

# Valery Bychenkov

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2214643/valery-bychenkov-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Optimization of laser-initiated generation of thermonuclear neutrons from microdroplet plasma. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2022</b> , 49, 42-47	0.5	0
221	Bright synchrotron radiation from relativistic self-trapping of a short laser pulse in near-critical density plasma.. <i>Physical Review E</i> , <b>2021</b> , 104, L053201	2.4	0
220	Electron Heating of the Cluster Plasma by an Ultrashort Laser Pulse. <i>JETP Letters</i> , <b>2021</b> , 114, 200-207	1.2	2
219	Efficient electron injection by hybrid parametric instability and forward direct laser acceleration in subcritical plasma. <i>Plasma Physics and Controlled Fusion</i> , <b>2021</b> , 63, 022001	2	4
218	Complementary diagnostics of high-intensity femtosecond laser pulses via vacuum acceleration of protons and electrons. <i>Plasma Physics and Controlled Fusion</i> , <b>2021</b> , 63, 014002	2	4
217	Neutron Production from Structured Targets Irradiated By an Ultrashort Laser Pulse. <i>Journal of Russian Laser Research</i> , <b>2021</b> , 42, 292	0.7	1
216	Proton acceleration from thin foils by extremely short PW laser pulse. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 063106	0.6	0
215	Self-Trapping of Extreme Light. <i>Radiophysics and Quantum Electronics</i> , <b>2021</b> , 63, 742-755	0.7	1
214	Nonlinear Laser Radiation Absorption Due to Relativistic Plasma Resonance in an Inhomogeneous Plasma. <i>Journal of Experimental and Theoretical Physics</i> , <b>2021</b> , 133, 236-252	1	1
213	Relativistic Self-Trapping of Extreme Laser Light in an Inhomogeneous Plasma. <i>JETP Letters</i> , <b>2021</b> , 114, 579-584	1.2	0
212	Laser-triggered fast charge-separation field generates a strong surface current and wave. <i>Plasma Physics and Controlled Fusion</i> , <b>2020</b> , 62, 094003	2	1
211	Efficiency enhancement of thermonuclear DD reaction in femtosecond laser plasma with the use of structured low-average-density targets. <i>Quantum Electronics</i> , <b>2020</b> , 50, 169-174	1.8	8
210	Characterizing extreme laser intensities by ponderomotive acceleration of protons from rarified gas. <i>New Journal of Physics</i> , <b>2020</b> , 22, 023003	2.9	5
209	Generation of gamma radiation by a subterawatt ultrashort laser pulse: optimisation of preplasma and pulse duration. <i>Quantum Electronics</i> , <b>2020</b> , 50, 335-342	1.8	2
208	Ultrafast target charging due to polarization triggered by laser-accelerated electrons. <i>Physical Review E</i> , <b>2020</b> , 102, 021202	2.4	3
207	Bunching of light ions driven by heavy-ion front in multispecies ion beam accelerated by laser. <i>Physical Review E</i> , <b>2020</b> , 102, 023212	2.4	2
206	Shielded radiography with gamma rays from laser-accelerated electrons in a self-trapping regime. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 123103	2.1	1

205	Magnetic field generation from a coil-shaped foil by a laser-triggered hot-electron current. <i>Laser Physics Letters</i> , <b>2019</b> , 16, 066006	1.5	1
204	SpectralDynamic Model of the Hot Plasma Layer Expansion. <i>Journal of Experimental and Theoretical Physics</i> , <b>2019</b> , 128, 133-157	1	1
203	Electron parametric instabilities in nonuniform plasma with a strong density gradient excited by femtosecond laser pulses of subrelativistic intensity. <i>Quantum Electronics</i> , <b>2019</b> , 49, 386-390	1.8	6
202	Analytic theory of relativistic self-focusing for a Gaussian light beam entering a plasma: Renormalization-group approach. <i>Physical Review E</i> , <b>2019</b> , 99, 043201	2.4	11
201	Generation of high-charge electron beam in a subcritical-density plasma through laser pulse self-trapping. <i>Plasma Physics and Controlled Fusion</i> , <b>2019</b> , 61, 124004	2	5
200	Harmonic Generation by Relativistic Plasma Resonance. <i>Journal of Russian Laser Research</i> , <b>2019</b> , 40, 429-434	2.1	1
199	Higher-order harmonic generation of laser radiation due to relativistic plasma resonance at nonrelativistic laser intensity. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 113113	2.1	5
