1	7
18	2D axial-azimuthal particle-in-cell benchmark for low-temperature partially magnetized plasmas. Plasma Sources Science and Technology, 2019, 28, 105010.	3.1	72

#	Article	IF	CITATIONS
19	Hall thruster with externally driven oscillations. , 2019, , .		1
20	Determining the gas composition for the growth of BNNTs using a thermodynamic approach. Physical Chemistry Chemical Physics, 2019, 21, 13268-13286.	2.8	8
21	Self-Organization, Structures, and Anomalous Transport in Turbulent Partially Magnetized Plasmas with Crossed Electric and Magnetic Fields. Physical Review Letters, 2019, 122, 185001.	7.8	21
22	Boundary-induced effect on the spoke-like activity in <i>E</i> × <i>B</i> plasma. Physics of Plasmas, 20 26, .	019, 1.9	17
23	Electrostatic solitary waves in ion beam neutralization. Physics of Plasmas, 2019, 26, 050704.	1.9	5
24	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
25	Method for Approximating Field-Line Curves Using Ionospheric Observations of Energy-Variable Electron Beams Launched From Satellites. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	1
26	Relativistic Particle Beams as a Resource to Solve Outstanding Problems in Space Physics. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	13
27	Evolution of a Relativistic Electron Beam for Tracing Magnetospheric Field Lines. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	12
28	Investigation of the short argon arc with hot anode. I. Numerical simulations of non-equilibrium effects in the near-electrode regions. Physics of Plasmas, 2018, 25, .	1.9	37
29	Investigation of the short argon arc with hot anode. II. Analytical model. Physics of Plasmas, 2018, 25, 013522.	1.9	29
30	Generation of forerunner electron beam during interaction of ion beam pulse with plasma. Physics of Plasmas, 2018, 25, 011609.	1.9	9
31	On limitations of laser-induced fluorescence diagnostics for xenon ion velocity distribution function measurements in Hall thrusters. Physics of Plasmas, 2018, 25, .	1.9	21
32	Quantitative imaging of carbon dimer precursor for nanomaterial synthesis in the carbon arc. Plasma Sources Science and Technology, 2018, 27, 025008.	3.1	11
33	Excitation of a global plasma mode by an intense electron beam in a dc discharge. Physics of Plasmas, 2018, 25, 011606.	1.9	5
34	Current flow instability and nonlinear structures in dissipative two-fluid plasmas. Physics of Plasmas, 2018, 25, .	1.9	21
35	Modeling of reduced secondary electron emission yield from a foam or fuzz surface. Journal of Applied Physics, 2018, 123, .	2.5	33
36	Nonlinear structures and anomalous transport in partially magnetized E×B plasmas. Physics of Plasmas, 2018, 25, 011608.	1.9	62

#	Article	IF	CITATIONS
37	Benchmarking and validation of global model code for negative hydrogen ion sources. Physics of Plasmas, 2018, 25, .	1.9	24
38	Design and implementation of a Thomson parabola for fluence dependent energy-loss measurements at the Neutralized Drift Compression eXperiment. Review of Scientific Instruments, 2018, 89, 103302.	1.3	4
39	Nano-size effects in graphite/graphene structure exposed to cesium vapor. Journal of Applied Physics, 2018, 124, .	2.5	14
40	Root-growth of boron nitride nanotubes: experiments and <i>ab initio</i> simulations. Nanoscale, 2018, 10, 22223-22230.	5.6	19
41	Synthesis of nanoparticles in carbon arc: measurements and modeling. MRS Communications, 2018, 8, 842-849.	1.8	21
42	Nonlinear structures of lower-hybrid waves driven by the ion beam. Physics of Plasmas, 2018, 25, .	1.9	7
43	Scaling of spoke rotation frequency within a Penning discharge. Physics of Plasmas, 2018, 25, .	1.9	35
44	<i>In situ</i> diagnostics for nanomaterial synthesis in carbon arc plasma. Plasma Sources Science and Technology, 2018, 27, 084001.	3.1	11
45	Particle-in-cell simulations of anomalous transport in a Penning discharge. Physics of Plasmas, 2018, 25, .	1.9	24
46	Evolution of the electron cyclotron drift instability in two-dimensions. Physics of Plasmas, 2018, 25, .	1.9	57
47	Spatial symmetry breaking in single-frequency CCP discharge with transverse magnetic field. Physics of Plasmas, 2018, 25, .	1.9	25
48	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
49	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
50	Three regimes of high-voltage breakdown in helium. Plasma Sources Science and Technology, 2018, 27, 104004.	3.1	12
51	First energy loss measurements of intense pulsed ion beams in matter using a Thomson parabola at NDCX-II. , 2018, , .		0
52	Ion velocity distribution functions in argon and helium discharges: detailed comparison of numerical simulation results and experimental data. Plasma Sources Science and Technology, 2017, 26, 024002.	3.1	14
53	Simulations of ion velocity distribution functions taking into account both elastic and charge exchange collisions. Plasma Sources Science and Technology, 2017, 26, 024001.	3.1	23
54	Migration of a carbon adatom on a charged single-walled carbon nanotube. Carbon, 2017, 116, 174-180.	10.3	11

