

# Valery Bychenkov

## List of Publications by Year in descending order

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248  
papers

5,776  
citations

109264

35  
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91828

69  
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249  
all docs

249  
docs citations

249  
times ranked

2468  
citing authors

#	ARTICLE	IF	CITATIONS
1	Forward Ion Acceleration in Thin Films Driven by a High-Intensity Laser. <i>Physical Review Letters</i> , 2000, 84, 4108-4111.	2.9	677
2	Ionization Induced Trapping in a Laser Wakefield Accelerator. <i>Physical Review Letters</i> , 2010, 104, 025004.	2.9	340
3	Laser-triggered ion acceleration and table top isotope production. <i>Applied Physics Letters</i> , 2001, 78, 595-597.	1.5	187
4	Self-focusing, channel formation, and high-energy ion generation in interaction of an intense short laser pulse with a He jet. <i>Physical Review E</i> , 1999, 59, 7042-7054.	0.8	183
5	Accelerating monoenergetic protons from ultrathin foils by flat-top laser pulses in the directed-Coulomb-explosion regime. <i>Physical Review E</i> , 2008, 78, 026412.	0.8	160
6	Fast ignitor concept with light ions. <i>Plasma Physics Reports</i> , 2001, 27, 1017-1020.	0.3	142
7	High-energy ion generation in interaction of short laser pulse with high-density plasma. <i>Applied Physics B: Lasers and Optics</i> , 2002, 74, 207-215.	1.1	140
8	Electron Acceleration by a Short Relativistic Laser Pulse at the Front of Solid Targets. <i>Physical Review Letters</i> , 2000, 85, 570-573.	2.9	137
9	Generation of GeV protons from 1 PW laser interaction with near critical density targets. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	126
10	Analytic Solutions to the Vlasov Equations for Expanding Plasmas. <i>Physical Review Letters</i> , 2003, 90, 185004.	2.9	105
11	Accelerating protons to therapeutic energies with ultraintense, ultraclean, and ultrashort laser pulses. <i>Medical Physics</i> , 2008, 35, 1770-1776.	1.6	101
12	Self-Organization of a Plasma due to 3D Evolution of the Weibel Instability. <i>Physical Review Letters</i> , 2004, 93, 215004.	2.9	97
13	Charge separation effects in solid targets and ion acceleration with a two-temperature electron distribution. <i>Physical Review E</i> , 2004, 69, 026411.	0.8	95
14	Ion-acoustic turbulence and anomalous transport. <i>Physics Reports</i> , 1988, 164, 119-215.	10.3	93
15	Controlled electron injection into the wake wave using plasma density inhomogeneity. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	88
16	Nonlocal Electron Transport in a Plasma. <i>Physical Review Letters</i> , 1995, 75, 4405-4408.	2.9	86
17	Ion acceleration in expanding multispecies plasmas. <i>Physics of Plasmas</i> , 2004, 11, 3242-3250.	0.7	82
18	Ion acceleration in short-laser-pulse interaction with solid foils. <i>Plasma Physics and Controlled Fusion</i> , 2005, 47, B869-B877.	0.9	76