198	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> , <b>2019</b> , 26, 123107	2	5
197	Stochastic electron heating in an interference field of several laser pulses of a picosecond duration. <i>Plasma Physics and Controlled Fusion</i> , <b>2019</b> , 61, 025015	2.1	11
196	Growth and propagation of self-generated magnetic dipole vortices in collisionless shocks produced by interpenetrating plasmas. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 012118	1.2	4
195	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> , <b>2018</b> , 909, 156-159	2	8
194	Return current instability driven by a temperature gradient in ICF plasmas. <i>Plasma Physics and Controlled Fusion</i> , <b>2018</b> , 60, 014004	1.2	3
193	Self-Focusing of a Light Beam in a Medium with Relativistic Nonlinearity: New Analytical Solutions. <i>JETP Letters</i> , <b>2018</b> , 107, 458-463	1.8	6
192	Laser-induced thermoelectric current as a source of generation of THz surface electromagnetic waves. <i>Quantum Electronics</i> , <b>2018</b> , 48, 653-657	4.9	6
191	Ion energy spectra directly measured in the interaction volume of intense laser pulses with clustered plasma. <i>Scientific Reports</i> , <b>2018</b> , 8, 9404	2	8
190	Optimization of electron acceleration by short laser pulses from low-density targets. <i>Plasma Physics and Controlled Fusion</i> , <b>2018</b> , 60, 084010	0.5	1
189	Modeling of Laser Generation and Propagation of Electron Bunch Along Thin Irradiated Wire. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2018</b> , 45, 346-349	2.1	1
188	Ion acoustic turbulence driven by return current leads to hot electrons in laser-produced plasma. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 102706		

187	Direct electron acceleration for diagnostics of a laser pulse focused by an off-axis parabolic mirror. <i>Applied Physics B: Lasers and Optics</i> , <b>2018</b> , 124, 1	1.9	9
186	Accelerated electrons for in situ peak intensity monitoring of tightly focused femtosecond laser radiation at high intensities. <i>Plasma Physics and Controlled Fusion</i> , <b>2018</b> , 60, 105011	2	9
185	Angular distribution of electrons directly accelerated by an intense tightly focused laser pulse. <i>Quantum Electronics</i> , <b>2017</b> , 47, 38-41	1.8	8
184	Ion acceleration in electrostatic field of charged cavity created by ultra-short laser pulses of 1020-1021 W/cm <sup>2</sup> . <i>Physics of Plasmas</i> , <b>2017</b> , 24, 010704	2.1	5
183	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> , <b>2017</b> , 59, 034009	2	2
182	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> , <b>2017</b> , 47, 232-235	1.8	3
181	Prepulse controlled electron acceleration from solids by a femtosecond laser pulse in the slightly relativistic regime. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 063109	2.1	16
180	A model of anomalous absorption of laser light on ion acoustic turbulence. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 012701	2.1	6
179	Electrostatic fluctuations in collisional plasmas. <i>Physical Review E</i> , <b>2017</b> , 96, 043207	2.4	11
178	Nanostructured plasmas for enhanced gamma emission at relativistic laser interaction with solids. <i>Applied Physics B: Lasers and Optics</i> , <b>2017</b> , 123, 1	1.9	9
177	Comparison of optimized ion acceleration from thin foils and low-density targets for linearly and circularly polarized laser pulses. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 113102	2.1	6
176	Nonlinear relativistic plasma resonance: Renormalization group approach. <i>Plasma Physics Reports</i> , <b>2017</b> , 43, 175-190	1.2	4
175	Radial acceleration of ions during adiabatic expansion of a multicomponent cylindrical plasma. <i>Quantum Electronics</i> , <b>2017</b> , 47, 1023-1030	1.8	2
174	Nonlinear Thomson scattering of a relativistically strong tightly focused ultrashort laser pulse. <i>Plasma Physics Reports</i> , <b>2016</b> , 42, 818-833	1.2	15
173	Synchronized Ion Acceleration by Ultraintense Slow Light. <i>Physical Review Letters</i> , <b>2016</b> , 116, 085004	7.4	18