#	Article	IF	CITATIONS
55	Irradiation of materials with short, intense ion pulses at NDCX-II. Laser and Particle Beams, 2017, 35, 373-378.	1.0	14
56	Validation and benchmarking of two particle-in-cell codes for a glow discharge. Plasma Sources Science and Technology, 2017, 26, 014003.	3.1	30
57	Fluid theory and simulations of instabilities, turbulent transport and coherent structures in partially-magnetized plasmas of \$mathbf{E}imes mathbf{B}\$ discharges. Plasma Physics and Controlled Fusion, 2017, 59, 014041.	2.1	83
58	Investigation of the Paschen curve for helium in the 100–1000 kV range. Physics of Plasmas, 2017, 24, 093511.	1.9	36
59	The 2017 Plasma Roadmap: Low temperature plasma science and technology. Journal Physics D: Applied Physics, 2017, 50, 323001.	2.8	710
60	"Feathered―fractal surfaces to minimize secondary electron emission for a wide range of incident angles. Journal of Applied Physics, 2017, 122, .	2.5	14
61	Electron acceleration due to the interaction between a neutralized ion beam and background plasma. , 2017, , .		Ο
62	Self-Consistent Numerical Simulation of Carbon Arc for Nanoparticle Synthesis. , 2017, , .		0
63	Particle-in-Cell Simulation of Anomalous Transport in a Penning Discharge. , 2017, , .		Ο
64	Validation and Benchmarking of Two Particle-in-Cell Codes for a Glow Discharge. , 2017, , .		0
65	Nonlinear Electron Cyclotron Oscillations And Cross-Field Transport In Exb Discharges. , 2017, , .		Ο
66	Paschen Curve for Helium in 100–1000 KV Range. , 2017, , .		0
67	Improvement in the Flat Probe Diagnostics for Arbitrary Degree of Anisotropy. , 2017, , .		Ο
68	Dynamics of Ion Beam Charge Neutralization by Ferroelectric Plasma Sources*. , 2017, , .		0
69	Amplification Due to the Two-Stream Instability of Self-Electric and Magnetic Fields of an Ion or Electron Beam Propagating in Background Plasma. , 2017, , .		Ο
70	The Two-Stream Instability in a Finite Length Plasma. , 2017, , .		0
71	Nonlocal regimes of large scale instabilities of inhomogeneous Hall plasmas. , 2016, , .		0
72	Dynamics of ion beam charge neutralization by ferroelectric plasma sources. Physics of Plasmas, 2016, 23, .	1.9	14

