Nikhil Chakrabarti

List of Publications by Year
in descending order

52	402	840776 11	839539 18
papers	citations	h-index	g-index

52	52	52	195
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electron acoustic shock waves in a collisional plasma. Physical Review E, 2012, 86, 066408.	2.1	37
2	Linear and nonlinear electrostatic modes in a strongly coupled quantum plasma. Physics of Plasmas, 2012, 19, .	1.9	30
3	Nonlinear behavior of electron acoustic waves in an un-magnetized plasma. Physics of Plasmas, 2011, 18, .	1.9	28
4	Experimental observation of electron-acoustic wave propagation in laboratory plasma. Physics of Plasmas, 2017, 24, .	1.9	28
5	Nonlinear interaction of electron plasma waves with electron acoustic waves in plasmas. Physics of Plasmas, 2009, 16, .	1.9	21
6	Viscoelastic modes in a strongly coupled, cold, magnetized dusty plasma. Physics of Plasmas, 2010, 17, 113708.	1.9	18
7	Nonlinear wave propagation in a gravitating quantum fluid. Physical Review E, 2011, 84, 046601.	2.1	18
8	Nonlinear lower-hybrid oscillations in cold plasma. Physics of Plasmas, 2010, 17, 082306.	1.9	14
9	Exact Time-Dependent Nonlinear Dispersive Wave Solutions in Compressible Magnetized Plasmas Exhibiting Collapse. Physical Review Letters, 2011, 106, 145003.	7.8	13
10	Velocity shear effect on the longitudinal wave in a strongly coupled dusty plasma. Astrophysics and Space Science, 2014, 349, 789-798.	1.4	13
11	Phase-mixing of large amplitude electron oscillations in a cold inhomogeneous plasma. Physics of Plasmas, 2018, 25, .	1.9	12
12	Nonlinear interaction of quantum electron plasma waves with quantum electron acoustic waves in plasmas. Physical Review E, 2011, 83, 016404.	2.1	11
13	Relativistic effects on nonlinear lower hybrid oscillations in cold plasma. Journal of Mathematical Physics, 2011, 52, .	1.1	10
14	Wave breaking phenomenon of lower-hybrid oscillations induced by a background inhomogeneous magnetic field. Physics of Plasmas, 2012, 19, .	1.9	10
15	Phase-mixing of electrostatic modes in a cold magnetized electron-positron plasma. Physics of Plasmas, 2013, 20, 082302.	1.9	10
16	Phase mixing of upper hybrid oscillations in a cold inhomogeneous plasma placed in an inhomogeneous magnetic field. Physics of Plasmas, 2013, 20, .	1.9	10
17	Relativistic wave-breaking limit of electrostatic waves in cold electron-positron-ion plasmas. European Physical Journal D, 2016, 70, 1.	1.3	9
18	Nonstationary magnetosonic wave dynamics in plasmas exhibiting collapse. Physical Review E, 2013, 88, 023102.	2.1	8