172	Optimization of a Laser-Based Proton Source and a New Mechanism of Ion Acceleration. <i>IEEE Transactions on Plasma Science</i> , <b>2016</b> , 44, 364-368	1.3	1
171	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> , <b>2016</b> , 58, 034022	2	3
170	On the theory of nonlinear Thomson scattering of a highly focused laser pulse. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2016</b> , 43, 12-15	0.5	1

169	Renormgroup algorithm for the theory of the relativistic plasma resonance. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 769, 012083	0.3	
168	Terahertz radiation in laser-induced charge separation in the irradiated plasma target. <i>Quantum Electronics</i> , <b>2016</b> , 46, 1023-1030	1.8	5
167	Double-pulse femtosecond laser ablation of the surface of stainless steel with variable interpulse delays. <i>JETP Letters</i> , <b>2016</b> , 104, 421-424	1.2	4
166	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> , <b>2016</b> , 109, 211902	3.4	8
165	Resonance between heat-carrying electrons and Langmuir waves in inertial confinement fusion plasmas. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 012707	2.1	9
164	Target optimisation for the yield of X-rays of desired hardness under femtosecond pulse irradiation. <i>Quantum Electronics</i> , <b>2016</b> , 46, 342-346	1.8	2
163	Acceleration of ions by low-intense laser light in low-density targets. <i>JETP Letters</i> , <b>2016</b> , 104, 618-623	1.2	2
162	Nonlinear plasma resonance in inhomogeneous relativistic plasma. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2016</b> , 43, 16-19	0.5	
161	Separation of ions on the front of a shock wave in a multicomponent plasma. <i>JETP Letters</i> , <b>2016</b> , 103, 238-243	1.2	5
160	Enhanced relativistic laser-plasma coupling utilizing laser-induced micromodified target. <i>Laser Physics Letters</i> , <b>2015</b> , 12, 046005	1.5	13
159	Semi-analytical model of thin plasma layer expansion into vacuum. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2015</b> , 42, 176-179	0.5	2
158	On the feasibility of increasing the energy of laser-accelerated protons by using low-density targets. <i>Plasma Physics Reports</i> , <b>2015</b> , 41, 501-506	1.2	1
157	Dynamics of ponderomotive ion acceleration in a laser-plasma channel. <i>Plasma Physics Reports</i> , <b>2015</b> , 41, 343-349	1.2	1
156	Laser acceleration of ions: recent results and prospects for applications. <i>Physics-Uspexhi</i> , <b>2015</b> , 58, 71-81	2.8	14
155	Laser-based ion sources for medical applications. <i>European Physical Journal: Special Topics</i> , <b>2015</b> , 224, 2621-2624	2.3	2
154	Radial acceleration of ions by a laser pulse in a plasma channel. <i>Journal of Experimental and Theoretical Physics</i> , <b>2015</b> , 121, 1-18	1	1
153	Laser vacuum acceleration of a relativistic electron bunch. <i>Quantum Electronics</i> , <b>2015</b> , 45, 551-555	1.8	1
152	Radiative heat transport instability in a laser produced inhomogeneous plasma. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 082705	2.1	2

151	Parametric waves excitation in relativistic laser-plasma interactions for electron acceleration. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 653, 012007	0.3	4
150	Group analysis of kinetic equations in a non-linear thermal transport problem. <i>International Journal of Non-Linear Mechanics</i> , <b>2015</b> , 71, 1-7	2.8	7
149	Ion energy scaling under optimum conditions of laser plasma acceleration from solid density targets. <i>Physical Review Special Topics: Accelerators and Beams</i> , <b>2015</b> , 18,		21
148	DSMC Modeling of a Single Hot Spot Evolution Using the Landau-Fokker-Planck Equation. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 107-116	1.1	2
147	Novel photonuclear techniques based on femtosecond lasers. <i>Physics of Particles and Nuclei Letters</i> , <b>2014</b> , 11, 54-59	0.5	3
146	Nonlocal transport in hot plasma. Part II. <i>Plasma Physics Reports</i> , <b>2014</b> , 40, 505-563	1.2	7
145	Stochastic electron acceleration in plasma waves driven by a high-power subpicosecond laser pulse. <i>Plasma Physics Reports</i> , <b>2014</b> , 40, 202-214	1.2	15
