

Valery Bychenkov

List of Publications by Citations

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222
papers

4,864
citations

33
h-index

63
g-index

249
ext. papers

5,303
ext. citations

2.1
avg, IF

5.31
L-index

#	Paper	IF	Citations
222	Forward ion acceleration in thin films driven by a high-intensity laser. <i>Physical Review Letters</i> , 2000 , 84, 4108-11	7.4	597
221	Ionization induced trapping in a laser wakefield accelerator. <i>Physical Review Letters</i> , 2010 , 104, 025004	7.4	277
220	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, 7042-54	2.4	162
219	Laser-triggered ion acceleration and table top isotope production. <i>Applied Physics Letters</i> , 2001 , 78, 595-597	3.7	154
218	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	2.4	144
217	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	1.9	133
216	Electron acceleration by a short relativistic laser pulse at the front of solid targets. <i>Physical Review Letters</i> , 2000 , 85, 570-3	7.4	122
215	Fast ignitor concept with light ions. <i>Plasma Physics Reports</i> , 2001 , 27, 1017-1020	1.2	115
214	Generation of GeV protons from 1 PW laser interaction with near critical density targets. <i>Physics of Plasmas</i> , 2010 , 17,	2.1	101
213	Analytic solutions to the Vlasov equations for expanding plasmas. <i>Physical Review Letters</i> , 2003 , 90, 185004	7.4	97
212	Charge separation effects in solid targets and ion acceleration with a two-temperature electron distribution. <i>Physical Review E</i> , 2004 , 69, 026411	2.4	90
211	Accelerating protons to therapeutic energies with ultraintense, ultraclean, and ultrashort laser pulses. <i>Medical Physics</i> , 2008 , 35, 1770-6	4.4	87
210	Ion-acoustic turbulence and anomalous transport. <i>Physics Reports</i> , 1988 , 164, 119-215	27.7	85
209	Ion acceleration in expanding multispecies plasmas. <i>Physics of Plasmas</i> , 2004 , 11, 3242-3250	2.1	80
208	Nonlocal electron transport in a plasma. <i>Physical Review Letters</i> , 1995 , 75, 4405-4408	7.4	78
207	Self-organization of a plasma due to 3D evolution of the Weibel instability. <i>Physical Review Letters</i> , 2004 , 93, 215004	7.4	77
206	Controlled electron injection into the wake wave using plasma density inhomogeneity. <i>Physics of Plasmas</i> , 2008 , 15, 073111	2.1	75

205	Ion acceleration in short-laser-pulse interaction with solid foils. <i>Plasma Physics and Controlled Fusion</i> , 2005 , 47, B869-B877	2	69
204	High energy electron generation in surface-wave-produced plasmas. <i>Plasma Sources Science and Technology</i> , 1992 , 1, 126-131	3.5	61
203	Particle dynamics during adiabatic expansion of a plasma bunch. <i>Journal of Experimental and Theoretical Physics</i> , 2002 , 95, 226-241	1	60
202	Nuclear reactions triggered by laser-accelerated high-energy ions. <i>Journal of Experimental and Theoretical Physics</i> , 1999 , 88, 1137-1142	1	59
201	Quasimonoenergetic electron beams with relativistic energies and ultrashort duration from laser-solid interactions at 0.5 kHz. <i>Physical Review Letters</i> , 2009 , 103, 235001	7.4	58
200	Experimental and theoretical study of absorption of femtosecond laser pulses in interaction with solid copper targets. <i>Physical Review B</i> , 2009 , 79,	3.3	56
199	Enhanced inverse bremsstrahlung heating rates in a strong laser field. <i>Physics of Plasmas</i> , 2003 , 10, 3385-3396	2.1	56
198	Effect of nonlocal transport on heat-wave propagation. <i>Physical Review Letters</i> , 2004 , 92, 205006	7.4	55
197	Nonlocal electron transport in laser heated plasmas. <i>Physics of Plasmas</i> , 1998 , 5, 2742-2753	2.1	50
196	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. <i>Plasma Physics Reports</i> , 2002 , 28, 12-27	1.2	47
195	Electron distribution function in laser heated plasmas. <i>Physics of Plasmas</i> , 2001 , 8, 550-556	2.1	47
194	High-energy ion generation by short laser pulses. <i>Plasma Physics Reports</i> , 2004 , 30, 473-495	1.2	46
193	Evolution of the stimulated Raman scattering instability in two-dimensional particle-in-cell simulations. <i>Physics of Plasmas</i> , 2010 , 17, 092704	2.1	44
192	Optimization of laser-target interaction for proton acceleration. <i>Physics of Plasmas</i> , 2013 , 20, 023103	2.1	43
191	Quasihydrodynamic description of ion acoustic waves in a collisional plasma. <i>Physics of Plasmas</i> , 1994 , 1, 2419-2429	2.1	38
190	Heat transport and electron distribution function in laser produced plasmas with hot spots. <i>Physics of Plasmas</i> , 2002 , 9, 2302-2310	2.1	35
189	Ion acceleration during adiabatic plasma expansion: Renormalization group approach. <i>JETP Letters</i> , 2001 , 74, 10-14	1.2	31
188	Electron vacuum acceleration by a tightly focused laser pulse. <i>Physics of Plasmas</i> , 2008 , 15, 013108	2.1	30