#	Article	IF	Citations
19	Nonlinear electron acoustic cyclotron waves in presence of uniform magnetic field. Physics of Plasmas, 2013, 20, 042301.	1.9	8
20	Shock wave structures in a dissipative quantum plasma. Physical Review E, 2013, 87, .	2.1	8
21	Drift wave in pair-ion plasma. Pramana - Journal of Physics, 2013, 80, 283-287.	1.8	8
22	Small amplitude nonlinear electron acoustic solitary waves in weakly magnetized plasma. Physics of Plasmas, 2013, 20, 012113.	1.9	7
23	Wave breaking of nonlinear electron oscillations in a warm magnetized plasma. Physics of Plasmas, 2014, 21, 022308.	1.9	7
24	Nonstationary nonlinear dust-acoustic waves in unmagnetized plasma. Physics of Plasmas, 2003, 10, 3043-3046.	1.9	5
25	Formation and evolution of vortices in a collisional strongly coupled dusty plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2531-2539.	2.1	5
26	The MaPLE device: A linear machine for laboratory studies of the magnetized plasma physics phenomena. Journal of Plasma Physics, 2015, 81, .	2.1	4
27	Nonlinear interaction of electron acoustic waves with Langmuir waves in presence of magnetic field in plasmas. Journal of Plasma Physics, 2015, 81, .	2.1	4
28	Effect of electron inertia on dispersive properties of AlfvÃ©n waves in cold plasmas. Physics of Plasmas, 2017, 24, 102307.	1.9	4
29	Effects of collision on the time-independent states of a non-neutral plasma diode. Physics of Plasmas, 2018, 25, 083512.	1.9	4
30	Nonlinear structure formation of electron acoustic waves in plasmas. Physica Scripta, 2020, 95, 105603.	2.5	4
31	Collisional drag may lead to disappearance of wave-breaking phenomenon of lower hybrid oscillations. Physics of Plasmas, 2013, 20, 014501.	1.9	3
32	Nonlinear electron acoustic waves in presence of shear magnetic field. Physics of Plasmas, 2013, 20, 122112.	1.9	3
33	Longitudinal dust acoustic solitary waves in a strongly coupled complex (dusty) plasma. Journal of Plasma Physics, 2015, 81, .	2.1	3
34	Plasma wakefield excitation in a cold magnetized plasma for particle acceleration. Physics of Plasmas, 2017, 24, 052111.	1.9	3
35	Nonlinear coupling of Langmuir and electron acoustic waves in a viscous plasma. Physics of Plasmas, 2018, 25, .	1.9	3
36	Existence of electron acoustic solitary waves in relativistic limit. Physics of Plasmas, 2018, 25, 092101.	1.9	3

#	Article	IF	Citations
37	Velocity shear effect on Jeans instability in a viscoelastic fluid. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 389, 127084.	2.1	3
38	Nonlinear electron oscillations in a warm plasma. Physics of Plasmas, 2013, 20, 122303.	1.9	2
39	Nonlinear wave collapse, shock, and breather formation in an electron magnetohydrodynamic plasma. Physical Review E, 2014, 90, 063111.	2.1	2
40	Stability of an elliptical vortex in a strongly coupled dusty plasma. Physics of Plasmas, 2015, 22, .	1.9	2
41	Nonlinear low-frequency electrostatic wave dynamics in a two-dimensional quantum plasma. Annals of Physics, 2016, 371, 67-76.	2.8	2
42	Stability properties of the steady state solutions of a non-neutral plasma diode when there is a uniform magnetic field along transverse direction. Physics of Plasmas, 2017, 24, .	1.9	2
43	Role of transverse velocity-shear on collisional drift-wave instability in magnetized plasmas. Physics of Plasmas, 2001, 8, 97-102.	1.9	1
44	Suppression of magnetic instabilities in accelerating plasma surfaces by sheared electron flow. Physics of Plasmas, 2003, 10, 600-604.	1.9	1
45	Nonlinear hydromagnetic waves in two-ion-species plasmas. Physics of Plasmas, 2005, 12, 112101.	1.9	1
46	Nonlinear lower hybrid oscillations in a cold viscous plasma. Physics of Plasmas, 2011, 18, 124502.	1.9	0
47	Nonlinear generation of sheared flows and zonal magnetic fields by electron whistlers in plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3880-3883.	2.1	0
48	Nonlinear wave propagation in strongly correlated dusty plasmas. , 2012, , .		0
49	An exact solution in a gravitating fluid with a density-dependent viscosity. Journal of Plasma Physics, 2013, 79, 1075-1079.	2.1	0
50	On the wave-breaking phenomena in a cold magnetized plasma. , 2014, , .		0
51	Excitation of plasma wakefields by intense ultraâ€relativistic proton beam. Contributions To Plasma Physics, 2021, 61, e202000215.	1.1	0
52	Collisional drift wave instability in an ultracold neutral plasma. Physics of Plasmas, 2021, 28, 102101.	1.9	0