144	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> , <b>2014</b> , 21, 093110	2.1	15
143	Tc-99m production with ultrashort intense laser pulses. <i>Laser and Particle Beams</i> , <b>2014</b> , 32, 605-611	0.9	13
142	Laser-Triggered Proton Acceleration From Micro-Structured thin Targets. <i>Contributions To Plasma Physics</i> , <b>2013</b> , 53, 731-735	1.4	11
141	On the energy of ions at the expansion of a hot plasma layer into vacuum. <i>JETP Letters</i> , <b>2013</b> , 98, 70-75	1.2	6
140	Prepulse induced microstructured plasma with melted and solid targets: formation, properties & prospects to relativistic laser-plasma interaction <b>2013</b> ,		1
139	Nonlocal transport in hot plasma. Part I. <i>Plasma Physics Reports</i> , <b>2013</b> , 39, 698-744	1.2	21
138	Optimization of laser-target interaction for proton acceleration. <i>Physics of Plasmas</i> , <b>2013</b> , 20, 023103	2.1	43
137	High-Intensity Laser Triggered Proton Acceleration from Ultrathin Foils. <i>Contributions To Plasma Physics</i> , <b>2013</b> , 53, 161-164	1.4	4
136	Nonstationary kinetic theory of ion transport in plasma with small perturbations. <i>Plasma Physics Reports</i> , <b>2013</b> , 39, 364-373	1.2	1
135	X-Ray Diagnostics of Ultrashort Laser-Driven Plasma: Experiment and Simulations. <i>Contributions To Plasma Physics</i> , <b>2013</b> , 53, 116-121	1.4	13
134	Channeling of relativistic laser pulses in underdense plasmas and subsequent electron acceleration. <i>EPJ Web of Conferences</i> , <b>2013</b> , 59, 17001	0.3	1

133	New solutions in the theory of self-focusing with saturating nonlinearity. <i>Journal of Experimental and Theoretical Physics</i> , <b>2012</b> , 114, 25-38	1	4
132	Coulomb acceleration of light ions from homogeneous and layered targets. <i>Journal of Experimental and Theoretical Physics</i> , <b>2012</b> , 114, 748-767	1	2
131	Propagation of a laser-driven relativistic electron beam inside a solid dielectric. <i>Physical Review E</i> , <b>2012</b> , 86, 036412	2.4	6
130	Generation of a quasi-monoenergetic proton beam from laser-irradiated sub-micron droplets. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 073112	2.1	18
129	Femtosecond laser-plasma interaction with prepulse-generated liquid metal microjets. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 013104	2.1	14
128	Effect of a short weak prepulse on laser-triggered front-surface heavy-ion acceleration. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 103101	2.1	1
127	Acceleration of impurity ions in the coulomb explosion of a relativistic spherical cluster with a complex ion composition. <i>Plasma Physics Reports</i> , <b>2012</b> , 38, 879-890	1.2	
126	Electrostatic response of a two-component plasma with Coulomb collisions. <i>Physical Review Letters</i> , <b>2012</b> , 108, 205001	7.4	18
125	Relativistic coulomb explosion of spherical microplasma. <i>JETP Letters</i> , <b>2011</b> , 94, 97-100	1.2	9
124	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> , <b>2011</b> , 653, 62-65	1.2	7
123	Vacuum electron acceleration by a tightly focused, radially polarized, relativistically strong laser pulse. <i>Plasma Physics Reports</i> , <b>2011</b> , 37, 603-614	1.2	10
122	Ultrashort-laser-pulse absorption with spatial dispersion and nonlocal transport effects. <i>Journal of Russian Laser Research</i> , <b>2011</b> , 32, 163-176	0.7	1
121	Effective Generation of Collimated Ion Beams by Relativistic Laser Pulse Using 2D Microstructured Foils: 3D PIC Simulations. <i>Contributions To Plasma Physics</i> , <b>2011</b> , 51, 457-462	1.4	0
120	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 131501	3.4	9
119	Energetic electron and ion generation from interactions of intense laser pulses with laser machined conical targets. <i>Nuclear Fusion</i> , <b>2010</b> , 50, 055006	3.3	4
118	Ion response to relativistic electron bunches in the blowout regime of laser-plasma accelerators. <i>Physical Review Letters</i> , <b>2010</b> , 105, 195002	7.4	24
117	Ionization induced trapping in a laser wakefield accelerator. <i>Physical Review Letters</i> , <b>2010</b> , 104, 025004	7.4	277