#	ARTICLE	IF	CITATIONS
19	Nuclear reactions triggered by laser-accelerated high-energy ions. Journal of Experimental and Theoretical Physics, 1999, 88, 1137-1142.	0.2	68
20	Effect of Nonlocal Transport on Heat-Wave Propagation. Physical Review Letters, 2004, 92, 205006.	2.9	68
21	High energy electron generation in surface-wave-produced plasmas. Plasma Sources Science and Technology, 1992, 1, 126-131.	1.3	67
22	Quasimonoenergetic Electron Beams with Relativistic Energies and Ultrashort Duration from Laser-Solid Interactions at 0.5ÅkHz. Physical Review Letters, 2009, 103, 235001.	2.9	67
23	Enhanced inverse bremsstrahlung heating rates in a strong laser field. Physics of Plasmas, 2003, 10, 3385-3396.	0.7	64
24	Particle dynamics during adiabatic expansion of a plasma bunch. Journal of Experimental and Theoretical Physics, 2002, 95, 226-241.	0.2	63
25	Experimental and theoretical study of absorption of femtosecond laser pulses in interaction with solid copper targets. Physical Review B, 2009, 79, .	1.1	61
26	High-energy ion generation by short laser pulses. Plasma Physics Reports, 2004, 30, 473-495.	0.3	57
27	On the design of experiments for the study of relativistic nonlinear optics in the limit of single-cycle pulse duration and single-wavelength spot size. Plasma Physics Reports, 2002, 28, 12-27.	0.3	55
28	Nonlocal electron transport in laser heated plasmas. Physics of Plasmas, 1998, 5, 2742-2753.	0.7	51
29	Optimization of laser-target interaction for proton acceleration. Physics of Plasmas, 2013, 20, .	0.7	51
30	Electron distribution function in laser heated plasmas. Physics of Plasmas, 2001, 8, 550-556.	0.7	47
31	Evolution of the stimulated Raman scattering instability in two-dimensional particle-in-cell simulations. Physics of Plasmas, 2010, 17, .	0.7	47
32	Quasihydrodynamic description of ion acoustic waves in a collisional plasma. Physics of Plasmas, 1994, 1, 2419-2429.	0.7	41
33	Heat transport and electron distribution function in laser produced plasmas with hot spots. Physics of Plasmas, 2002, 9, 2302-2310.	0.7	40
34	Electron vacuum acceleration by a tightly focused laser pulse. Physics of Plasmas, 2008, 15, .	0.7	39
35	Laser triggered Coulomb explosion of nanoscale symmetric targets. Physics of Plasmas, 2007, 14, 053103.	0.7	36
36	Vacuum electron acceleration by tightly focused laser pulses with nanoscale targets. Physics of Plasmas, 2009, 16, .	0.7	36

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37	Coulomb explosion in a cluster plasma. Plasma Physics Reports, 2005, 31, 178-183.	0.3	35
38	Second harmonic generation in a laser plasma (review). Soviet Journal of Quantum Electronics, 1979, 9, 1081-1102.	0.1	33
39	Ion acceleration during adiabatic plasma expansion: Renormalization group approach. JETP Letters, 2001, 74, 10-14.	0.4	33
40	Kinetic theory of ion acoustic waves in a plasma with collisional electrons. Physical Review E, 1995, 52, 6759-6776.	0.8	32
41	Synchronized Ion Acceleration by Ultraintense Slow Light. Physical Review Letters, 2016, 116, 085004.	2.9	32
42	Theory of filamentation instability and stimulated Brillouin scattering with nonlocal hydrodynamics. Physics of Plasmas, 2000, 7, 1511-1519.	0.7	31
43	Observation of the plasma channel dynamics and Coulomb explosion in the interaction of a high-intensity laser pulse with a He gas jet. JETP Letters, 1997, 66, 828-834.	0.4	30
44	Acceleration of electrons by tightly focused femtosecond laser pulses. Quantum Electronics, 2007, 37, 273-284.	0.3	30
45	Anomalous Absorption of High-Energy Green Laser Light in High-Z Plasmas. Physical Review Letters, 2002, 88, 235002.	2.9	29
46	Nonlocal transport in hot plasma. Part I. Plasma Physics Reports, 2013, 39, 698-744.	0.3	29
47	Ion energy scaling under optimum conditions of laser plasma acceleration from solid density targets. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	29
48	Nonlinear Thomson scattering of a relativistically strong tightly focused ultrashort laser pulse. Plasma Physics Reports, 2016, 42, 818-833.	0.3	28
49	Thomson scattering from ion acoustic waves in laser plasmas. Physical Review E, 1998, 57, 3383-3391.	0.8	27
50	Kinetic description of the Coulomb explosion of a spherically symmetric cluster. Journal of Experimental and Theoretical Physics, 2005, 101, 212-223.	0.2	27
51	On the maximum energy of ions in a disintegrating ultrathin foil irradiated by a high-power ultrashort laser pulse. Quantum Electronics, 2005, 35, 1143-1145.	0.3	26
52	Ensemble of ultra-high intensity attosecond pulses from laser-plasma interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 476-480.	0.9	25
53	Ion Response to Relativistic Electron Bunches in the Blowout Regime of Laser-Plasma Accelerators. Physical Review Letters, 2010, 105, 195002.	2.9	25
54	Laser-triggered ion acceleration from a double-layer foil. Physics of Plasmas, 2009, 16, 043107.	0.7	24

