

Baifei Shen

List of Publications by Year in descending order

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236925

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docs citations

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times ranked

1057
citing authors

#	ARTICLE	IF	CITATIONS
1	Quasimonochromatic Bright Gamma-ray Generation from Synchronized Compton Scattering via Azimuthal Spatial-Temporal Coupling. <i>Physical Review Applied</i> , 2022, 17, .	3.8	3
2	Improving the accuracy of hard photon emission by sigmoid sampling of the quantum-electrodynamic table in particle-in-cell Monte Carlo simulations. <i>Physical Review E</i> , 2022, 105, 025309.	2.1	2
3	Generation of dense and well-collimated positron beam via ultra-intense laser colliding with a flying plasma layer. <i>Plasma Physics and Controlled Fusion</i> , 2022, 64, 045008.	2.1	0
4	Triple-vortex bremsstrahlung. <i>New Journal of Physics</i> , 2022, 24, 043037.	2.9	1
5	Finite orbital-angular-momentum carried by the final electron and photon in plane-wave electron-nucleus bremsstrahlung. <i>Physical Review Research</i> , 2022, 4, .	3.6	0
6	High efficiency laser-driven proton sources using 3D-printed micro-structure. <i>Communications Physics</i> , 2022, 5, .	5.3	7
7	Enhancement of vacuum diffraction by interference of signals produced by a probe x-ray free-electron laser with multiple transverse modes. <i>Physical Review A</i> , 2022, 106, .	2.5	2
8	Isolated intense half-cycle attosecond pulse generation with orbital angular momentum. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 035013.	2.1	3
9	Vortex Harmonic Generation by Circularly Polarized Gaussian Beam Interacting with Tilted Target. <i>Physical Review Applied</i> , 2021, 16, .	3.8	8
10	New phase-matching selection rule to generate angularly isolated harmonics. <i>High Power Laser Science and Engineering</i> , 2021, 9, .	4.6	5
11	Generation of relativistic positrons carrying intrinsic orbital angular momentum. <i>Physical Review D</i> , 2021, 104, .	4.7	6
12	Compressing magnetic field into a high-intensity electromagnetic field with a relativistic flying mirror. <i>Optics Express</i> , 2021, 29, 41121.	3.4	1
13	Twisted Breit-Wheeler electron-positron pair creation via vortex gamma photons. <i>Physical Review Research</i> , 2021, 3, .	3.6	6
14	Spin-to-orbital angular momentum conversion in harmonic generation driven by intense circularly polarized laser. <i>New Journal of Physics</i> , 2020, 22, 013054.	2.9	7
15	Spin-polarized proton beam generation from gas-jet targets by intense laser pulses. <i>Physical Review E</i> , 2020, 102, 011201.	2.1	17
16	High-repetition-rate few-attosecond high-quality electron beams generated from crystals driven by intense X-ray laser. <i>Matter and Radiation at Extremes</i> , 2020, 5, .	3.9	9
17	Spin-dependent two-photon Bragg scattering in the Kapitza-Dirac effect. <i>Physical Review A</i> , 2020, 102, .	2.5	5
18	XFEL beamline design for vacuum birefringence experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 982, 164553.	1.6	8

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19	Driving positron beam acceleration with coherent transition radiation. Communications Physics, 2020, 3, .	5.3	11
20	Spin-dependent radiative deflection in the quantum radiation-reaction regime. New Journal of Physics, 2020, 22, 013007.	2.9	15
21	Spin Filter for Polarized Electron Acceleration in Plasma Wakefields. Physical Review Applied, 2020, 13, .	3.8	15
22	Ultrafast measurements of ion temperature in high-energy-density plasmas by nuclear resonance fluorescence. Physics of Plasmas, 2019, 26, .	1.9	3
23	Vortex beam of tilted orbital angular momentum generated from grating. Plasma Physics and Controlled Fusion, 2019, 61, 105001.	2.1	6
24	Two-beam vacuum wave mixing using high-power laser and x-ray free-electron laser. Physical Review D, 2019, 100, .	4.7	6
25	Proton acceleration in a laser-induced relativistic electron vortex. Journal of Plasma Physics, 2019, 85, .	2.1	4
26	Polarized electron-beam acceleration driven by vortex laser pulses. New Journal of Physics, 2019, 21, 073052.	2.9	33
27	Monoenergetic proton beam accelerated by single reflection mechanism only during hole-boring stage. High Power Laser Science and Engineering, 2019, 7, .	4.6	6
28	Asymmetric optical vortex in plasma density gradient. Plasma Physics and Controlled Fusion, 2019, 61, 125003.	2.1	1
29	Polarized electron acceleration in beam-driven plasma wakefield based on density down-ramp injection. Physical Review E, 2019, 100, 043202.	2.1	27
30	Quantum reflection above the classical radiation-reaction barrier in the quantum electro-dynamics regime. Communications Physics, 2019, 2, .	5.3	16
31	Spectrum tailoring of low charge-to-mass ion beam by the triple-stage acceleration mechanism. Physics of Plasmas, 2019, 26, .	1.9	9
32	Stimulated Raman sidescattering in intense laser produced plasmas with steep density gradients. Plasma Physics and Controlled Fusion, 2019, 61, 075009.	2.1	1
33	Relativistic laser driven electron accelerator using micro-channel plasma targets. Physics of Plasmas, 2019, 26, .	1.9	45
34	Leveraging radiation reaction via laser-driven plasma fields. Plasma Physics and Controlled Fusion, 2019, 61, 065007.	2.1	4
35	Angular momentum oscillation in spiral-shaped foil plasmas. New Journal of Physics, 2019, 21, 043022.	2.9	5
36	Single-pulse laser-electron collision within a micro-channel plasma target. Plasma Physics and Controlled Fusion, 2019, 61, 065019.	2.1	10