116	Evolution of the stimulated Raman scattering instability in two-dimensional particle-in-cell simulations. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 092704	2.1	44

115	A detailed study of collisionless explosion of single- and two-ion-species spherical nanoplasmats. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 083110	2.1	17
114	Generation of GeV protons from 1 PW laser interaction with near critical density targets. <i>Physics of Plasmas</i> , <b>2010</b> , 17,	2.1	101
113	Axial magnetic field generation by intense circularly polarized laser pulses in underdense plasmas. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 083109	2.1	19
112	Swarm of ultra-high intensity attosecond pulses from laser-plasma interaction. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 244, 022029	0.3	1
111	Control of proton energy in ultra-high intensity laser-matter interaction. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 244, 042025	0.3	
110	Laser acceleration of light ions from a thin homogeneous foil of complex atomic composition. <i>Plasma Physics Reports</i> , <b>2010</b> , 36, 77-89	1.2	7
109	Monoenergetic proton beams from mass-limited targets irradiated by ultrashort laser pulses. <i>Plasma Physics Reports</i> , <b>2010</b> , 36, 256-262	1.2	8
108	Acceleration of light ions from an expanding ultrathin foil of complex ion composition. <i>Plasma Physics Reports</i> , <b>2010</b> , 36, 709-718	1.2	4
107	Ensemble of ultra-high intensity attosecond pulses from laser-plasma interaction. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2010</b> , 374, 476-480	2.3	22
106	Laser-triggered ion acceleration from a double-layer foil. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 043107	2.1	24
105	Direct acceleration of electrons by radially polarized laser pulse. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2009</b> , 36, 335-336	0.5	
104	Laser acceleration of light impurity from an ultrathin foil of complex ionic composition. <i>Bulletin of the Lebedev Physics Institute</i> , <b>2009</b> , 36, 340-341	0.5	
103	Taking into account electron-electron collisions in classical absorption of short laser pulses. <i>Plasma Physics Reports</i> , <b>2009</b> , 35, 244-250	1.2	5
102	Quasimonoenergetic electron beams with relativistic energies and ultrashort duration from laser-solid interactions at 0.5 kHz. <i>Physical Review Letters</i> , <b>2009</b> , 103, 235001	7.4	58
101	Vacuum electron acceleration by tightly focused laser pulses with nanoscale targets. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 053106	2.1	28
100	Experimental and theoretical study of absorption of femtosecond laser pulses in interaction with solid copper targets. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	56
99	Nonlocal transport model in equilibrium two-component plasmas. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 102301	2.1	6
98	Coulomb explosion of a cluster with a complex ion composition. <i>JETP Letters</i> , <b>2008</b> , 87, 623-627	1.2	10



97	Electron vacuum acceleration by a tightly focused laser pulse. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 013108	2.1	30
96	Controlled electron injection into the wake wave using plasma density inhomogeneity. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 073111	2.1	75
95	Accelerating protons to therapeutic energies with ultraintense, ultraclean, and ultrashort laser pulses. <i>Medical Physics</i> , <b>2008</b> , 35, 1770-6	4.4	87
94	Evolution of photoionization two-stream instability in collisional plasma. <i>High Energy Density Physics</i> , <b>2008</b> , 4, 73-77	1.2	8
93	Accelerating monoenergetic protons from ultrathin foils by flat-top laser pulses in the directed-Coulomb-explosion regime. <i>Physical Review E</i> , <b>2008</b> , 78, 026412	2.4	144
92	Laser-triggered quasi-monoenergetic ion beams at a moderate intensity and pulse duration. <i>Laser Physics</i> , <b>2008</b> , 18, 1025-1030	1.2	3
91	Electron transport and permittivity in a plasma with an arbitrary ionic charge. <i>Journal of Experimental and Theoretical Physics</i> , <b>2008</b> , 106, 983-998	1	13