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55	Generation of a quasi-monoenergetic proton beam from laser-irradiated sub-micron droplets. <i>Physics of Plasmas</i> , 2012, 19, 073112.	0.7	23
56	Axial magnetic field generation by intense circularly polarized laser pulses in underdense plasmas. <i>Physics of Plasmas</i> , 2010, 17, 083109.	0.7	22
57	Return current instability in laser heated plasmas. <i>Physics of Plasmas</i> , 1995, 2, 4169-4173.	0.7	21
58	Renormalization-group approach to the problem of light-beam self-focusing. <i>Physical Review A</i> , 2000, 61, .	1.0	21
59	Prepulse controlled electron acceleration from solids by a femtosecond laser pulse in the slightly relativistic regime. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	21
60	Optimization of electron acceleration by short laser pulses from low-density targets. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 084010.	0.9	21
61	Half-Integer Harmonics Generation in Laser-Produced Plasma. <i>Beitrage Aus Der Plasmaphysik</i> , 1983, 23, 331-340.	0.1	20
62	Ion acoustic waves in plasmas with light and heavy ions. <i>Physical Review E</i> , 1995, 51, 1400-1407.	0.8	20
63	Electrostatic Response of a Two-Component Plasma with Coulomb Collisions. <i>Physical Review Letters</i> , 2012, 108, 205001.	2.9	20
64	Laser acceleration of ions: recent results and prospects for applications. <i>Physics-Uspexhi</i> , 2015, 58, 71-81.	0.8	20
65	Analytic theory of relativistic self-focusing for a Gaussian light beam entering a plasma: Renormalization-group approach. <i>Physical Review E</i> , 2019, 99, 043201.	0.8	20
66	Electron acceleration by few-cycle laser pulses with single-wavelength spot size. <i>Physical Review E</i> , 2003, 67, 026416.	0.8	19
67	Femtosecond laser-plasma interaction with prepulse-generated liquid metal microjets. <i>Physics of Plasmas</i> , 2012, 19, 013104.	0.7	19
68	Direct electron acceleration for diagnostics of a laser pulse focused by an off-axis parabolic mirror. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 1.	1.1	19
69	Enhanced ion acoustic fluctuations in laser-produced plasmas. <i>Physical Review E</i> , 1994, 50, 4005-4016.	0.8	18
70	Kinetic Susceptibility and Transport Theory of Collisional Plasmas. <i>Physical Review Letters</i> , 2004, 93, 125002.	2.9	18
71	X-Ray Diagnostics of Ultrashort Laser-Driven Plasma: Experiment and Simulations. <i>Contributions To Plasma Physics</i> , 2013, 53, 116-121.	0.5	18
72	Accelerated electrons for <i>in situ</i> peak intensity monitoring of tightly focused femtosecond laser radiation at high intensities. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 105011.	0.9	18