0

#	Article	IF	CITATIONS
73	Band structure of the growth rate of the two-stream instability of an electron beam propagating in a bounded plasma. Physics of Plasmas, 2016, 23, .	1.9	23
74	Structure of nonlocal gradient-drift instabilities in Hall E × B discharges. Physics of Plasmas, 2016, 23, .	1.9	22
75	Modeling of reduced effective secondary electron emission yield from a velvet surface. Journal of Applied Physics, 2016, 120, 213302.	2.5	36
76	Effect of collisions on the two-stream instability in a finite length plasma. Physics of Plasmas, 2016, 23,	1.9	19
77	Short-pulse, compressed ion beams at the Neutralized Drift Compression Experiment. Journal of Physics: Conference Series, 2016, 717, 012079.	0.4	7
78	Turbulence and structures related to lower-hybrid and ion-sound instabilities in Hall thrusters. , 2016, , .		0
79	Measurements of low-energy electron reflection at a plasma boundary. Physics of Plasmas, 2015, 22, .	1.9	22
80	Generation of anomalously energetic suprathermal electrons by an electron beam interacting with a nonuniform plasma. Physics of Plasmas, 2015, 22, 123510.	1.9	18
81	Non-local electron energy probability function in a plasma expanding along a magnetic nozzle. Frontiers in Physics, 2015, 3, .	2.1	31
82	Defocusing of an ion beam propagating in background plasma due to two-stream instability. Physics of Plasmas, 2015, 22, 040701.	1.9	16
83	Self-amplification of electrons emitted from surfaces in plasmas with E × B fields. Plasma Sources Science and Technology, 2015, 24, 034010.	3.1	9
84	Instabilities and transport in plasmas with EXB drift. , 2015, , .		1
85	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
86	Intense ion beam neutralization using underdense background plasma. Physics of Plasmas, 2015, 22, .	1.9	11
87	Ion sound instability driven by the ion flows. Physics of Plasmas, 2015, 22, 052113.	1.9	15
88	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
89	Nonlocal kinetic theory of plasma discharges. , 2014, , .		0

90 Magnetic diagnostics of plasma - Surface interactions. , 2014, , .

#	Article	IF	CITATIONS
91	Mixing in phase—Space due to the two-stream instability of ion and electron beams propagating in background plasma. , 2014, , .		0
92	Effects of emitted electron temperature on the plasma sheath. Physics of Plasmas, 2014, 21, .	1.9	32
93	Wall current closure effects on plasma and sheath fluctuations in Hall thrusters. Physics of Plasmas, 2014, 21, .	1.9	6
94	Special issue on transport in <i>B</i> -fields in low-temperature plasmas. Plasma Sources Science and Technology, 2014, 23, 040201.	3.1	2
95	Effect of asymmetric secondary emission in bounded low-collisional <i>E</i> × <i>B</i> plasma on sheath and plasma properties. Journal Physics D: Applied Physics, 2014, 47, 405204.	2.8	9
96	Plasma-wall interaction in presence of intense electron emission from walls. , 2014, , .		0
97	Effects of beam-plasma instabilities on neutralized propagation of intense ion beams in background plasma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 733, 80-85.	1.6	13
98	Ferroelectric plasma sources for NDCX-II and heavy ion drivers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 733, 75-79.	1.6	5
99	Emissive sheath measurements in the afterglow of a radio frequency plasma. Physics of Plasmas, 2014, 21, 013510.	1.9	13
100	Sharp transition between two regimes of operation of dc discharge with two anodes and thermionic emission from cathode. Physics of Plasmas, 2014, 21, 053508.	1.9	4
101	Mitigating chromatic effects on the transverse focusing of intense charged particle beams for heavy ion fusion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 733, 65-69.	1.6	2
102	Modification of the loss cone for energetic particles. Geophysical Research Letters, 2014, 41, 8107-8113.	4.0	19
103	Distant diagnostics of nonequilibrium plasmas. , 2014, , .		0
104	Long wavelength gradient drift instability in Hall plasma devices. II. Applications. Physics of Plasmas, 2013, 20, 052108.	1.9	34
105	Kinetic Theory of Plasma Sheaths Surrounding Electron-Emitting Surfaces. Physical Review Letters, 2013, 111, 075002.	7.8	85
106	Observation of non-Maxwellian electron distributions in the NSTX divertor. Journal of Nuclear Materials, 2013, 438, S384-S387. Shorth Induced Instabilities in Placemes with employed	2.7	19
107	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msub><mml:mi mathvariant="bold">E<mml:mn>0</mml:mn></mml:mi </mml:msub> <mml:mo mathvariant="bold">×<mml:msub><mml:mi mathvariant="bold">B<mml:msub></mml:msub></mml:mi </mml:msub>Drift. Physical Review</mml:mo 	7.8	35
108	Letters, 2013, 111, 115002. Data needs for low temperature plasmas and accelerator applications. , 2013, , .		0