90	Coulomb explosion of a heated cluster. <i>Plasma Physics Reports</i> , <b>2008</b> , 34, 920-923	1.2	1
89	Acceleration of electrons by tightly focused femtosecond laser pulses. <i>Quantum Electronics</i> , <b>2007</b> , 37, 273-284	1.8	28
88	Two-stage laser acceleration of ions. <i>Plasma Physics Reports</i> , <b>2007</b> , 33, 655-658	1.2	1
87	Photoionization two-stream instability in a collisional plasma. <i>Plasma Physics Reports</i> , <b>2007</b> , 33, 974-981	1.2	2
86	Quasimonoenergetic ion bunches from exploding microstructured targets. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 103110	2.1	15
85	Laser triggered Coulomb explosion of nanoscale symmetric targets. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 053103	2.1	30
84	Ion acceleration by ultrahigh-power ultrashort laser pulses. <i>Quantum Electronics</i> , <b>2007</b> , 37, 863-868	1.8	14
83	Distinctive features of photoionized plasma from short x-ray-pulse interaction with gaseous medium. <i>Physics of Plasmas</i> , <b>2006</b> , 13, 013101	2.1	9
82	Dielectric function and electron transport in collisional plasma. <i>IEEE Transactions on Plasma Science</i> , <b>2006</b> , 34, 738-754	1.3	6
81	Analytical models of laser-triggered ion acceleration. <i>Laser Physics</i> , <b>2006</b> , 16, 237-243	1.2	4
80	Investigation of ion acceleration in an expanding laser plasma by using a hybrid Boltzmann-Vlasov-Poisson model. <i>Plasma Physics Reports</i> , <b>2006</b> , 32, 205-221	1.2	12

79	Relaxation of a thermal perturbation in a collisional plasma. <i>Plasma Physics Reports</i> , <b>2006</b> , 32, 337-343	1.2	6
78	Dispersion properties of a plasma produced by a short X-ray pulse. <i>Plasma Physics Reports</i> , <b>2006</b> , 32, 593-600	1.2	4
77	Monoenergetic ion beam from an exploding foil. <i>Plasma Physics Reports</i> , <b>2006</b> , 32, 973-976	1.2	4
76	TH-C-230A-06: High-Energy Proton Acceleration Driven by Ultra-Intense Ultra-Clean Laser Pulses. <i>Medical Physics</i> , <b>2006</b> , 33, 2272-2272	4.4	
75	Ion acceleration in short-laser-pulse interaction with solid foils. <i>Plasma Physics and Controlled Fusion</i> , <b>2005</b> , 47, B869-B877	2	69
74	Particle-in-cell simulations of heat flux driven ion acoustic instability. <i>Physics of Plasmas</i> , <b>2005</b> , 12, 012321	1.1	5
73	Coulomb explosion in a cluster plasma. <i>Plasma Physics Reports</i> , <b>2005</b> , 31, 178-183	1.2	29
72	Permittivity of plasma and nonstationary theory of nonlocal transport. <i>Journal of Experimental and Theoretical Physics</i> , <b>2005</b> , 100, 1159-1174	1	6
71	Kinetic description of the Coulomb explosion of a spherically symmetric cluster. <i>Journal of Experimental and Theoretical Physics</i> , <b>2005</b> , 101, 212-223	1	21
70	Laser-triggered ion acceleration at moderate intensity and pulse duration. <i>Applied Physics B: Lasers and Optics</i> , <b>2005</b> , 81, 537-542	1.9	4
69	On the maximum energy of ions in a disintegrating ultrathin foil irradiated by a high-power ultrashort laser pulse. <i>Quantum Electronics</i> , <b>2005</b> , 35, 1143-1145	1.8	24
68	Kinetic susceptibility and transport theory of collisional plasmas. <i>Physical Review Letters</i> , <b>2004</b> , 93, 125004	1.1	17
67	High-energy ion generation by short laser pulses. <i>Plasma Physics Reports</i> , <b>2004</b> , 30, 473-495	1.2	46
66	A nonlinear single-mode structure in a plasma with anisotropic temperature. <i>Plasma Physics Reports</i> , <b>2004</b> , 30, 1071-1074	1.2	
65	Nonequilibrium electron distribution functions and nonlinear thermal transport. <i>Physics of Plasmas</i> , <b>2004</b> , 11, 3997-4007	2.1	7
64	Charge separation effects in solid targets and ion acceleration with a two-temperature electron distribution. <i>Physical Review E</i> , <b>2004</b> , 69, 026411	2.4	90
63	Self-organization of a plasma due to 3D evolution of the Weibel instability. <i>Physical Review Letters</i> , <b>2004</b> , 93, 215004	7.4	77
62	Ion acceleration in expanding multispecies plasmas. <i>Physics of Plasmas</i> , <b>2004</b> , 11, 3242-3250	2.1	80

61	Effect of nonlocal transport on heat-wave propagation. <i>Physical Review Letters</i> , <b>2004</b> , 92, 205006	7.4	55