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73	Temperature relaxation in hot spots in a laser-produced plasma. <i>Physical Review E</i> , 1998, 57, 978-981.	0.8	17
74	Pion production under the action of intense ultrashort laser pulse on a solid target. <i>JETP Letters</i> , 2001, 74, 586-589.	0.4	17
75	Ion acoustic instability driven by a temperature gradient in laser-produced plasmas. <i>Physics of Plasmas</i> , 2001, 8, 3558-3564.	0.7	17
76	A detailed study of collisionless explosion of single- and two-ion-species spherical nanoplasmas. <i>Physics of Plasmas</i> , 2010, 17, 083110.	0.7	17
77	Comparative study of amplified spontaneous emission and short pre-pulse impacts onto fast electron generation at sub-relativistic femtosecond laser-plasma interaction. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	17
78	Tc-99m production with ultrashort intense laser pulses. <i>Laser and Particle Beams</i> , 2014, 32, 605-611.	0.4	17
79	Stochastic electron acceleration in plasma waves driven by a high-power subpicosecond laser pulse. <i>Plasma Physics Reports</i> , 2014, 40, 202-214.	0.3	17
80	Investigation of ion acceleration in an expanding laser plasma by using a hybrid Boltzmann-Vlasov-Poisson model. <i>Plasma Physics Reports</i> , 2006, 32, 205-221.	0.3	16
81	Enhanced relativistic laser-plasma coupling utilizing laser-induced micromodified target. <i>Laser Physics Letters</i> , 2015, 12, 046005.	0.6	16
82	Effective production of gammas, positrons, and photonuclear particles from optimized electron acceleration by short laser pulses in low-density targets. <i>Physics of Plasmas</i> , 2019, 26, 123107.	0.7	16
83	The kinetic theory of the nonlinear low-frequency response of a collisionless plasma to high-frequency electromagnetic radiation. <i>Journal of Plasma Physics</i> , 1992, 48, 167-176.	0.7	15
84	Quasimonoenergetic ion bunches from exploding microstructured targets. <i>Physics of Plasmas</i> , 2007, 14, 103110.	0.7	15
85	Ion acceleration by ultrahigh-power ultrashort laser pulses. <i>Quantum Electronics</i> , 2007, 37, 863-868.	0.3	15
86	Magnetic field generation by short ultraintense laser pulse in underdense plasmas. <i>Laser and Particle Beams</i> , 1996, 14, 55-62.	0.4	14
87	Terahertz radiation in laser-induced charge separation in the irradiated plasma target. <i>Quantum Electronics</i> , 2016, 46, 1023-1030.	0.3	14
88	Growth and propagation of self-generated magnetic dipole vortices in collisionless shocks produced by interpenetrating plasmas. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	14
89	Characterizing extreme laser intensities by ponderomotive acceleration of protons from rarified gas. <i>New Journal of Physics</i> , 2020, 22, 023003.	1.2	14
90	Complementary diagnostics of high-intensity femtosecond laser pulses via vacuum acceleration of protons and electrons. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 014002.	0.9	14

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91	Plasma fluctuations driven by a randomized laser beam. <i>Physics of Plasmas</i> , 1999, 6, 3002-3011.	0.7	13
92	Linear theory of nonlocal transport in a magnetized plasma. <i>Physics of Plasmas</i> , 2003, 10, 4633-4644.	0.7	13
93	Electron transport and permittivity in a plasma with an arbitrary ionic charge. <i>Journal of Experimental and Theoretical Physics</i> , 2008, 106, 983-998.	0.2	13
94	Angular distribution of electrons directly accelerated by an intense tightly focused laser pulse. <i>Quantum Electronics</i> , 2017, 47, 38-41.	0.3	13
95	Nanostructured plasmas for enhanced gamma emission at relativistic laser interaction with solids. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	1.1	13
96	Comparison of optimized ion acceleration from thin foils and low-density targets for linearly and circularly polarized laser pulses. <i>Physics of Plasmas</i> , 2017, 24, 113102.	0.7	13
97	Generation of high-charge electron beam in a subcritical-density plasma through laser pulse self-trapping. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 124004.	0.9	13
98	Efficient electron injection by hybrid parametric instability and forward direct laser acceleration in subcritical plasma. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 022001.	0.9	13
99	Transverse electron susceptibility and the electromagnetic wave absorption in weakly collisional plasmas. <i>Physics of Plasmas</i> , 1997, 4, 4205-4209.	0.7	12
100	Stationary laser beam filaments in a semicollisional plasma. <i>Physics of Plasmas</i> , 2000, 7, 441-444.	0.7	12
101	Coulomb explosion of a cluster with a complex ion composition. <i>JETP Letters</i> , 2008, 87, 623-627.	0.4	12
102	Relativistic coulomb explosion of spherical microplasma. <i>JETP Letters</i> , 2011, 94, 97-100.	0.4	12
103	Vacuum electron acceleration by a tightly focused, radially polarized, relativistically strong laser pulse. <i>Plasma Physics Reports</i> , 2011, 37, 603-614.	0.3	12
104	Ion acoustic waves in plasmas with collisional electrons. <i>Physical Review E</i> , 1994, 50, 5134-5137.	0.8	11
105	Distinctive features of photoionized plasma from short x-ray-pulse interaction with gaseous medium. <i>Physics of Plasmas</i> , 2006, 13, 013101.	0.7	11
106	Laser-Triggered Proton Acceleration From Micro-Structured thin Targets. <i>Contributions To Plasma Physics</i> , 2013, 53, 731-735.	0.5	11
107	Nonlocal transport in hot plasma. Part II. <i>Plasma Physics Reports</i> , 2014, 40, 505-563.	0.3	11
108	Double-pulse femtosecond laser peening of aluminum alloy AA5038: Effect of inter-pulse delay on transient optical plume emission and final surface micro-hardness. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	11

