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List of Publications by Year
in descending order

42 papers	1,514 citations	394421 19 h-index	315739 38 g-index
44 all docs	44 docs citations	44 times ranked	841 citing authors

#	Article	IF	Citations
1	High-efficiency acceleration of an electron beam in a plasma wakefield accelerator. Nature, 2014, 515, 92-95.	27.8	403
2	Multi-gigaelectronvolt acceleration of positrons in a self-loaded plasma wakefield. Nature, 2015, 524, 442-445.	27.8	133
3	Plasma wakefield acceleration experiments at FACET. New Journal of Physics, 2010, 12, 055030.	2.9	103
4	Demonstration of a positron beam-driven hollow channel plasma wakefield accelerator. Nature Communications, 2016, 7, 11785.	12.8	93
5	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
6	Plasma wakefield acceleration experiments at FACET II. Plasma Physics and Controlled Fusion, 2018, 60, 034001.	2.1	63
7	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
8	An improved iteration loop for the three dimensional quasi-static particle-in-cell algorithm: QuickPIC. Journal of Computational Physics, 2013, 250, 165-177.	3.8	50
9	Phase-Space Dynamics of Ionization Injection in Plasma-Based Accelerators. Physical Review Letters, 2014, 112, 035003.	7.8	49
10	Implementation of a hybrid particle code with a PIC description in r–z and a gridless description in Ï• into OSIRIS. Journal of Computational Physics, 2015, 281, 1063-1077.	3.8	49
11	Measurement of Transverse Wakefields Induced by a Misaligned Positron Bunch in a Hollow Channel Plasma Accelerator. Physical Review Letters, 2018, 120, 124802.	7.8	38
12	9 GeV energy gain in a beam-driven plasma wakefield accelerator. Plasma Physics and Controlled Fusion, 2016, 58, 034017.	2.1	35
13	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
14	Acceleration of a trailing positron bunch in a plasma wakefield accelerator. Scientific Reports, 2017, 7, 14180.	3.3	32
15	Ion Motion Induced Emittance Growth of Matched Electron Beams in Plasma Wakefields. Physical Review Letters, 2017, 118, 244801.	7.8	30
16	<i>InÂSitu</i> Generation of High-Energy Spin-Polarized Electrons in a Beam-Driven Plasma Wakefield Accelerator. Physical Review Letters, 2021, 126, 054801.	7.8	28
17	Beam Loading by Distributed Injection of Electrons in a Plasma Wakefield Accelerator. Physical Review Letters, 2014, 112, 025001.	7.8	25
18	Modeling of laser wakefield acceleration in Lorentz boosted frame using EM-PIC code with spectral solver. Journal of Computational Physics, 2014, 266, 124-138.	3.8	23

#	ARTICLE	IF	CITATIONS
19	High Efficiency Uniform Wakefield Acceleration of a Positron Beam Using Stable Asymmetric Mode in a Hollow Channel Plasma. Physical Review Letters, 2021, 127, 174801.	7.8	22
20	High-field plasma acceleration in a high-ionization-potential gas. Nature Communications, 2016, 7, 11898.	12.8	18
21	Self-mapping the longitudinal field structure of a nonlinear plasma accelerator cavity. Nature Communications, 2016, 7, 12483.	12.8	18
22	Strategies for mitigating the ionization-induced beam head erosion problem in an electron-beam-driven plasma wakefield accelerator. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	17
23	On numerical errors to the fields surrounding a relativistically moving particle in PIC codes. Journal of Computational Physics, 2020, 413, 109451.	3.8	14
24	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
25	Emittance preservation through density ramp matching sections in a plasma wakefield accelerator. Physical Review Accelerators and Beams, 2020, 23, .	1.6	13
26	Near-Ideal Dechirper for Plasma-Based Electron and Positron Acceleration Using a Hollow Channel Plasma. Physical Review Applied, 2019, 12, .	3.8	10
27	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
28	Generating high quality ultrarelativistic electron beams using an evolving electron beam driver. Physical Review Accelerators and Beams, 2020, 23, .	1.6	10
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	Long-range attraction of an ultrarelativistic electron beam by a column of neutral plasma. New Journal of Physics, 2016, 18, 103013.	2.9	5
31	Positron beam extraction from an electron-beam-driven plasma wakefield accelerator. Physical Review Accelerators and Beams, 2019, 22, .	1.6	5
32	Some observations on trapping in nonlinear multi-dimensional wakes. AIP Conference Proceedings, 2013, , .	0.4	4
33	Transverse oscillations in plasma wakefield experiments at FACET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 94-98.	1.6	4
34	Producing multi-coloured bunches through beam-induced ionization injection in plasma wakefield accelerator. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180184.	3.4	4
35	Betatron radiation and emittance growth in plasma wakefield accelerators. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180173.	3.4	4
36	An examination of the scaling laws for LWFA in the self-guided nonlinear blowout regime. AIP Conference Proceedings, 2017, , .	0.4	1

#	Article	IF	Citations
37	Mitigation Techniques for Witness Beam Hosing in Plasma - Based Acceleration. , 2018, , .		1
38	Highly spin-polarized multi-GeV electron beams generated by single-species plasma photocathodes. Physical Review Research, 2022, 4, .	3.6	1
39	Coherent transition radiation from a self-modulated charged particle beam. , 2013, , .		0
40	Summary of Working Group 2: Computations for Accelerator Physics. , 2018, , .		0
41	Generation and Acceleration of the Trailing Positron Bunch Using a Drive- Trailing Electron Bunch Configuration. , 2018, , .		0
42	The optimal beam-loading in two-bunch nonlinear plasma wakefield accelerators. Plasma Physics and Controlled Fusion, 2022, 64, 065007.	2.1	0