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37	The emission of $\hat{\Gamma}^3$ -Ray beams with orbital angular momentum in laser-driven micro-channel plasma target. <i>Scientific Reports</i> , 2019, 9, 18780.	3.3	10
38	New Optical Manipulation of Relativistic Vortex Cutter. <i>Physical Review Letters</i> , 2019, 122, 024801.	7.8	35
39	Proton array focused by a laser-irradiated mesh. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	4
40	Terawatt-scale optical half-cycle attosecond pulses. <i>Scientific Reports</i> , 2018, 8, 2669.	3.3	70
41	Exploring vacuum birefringence based on a 100 PW laser and an x-ray free electron laser beam. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 044002.	2.1	90
42	Relativistic magnetic reconnection driven by a laser interacting with a micro-scale plasma slab. <i>Nature Communications</i> , 2018, 9, 1601.	12.8	15
43	Laser-driven ultrafast antiproton beam. <i>Physics of Plasmas</i> , 2018, 25, 023111.	1.9	2
44	Ultra-bright, well-collimated, GeV gamma-ray production in the QED regime. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	6
45	Ultrafast gamma-ray line emission driven by laser-accelerated ion beams. <i>AIP Advances</i> , 2018, 8, 115319.	1.3	1
46	Effects of radiation reaction on laser proton acceleration in the bubble regime. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	2
47	Magnetic Field Generation in Plasma Waves Driven by Copropagating Intense Twisted Lasers. <i>Physical Review Letters</i> , 2018, 121, 145002.	7.8	63
48	Generation of collimated electron jets from plasma under applied electromagnetostatic field. <i>Laser and Particle Beams</i> , 2018, 36, 384-390.	1.0	1
49	Effects of micro-structures on laser-proton acceleration. <i>Physics of Plasmas</i> , 2018, 25, 103109.	1.9	14
50	Multi-stage proton acceleration controlled by double beam image technique. <i>Physics of Plasmas</i> , 2018, 25, 063116.	1.9	11
51	Autocorrelation pulse-duration measurement of relativistic femtosecond laser. <i>Physics of Plasmas</i> , 2018, 25, 073101.	1.9	1
52	Transparency of near-critical density plasmas under extreme laser intensities. <i>New Journal of Physics</i> , 2018, 20, 053043.	2.9	8
53	Collisionless Shock Acceleration of High-Flux Quasimonoenergetic Proton Beams Driven by Circularly Polarized Laser Pulses. <i>Physical Review Letters</i> , 2017, 119, 164801.	7.8	43
54	Crater-like structures induced by intense laser. <i>Applied Physics Letters</i> , 2017, 111, 184104.	3.3	2

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55	Ultrafast multi-MeV gamma-ray beam produced by laser-accelerated electrons. <i>Physics of Plasmas</i> , 2017, 24, 093104.	1.9	22
56	Generation of gamma-ray beam with orbital angular momentum in the QED regime. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	28
57	Radiation from laser-microplasma-waveguide interactions in the ultra-intense regime. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	5
58	Ultrashort megaelectronvolt positron beam generation based on laser-accelerated electrons. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	41
59	Deflection of a Reflected Intense Vortex Laser Beam. <i>Physical Review Letters</i> , 2016, 117, 113904.	7.8	23
60	Bright X-Ray Source from a Laser-Driven Microplasma Waveguide. <i>Physical Review Letters</i> , 2016, 116, 115001.	7.8	47
61	Direct acceleration of electrons by a CO2 laser in a curved plasma waveguide. <i>Scientific Reports</i> , 2016, 6, 28147.	3.3	8
62	Focal spot effects on the generation of proton beams during target normal sheath acceleration. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 025010.	2.1	6
63	Particle-in-cell simulation of x-ray wakefield acceleration and betatron radiation in nanotubes. <i>Physical Review Accelerators and Beams</i> , 2016, 19, .	1.6	38
64	Generation of Intense High-Order Vortex Harmonics. <i>Physical Review Letters</i> , 2015, 114, 173901.	7.8	117
65	Hollow screw-like drill in plasma using an intense Laguerre-Gaussian laser. <i>Scientific Reports</i> , 2015, 5, 8274.	3.3	51
66	Quasi-monoenergetic ion generation by hole-boring radiation pressure acceleration in inhomogeneous plasmas using tailored laser pulses. <i>Physics of Plasmas</i> , 2014, 21, 012705.	1.9	22
67	Radiation-Reaction Trapping of Electrons in Extreme Laser Fields. <i>Physical Review Letters</i> , 2014, 112, 145003.	7.8	147
68	Energy partition, γ -ray emission, and radiation reaction in the near-quantum electro-dynamical regime of laser-plasma interaction. <i>Physics of Plasmas</i> , 2014, 21, 023109.	1.9	76
69	Layered structure in the interaction of thin foil with two laser pulses. <i>Physics of Plasmas</i> , 2014, 21, 024502.	1.9	0
70	Light Fan Driven by a Relativistic Laser Pulse. <i>Physical Review Letters</i> , 2014, 112, 235001.	7.8	95
71	Positron acceleration in a hollow plasma channel up to TeV regime. <i>Scientific Reports</i> , 2014, 4, 4171.	3.3	33
72	Effects of nanosecond-scale prepulse on generation of high-energy protons in target normal sheath acceleration. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	19