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109	Electrostatic fluctuations in collisional plasmas. <i>Physical Review E</i> , 2017, 96, 043207.	0.8	11
110	Return current instability driven by a temperature gradient in ICF plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 014004.	0.9	11
111	Effect of anomalous resistivity on MHD wave damping. <i>Journal of Geophysical Research</i> , 1995, 100, 9535.	3.3	10
112	Theory of nonlocal transport for small perturbations in a plasma. <i>Journal of Experimental and Theoretical Physics</i> , 1998, 87, 916-925.	0.2	10
113	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. <i>Applied Physics Letters</i> , 2011, 99, 131501.	1.5	10
114	Ion energy spectra directly measured in the interaction volume of intense laser pulses with clustered plasma. <i>Scientific Reports</i> , 2018, 8, 9404.	1.6	10
115	Nonlinear Thomson scattering of a tightly focused relativistically intense laser pulse by an ensemble of particles. <i>Quantum Electronics</i> , 2020, 50, 922-928.	0.3	10
116	Efficiency enhancement of thermonuclear DD reaction in femtosecond laser plasma with the use of structured low-average-density targets. <i>Quantum Electronics</i> , 2020, 50, 169-174.	0.3	10
117	Stimulated Raman scattering in non-Maxwellian plasmas. <i>Physics of Plasmas</i> , 1997, 4, 1481-1483.	0.7	9
118	Evolution of photoionization two-stream instability in collisional plasma. <i>High Energy Density Physics</i> , 2008, 4, 73-77.	0.4	9
119	Laser acceleration of light ions from a thin homogeneous foil of complex atomic composition. <i>Plasma Physics Reports</i> , 2010, 36, 77-89.	0.3	9
120	Monoenergetic proton beams from mass-limited targets irradiated by ultrashort laser pulses. <i>Plasma Physics Reports</i> , 2010, 36, 256-262.	0.3	9
121	Group analysis of kinetic equations in a non-linear thermal transport problem. <i>International Journal of Non-Linear Mechanics</i> , 2015, 71, 1-7.	1.4	9
122	Resonance between heat-carrying electrons and Langmuir waves in inertial confinement fusion plasmas. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	9
123	Two-dimensional vortex structures in an anisotropic plasma. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1990, 82, 11-18.	0.3	8
124	Cylindrical cumulation of fast ions in a ring focus of a high-power subpicosecond laser. <i>JETP Letters</i> , 1999, 69, 20-25.	0.4	8
125	Comparative analysis of laser-triggered proton generation from overdense and low-density targets. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 653, 62-65.	0.7	8
126	Ion acceleration in electrostatic field of charged cavity created by ultra-short laser pulses of $10^{20}$ W/cm <sup>2</sup> . <i>Physics of Plasmas</i> , 2017, 24, .	0.7	8