187	Laser triggered Coulomb explosion of nanoscale symmetric targets. <i>Physics of Plasmas</i> , 2007 , 14, 053103.1	2.1	30
186	Kinetic theory of ion acoustic waves in a plasma with collisional electrons. <i>Physical Review E</i> , 1995 , 52, 6759-6776	2.4	30
185	Coulomb explosion in a cluster plasma. <i>Plasma Physics Reports</i> , 2005 , 31, 178-183	1.2	29
184	Vacuum electron acceleration by tightly focused laser pulses with nanoscale targets. <i>Physics of Plasmas</i> , 2009 , 16, 053106	2.1	28
183	Observation of the plasma channel dynamics and Coulomb explosion in the interaction of a high-intensity laser pulse with a He gas jet. <i>JETP Letters</i> , 1997 , 66, 828-834	1.2	28
182	Acceleration of electrons by tightly focused femtosecond laser pulses. <i>Quantum Electronics</i> , 2007 , 37, 273-284	1.8	28
181	Anomalous absorption of high-energy green laser light in high- z plasmas. <i>Physical Review Letters</i> , 2002 , 88, 235002	7.4	28
180	Theory of filamentation instability and stimulated Brillouin scattering with nonlocal hydrodynamics. <i>Physics of Plasmas</i> , 2000 , 7, 1511-1519	2.1	28
179	Second harmonic generation in a laser plasma (review). <i>Soviet Journal of Quantum Electronics</i> , 1979 , 9, 1081-1102		26
178	Thomson scattering from ion acoustic waves in laser plasmas. <i>Physical Review E</i> , 1998 , 57, 3383-3391	2.4	25
177	Ion response to relativistic electron bunches in the blowout regime of laser-plasma accelerators. <i>Physical Review Letters</i> , 2010 , 105, 195002	7.4	24
176	Laser-triggered ion acceleration from a double-layer foil. <i>Physics of Plasmas</i> , 2009 , 16, 043107	2.1	24
175	On the maximum energy of ions in a disintegrating ultrathin foil irradiated by a high-power ultrashort laser pulse. <i>Quantum Electronics</i> , 2005 , 35, 1143-1145	1.8	24
174	Ensemble of ultra-high intensity attosecond pulses from laser-plasma interaction. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010 , 374, 476-480	2.3	22
173	Nonlocal transport in hot plasma. Part I. <i>Plasma Physics Reports</i> , 2013 , 39, 698-744	1.2	21
172	Kinetic description of the Coulomb explosion of a spherically symmetric cluster. <i>Journal of Experimental and Theoretical Physics</i> , 2005 , 101, 212-223	1	21
171	Ion energy scaling under optimum conditions of laser plasma acceleration from solid density targets. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2015 , 18,		21
170	Renormalization-group approach to the problem of light-beam self-focusing. <i>Physical Review A</i> , 2000 , 61,	2.6	20

