

# Rajaraman Ganesh

## List of Publications by Year in descending order

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89  
papers

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citations

840776  
11  
h-index

940533  
16  
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90  
all docs

90  
docs citations

90  
times ranked

302  
citing authors

#	ARTICLE	IF	CITATIONS
1	Kelvin Helmholtz Instability in Strongly Coupled Yukawa Liquids. Physical Review Letters, 2010, 104, 215003.	7.8	50
2	Global gyrokinetic stability of collisionless microtearing modes in large aspect ratio tokamaks. Physics of Plasmas, 2014, 21, 082513.	1.9	23
3	Coherent Vortices in Strongly Coupled Liquids. Physical Review Letters, 2011, 106, 135001.	7.8	22
4	Effect of external drive on strongly coupled Yukawa systems: A nonequilibrium molecular dynamics study. Physical Review E, 2009, 80, 056408.	2.1	17
5	A full radius gyrokinetic stability analysis for large aspect ratio finite- $\hat{I}^2$ tokamaks. Physics of Plasmas, 2004, 11, 3106-3130.	1.9	15
6	Global Gyrokinetic Stability of Pressure-Gradient-Driven Electromagnetic Modes in Tokamaks with Regions of Low Shear. Physical Review Letters, 2005, 94, 145002.	7.8	13
7	Nonlinear Landau damping and formation of Bernstein-Greene-Kruskal structures for plasmas with q-nonextensive velocity distributions. Physics of Plasmas, 2013, 20, 032106.	1.9	13
8	Phase transition and emergence of active temperature in an active Brownian system in underdamped background. Physical Review E, 2020, 101, 032121.	2.1	13
9	Linear and nonlinear evolution of the ion resonance instability in cylindrical traps: A numerical study. Physics of Plasmas, 2015, 22, .	1.9	12
10	Kolmogorov flow in two dimensional strongly coupled dusty plasma. Physics of Plasmas, 2014, 21, 073707.	1.9	11
11	Chirp-driven giant phase space vortices. Physics of Plasmas, 2016, 23, 062112.	1.9	11
12	Symmetry in electron and ion dispersion in 1D Vlasov-Poisson plasma. Physics of Plasmas, 2018, 25, 112102.	1.9	11
13	Short wavelength ion temperature gradient turbulence. Physics of Plasmas, 2012, 19, .	1.9	10
14	Inertia driven radial breathing and nonlinear relaxation in cylindrically confined pure electron plasma. Physics of Plasmas, 2014, 21, 022116.	1.9	10
15	Properties of gravitationally equilibrated Yukawa systems—A molecular dynamics study. Physics of Plasmas, 2014, 21, .	1.9	10
16	Molecular dynamics study of flow past an obstacle in strongly coupled Yukawa liquids. Physics of Plasmas, 2016, 23, .	1.9	10
17	Formation of quasistationary vortex and transient hole patterns through vortex merger. Physics of Plasmas, 2002, 9, 4551-4559.	1.9	9
18	A comprehensive gyrokinetic description of global electrostatic microinstabilities in a tokamak. Physics of Plasmas, 2009, 16, 052507.	1.9	9

#	ARTICLE	IF	CITATIONS
19	Short wavelength ion temperature gradient mode and coupling with trapped electrons. Physics of Plasmas, 2009, 16, .	1.9	9
20	Toroidal universal drift instability: A global gyrokinetic study. Physics of Plasmas, 2010, 17, 102105.	1.9	9
21	Kolmogorov flow in two dimensional strongly coupled Yukawa liquid: A molecular dynamics study. Physics of Plasmas, 2015, 22, .	1.9	9
22	Driven phase space vortices in plasmas with nonextensive velocity distribution. Physics of Plasmas, 2017, 24, .	1.9	9
23	Isothermal equation of state of three dimensional Yukawa gas. Physics of Plasmas, 2017, 24, .	1.9	9
24	A new multi-line cusp magnetic field plasma device (MPD) with variable magnetic field. Review of Scientific Instruments, 2018, 89, 043510.	1.3	9
25	Lane formation in driven pair-ion plasmas. Physics of Plasmas, 2020, 27, .	1.9	9
26	Radial transport of energetic ions in the presence of trapped electron mode turbulence. Physics of Plasmas, 2011, 18, .	1.9	8
27	Nature of energetic ion transport by ion temperature gradient driven turbulence and size scaling. Physics of Plasmas, 2012, 19, .	1.9	8
28	Dense strongly coupled plasma in double laser pulse ablation of lithium: Experiment and simulation. Physics of Plasmas, 2013, 20, .	1.9	8
29	Observation of the Rayleigh-Bénard convection cells in strongly coupled Yukawa liquids. Physics of Plasmas, 2015, 22, .	1.9	8
30	Effect of magnetic field topology on quasi-stationary equilibrium, fluctuations, and flows in a simple toroidal device. Physics of Plasmas, 2016, 23, .	1.9	8
31	Destabilization of a cylindrically confined electron cloud by impact ionization of background neutrals: 2D3v PIC simulation with Monte-Carlo-collisions. Physics of Plasmas, 2017, 24, .	1.9	8
32	Coherent phase space structures in a 1D electrostatic plasma using particle-in-cell and Vlasov simulations: A comparative study. Physics of Plasmas, 2018, 25, .	1.9	8
33	Parallel shear flow instabilities in strongly coupled Yukawa liquids: A comparison of generalized hydrodynamic model and molecular dynamics results. Physics of Plasmas, 2010, 17, 103706.	1.9	7
34	Role of fluctuations and flows in sustaining mean profiles in a current less toroidal plasma. Physics of Plasmas, 2011, 18, 042310.	1.9	7
35	Coherent to turbulence transition, enhanced flow and confinement in a simple toroidal plasma. Physics of Plasmas, 2012, 19, 032307.	1.9	7
36	Role of Trapped Electrons on Global Gyrokinetic Linear Stability of Collisionless Microtearing Modes. Journal of Physics: Conference Series, 2014, 561, 012017.	0.4	7