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109	Active electron energy distribution function control in direct current discharge using an auxiliary electrode. Physics of Plasmas, 2013, 20, 101606.	1.9	16
110	Preface to Special Topic: Electron kinetic effects in low temperature plasmas. Physics of Plasmas, 2013, 20, 101501.	1.9	2
111	Modeling a short dc discharge with thermionic cathode and auxiliary anode. Physics of Plasmas, 2013, 20, .	1.9	12
112	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
113	Halo formation and self-pinching of an electron beam undergoing the Weibel instability. Physics of Plasmas, 2012, 19, 103106.	1.9	2
114	Enhanced collective focusing of intense neutralized ion beam pulses in the presence of weak solenoidal magnetic fields. Physics of Plasmas, 2012, 19, 056704.	1.9	6
115	Plasma source development for the NDCX-I and NDCX-II neutralized drift compression experiments. Laser and Particle Beams, 2012, 30, 435-443.	1.0	5
116	Plasma-wall interaction in presence of intense electron emission from walls. , 2012, , .		0
117	Control of current and voltage oscillations in a short dc discharge making use of external auxiliary electrode. Review of Scientific Instruments, 2012, 83, 103502.	1.3	6
118	Nonlocal effects in beam generated plasmas for plasma electronics. , 2012, , .		0
119	Instability, collapse, and oscillation of sheaths caused by secondary electron emission. Physics of Plasmas, 2012, 19, .	1.9	28
120	Absence of Debye Sheaths due to Secondary Electron Emission. Physical Review Letters, 2012, 108, 255001.	7.8	80
121	Electron scattering in helium for Monte Carlo simulations. Physics of Plasmas, 2012, 19, .	1.9	19
122	Long wavelength gradient drift instability in Hall plasma devices. I. Fluid theory. Physics of Plasmas, 2012, 19, .	1.9	66
123	General Cause of Sheath Instability Identified for Low Collisionality Plasmas in Devices with Secondary Electron Emission. Physical Review Letters, 2012, 108, 235001.	7.8	54
124	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
125	Effects of errors in velocity tilt on maximum longitudinal compression during neutralized drift compression of intense beam pulses: II. Analysis of experimental data of the Neutralized Drift Compression eXperiment-I (NDCX-I). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators. Spectrometers. Detectors and Associated Equipment, 2012, 678, 39-47.	1.6	5
126	A comparison of emissive probe techniques for electric potential measurements in a complex plasma. , 2011, , .		0

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127	A comparison of emissive probe techniques for electric potential measurements in a complex plasma. Physics of Plasmas, 2011, 18, .	1.9	104
128	Effect of Secondary Electron Emission on Electron Cross-Field Current in \$E imes B\$ Discharges. IEEE Transactions on Plasma Science, 2011, 39, 995-1006.	1.3	72
129	Thin foil transformation into liquid droplets due to the Rayleigh-Taylor instability in NDCX-1 experiments. High Energy Density Physics, 2011, 7, 343-345.	1.5	0
130	Collective focusing of intense ion beam pulses for high-energy density physics applications. Physics of Plasmas, 2011, 18, .	1.9	8
131	Nonlocal collisionless and collisional electron transport in low temperature plasmas. , 2010, , .		2
132	Kinetic effects in hall plasma thrusters. , 2010, , .		0
133	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
134	Experimental program for the Princeton Ion Source Test Facility. Laser and Particle Beams, 2010, 28, 571-574.	1.0	0
135	Beam dynamics of the Neutralized Drift Compression Experiment-II, a novel pulse-compressing ion accelerator. Physics of Plasmas, 2010, 17, 056704.	1.9	44
136	Physics of neutralization of intense high-energy ion beam pulses by electrons. Physics of Plasmas, 2010, 17, .	1.9	36
137	Principles of Transport in Multicomponent Plasmas. Springer Series on Atomic, Optical, and Plasma Physics, 2010, , 17-39.	0.2	3
138	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
139	Enhanced Self-Focusing of an Ion Beam Pulse Propagating through a Background Plasma along a Solenoidal Magnetic Field. Physical Review Letters, 2009, 103, 075003.	7.8	19
140	Non-local collisionless and collisional electron transport in low-temperature plasma. Plasma Physics and Controlled Fusion, 2009, 51, 124003.	2.1	27
141	Calculation of charge-changing cross-sections of ions or atoms colliding with fast ions using the classical trajectory method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 196-204.	1.6	5
142	Survey of collective instabilities and beam–plasma interactions in intense heavy ion beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 11-21.	1.6	22
143	Nonlinear evolution of the Weibel instability of relativistic electron beams. Physics of Plasmas, 2009, 16, .	1.9	25
144	Simulations and experiments of intense ion beam current density compression in space and time. Physics of Plasmas, 2009, 16, 056701.	1.9	15