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73	Proton acceleration by plasma wakefield driven by an intense proton beam. <i>Laser and Particle Beams</i> , 2013, 31, 427-438.	1.0	1
74	Scheme for proton-driven plasma-wakefield acceleration of positively charged particles in a hollow plasma channel. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	22
75	Nanocontrol of single dense energetic electron sheet in a chirped pulse with critical relativistic intensity. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	1
76	Inertial confinement fusion driven by long wavelength electromagnetic pulses. <i>High Power Laser Science and Engineering</i> , 2013, 1, 105-109.	4.6	4
77	Electron beam dynamics and self-cooling up to PeV level due to betatron radiation in plasma-based accelerators. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	10
78	Laser plasma accelerator driven by a super-Gaussian pulse. <i>Journal of Plasma Physics</i> , 2012, 78, 447-453.	2.1	14
79	Ultra-intense single attosecond pulse generated from circularly polarized laser interacting with overdense plasma. <i>Physics of Plasmas</i> , 2011, 18, 083104.	1.9	19
80	Instabilities in interaction of circularly polarized laser pulse and overdense target. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	17
81	Operating plasma density issues on large-scale laser-plasma accelerators toward high-energy frontier. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2011, 14, .	1.8	46
82	Efficient acceleration of monoenergetic proton beam by sharp front laser pulse. <i>Physics of Plasmas</i> , 2011, 18, 013103.	1.9	29
83	Generation of a large amount of energetic electrons in complex-structure bubble. <i>New Journal of Physics</i> , 2010, 12, 023037.	2.9	16
84	Overloading effect of energetic electrons in the bubble regime of laser wakefield acceleration. <i>Physics of Plasmas</i> , 2010, 17, 103108.	1.9	5
85	Effects of pulse duration and areal density on ultrathin foil acceleration. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	8
86	Ultrahigh energy proton generation in sequential radiation pressure and bubble regime. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	25
87	Comment on "Generating High-Current Monoenergetic Proton Beams by a Circularly Polarized Laser Pulse in the Phase-Stable Acceleration Regime", <i>Physical Review Letters</i> , 2009, 102, 239501; author reply 239502.	7.8	12
88	Ion acceleration with mixed solid targets interacting with circularly polarized lasers. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2009, 12, .	1.8	21
89	High-energy monoenergetic proton bunch from laser interaction with a complex target. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	18
90	High-quality monoenergetic proton generation by sequential radiation pressure and bubble acceleration. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2009, 12, .	1.8	32

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91	Generation of plasma intrinsic oscillation at the front surface of a target irradiated by a circularly polarized laser pulse. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	14
92	The Diagnostics of Density Distribution for Dense Hot DT Plasmas Using Fast Protons. <i>The Review of Laser Engineering</i> , 2008, 36, 1150-1152.	0.0	0
93	Efficient GeV ion generation by ultraintense circularly polarized laser pulse. <i>Physics of Plasmas</i> , 2007, 14, .	1.9	118
94	Multistaged acceleration of ions by circularly polarized laser pulse: Monoenergetic ion beam generation. <i>Physics of Plasmas</i> , 2007, 14, .	1.9	95
95	Electron acceleration by a propagating laser pulse in vacuum. <i>Physics of Plasmas</i> , 2007, 14, 083102.	1.9	8
96	Transparency of an overdense plasma layer. <i>Physical Review E</i> , 2001, 64, 056406.	2.1	86
97	Condition of laser pulse width for relativistic self-focusing. <i>Science Bulletin</i> , 1997, 42, 555-557.	1.7	0
98	Spatiotemporal instabilities of terahertz OAM beams from air plasma via chirping a few-cycle vortex pump field. <i>Journal of Optics (India)</i> , 0, , 1.	1.7	2
99	Ultra-fast polarization of a thin electron layer in the rotational standing-wave field driven by double ultra-intense laser pulses. <i>New Journal of Physics</i> , 0, , .	2.9	0