169	Return current instability in laser heated plasmas. <i>Physics of Plasmas</i> , 1995 , 2, 4169-4173	2.1	20
168	Half-Integer Harmonics Generation in Laser-Produced Plasma. <i>Beitrage Aus Der Plasmaphysik</i> , 1983 , 23, 331-340		20
167	Axial magnetic field generation by intense circularly polarized laser pulses in underdense plasmas. <i>Physics of Plasmas</i> , 2010 , 17, 083109	2.1	19
166	Synchronized Ion Acceleration by Ultraintense Slow Light. <i>Physical Review Letters</i> , 2016 , 116, 085004	7.4	18
165	Generation of a quasi-monoenergetic proton beam from laser-irradiated sub-micron droplets. <i>Physics of Plasmas</i> , 2012 , 19, 073112	2.1	18
164	Electrostatic response of a two-component plasma with Coulomb collisions. <i>Physical Review Letters</i> , 2012 , 108, 205001	7.4	18
163	Electron acceleration by few-cycle laser pulses with single-wavelength spot size. <i>Physical Review E</i> , 2003 , 67, 026416	2.4	18
162	Ion acoustic waves in plasmas with light and heavy ions. <i>Physical Review E</i> , 1995 , 51, 1400-1407	2.4	18
161	A detailed study of collisionless explosion of single- and two-ion-species spherical nanoplasmas. <i>Physics of Plasmas</i> , 2010 , 17, 083110	2.1	17
160	Kinetic susceptibility and transport theory of collisional plasmas. <i>Physical Review Letters</i> , 2004 , 93, 125002	7.4	17
159	Enhanced ion acoustic fluctuations in laser-produced plasmas. <i>Physical Review E</i> , 1994 , 50, 4005-4016	2.4	17
158	Prepulse controlled electron acceleration from solids by a femtosecond laser pulse in the slightly relativistic regime. <i>Physics of Plasmas</i> , 2017 , 24, 063109	2.1	16
157	Ion acoustic instability driven by a temperature gradient in laser-produced plasmas. <i>Physics of Plasmas</i> , 2001 , 8, 3558-3564	2.1	16
156	Temperature relaxation in hot spots in a laser-produced plasma. <i>Physical Review E</i> , 1998 , 57, 978-981	2.4	16
155	Nonlinear Thomson scattering of a relativistically strong tightly focused ultrashort laser pulse. <i>Plasma Physics Reports</i> , 2016 , 42, 818-833	1.2	15
154	Stochastic electron acceleration in plasma waves driven by a high-power subpicosecond laser pulse. <i>Plasma Physics Reports</i> , 2014 , 40, 202-214	1.2	15
153	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, 093110	2.1	15
152	Quasimonoenergetic ion bunches from exploding microstructured targets. <i>Physics of Plasmas</i> , 2007 , 14, 103110	2.1	15

151	Laser acceleration of ions: recent results and prospects for applications. <i>Physics-Uspekhi</i> , 2015 , 58, 71-81	2.8	14
150	Femtosecond laser-plasma interaction with prepulse-generated liquid metal microjets. <i>Physics of Plasmas</i> , 2012 , 19, 013104	2.1	14
149	Ion acceleration by ultrahigh-power ultrashort laser pulses. <i>Quantum Electronics</i> , 2007 , 37, 863-868	1.8	14
148	Pion production under the action of intense ultrashort laser pulse on a solid target. <i>JETP Letters</i> , 2001 , 74, 586-589	1.2	14
147	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	2.7	14
146	Enhanced relativistic laser-plasma coupling utilizing laser-induced micromodified target. <i>Laser Physics Letters</i> , 2015 , 12, 046005	1.5	13
145	Tc-99m production with ultrashort intense laser pulses. <i>Laser and Particle Beams</i> , 2014 , 32, 605-611	0.9	13
144	X-Ray Diagnostics of Ultrashort Laser-Driven Plasma: Experiment and Simulations. <i>Contributions To Plasma Physics</i> , 2013 , 53, 116-121	1.4	13
143	Electron transport and permittivity in a plasma with an arbitrary ionic charge. <i>Journal of Experimental and Theoretical Physics</i> , 2008 , 106, 983-998	1	13
142	Linear theory of nonlocal transport in a magnetized plasma. <i>Physics of Plasmas</i> , 2003 , 10, 4633-4644	2.1	13
141	Transverse electron susceptibility and the electromagnetic wave absorption in weakly collisional plasmas. <i>Physics of Plasmas</i> , 1997 , 4, 4205-4209	2.1	12
140	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	1.2	12
139	Stationary laser beam filaments in a semicollisional plasma. <i>Physics of Plasmas</i> , 2000 , 7, 441-444	2.1	12
138	Plasma fluctuations driven by a randomized laser beam. <i>Physics of Plasmas</i> , 1999 , 6, 3002-3011	2.1	12
137	Magnetic field generation by short ultraintense laser pulse in underdense plasmas. <i>Laser and Particle Beams</i> , 1996 , 14, 55-62	0.9	12
136	Electrostatic fluctuations in collisional plasmas. <i>Physical Review E</i> , 2017 , 96, 043207	2.4	11
135	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	2.4	11
134	Growth and propagation of self-generated magnetic dipole vortices in collisionless shocks produced by interpenetrating plasmas. <i>Physics of Plasmas</i> , 2018 , 25, 012118	2.1	11