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37	Molecular shear heating and vortex dynamics in thermostatted two dimensional Yukawa liquids. Physics of Plasmas, 2016, 23, .	1.9	7
38	Influence of electron-neutral elastic collisions on the instability of an ion-contaminated cylindrical electron cloud: 2D3V PIC-with-MCC simulations. Physics of Plasmas, 2016, 23, 102111.	1.9	7
39	Compressibility effects on a shear flow in strongly coupled dusty plasma. I. A study using computational fluid dynamics. Physics of Plasmas, 2018, 25, .	1.9	7
40	Supersonic flows past an obstacle in Yukawa liquids. Physics of Plasmas, 2018, 25, .	1.9	7
41	Inertia driven radial breathing and nonlinear relaxation in cylindrically confined pure electron plasma. AIP Conference Proceedings, 2015, , .	0.4	6
42	Compressible Kolmogorov flow in strongly coupled dusty plasma using molecular dynamics and computational fluid dynamics. II. A comparative study. Physics of Plasmas, 2018, 25, .	1.9	6
43	Evidence for neutrals carrying ion-acoustic wave momentum in a partially ionized plasma. Physics of Plasmas, 2020, 27, .	1.9	6
44	A novel quiescent quasi-steady state of a toroidal electron plasma. Physics of Plasmas, 2021, 28, .	1.9	6
45	A simple experimental method to determine magnetic field topology in toroidal plasma devices. Review of Scientific Instruments, 2015, 86, 033504.	1.3	5
46	A molecular dynamics study of phase transition in strongly coupled pair-ion plasmas. Physics of Plasmas, 2015, 22, 082116.	1.9	5
47	Negative entropy-production rate in Rayleigh-Bénard convection in two-dimensional Yukawa liquids. Physical Review E, 2019, 100, 053201.	2.1	5
48	Trapped particle instability in : l homogeneous Vlasov plasmas. Physica Scripta, 2021, 96, 125616.	2.5	5
49	Dynamics of uniform vortex patch with a point vortex. IEEE Transactions on Plasma Science, 2002, 30, 6-7.	1.3	4
50	Sluggish response of untrapped electrons and global electrostatic micro-instabilities in a tokamak. Journal of Physics: Conference Series, 2010, 208, 012058.	0.4	4
51	Viscoelastic effects on asymmetric two-dimensional vortex patterns in a strongly coupled dusty plasma. Contributions To Plasma Physics, 2019, 59, e201800189.	1.1	4
52	Recurrence in three dimensional magnetohydrodynamic plasma. Physics of Plasmas, 2019, 26, .	1.9	4
53	Double layer formation and thrust generation in an expanding plasma using 1D-3V PIC simulation. Physics of Plasmas, 2020, 27, 093505.	1.9	4
54	The emergence of inertial waves from coherent vortex source in strongly coupled dusty plasma. Physics of Plasmas, 2020, 27, 050701.	1.9	4

