Fei Li

List of Publications by Year
in descending order

33 papers	676 citations	759233 12 h-index	552781 26 g-index
34 all docs	34 docs citations	34 times ranked	517 citing authors

#	Article	IF	Citations
1	Ultrabright Electron Bunch Injection in a Plasma Wakefield Driven by a Superluminal Flying Focus Electron Beam. Physical Review Letters, 2022, 128, 174803.	7.8	8
2	Generation of ultrahigh-brightness pre-bunched beams from a plasma cathode for X-ray free-electron lasers. Nature Communications, 2022, 13, .	12.8	11
3	Highly spin-polarized multi-GeV electron beams generated by single-species plasma photocathodes. Physical Review Research, 2022, 4, .	3.6	1
4	A new field solver for modeling of relativistic particle-laser interactions using the particle-in-cell algorithm. Computer Physics Communications, 2021, 258, 107580.	7.5	14
5	A quasi-static particle-in-cell algorithm based on an azimuthal Fourier decomposition for highly efficient simulations of plasma-based acceleration: QPAD. Computer Physics Communications, 2021, 261, 107784.	7.5	10
6	A multi-sheath model for highly nonlinear plasma wakefields. Physics of Plasmas, 2021, 28, .	1.9	12
7	Accurately simulating nine-dimensional phase space of relativistic particles in strong fields. Journal of Computational Physics, 2021, 438, 110367.	3.8	13
8	InÂSitu Generation of High-Energy Spin-Polarized Electrons in a Beam-Driven Plasma Wakefield Accelerator. Physical Review Letters, 2021, 126, 054801.	7.8	28
9	On numerical errors to the fields surrounding a relativistically moving particle in PIC codes. Journal of Computational Physics, 2020, 413, 109451.	3.8	14
10	Ion acceleration with an ultra-intense two-frequency laser tweezer. New Journal of Physics, 2020, 22, 052002.	2.9	3
11	Emittance preservation through density ramp matching sections in a plasma wakefield accelerator. Physical Review Accelerators and Beams, 2020, 23, .	1.6	13
12	Generating high quality ultrarelativistic electron beams using an evolving electron beam driver. Physical Review Accelerators and Beams, 2020, 23, .	1.6	10
13	Near-Ideal Dechirper for Plasma-Based Electron and Positron Acceleration Using a Hollow Channel Plasma. Physical Review Applied, 2019, 12, .	3.8	10
14	Effect of fluctuations in the down ramp plasma source profile on the emittance and current profile of the self-injected beam in a plasma wakefield accelerator. Physical Review Accelerators and Beams, 2019, 22, .	1.6	10
15	Transverse phase space diagnostics for ionization injection in laser plasma acceleration using permanent magnetic quadrupoles. Plasma Physics and Controlled Fusion, 2018, 60, 044007.	2.1	4
16	Phase locked multiple rings in the radiation pressure ion acceleration process. Plasma Physics and Controlled Fusion, 2018, 60, 044016.	2.1	2
17	Evolution of plasma wakes in density up- and down-ramps. Plasma Physics and Controlled Fusion, 2018, 60, 024003.	2.1	4
18	Probing plasma wakefields using electron bunches generated from a laser wakefield accelerator. Plasma Physics and Controlled Fusion, 2018, 60, 044013.	2.1	6

#	Article	IF	Citations
19	Mitigation Techniques for Witness Beam Hosing in Plasma - Based Acceleration. , 2018, , .		1
20	Tri-stage quasimonoenergetic proton acceleration from a multi-species thick target. Physics of Plasmas, 2018, 25, 073105.	1.9	2
21	Physical mechanism of the electron-ion coupled transverse instability in laser pressure ion acceleration for different regimes. Physical Review E, 2018, 98, 013202.	2.1	9
22	Relativistic single-cycle tunable infrared pulses generated from a tailored plasma density structure. Nature Photonics, 2018, 12, 489-494.	31.4	59
23	Controlling the numerical Cerenkov instability in PIC simulations using a customized finite difference Maxwell solver and a local FFT based current correction. Computer Physics Communications, 2017, 214, 6-17.	7.5	35
24	Femtosecond Probing of Plasma Wakefields and Observation of the Plasma Wake Reversal Using a Relativistic Electron Bunch. Physical Review Letters, 2017, 119, 064801.	7.8	44
25	High quality electron bunch generation using a longitudinal density-tailored plasma-based accelerator in the three-dimensional blowout regime. Physical Review Accelerators and Beams, 2017, 20, .	1.6	53
26	Physical Mechanism of the Transverse Instability in Radiation Pressure Ion Acceleration. Physical Review Letters, 2016, 117, 234801.	7.8	30
27	Physics of Phase Space Matching for Staging Plasma and Traditional Accelerator Components Using Longitudinally Tailored Plasma Profiles. Physical Review Letters, 2016, 116, 124801.	7.8	73
28	Colliding ionization injection in a plasma wakefield accelerator. Plasma Physics and Controlled Fusion, 2016, 58, 034015.	2.1	6
29	Enabling Lorentz boosted frame particle-in-cell simulations of laser wakefield acceleration in quasi-3D geometry. Journal of Computational Physics, 2016, 316, 747-759.	3.8	8
30	Low-energy-spread laser wakefield acceleration using ionization injection with a tightly focused laser in a mismatched plasma channel. Plasma Physics and Controlled Fusion, 2016, 58, 034004.	2.1	7
31	Low emittance electron beam generation from a laser wakefield accelerator using two laser pulses with different wavelengths. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	46
32	Phase-Space Dynamics of Ionization Injection in Plasma-Based Accelerators. Physical Review Letters, 2014, 112, 035003.	7.8	49
33	Generating High-Brightness Electron Beams via Ionization Injection by Transverse Colliding Lasers in a Plasma-Wakefield Accelerator. Physical Review Letters, 2013, 111, 015003.	7.8	80