133	Laser-Triggered Proton Acceleration From Micro-Structured thin Targets. <i>Contributions To Plasma Physics</i> , 2013 , 53, 731-735	1.4	11
132	Vacuum electron acceleration by a tightly focused, radially polarized, relativistically strong laser pulse. <i>Plasma Physics Reports</i> , 2011 , 37, 603-614	1.2	10
131	Theory of nonlocal transport for small perturbations in a plasma. <i>Journal of Experimental and Theoretical Physics</i> , 1998 , 87, 916-925	1	10
130	Coulomb explosion of a cluster with a complex ion composition. <i>JETP Letters</i> , 2008 , 87, 623-627	1.2	10
129	Effect of anomalous resistivity on MHD wave damping. <i>Journal of Geophysical Research</i> , 1995 , 100, 9535		10
128	Ion acoustic waves in plasmas with collisional electrons. <i>Physical Review E</i> , 1994 , 50, 5134-5137	2.4	10
127	Nanostructured plasmas for enhanced gamma emission at relativistic laser interaction with solids. <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1	1.9	9
126	Relativistic coulomb explosion of spherical microplasma. <i>JETP Letters</i> , 2011 , 94, 97-100	1.2	9
125	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. <i>Applied Physics Letters</i> , 2011 , 99, 131501	3.4	9
124	Distinctive features of photoionized plasma from short x-ray-pulse interaction with gaseous medium. <i>Physics of Plasmas</i> , 2006 , 13, 013101	2.1	9
123	Resonance between heat-carrying electrons and Langmuir waves in inertial confinement fusion plasmas. <i>Physics of Plasmas</i> , 2016 , 23, 012707	2.1	9
122	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	1.9	9
121	Accelerated electrons for in situ peak intensity monitoring of tightly focused femtosecond laser radiation at high intensities. <i>Plasma Physics and Controlled Fusion</i> , 2018 , 60, 105011	2	9
120	Angular distribution of electrons directly accelerated by an intense tightly focused laser pulse. <i>Quantum Electronics</i> , 2017 , 47, 38-41	1.8	8
119	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	1.8	8
118	Return current instability driven by a temperature gradient in ICF plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2018 , 60, 014004	2	8
117	Optimization of electron acceleration by short laser pulses from low-density targets. <i>Plasma Physics and Controlled Fusion</i> , 2018 , 60, 084010	2	8
116	Monoenergetic proton beams from mass-limited targets irradiated by ultrashort laser pulses. <i>Plasma Physics Reports</i> , 2010 , 36, 256-262	1.2	8