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127	Electron parametric instabilities in nonuniform plasma with a strong density gradient excited by femtosecond laser pulses of subrelativistic intensity. <i>Quantum Electronics</i> , 2019, 49, 386-390.	0.3	8
128	Shielded radiography with gamma rays from laser-accelerated electrons in a self-trapping regime. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	8
129	Self-similar solution to the Fokker-Planck equation in inhomogeneous plasma. <i>Physics of Plasmas</i> , 2002, 9, 2872-2875.	0.7	7
130	Nonequilibrium electron distribution functions and nonlinear thermal transport. <i>Physics of Plasmas</i> , 2004, 11, 3997-4007.	0.7	7
131	On the energy of ions at the expansion of a hot plasma layer into vacuum. <i>JETP Letters</i> , 2013, 98, 70-75.	0.4	7
132	Parametric waves excitation in relativistic laser-plasma interactions for electron acceleration. <i>Journal of Physics: Conference Series</i> , 2015, 653, 012007.	0.3	7
133	Improvement of hot-electron and gamma-ray yields by selecting preplasma thickness for a target irradiated by a short laser pulse. <i>Quantum Electronics</i> , 2017, 47, 232-235.	0.3	7
134	Laser-induced thermoelectric current as a source of generation of THz surface electromagnetic waves. <i>Quantum Electronics</i> , 2018, 48, 653-657.	0.3	7
135	Ultrafast target charging due to polarization triggered by laser-accelerated electrons. <i>Physical Review E</i> , 2020, 102, 021202.	0.8	7
136	Self-Trapping of Extreme Light. <i>Radiophysics and Quantum Electronics</i> , 2021, 63, 742-755.	0.1	7
137	Bright synchrotron radiation from relativistic self-trapping of a short laser pulse in near-critical density plasma. <i>Physical Review E</i> , 2021, 104, L053201.	0.8	7
138	Relativistic Self-Trapping of Extreme Laser Light in an Inhomogeneous Plasma. <i>JETP Letters</i> , 2021, 114, 579-584.	0.4	7
139	Filamentation and magnetic field generation by charged particle beams in laser produced plasmas. <i>Plasma Physics</i> , 1983, 25, 827-831.	0.9	6
140	Singular vortex flows in plasmas with anisotropic pressure. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 138, 127-130.	0.9	6
141	Langevin representation of laser heating in PIC simulations. <i>Computer Physics Communications</i> , 2002, 143, 48-53.	3.0	6
142	Particle-in-cell simulations of heat flux driven ion acoustic instability. <i>Physics of Plasmas</i> , 2005, 12, 012321.	0.7	6
143	Permittivity of plasma and nonstationary theory of nonlocal transport. <i>Journal of Experimental and Theoretical Physics</i> , 2005, 100, 1159-1174.	0.2	6
144	Dielectric function and electron transport in collisional plasma. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 738-754.	0.6	6