60	Nonthermal tails of the electron distribution functions with nonlocal transport <b>2003</b> , 5228, 510		1
59	Single-mode nonlinear regime of Weibel instability in a plasma with anisotropic temperature. <i>JETP Letters</i> , <b>2003</b> , 78, 119-122	1.2	3
58	Enhanced inverse bremsstrahlung heating rates in a strong laser field. <i>Physics of Plasmas</i> , <b>2003</b> , 10, 3385-3396	2.3	56
57	Electron acceleration by few-cycle laser pulses with single-wavelength spot size. <i>Physical Review E</i> , <b>2003</b> , 67, 026416	2.4	18
56	Analytic solutions to the Vlasov equations for expanding plasmas. <i>Physical Review Letters</i> , <b>2003</b> , 90, 185004	2.4	97
55	Linear theory of nonlocal transport in a magnetized plasma. <i>Physics of Plasmas</i> , <b>2003</b> , 10, 4633-4644	2.1	13
54	High-energy ion generation in interaction of short laser pulse with high-density plasma. <i>Applied Physics B: Lasers and Optics</i> , <b>2002</b> , 74, 207-215	1.9	133
53	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> , <b>2002</b> , 28, 12-27	1.2	47
52	Particle dynamics during adiabatic expansion of a plasma bunch. <i>Journal of Experimental and Theoretical Physics</i> , <b>2002</b> , 95, 226-241	1	60
51	Langevin representation of laser heating in PIC simulations. <i>Computer Physics Communications</i> , <b>2002</b> , 143, 48-53	4.2	4
50	Anomalous absorption of high-energy green laser light in high- z plasmas. <i>Physical Review Letters</i> , <b>2002</b> , 88, 235002	7.4	28
49	Self-similar solution to the Fokker-Planck equation in inhomogeneous plasma. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 2872-2875	2.1	6
48	Heat transport and electron distribution function in laser produced plasmas with hot spots. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 2302-2310	2.1	35
47	Resonant instability of laser speckles in a semicollisional underdense plasma <b>2001</b> , 4424, 336		
46	Ion acceleration during adiabatic plasma expansion: Renormalization group approach. <i>JETP Letters</i> , <b>2001</b> , 74, 10-14	1.2	31
45	Fast ignitor concept with light ions. <i>Plasma Physics Reports</i> , <b>2001</b> , 27, 1017-1020	1.2	115
44	Pion production under the action of intense ultrashort laser pulse on a solid target. <i>JETP Letters</i> , <b>2001</b> , 74, 586-589	1.2	14

43	Laser-triggered ion acceleration and table top isotope production. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 595-597	3.7	154
42	Ion acoustic instability driven by a temperature gradient in laser-produced plasmas. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 3558-3564	2.1	16
41	Electron distribution function in laser heated plasmas. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 550-556	2.1	47
40	Single-mode magnetic structures in a plasma with anisotropic pressure. <i>Plasma Physics Reports</i> , <b>2000</b> , 26, 54-61	1.2	2
39	Theory of filamentation instability and stimulated Brillouin scattering with nonlocal hydrodynamics. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 1511-1519	2.1	28
38	Stationary laser beam filaments in a semicollisional plasma. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 441-444	2.1	12
37	Electron acceleration by a short relativistic laser pulse at the front of solid targets. <i>Physical Review Letters</i> , <b>2000</b> , 85, 570-3	7.4	122
36	Renormalization-group approach to the problem of light-beam self-focusing. <i>Physical Review A</i> , <b>2000</b> , 61,	2.6	20
35	Forward ion acceleration in thin films driven by a high-intensity laser. <i>Physical Review Letters</i> , <b>2000</b> , 84, 4108-11	7.4	597
34	Plasma fluctuations driven by a randomized laser beam. <i>Physics of Plasmas</i> , <b>1999</b> , 6, 3002-3011	2.1	12
33	Nuclear reactions triggered by laser-accelerated high-energy ions. <i>Journal of Experimental and Theoretical Physics</i> , <b>1999</b> , 88, 1137-1142	1	59
32	Cylindrical cumulation of fast ions in a ring focus of a high-power subpicosecond laser. <i>JETP Letters</i> , <b>1999</b> , 69, 20-25	1.2	7
31	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> , <b>1999</b> , 59, 7042-54	2.4	162