115	Evolution of photoionization two-stream instability in collisional plasma. <i>High Energy Density Physics</i> , 2008 , 4, 73-77	1.2	8
114	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, 211902	3.4	8
113	Nonlocal transport in hot plasma. Part II. <i>Plasma Physics Reports</i> , 2014 , 40, 505-563	1.2	7
112	Group analysis of kinetic equations in a non-linear thermal transport problem. <i>International Journal of Non-Linear Mechanics</i> , 2015 , 71, 1-7	2.8	7
111	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	1.2	7
110	Laser acceleration of light ions from a thin homogeneous foil of complex atomic composition. <i>Plasma Physics Reports</i> , 2010 , 36, 77-89	1.2	7
109	Nonequilibrium electron distribution functions and nonlinear thermal transport. <i>Physics of Plasmas</i> , 2004 , 11, 3997-4007	2.1	7
108	Cylindrical cumulation of fast ions in a ring focus of a high-power subpicosecond laser. <i>JETP Letters</i> , 1999 , 69, 20-25	1.2	7
107	Two-dimensional vortex structures in an anisotropic plasma. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1990 , 82, 11-18	0.7	7
106	A model of anomalous absorption of laser light on ion acoustic turbulence. <i>Physics of Plasmas</i> , 2017 , 24, 012701	2.1	6
105	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	1.8	6
104	Laser-induced thermoelectric current as a source of generation of THz surface electromagnetic waves. <i>Quantum Electronics</i> , 2018 , 48, 653-657	1.8	6
103	Ion energy spectra directly measured in the interaction volume of intense laser pulses with clustered plasma. <i>Scientific Reports</i> , 2018 , 8, 9404	4.9	6
102	On the energy of ions at the expansion of a hot plasma layer into vacuum. <i>JETP Letters</i> , 2013 , 98, 70-75	1.2	6
101	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	2.1	6
100	Propagation of a laser-driven relativistic electron beam inside a solid dielectric. <i>Physical Review E</i> , 2012 , 86, 036412	2.4	6
99	Nonlocal transport model in equilibrium two-component plasmas. <i>Physics of Plasmas</i> , 2009 , 16, 102301	2.1	6
98	Dielectric function and electron transport in collisional plasma. <i>IEEE Transactions on Plasma Science</i> , 2006 , 34, 738-754	1.3	6

97	Relaxation of a thermal perturbation in a collisional plasma. <i>Plasma Physics Reports</i> , 2006 , 32, 337-343	1.2	6
96	Permittivity of plasma and nonstationary theory of nonlocal transport. <i>Journal of Experimental and Theoretical Physics</i> , 2005 , 100, 1159-1174	1	6
95	Self-similar solution to the Fokker-Planck equation in inhomogeneous plasma. <i>Physics of Plasmas</i> , 2002 , 9, 2872-2875	2.1	6
94	Filamentation and magnetic field generation by charged particle beams in laser produced plasmas. <i>Plasma Physics</i> , 1983 , 25, 827-831		6
93	Ion acceleration in electrostatic field of charged cavity created by ultra-short laser pulses of 1020×10^{21} W/cm ² . <i>Physics of Plasmas</i> , 2017 , 24, 010704	2.1	5
92	Characterizing extreme laser intensities by ponderomotive acceleration of protons from rarified gas. <i>New Journal of Physics</i> , 2020 , 22, 023003	2.9	5
91	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	2	5
90	Taking into account electron-electron collisions in classical absorption of short laser pulses. <i>Plasma Physics Reports</i> , 2009 , 35, 244-250	1.2	5
89	Particle-in-cell simulations of heat flux driven ion acoustic instability. <i>Physics of Plasmas</i> , 2005 , 12, 012324	1.1	5
88	Singular vortex flows in plasmas with anisotropic pressure. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989 , 138, 127-130	2.3	5
87	Terahertz radiation in laser-induced charge separation in the irradiated plasma target. <i>Quantum Electronics</i> , 2016 , 46, 1023-1030	1.8	5
86	Separation of ions on the front of a shock wave in a multicomponent plasma. <i>JETP Letters</i> , 2016 , 103, 238-243	1.2	5
85	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	2.1	5
84	Stochastic electron heating in an interference field of several laser pulses of a picosecond duration. <i>Plasma Physics and Controlled Fusion</i> , 2019 , 61, 025015	2	5
83	Ultrashort PW laser pulse interaction with target and ion acceleration. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018 , 909, 156-159	1.2	4
82	New solutions in the theory of self-focusing with saturating nonlinearity. <i>Journal of Experimental and Theoretical Physics</i> , 2012 , 114, 25-38	1	4
81	High-Intensity Laser Triggered Proton Acceleration from Ultrathin Foils. <i>Contributions To Plasma Physics</i> , 2013 , 53, 161-164	1.4	4
80	Nonlinear relativistic plasma resonance: Renormalization group approach. <i>Plasma Physics Reports</i> , 2017 , 43, 175-190	1.2	4