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145	Relaxation of a thermal perturbation in a collisional plasma. Plasma Physics Reports, 2006, 32, 337-343.	0.3	6
146	Monoenergetic ion beam from an exploding foil. Plasma Physics Reports, 2006, 32, 973-976.	0.3	6
147	Nonlocal transport model in equilibrium two-component plasmas. Physics of Plasmas, 2009, 16, 102301.	0.7	6
148	Energetic electron and ion generation from interactions of intense laser pulses with laser machined conical targets. Nuclear Fusion, 2010, 50, 055006.	1.6	6
149	Propagation of a laser-driven relativistic electron beam inside a solid dielectric. Physical Review E, 2012, 86, 036412.	0.8	6
150	Acceleration of ions by "slow" intense laser light in low-density targets. JETP Letters, 2016, 104, 618-623.	0.4	6
151	Separation of ions on the front of a shock wave in a multicomponent plasma. JETP Letters, 2016, 103, 238-243.	0.4	6
152	A model of anomalous absorption of laser light on ion acoustic turbulence. Physics of Plasmas, 2017, 24, .	0.7	6
153	Ultrashort PW laser pulse interaction with target and ion acceleration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 909, 156-159.	0.7	6
154	Magnetic field generation from a coil-shaped foil by a laser-triggered hot-electron current. Laser Physics Letters, 2019, 16, 066006.	0.6	6
155	Laser-triggered ion acceleration at moderate intensity and pulse duration. Applied Physics B: Lasers and Optics, 2005, 81, 537-542.	1.1	5
156	Taking into account electron-electron collisions in classical absorption of short laser pulses. Plasma Physics Reports, 2009, 35, 244-250.	0.3	5
157	Acceleration of light ions from an expanding ultrathin foil of complex ion composition. Plasma Physics Reports, 2010, 36, 709-718.	0.3	5
158	High-Intensity Laser Triggered Proton Acceleration from Ultrathin Foils. Contributions To Plasma Physics, 2013, 53, 161-164.	0.5	5
159	Stochastic electron heating in an interference field of several laser pulses of a picosecond duration. Plasma Physics and Controlled Fusion, 2019, 61, 025015.	0.9	5
160	Neutron Production from Structured Targets Irradiated By an Ultrashort Laser Pulse. Journal of Russian Laser Research, 2021, 42, 292.	0.3	5
161	Laser-based photonuclear production of medical isotopes and nuclear waste transmutation. Plasma Physics and Controlled Fusion, 2022, 64, 054002.	0.9	5
162	Transport phenomena in a turbulent plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 101, 258-260.	0.9	4

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163	Analytical models of laser-triggered ion acceleration. Laser Physics, 2006, 16, 237-243.	0.6	4
164	Dispersion properties of a plasma produced by a short X-ray pulse. Plasma Physics Reports, 2006, 32, 593-600.	0.3	4
165	New solutions in the theory of self-focusing with saturating nonlinearity. Journal of Experimental and Theoretical Physics, 2012, 114, 25-38.	0.2	4
166	Double-pulse femtosecond laser ablation of the surface of stainless steel with variable interpulse delays. JETP Letters, 2016, 104, 421-424.	0.4	4
167	Target optimisation for the yield of X-rays of desired hardness under femtosecond pulse irradiation. Quantum Electronics, 2016, 46, 342-346.	0.3	4
168	Synchronized ion acceleration by ultraintense slow light and electron source for x-ray production from low-density targets. Plasma Physics and Controlled Fusion, 2017, 59, 034009.	0.9	4
169	Nonlinear relativistic plasma resonance: Renormalization group approach. Plasma Physics Reports, 2017, 43, 175-190.	0.3	4
170	Self-Focusing of a Light Beam in a Medium with Relativistic Nonlinearity: New Analytical Solutions. JETP Letters, 2018, 107, 458-463.	0.4	4
171	Electron Heating of the Cluster Plasma by an Ultrashort Laser Pulse. JETP Letters, 2021, 114, 200-207.	0.4	4
172	Nonlinear penetration of microwave radiation in a plasma with frequent collisions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 169, 77-81.	0.9	3
173	Effect of cylindrical curvature on nonlocal electron transport in a plasma. Physics of Plasmas, 1996, 3, 3518-3519.	0.7	3
174	Nonlocal electron transport in spherical plasmas. Physics of Plasmas, 1996, 3, 1280-1283.	0.7	3
175	Single-mode nonlinear regime of Weibel instability in a plasma with anisotropic temperature. JETP Letters, 2003, 78, 119-122.	0.4	3
176	Laser-triggered quasi-monoenergetic ion beams at a moderate intensity and pulse duration. Laser Physics, 2008, 18, 1025-1030.	0.6	3
177	Effect of a short weak prepulse on laser-triggered front-surface heavy-ion acceleration. Physics of Plasmas, 2012, 19, 103101.	0.7	3
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