30	Theory of nonlocal transport for small perturbations in a plasma. <i>Journal of Experimental and Theoretical Physics</i> , <b>1998</b> , 87, 916-925	1	10
29	Nonlocal electron transport in laser heated plasmas. <i>Physics of Plasmas</i> , <b>1998</b> , 5, 2742-2753	2.1	50
28	Thomson scattering from ion acoustic waves in laser plasmas. <i>Physical Review E</i> , <b>1998</b> , 57, 3383-3391	2.4	25
27	Temperature relaxation in hot spots in a laser-produced plasma. <i>Physical Review E</i> , <b>1998</b> , 57, 978-981	2.4	16
26	Transverse electron susceptibility and the electromagnetic wave absorption in weakly collisional plasmas. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 4205-4209	2.1	12

25	Stimulated Raman scattering in non-Maxwellian plasmas. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 1481-1483	2.1	4
24	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> , <b>1997</b> , 66, 828-834	1.2	28
23	Magnetic field generation by short ultraintense laser pulse in underdense plasmas. <i>Laser and Particle Beams</i> , <b>1996</b> , 14, 55-62	0.9	12
22	Effect of cylindrical curvature on nonlocal electron transport in a plasma. <i>Physics of Plasmas</i> , <b>1996</b> , 3, 3518-3519	2.1	2
21	Nonlocal electron transport in spherical plasmas. <i>Physics of Plasmas</i> , <b>1996</b> , 3, 1280-1283	2.1	2
20	Kinetic theory of ion acoustic waves in a plasma with collisional electrons. <i>Physical Review E</i> , <b>1995</b> , 52, 6759-6776	2.4	30
19	Ion acoustic waves in plasmas with light and heavy ions. <i>Physical Review E</i> , <b>1995</b> , 51, 1400-1407	2.4	18
18	Nonlocal electron transport in a plasma. <i>Physical Review Letters</i> , <b>1995</b> , 75, 4405-4408	7.4	78
17	Effect of anomalous resistivity on MHD wave damping. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9535		10
16	Return current instability in laser heated plasmas. <i>Physics of Plasmas</i> , <b>1995</b> , 2, 4169-4173	2.1	20
15	Quasihydrodynamic description of ion acoustic waves in a collisional plasma. <i>Physics of Plasmas</i> , <b>1994</b> , 1, 2419-2429	2.1	38
14	Ion acoustic waves in plasmas with collisional electrons. <i>Physical Review E</i> , <b>1994</b> , 50, 5134-5137	2.4	10
13	Enhanced ion acoustic fluctuations in laser-produced plasmas. <i>Physical Review E</i> , <b>1994</b> , 50, 4005-4016	2.4	17
12	The kinetic theory of the nonlinear low-frequency response of a collisionless plasma to high-frequency electromagnetic radiation. <i>Journal of Plasma Physics</i> , <b>1992</b> , 48, 167-176	2.7	14
11	Waves with nonlinear polarization due to a self-generated magnetic field in a plasma. <i>Journal of Plasma Physics</i> , <b>1992</b> , 48, 325-333	2.7	1
10	High energy electron generation in surface-wave-produced plasmas. <i>Plasma Sources Science and Technology</i> , <b>1992</b> , 1, 126-131	3.5	61
9	Nonlinear penetration of microwave radiation in a plasma with frequent collisions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1992</b> , 169, 77-81	2.3	2
8	Two-dimensional vortex structures in an anisotropic plasma. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , <b>1990</b> , 82, 11-18	0.7	7

7	Singular vortex flows in plasmas with anisotropic pressure. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1989</b> , 138, 127-130	2.3	5
6	Ion-acoustic turbulence and anomalous transport. <i>Physics Reports</i> , <b>1988</b> , 164, 119-215	27.7	85
5	Investigation of the $\pi$ harmonic generation in plasma on the Delfin-1 installation. <i>Laser and Particle Beams</i> , <b>1988</b> , 6, 593-596	0.9	0
4	Transport phenomena in a turbulent plasma. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1984</b> , 101, 258-260	2.3	2
3	Half-Integer Harmonics Generation in Laser-Produced Plasma. <i>Beitrage Aus Der Plasmaphysik</i> , <b>1983</b> , 23, 331-340		20
2	Filamentation and magnetic field generation by charged particle beams in laser produced plasmas. <i>Plasma Physics</i> , <b>1983</b> , 25, 827-831		6
1	Second harmonic generation in a laser plasma (review). <i>Soviet Journal of Quantum Electronics</i> , <b>1979</b> , 9, 1081-1102		26