

A Stephen Richardson

List of Publications by Year in descending order

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

Version: 2024-02-01

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	Particle-in-cell simulations of ion dynamics in a pinched-beam diode. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	1
2	Simulating a pulsed-power-driven plasma with ideal MHD. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	0
3	Recomputing Beam-Impact Parameters for N ₂ Gas [*] . , 2022, , .		0
4	Assessment of N ₂ De-Excitation Reactions in a Low-Pressure Electron Beam Plasma Simulation. , 2022, , .		0
5	TurboPy: A lightweight python framework for computational physics. <i>Computer Physics Communications</i> , 2021, 258, 107607.	7.5	1
6	A 1-D Model for the Millimeter-Wave Absorption and Heating of Dielectric Materials in Power Beaming Applications. <i>IEEE Transactions on Plasma Science</i> , 2021, 49, 695-702.	1.3	3
7	Predicted Effects of Nonlinear Induced Scattering in the SMART Experiment. , 2021, , .		0
8	Modeling intense-electron-beam generated plasmas using a rigid-beam approximation. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	4
9	Characterization of Vibrational and Rotational N ₂ Spectral Bands in an Electron Beam Produced Plasma Via a 1.3m High-Resolution Multi-View Spectrometer. , 2021, , .		0
10	Effect of Initial Conditions on Charged Particle Acceleration in a Dense Plasma Focus. , 2020, , .		0
11	A multi-term spherical harmonic expansion of the Boltzmann equation for application to low-temperature collisional plasmas. <i>Physics of Plasmas</i> , 2019, 26, 103506.	1.9	4
12	Understanding and Harnessing the Dual Electrostatic/Electromagnetic Character of Plasma Turbulence in the Near-Earth Space Environment. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 10365-10375.	2.4	11
13	Propagation speed, linear stability, and ion acceleration in radially imploding Hall-driven electron-magnetohydrodynamic shocks. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	1
14	Characterization of the Mercury pulsed power x-ray source spectrum using multichannel density aerogel Cherenkov detectors. <i>Review of Scientific Instruments</i> , 2018, 89, 10F113.	1.3	5
15	Simulations of a Dense Plasma Focus on a High-Impedance Generator. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 3881-3885.	1.3	6
16	Ideal form of optical plasma lenses. <i>Physics of Plasmas</i> , 2018, 25, 063101.	1.9	6
17	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, , .		0
18	Initial Results from a Dense Plasma Focus Driven by a High-Inductance Generator. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
19	Measurements of Early-Time Plasma Evolution in the Hawk Dense Plasma Focus. , 2018, , .		0
20	Measuring Pressure In Warm Dense Tungsten Plasma Created In Plasma Filled Rod-Pinch Diodes. , 2017, , .		0
21	The effect of electron inertia in Hall-driven magnetic field penetration in electron-magnetohydrodynamics. Physics of Plasmas, 2016, 23, .	1.9	6
22	Effects of pulsed anode heating on self-magnetic-pinch radiographic performance using NRL's Mercury IVA. , 2016, , .		0
23	Particle-in-cell simulations of electron beam control using an inductive current divider. Physics of Plasmas, 2015, 22, 113108.	1.9	1
24	Controlling hollow relativistic electron beam orbits with an inductive current divider. Physics of Plasmas, 2015, 22, 023107.	1.9	1
25	Nonquasineutral electron vortices in nonuniform plasmas. Physics of Plasmas, 2014, 21, 112306.	1.9	5
26	Magnetic field penetration and magnetohydrodynamic acceleration in opening switch plasmas. , 2014, , .		0
27	Plasma injection technique for species separation and magnetic field penetration experiments. , 2014, , .		1
28	Visualization of Magnetic Field Penetration in Multicomponent Plasma. IEEE Transactions on Plasma Science, 2014, 42, 2552-2553.	1.3	5
29	Advanced gas chemistry model for gasses disturbed by an intense electron beam. , 2014, , .		0
30	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
31	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
32	X-ray dose distribution measurements for electron-beam optimization on the Mercury inductive voltage adder. , 2013, , .		1
33	Electron-beam optimization for bremsstrahlung-induced photofission. , 2013, , .		0
34	Theory and simulations of electron vortices generated by magnetic pushing. Physics of Plasmas, 2013, 20, 082115.	1.9	7
35	Symplectic integrators with adaptive time steps. Plasma Physics and Controlled Fusion, 2012, 54, 014004.	2.1	10
36	Control of ideal and resistive magnetohydrodynamic modes in reversed field pinches with a resistive wall. Physics of Plasmas, 2010, 17, 112511.	1.9	7

#	ARTICLE	IF	CITATIONS
37	Quadratic corrections to the metaplectic formulation of resonant mode conversion. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 375501.	2.1	4
38	Mode conversion and tunneling. , 0, , 228-326.		0