

Bhuvana Srinivasan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2735757/publications.pdf>

Version: 2024-02-01

42
papers

507
citations

759233

12
h-index

677142

22
g-index

46
all docs

46
docs citations

46
times ranked

503
citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced physics calculations using a multi-fluid plasma model. Computer Physics Communications, 2011, 182, 1767-1770.	7.5	62
2	Magnetic field generation in Rayleigh-Taylor unstable inertial confinement fusion plasmas. Physical Review Letters, 2012, 108, 165002.	7.8	61
3	Analytical and computational study of the ideal full two-fluid plasma model and asymptotic approximations for Hall-magnetohydrodynamics. Physics of Plasmas, 2011, 18, .	1.9	48
4	The mitigating effect of magnetic fields on Rayleigh-Taylor unstable inertial confinement fusion plasmas. Physics of Plasmas, 2013, 20, .	1.9	43
5	Continuum kinetic and multi-fluid simulations of classical sheaths. Physics of Plasmas, 2017, 24, .	1.9	41
6	Mechanism for magnetic field generation and growth in Rayleigh-Taylor unstable inertial confinement fusion plasmas. Physics of Plasmas, 2012, 19, 082703.	1.9	39
7	Equation of State Measurements of Warm Dense Carbon Using Laser-Driven Shock and Release Technique. Physical Review Letters, 2014, 112, 155003.	7.8	38
8	Numerical Methods for Two-Fluid Dispersive Fast MHD Phenomena. Communications in Computational Physics, 2011, 10, 183-215.	1.7	25
9	Using cylindrical implosions to investigate hydrodynamic instabilities in convergent geometry. Matter and Radiation at Extremes, 2019, 4, 065403.	3.9	25
10	Nonlinear saturation of the Weibel instability. Physics of Plasmas, 2017, 24, .	1.9	16
11	Combined x-ray scattering, radiography, and velocity interferometry/streaked optical pyrometry measurements of warm dense carbon using a novel technique of shock-and-release. Physics of Plasmas, 2014, 21, .	1.9	13
12	Mitigating hydrodynamic mix at the gas-ice interface with a combination of magnetic, ablative, and viscous stabilization. Europhysics Letters, 2014, 107, 65001.	2.0	13
13	Bohm Criterion of Plasma Sheaths away from Asymptotic Limits. Physical Review Letters, 2022, 128, 085002.	7.8	9
14	Role of hydrodynamic instability growth in hot-spot mass gain and fusion performance of inertial confinement fusion implosions. Physics of Plasmas, 2014, 21, 102704.	1.9	8
15	A survey of the effects of magnetic fields, resistivity, viscosity and thermal conduction on the Rayleigh-Taylor instability. Radiation Effects and Defects in Solids, 2020, 175, 1009-1014.	1.2	6
16	Modeling the dominance of the gradient drift or Kelvin-Helmholtz instability in sheared ionospheric E _z flows. Physics of Plasmas, 2021, 28, .	1.9	6
17	Investigation of the Gradient Drift Instability as a Cause of Density Irregularities in Subauroral Polarization Streams. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029027.	2.4	6
18	Deceleration-stage Rayleigh-Taylor growth in a background magnetic field studied in cylindrical and Cartesian geometries. Matter and Radiation at Extremes, 2022, 7, .	3.9	6

#	ARTICLE	IF	CITATIONS
19	Role of electron inertia and electron/ion finite Larmor radius effects in low-beta, magneto-Rayleigh-Taylor instability. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	5
20	Plasma-material boundary conditions for discontinuous Galerkin continuum-kinetic simulations, with a focus on secondary electron emission. <i>Journal of Computational Physics</i> , 2020, 406, 109215.	3.8	4
21	Cross-code verification and sensitivity analysis to effectively model the electrothermal instability. <i>High Energy Density Physics</i> , 2021, 38, 100925.	1.5	4
22	Multi-fluid studies of plasma shocks relevant to inertial confinement fusion. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012054.	0.4	3
23	A survey of fluid and kinetic instabilities relevant to space and laboratory plasmas. <i>Radiation Effects and Defects in Solids</i> , 2019, 174, 31-45.	1.2	3
24	The effect of anomalous resistivity on fast electrothermal instability. <i>Physics of Plasmas</i> , 2021, 28, 102106.	1.9	3
25	The effect of viscosity and resistivity on Rayleigh-Taylor instability induced mixing in magnetized high-energy-density plasmas. <i>Journal of Plasma Physics</i> , 2022, 88, .	2.1	3
26	A study of 3-dimensional plasma configurations using the two-fluid plasma model. , 2009, , .		2
27	An efficient reconstruction algorithm for diffusion on triangular grids using the nodal discontinuous Galerkin method. <i>Computer Physics Communications</i> , 2021, 264, 107873.	7.5	2
28	A boundary value reservoir problem and boundary conditions for multi-moment multifluid simulations of sheaths. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	2
29	Comparisons of Two-Fluid Plasma Models. , 2008, , .		1
30	Kinetic studies of ICF implosions. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012027.	0.4	1
31	Continuum Kinetic Study of Magnetized Sheaths for Use in Hall Thrusters. , 2016, , .		1
32	Recent advances in plasma modeling for space applications. <i>Radiation Effects and Defects in Solids</i> , 2017, 172, 74-80.	1.2	1
33	Continuum kinetic simulations of magnetized sheaths in Hall thrusters with secondary electron emission. , 2017, , .		1
34	Likelihood of gradient drift instability development during the August 21, 2017 solar eclipse. <i>Radiation Effects and Defects in Solids</i> , 2020, 175, 136-140.	1.2	1
35	Multidimensional Tests of a Finite-Volume Solver for MHD With a Real-Gas Equation of State. <i>IEEE Transactions on Plasma Science</i> , 2020, 48, 902-913.	1.3	1
36	Investigating the impact of the latitudinal velocity profile on nonlinear gradient drift instability development in the subauroral ionosphere. <i>Radiation Effects and Defects in Solids</i> , 2022, 177, 2-14.	1.2	1

#	ARTICLE	IF	CITATIONS
37	Comparisons and Applications of Two Fluid Plasma Algorithms. , 2008, , .		0
38	Publisher's Note: Equation of State Measurements of Warm Dense Carbon Using Laser-Driven Shock and Release Technique [Phys. Rev. Lett. 112, 155003 (2014)]. Physical Review Letters, 2014, 112, .	7.8	0
39	Plasma physics effects on thermonuclear burn rate in the presence of hydrodynamic mix. Journal of Physics: Conference Series, 2016, 688, 012123.	0.4	0
40	Simulations of plasma sheaths using continuum kinetic models. , 2016, , .		0
41	Hall thruster relevant continuum kinetic sheaths simulations with self-consistent secondary electron emission. , 2018, , .		0
42	Kinetic interpretation of the classical Rayleigh-Taylor instability. Physical Review E, 2022, 105, .	2.1	0