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145	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
146	Effects of Sheath Instability on Properties of a Hall Thruster. , 2008, , .		0
147	Transport of intense beam pulses through background plasma. , 2008, , .		0
148	Heavy ion fusion science research for high energy density physics and fusion applications. Journal of Physics: Conference Series, 2008, 112, 032029.	0.4	4
149	a <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mtext>â^</mml:mtext><mml:mtext><mml:mi>MeV</mml:mi>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi mathvariant="normal">K<mml:mo>+</mml:mo></mml:mi </mml:msup></mml:mtext></mml:mrow></mml:math> -ion beam. Physical	ml:mrow>	<لِmml:math
150	Review A, 2008, 78, . 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. Physics of Plasmas, 2008, 15, .	1.9	12
151	Plasma-sheath instability in Hall thrusters due to periodic modulation of the energy of secondary electrons in cyclotron motion. Physics of Plasmas, 2008, 15, .	1.9	52
152	Merging of Super-Alfvénic Current Filaments during Collisionless Weibel Instability of Relativistic Electron Beams. Physical Review Letters, 2008, 101, 175001.	7.8	31
153	Extreme compression of heavy-ion beam pulses: Experiments and modeling. , 2007, , .		1
154	Heavy-ion-fusion-science: summary of US progress. Nuclear Fusion, 2007, 47, 721-727.	3.5	15
155	Charge and current neutralization of an ion beam pulse by background plasma in the presence of applied magnetic field. , 2007, , .		0
156	Calculation of charge-changing cross sections of ions or atoms colliding with fast ions using the classical trajectory method. , 2007, , .		0
157	Electron Kinetic Effects and Beam-Related Instabilities in Hall Thrusters. , 2007, , .		4
158	Effects of non-Maxwellian electron velocity distribution function on two-stream instability in low-pressure discharges. Physics of Plasmas, 2007, 14, 013508.	1.9	35
159	Charge and Current Neutralization of an Ion-Beam Pulse Propagating in a Background Plasma along a Solenoidal Magnetic Field. Physical Review Letters, 2007, 99, 235002.	7.8	35
160	Kinetic effects in a Hall thruster discharge. Physics of Plasmas, 2007, 14, 057104.	1.9	114
161	Multispecies Weibel instability for intense charged particle beam propagation through neutralizing background plasma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 70-78.	1.6	12
162	Theory and simulation of warm dense matter targets. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 275-283.	1.6	51

