A Stephen Richardson

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3859222/publications.pdf

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38 papers 170 citations

1478505 6 h-index 1588992 8 g-index

40 all docs

40 docs citations

40 times ranked

276 citing authors

#	Article	IF	CITATIONS
1	Understanding and Harnessing the Dual Electrostatic/Electromagnetic Character of Plasma Turbulence in the Nearâ€Earth Space Environment. Journal of Geophysical Research: Space Physics, 2019, 124, 10365-10375.	2.4	11
2	Symplectic integrators with adaptive time steps. Plasma Physics and Controlled Fusion, 2012, 54, 014004.	2.1	10
3	Control of ideal and resistive magnetohydrodynamic modes in reversed field pinches with a resistive wall. Physics of Plasmas, 2010, 17, 112511.	1.9	7
4	Theory and simulations of electron vortices generated by magnetic pushing. Physics of Plasmas, 2013, 20, 082115.	1.9	7
5	The effect of electron inertia in Hall-driven magnetic field penetration in electron-magnetohydrodynamics. Physics of Plasmas, 2016, 23, .	1.9	6
6	Simulations of a Dense Plasma Focus on a High-Impedance Generator. IEEE Transactions on Plasma Science, 2018, 46, 3881-3885.	1.3	6
7	Ideal form of optical plasma lenses. Physics of Plasmas, 2018, 25, 063101.	1.9	6
8	Nonquasineutral electron vortices in nonuniform plasmas. Physics of Plasmas, 2014, 21, 112306.	1.9	5
9	Visualization of Magnetic Field Penetration in Multicomponent Plasma. IEEE Transactions on Plasma Science, 2014, 42, 2552-2553.	1.3	5
10	Characterization of the Mercury pulsed power x-ray source spectrum using multichannel density aerogel Cherenkov detectors. Review of Scientific Instruments, 2018, 89, 10F113.	1.3	5
11	Quadratic corrections to the metaplectic formulation of resonant mode conversion. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 375501.	2.1	4
12	Acceleration of Ions by an Electron Beam Injected Into a Closed Conducting Cavity. IEEE Transactions on Plasma Science, 2013, 41, 2299-2312.	1.3	4
13	A multi-term spherical harmonic expansion of the Boltzmann equation for application to low-temperature collisional plasmas. Physics of Plasmas, 2019, 26, 103506.	1.9	4
14	Modeling intense-electron-beam generated plasmas using a rigid-beam approximation. Physics of Plasmas, 2021, 28, .	1.9	4
15	A 1-D Model for the Millimeter-Wave Absorption and Heating of Dielectric Materials in Power Beaming Applications. IEEE Transactions on Plasma Science, 2021, 49, 695-702.	1.3	3
16	Control of magnetohydrodynamic modes in reversed field pinches with normal and tangential magnetic field sensing and two resistive walls. Plasma Physics and Controlled Fusion, 2013, 55, 084002.	2.1	2
17	X-ray dose distribution measurements for electron-beam optimization on the Mercury inductive voltage adder. , 2013 , , .		1
18	Plasma injection technique for species separation and magnetic field penetration experiments. , 2014, , .		1

#	Article	IF	CITATIONS
19	Particle-in-cell simulations of electron beam control using an inductive current divider. Physics of Plasmas, 2015, 22, 113108.	1.9	1
20	Controlling hollow relativistic electron beam orbits with an inductive current divider. Physics of Plasmas, 2015, 22, 023107.	1.9	1
21	Propagation speed, linear stability, and ion acceleration in radially imploding Hall-driven electron-magnetohydrodynamic shocks. Physics of Plasmas, 2018, 25, .	1.9	1
22	TurboPy: A lightweight python framework for computational physics. Computer Physics Communications, 2021, 258, 107607.	7.5	1
23	Particle-in-cell simulations of ion dynamics in a pinched-beam diode. Physics of Plasmas, 2022, 29, .	1.9	1
24	Electron-beam optimization for bremsstrahlung-induced photofission., 2013,,.		0
25	Mode conversion and tunneling. , 0, , 228-326.		O
26	Magnetic field penetration and magnetohydrodynamic acceleration in opening switch plasmas. , 2014, , .		0
27	Advanced gas chemistry model for gasses disturbed by an intense electron beam. , 2014, , .		O
28	Effects of pulsed anode heating on self-magnetic-pinch radiographic performance using NRL's Mercury IVA. , $2016, , .$		0
29	Measuring Pressure In Warm Dense Tungsten Plasma Created In Plasma Filled Rod-Pinch Diodes. , 2017, ,		0
30	Predicted Effects of Nonlinear Induced Scattering in the SMART Experiment. , 2021, , .		0
31	Effect of emission models on particle-in-cell simulations of a large-area bremsstrahlung diode operating at 5 MV with comparison to experimentally measured dose. , 2018, , .		O
32	Initial Results from a Dense Plasma Focus Driven by a High-Inductance Generator., 2018,,.		0
33	Characterization of Vibrational and Rotational N2 Spectral Bands in an Electron Beam Produced Plasma Via a 1.3m High-Resolution Multi-View Spectrometer. , 2021, , .		O
34	Measurements of Early-Time Plasma Evolution in the Hawk Dense Plasma Focus. , 2018, , .		0
35	Effect of Initial Conditions on Charged Particle Acceleration in a Dense Plasma Focus. , 2020, , .		0
36	Simulating a pulsed-power-driven plasma with ideal MHD. Physics of Plasmas, 2022, 29, .	1.9	0

#	Article	IF	CITATIONS
37	Recomputing Beam-Impact Parameters for N2 Gas [*] ., 2022,,.		o
38	Assessment of N $<$ sub $>$ 2 $<$ /sub $>$ De-Excitation Reactions in a Low-Pressure Electron Beam Plasma Simulation. , 2022, , .		0