

# Nikhil Chakrabarti

## List of Publications by Year in descending order

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52  
papers

402  
citations

840776

11  
h-index

839539

18  
g-index

52  
all docs

52  
docs citations

52  
times ranked

195  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Excitation of plasma wakefields by intense ultra-relativistic proton beam. Contributions To Plasma Physics, 2021, 61, e202000215.	1.1	0
3	Collisional drift wave instability in an ultracold neutral plasma. Physics of Plasmas, 2021, 28, 102101.	1.9	0
4	Nonlinear structure formation of electron acoustic waves in plasmas. Physica Scripta, 2020, 95, 105603.	2.5	4
5	Phase-mixing of large amplitude electron oscillations in a cold inhomogeneous plasma. Physics of Plasmas, 2018, 25, .	1.9	12
6	Nonlinear coupling of Langmuir and electron acoustic waves in a viscous plasma. Physics of Plasmas, 2018, 25, .	1.9	3
7	Existence of electron acoustic solitary waves in relativistic limit. Physics of Plasmas, 2018, 25, 092101.	1.9	3
8	Effects of collision on the time-independent states of a non-neutral plasma diode. Physics of Plasmas, 2018, 25, 083512.	1.9	4
9	Plasma wakefield excitation in a cold magnetized plasma for particle acceleration. Physics of Plasmas, 2017, 24, 052111.	1.9	3
10	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
11	Effect of electron inertia on dispersive properties of Alfvén waves in cold plasmas. Physics of Plasmas, 2017, 24, 102307.	1.9	4
12	Experimental observation of electron-acoustic wave propagation in laboratory plasma. Physics of Plasmas, 2017, 24, .	1.9	28
13	Nonlinear low-frequency electrostatic wave dynamics in a two-dimensional quantum plasma. Annals of Physics, 2016, 371, 67-76.	2.8	2
14	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
15	Relativistic wave-breaking limit of electrostatic waves in cold electron-positron-ion plasmas. European Physical Journal D, 2016, 70, 1.	1.3	9
16	Stability of an elliptical vortex in a strongly coupled dusty plasma. Physics of Plasmas, 2015, 22, .	1.9	2
17	Longitudinal dust acoustic solitary waves in a strongly coupled complex (dusty) plasma. Journal of Plasma Physics, 2015, 81, .	2.1	3
18	The MaPLE device: A linear machine for laboratory studies of the magnetized plasma physics phenomena. Journal of Plasma Physics, 2015, 81, .	2.1	4

#	ARTICLE	IF	CITATIONS
19	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
20	Nonlinear wave collapse, shock, and breather formation in an electron magnetohydrodynamic plasma. Physical Review E, 2014, 90, 063111.	2.1	2
21	Velocity shear effect on the longitudinal wave in a strongly coupled dusty plasma. Astrophysics and Space Science, 2014, 349, 789-798.	1.4	13
22	Wave breaking of nonlinear electron oscillations in a warm magnetized plasma. Physics of Plasmas, 2014, 21, 022308.	1.9	7
23	On the wave-breaking phenomena in a cold magnetized plasma. , 2014, , .		0
24	Nonstationary magnetosonic wave dynamics in plasmas exhibiting collapse. Physical Review E, 2013, 88, 023102.	2.1	8
25	Nonlinear electron oscillations in a warm plasma. Physics of Plasmas, 2013, 20, 122303.	1.9	2
26	An exact solution in a gravitating fluid with a density-dependent viscosity. Journal of Plasma Physics, 2013, 79, 1075-1079.	2.1	0
27	Nonlinear electron acoustic cyclotron waves in presence of uniform magnetic field. Physics of Plasmas, 2013, 20, 042301.	1.9	8
28	Phase-mixing of electrostatic modes in a cold magnetized electron-positron plasma. Physics of Plasmas, 2013, 20, 082302.	1.9	10
29	Collisional drag may lead to disappearance of wave-breaking phenomenon of lower hybrid oscillations. Physics of Plasmas, 2013, 20, 014501.	1.9	3
30	Small amplitude nonlinear electron acoustic solitary waves in weakly magnetized plasma. Physics of Plasmas, 2013, 20, 012113.	1.9	7
31	Shock wave structures in a dissipative quantum plasma. Physical Review E, 2013, 87, .	2.1	8
32	Drift wave in pair-ion plasma. Pramana - Journal of Physics, 2013, 80, 283-287.	1.8	8
33	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
34	Nonlinear electron acoustic waves in presence of shear magnetic field. Physics of Plasmas, 2013, 20, 122112.	1.9	3
35	Nonlinear wave propagation in strongly correlated dusty plasmas. , 2012, , .		0
36	Electron acoustic shock waves in a collisional plasma. Physical Review E, 2012, 86, 066408.	2.1	37

#	ARTICLE	IF	CITATIONS
37	Wave breaking phenomenon of lower-hybrid oscillations induced by a background inhomogeneous magnetic field. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	10
38	Linear and nonlinear electrostatic modes in a strongly coupled quantum plasma. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	30
39	Relativistic effects on nonlinear lower hybrid oscillations in cold plasma. <i>Journal of Mathematical Physics</i> , 2011, 52, .	1.1	10
40	Nonlinear lower hybrid oscillations in a cold viscous plasma. <i>Physics of Plasmas</i> , 2011, 18, 124502.	1.9	0
41	Nonlinear interaction of quantum electron plasma waves with quantum electron acoustic waves in plasmas. <i>Physical Review E</i> , 2011, 83, 016404.	2.1	11
42	Nonlinear generation of sheared flows and zonal magnetic fields by electron whistlers in plasmas. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 3880-3883.	2.1	0
43	Exact Time-Dependent Nonlinear Dispersive Wave Solutions in Compressible Magnetized Plasmas Exhibiting Collapse. <i>Physical Review Letters</i> , 2011, 106, 145003.	7.8	13
44	Nonlinear wave propagation in a gravitating quantum fluid. <i>Physical Review E</i> , 2011, 84, 046601.	2.1	18
45	Nonlinear behavior of electron acoustic waves in an un-magnetized plasma. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	28
46	Nonlinear lower-hybrid oscillations in cold plasma. <i>Physics of Plasmas</i> , 2010, 17, 082306.	1.9	14
47	Viscoelastic modes in a strongly coupled, cold, magnetized dusty plasma. <i>Physics of Plasmas</i> , 2010, 17, 113708.	1.9	18
48	Nonlinear interaction of electron plasma waves with electron acoustic waves in plasmas. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	21
49	Nonlinear hydromagnetic waves in two-ion-species plasmas. <i>Physics of Plasmas</i> , 2005, 12, 112101.	1.9	1
50	Suppression of magnetic instabilities in accelerating plasma surfaces by sheared electron flow. <i>Physics of Plasmas</i> , 2003, 10, 600-604.	1.9	1
51	Nonstationary nonlinear dust-acoustic waves in unmagnetized plasma. <i>Physics of Plasmas</i> , 2003, 10, 3043-3046.	1.9	5
52	Role of transverse velocity-shear on collisional drift-wave instability in magnetized plasmas. <i>Physics of Plasmas</i> , 2001, 8, 97-102.	1.9	1