#	Article	IF	CITATIONS
163	Optimized simultaneous transverse and longitudinal focusing of intense ion beam pulses for warm dense matter applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 289-297.	1.6	27
164	Recent US advances in ion-beam-driven high energy density physics and heavy ion fusion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 1-7.	1.6	52
165	Effects of finite pulse length, magnetic field, and gas ionization on ion beam pulse neutralization by background plasma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 93-102.	1.6	20
166	Integrated simulation of an ion-driven warm dense matter experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 231-237.	1.6	24
167	Computationally efficient description of relativistic electron beam transport in collisionless plasma. Physics of Plasmas, 2007, 14, 043103.	1.9	16
168	Plans for longitudinal and transverse neutralized beam compression experiments, and initial results from solenoid transport experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 215-222.	1.6	25
169	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
170	Kinetic Effects in Hall Thruster Discharge. , 2006, , .		1
171	Modification of electron velocity distribution in bounded plasmas by secondary electron emission. IEEE Transactions on Plasma Science, 2006, 34, 815-824.	1.3	43
172	Self-consistent modeling of nonlocal inductively coupled plasmas. IEEE Transactions on Plasma Science, 2006, 34, 767-785.	1.3	15
173	Revisiting the anomalous RF field penetration into a warm plasma. IEEE Transactions on Plasma Science, 2006, 34, 696-717.	1.3	78
174	Kinetic simulation of secondary electron emission effects in Hall thrusters. Physics of Plasmas, 2006, 13, 014501.	1.9	100
175	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
176	Scaling and formulary of cross-sections for ion–atom impact ionization. New Journal of Physics, 2006, 8, 278-278.	2.9	54
177	Guest Editorial Special Issue of Invited Papers of 2005 Workshop on Nonlocal, Collisionless Electron Transport in Plasmas. IEEE Transactions on Plasma Science, 2006, 34, 694-695.	1.3	1
178	Towards a Modular Point Design for Heavy Ion Fusion. Fusion Science and Technology, 2005, 47, 621-625.	1.1	2
179	Neutralized transport experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 544, 225-235.	1.6	23
180	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

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181	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
182	lonization 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
183	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
184	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
185	Images of complex interactions of an intense ion beam with plasma electrons. IEEE Transactions on Plasma Science, 2005, 33, 556-557.	1.3	2
186	Enhanced collisionless heating in a nonuniform plasma at the bounce resonance condition. Physics of Plasmas, 2005, 12, 080704.	1.9	23
187	Effectiveness of electron-cyclotron and transmission resonance heating in inductively coupled plasmas. Physics of Plasmas, 2005, 12, 104505.	1.9	9
188	Overview of US heavy ion fusion research. Nuclear Fusion, 2005, 45, 131-137.	3.5	27
189	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
190	Scaling cross sections for ion-atom impact ionization. Physics of Plasmas, 2004, 11, 1229-1232.	1.9	13
191	Collective instabilities and beam-plasma interactions in intense heavy ion beams. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	42
192	Anomalous skin effect for anisotropic electron velocity distribution function. Physics of Plasmas, 2004, 11, 3328-3330.	1.9	12
193	Landau damping and anomalous skin effect in low-pressure gas discharges: Self-consistent treatment of collisionless heating. Physics of Plasmas, 2004, 11, 2399-2410.	1.9	31
194	Nonlinear plasma waves excitation by intense ion beams in background plasma. Physics of Plasmas, 2004, 11, 3546-3552.	1.9	45
195	Effect of electron energy distribution function on power deposition and plasma density in an inductively coupled discharge at very low pressures. Plasma Sources Science and Technology, 2003, 12, 302-312.	3.1	25
196	Effect of non-local electron conductivity on power absorption and plasma density profiles in low pressure inductively coupled discharges. Plasma Sources Science and Technology, 2003, 12, 170-181.	3.1	22
197	Progress in heavy ion fusion research. Physics of Plasmas, 2003, 10, 2064-2070.	1.9	17
198	Self-consistent system of equations for a kinetic description of the low-pressure discharges accounting for the nonlocal and collisionless electron dynamics. Physical Review E, 2003, 68, 026411.	2.1	30