79	Parametric waves excitation in relativistic laser-plasma interactions for electron acceleration. <i>Journal of Physics: Conference Series</i> , 2015 , 653, 012007	0.3	4
78	Energetic electron and ion generation from interactions of intense laser pulses with laser machined conical targets. <i>Nuclear Fusion</i> , 2010 , 50, 055006	3.3	4
77	Acceleration of light ions from an expanding ultrathin foil of complex ion composition. <i>Plasma Physics Reports</i> , 2010 , 36, 709-718	1.2	4
76	Stimulated Raman scattering in non-Maxwellian plasmas. <i>Physics of Plasmas</i> , 1997 , 4, 1481-1483	2.1	4
75	Analytical models of laser-triggered ion acceleration. <i>Laser Physics</i> , 2006 , 16, 237-243	1.2	4
74	Dispersion properties of a plasma produced by a short X-ray pulse. <i>Plasma Physics Reports</i> , 2006 , 32, 593-600	1.6	4
73	Monoenergetic ion beam from an exploding foil. <i>Plasma Physics Reports</i> , 2006 , 32, 973-976	1.2	4
72	Langevin representation of laser heating in PIC simulations. <i>Computer Physics Communications</i> , 2002 , 143, 48-53	4.2	4
71	Laser-triggered ion acceleration at moderate intensity and pulse duration. <i>Applied Physics B: Lasers and Optics</i> , 2005 , 81, 537-542	1.9	4
70	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	2	4
69	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	2	4
68	Double-pulse femtosecond laser ablation of the surface of stainless steel with variable interpulse delays. <i>JETP Letters</i> , 2016 , 104, 421-424	1.2	4
67	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	1.8	3
66	Comparative study of ion acceleration by linearly polarized laser pulses from optimized targets of solid and near-critical density. <i>Plasma Physics and Controlled Fusion</i> , 2016 , 58, 034022	2	3
65	Self-Focusing of a Light Beam in a Medium with Relativistic Nonlinearity: New Analytical Solutions. <i>JETP Letters</i> , 2018 , 107, 458-463	1.2	3
64	Novel photonuclear techniques based on femtosecond lasers. <i>Physics of Particles and Nuclei Letters</i> , 2014 , 11, 54-59	0.5	3
63	Laser-triggered quasi-monoenergetic ion beams at a moderate intensity and pulse duration. <i>Laser Physics</i> , 2008 , 18, 1025-1030	1.2	3
62	Single-mode nonlinear regime of Weibel instability in a plasma with anisotropic temperature. <i>JETP Letters</i> , 2003 , 78, 119-122	1.2	3

61	Ultrafast target charging due to polarization triggered by laser-accelerated electrons. <i>Physical Review E</i> , 2020 , 102, 021202	2.4	3
60	Synchronized ion acceleration by ultraintense slow light and electron source for x-ray production from low-density targets. <i>Plasma Physics and Controlled Fusion</i> , 2017 , 59, 034009	2	2
59	Semi-analytical model of thin plasma layer expansion into vacuum. <i>Bulletin of the Lebedev Physics Institute</i> , 2015 , 42, 176-179	0.5	2
58	Laser-based ion sources for medical applications. <i>European Physical Journal: Special Topics</i> , 2015 , 224, 2621-2624	2.3	2
57	Generation of gamma radiation by a subterawatt ultrashort laser pulse: optimisation of preplasma and pulse duration. <i>Quantum Electronics</i> , 2020 , 50, 335-342	1.8	2
56	DSMC Modeling of a Single Hot Spot Evolution Using the Landau-Fokker-Planck Equation. <i>Acta Applicandae Mathematicae</i> , 2014 , 132, 107-116	1.1	2
55	Coulomb acceleration of light ions from homogeneous and layered targets. <i>Journal of Experimental and Theoretical Physics</i> , 2012 , 114, 748-767	1	2
54	Radial acceleration of ions during adiabatic expansion of a multicomponent cylindrical plasma. <i>Quantum Electronics</i> , 2017 , 47, 1023-1030	1.8	2
53	Radiative heat transport instability in a laser produced inhomogeneous plasma. <i>Physics of Plasmas</i> , 2015 , 22, 082705	2.1	2
52	Photoionization two-stream instability in a collisional plasma. <i>Plasma Physics Reports</i> , 2007 , 33, 974-981	1.2	2
51	Single-mode magnetic structures in a plasma with anisotropic pressure. <i>Plasma Physics Reports</i> , 2000 , 26, 54-61	1.2	2
50	Effect of cylindrical curvature on nonlocal electron transport in a plasma. <i>Physics of Plasmas</i> , 1996 , 3, 3518-3519	2.1	2
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