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55	Landau damping in one dimensional periodic inhomogeneous collisionless plasmas. AIP Advances, 2021, 11, 025229.	1.3	4
56	Effect of external magnetic field on lane formation in driven pair-ion plasmas. Journal of Plasma Physics, 2021, 87, .	2.1	4
57	Trapped particle instability in : II inhomogeneous Vlasov plasmas. Physica Scripta, 2021, 96, 125615.	2.5	4
58	Numerical Simulation Of A Bi-directional Plasma Thruster For Space Debris Removal. Journal of Plasma Physics, 2022, 88, .	2.1	4
59	Statistical mechanics of charged rings. Physics of Plasmas, 1996, 3, 22-28.	1.9	3
60	Coevolution of inverse cascade and nonlinear heat front in shear flows of strongly coupled Yukawa liquids. Physics of Plasmas, 2011, 18, 083704.	1.9	3
61	Experimental observation of drift wave turbulence in an inhomogeneous six-pole cusp magnetic field of MPD. Physics of Plasmas, 2018, 25, 112114.	1.9	3
62	Dynamics of a toroidal pure electron plasma using 3D PIC simulations. Physics of Plasmas, 2019, 26, .	1.9	3
63	Finite $\hat{r}^2$ effects on short wavelength ion temperature gradient modes. Physics of Plasmas, 2020, 27, 052509.	1.9	3
64	Effect of in-plane shear flow on the magnetic island coalescence instability. Physics of Plasmas, 2021, 28, .	1.9	3
65	Role of multi-cusp magnetic field on plasma containment. Plasma Research Express, 2020, 2, 045001.	0.9	3
66	Self-organization of pure electron plasma in a partially toroidal magnetic-electrostatic trap: A 3D particle-in-cell simulation. Journal of Applied Physics, 2021, 130, .	2.5	3
67	Emergence of directed motion in a 2D system of Yukawa particles on 1D Ratchet. Physica A: Statistical Mechanics and Its Applications, 2022, 593, 126913.	2.6	3
68	Long time fate of two-dimensional incompressible high Reynolds number Navier–Stokes turbulence: A quantitative comparison between theory and simulation. Physics of Fluids, 2022, 34, .	4.0	3
69	Electron Plasmas in a Small Aspect Ratio Toroidal Experiment. AIP Conference Proceedings, 2006, , .	0.4	2
70	Role of ion mass in the generation of fluctuations and poloidal flows in a simple toroidal plasma. Physics of Plasmas, 2012, 19, .	1.9	2
71	Fluctuations and intermittent poloidal transport in a simple toroidal plasma. Physics of Plasmas, 2013, 20, 072308.	1.9	2
72	Compressibility effects on quasistationary vortex and transient hole patterns through vortex merger. Physica Scripta, 2019, 94, 115005.	2.5	2

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73	Phase of particle-level velocity perturbations determines the fate of Rayleigh-Bénard convection cells in 2D Yukawa liquids. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	2
74	Spot formation in three-dimensional Yukawa liquid. <i>Physics of Fluids</i> , 2021, 33, .	4.0	2
75	COHERENT STRUCTURES IN TOROIDAL ELECTRON PLASMAS: SIMULATION AND EXPERIMENTS. , 2007, , .		2
76	A molecular dynamics study of dipolar vortices in strongly coupled Yukawa liquids. <i>Physics of Fluids</i> , 2012, 24, 092002.	4.0	1
77	Molecular dynamics of Yukawa liquids in gravitation: Equilibrium, Instability and Transport. <i>Journal of Plasma Physics</i> , 2014, 80, 895-917.	2.1	1
78	Plasma heating via adiabatic magnetic compression-expansion cycle. <i>Physics of Plasmas</i> , 2016, 23, 062514.	1.9	1
79	Response to "Comment on "Symmetry in electron and ion dispersion in 1D Vlasov-Poisson plasma" <i>TM</i> ". [Phys. Plasmas 26, 064701 (2019)]. <i>Physics of Plasmas</i> , 2019, 26, 064702.	1.9	1
80	Coherent nonlinear oscillations in magnetohydrodynamic plasma. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	1
81	Driven electrostatic phase space vortices in a 1D weakly dissipative Vlasov-Poisson system. <i>Physics of Plasmas</i> , 2020, 27, 032107.	1.9	1
82	Lane dynamics in pair-ion plasmas: effect of obstacle and geometric aspect ratio. <i>Journal of Plasma Physics</i> , 2021, 87, .	2.1	1
83	Effect of particle mass inhomogeneity on the two-dimensional Rayleigh-Bénard system of Yukawa liquids: A molecular dynamics study. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	1
84	Strongly correlated classical plasmas under external forcing and dissipation - an example using Molecular Dynamics. <i>Journal of Physics: Conference Series</i> , 2016, 759, 012061.	0.4	0
85	Observation of toroidal acoustic mode in a current-less toroidal plasma. <i>Physics of Plasmas</i> , 2019, 26, 072307.	1.9	0
86	Effect of parallel connection length on the properties of a low-temperature plasma confined in a current-less toroidal device. <i>Indian Journal of Physics</i> , 2021, 95, 989-1002.	1.8	0
87	10.1063/5.0092212.2. , 2022, , .		0
88	10.1063/5.0092212.4. , 2022, , .		0
89	10.1063/5.0092212.3. , 2022, , .		0