#	Article	IF	CITATIONS
199	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. Physical Review A, 2003, 68, .	2.5	13
200	Anomalous Capacitive Sheath with Deep Radio-Frequency Electric-Field Penetration. Physical Review Letters, 2002, 89, 265006.	7.8	94
201	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
202	Collisionless Electron Heating in RF Gas Discharges: II. The Role of Collisions and Non-linear Effects. , 2002, , 283-291.		1
203	Analytical and numerical studies of heavy ion beam transport in the fusion chamber. Laser and Particle Beams, 2002, 20, 497-502.	1.0	20
204	Multiple electron stripping of heavy ion beams. Laser and Particle Beams, 2002, 20, 551-554.	1.0	19
205	Collisionless Electron Heating in RF Gas Discharges: I. Quasilinear Theory. , 2002, , 257-281.		3
206	Overview of theory and modeling in the heavy ion fusion virtual national laboratory. Laser and Particle Beams, 2002, 20, 377-384.	1.0	14
207	How to patch active plasma and collisionless sheath: A practical guide. Physics of Plasmas, 2002, 9, 4788-4793.	1.9	58
208	Ion-beam plasma neutralization interaction images. IEEE Transactions on Plasma Science, 2002, 30, 12-13.	1.3	7
209	Negative ion density fronts. Physics of Plasmas, 2001, 8, 2540-2548.	1.9	28
210	Stabilizing influence of axial momentum spread on the two-stream instability in intense heavy ion beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 464, 493-501.	1.6	6
211	Spatiotemporal dynamics of charged species in the afterglow of plasmas containing negative ions. Physical Review E, 2001, 64, 036402.	2.1	31
212	Two-stream sausage and hollowing instabilities in high-intensity particle beams. Physics of Plasmas, 2001, 8, 4637-4646.	1.9	9
213	Multiple electron stripping of 3.4 MeV/amu Kr7+ and Xe11+ in nitrogen. Physics of Plasmas, 2001, 8, 1753-1756.	1.9	47
214	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
215	Signal propagation in collisional plasma with negative ions. Physics of Plasmas, 2001, 8, 719-725.	1.9	7
216	Self-trapping of negative ions due to electron detachment in the afterglow of electronegative gas plasmas. Applied Physics Letters, 2000, 76, 2844-2846.	3.3	19

#	Article	IF	CITATIONS
217	Negative Ion Density Fronts during Ignition and Extinction of Plasmas in Electronegative Gases. Physical Review Letters, 2000, 84, 1918-1921.	7.8	27
218	Charged species profiles in oxygen plasma. Applied Physics Letters, 2000, 77, 800-802.	3.3	64
219	Electron Boltzmann kinetic equation averaged over fast electron bouncing and pitch-angle scattering for fast modeling of electron cyclotron resonance discharge. Physical Review E, 2000, 61, 1875-1889.	2.1	39
220	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
221	Effects of Collisions and Particle Trapping on Collisionless Heating. Physical Review Letters, 1999, 82, 327-330.	7.8	47
222	Transverse conductivity in a braided magnetic field. Physics of Plasmas, 1998, 5, 3901-3909.	1.9	36
223	Fast modelling of low-pressure radio-frequency collisional capacitively coupled discharge and investigation of the formation of a non-Maxwellian electron distribution function. Plasma Sources Science and Technology, 1998, 7, 268-281.	3.1	29
224	Modelling plasma discharges at high electronegativity. Plasma Sources Science and Technology, 1997, 6, 437-449.	3.1	108
225	Quasilinear theory of collisionless electron heating in radio frequency gas discharges. Physics of Plasmas, 1997, 4, 2413-2421.	1.9	71
226	Fast modeling of the lowâ€pressure capacitively coupled radioâ€frequency discharge based on the nonlocal approach. Applied Physics Letters, 1996, 69, 2341-2343.	3.3	12
227	Stochastic electron heating in bounded radioâ€frequency plasmas. Applied Physics Letters, 1996, 69, 3818-3820.	3.3	97
228	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
229	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
230	Low-pressure RF discharge in the free-flight regime. IEEE Transactions on Plasma Science, 1992, 20, 86-92.	1.3	53
231	Statistical T matrix in the theory of dense gases and the Enskog approach. Theoretical and Mathematical Physics(Russian Federation), 1991, 87, 503-511.	0.9	0
232	Explosive generation of cold electrons in low-pressure discharges. , 0, , .		0
233	Progress in heavy ion driven inertial fusion energy: from scaled experiments to the integrated research experiment. , 0, , .		5
234	Vlasov-Maxwell description of axisymmetric two-stream instabilities in high-intensity particle beams. , 0, , .		0

#	Article	IF	CITATIONS
235	Multispecies Weibel Instability for Intense Ion Beam Propagation Through Background Plasma. , 0, , .		1
236	Initial Results on Neutralized Drift Compression Experiments (NDCX-IA) for High Intensity Ion Beam. , 0, , .		2
237	Highly Compressed Ion Beams for High Energy Density Science. , 0, , .		10