Sriram Ramaswamy

List of Publications by Year
in descending order

67	7,126	156536	124990
papers	citations	32 h-index	64 g-index

68	68	68	3996
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Symmetry, Thermodynamics, and Topology in Active Matter. Physical Review X, 2022, 12, .	2.8	59
2	Active nonreciprocal attraction between motile particles in an elastic medium. Physical Review E, 2022, 105, .	0.8	11
3	Layered Chiral Active Matter: Beyond Odd Elasticity. Physical Review Letters, 2021, 126, 248001.	2.9	14
4	Inertia Drives a Flocking Phase Transition in Viscous Active Fluids. Physical Review X, 2021, 11, .	2.8	10
5	Strong confinement of active microalgae leads to inversion of vortex flow and enhanced mixing. ELife, 2021, 10, .	2.8	3
6	Heating leads to liquid-crystal and crystalline order in a two-temperature active fluid of rods. Physical Review E, 2021, 104, 054610.	0.8	8
7	Waves, Algebraic Growth, and Clumping in Sedimenting Disk Arrays. Physical Review X, 2020, 10, .	2.8	5
8	Nonmutual torques and the unimportance of motility for long-range order in two-dimensional flocks. Physical Review E, 2020, 101, 052601.	0.8	31
9	Phases and excitations of active rodâ€“bead mixtures: simulations and experiments. Soft Matter, 2020, 16, 7210-7221.	1.2	14
10	Swimmer Suspensions on Substrates: Anomalous Stability and Long-Range Order. Physical Review Letters, 2020, 124, 028002.	2.9	25
11	Omnidirectional transport and navigation of Janus particles through a nematic liquid crystal film. Physical Review Research, 2020, 2, .	1.3	17
12	Pairing, waltzing and scattering of chemotactic active colloids. New Journal of Physics, 2019, 21, 063006.	1.2	55
13	Kepler Orbits in Pairs of Disks Settling in a Viscous Fluid. Physical Review Letters, 2019, 122, 224501.	2.9	9
14	Inferring critical thresholds of ecosystem transitions from spatial data. Ecology, 2019, 100, e02722.	1.5	21
15	Trapping and sorting active particles: Motility-induced condensation and smectic defects. Physical Review E, 2019, 99, 032605.	0.8	36
16	Oriented Active Solids. Physical Review Letters, 2019, 123, 238001.	2.9	21
17	Active fluids. Nature Reviews Physics, 2019, 1, 640-642.	11.9	25
18	Low-noise phase of a two-dimensional active nematic system. Physical Review E, 2018, 97, 012707.	0.8	28

#	Article	IF	Citations
19	Origins and diagnostics of the nonequilibrium character of active systems. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 123201.	0.9	43
20	Defect Unbinding in Active Nematics. Physical Review Letters, 2018, 121, 108002.	2.9	77
21	A nonequilibrium force can stabilize 2D active nematics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6934-6939.	3.3	43
22	Hydrodynamic instabilities in active cholesteric liquid crystals. European Physical Journal E, 2017, 40, 50.	0.7	28
23	Active matter. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 054002.	0.9	227
24	Glass susceptibility: Growth kinetics and saturation under shear. Physical Review E, 2016, 94, 012607.	0.8	1
25	Silent Flocks: Constraints on Signal Propagation Across Biological Groups. Physical Review Letters, 2015, 114, 218101.	2.9	37
26	Anisotropic isometric fluctuation relations in experiment and theory on a self-propelled rod. Physical Review E, 2015, 91, 030102.	0.8	25
27	Nonequilibrium noise in electrophoresis: The microion wind. Physical Review E, 2014, 89, 032307.	0.8	1
28	Activating Membranes. Physical Review Letters, 2014, 112, 258101.	2.9	42
29	Clusters, asters, and collective oscillations in chemotactic colloids. Physical Review E, 2014, 89, 062316.	0.8	213
30	Universal power law in crossover from integrability to quantum chaos. Physical Review B, 2014, 90, .	1.1	27
31	Flocking at a distance in active granular matter. Nature Communications, 2014, 5, 4688.	5.8	198
32	Actomyosin contractility rotates the cell nucleus. Scientific Reports, 2014, 4, 3781.	1.6	59
33	Live Soap: Stability, Order, and Fluctuations in Apolar Active Smectics. Physical Review Letters, 2013, 110, 118102.	2.9	32
34	Mesoscopic theory for fluctuating active nematics. New Journal of Physics, 2013, 15, 085032.	1.2	101
35	A drop of active matter. Journal of Fluid Mechanics, 2012, 705, 46-57.	1.4	41
36	Oscillatory settling in wormlike-micelle solutions: bursts and a long time scale. Soft Matter, 2012, 8, 4310.	1.2	18

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37	Symmetry Properties of the Large-Deviation Function of the Velocity of a Self-Propelled Polar Particle. Physical Review Letters, 2011, 106, 118001.	2.9	56
38	A dynamic renormalization group study of active nematics. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P02003.	0.9	32
39	The Mechanics and Statistics of Active Matter. Annual Review of Condensed Matter Physics, 2010, 1, 323-345.	5.2	1,438
40	Long-Lived Giant Number Fluctuations in a Swarming Granular Nematic. Science, 2007, 317, 105-108.	6.0	674
41	Nonequilibrium steady states in a vibrated-rod monolayer: tetratic, nematic, and smectic correlations. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P01005-P01005.	0.9	124
42	Active Nematics Are Intrinsically Phase Separated. Physical Review Letters, 2006, 97, 090602.	2.9	78
43	Hydrodynamics and phases of flocks. Annals of Physics, 2005, 318, 170-244.	1.0	746
44	Rheology of Active-Particle Suspensions. Physical Review Letters, 2004, 92, 118101.	2.9	435
45	Hydrodynamic Fluctuations and Instabilities in Ordered Suspensions of Self-Propelled Particles. Physical Review Letters, 2002, 89, 058101.	2.9	699
46	Theory of suspension segregation in partially filled horizontal rotating cylinders. Physics of Fluids, 2001, 13, 3517-3520.	1.6	16
47	Ludwig Boltzmann and entropy. Resonance, 2001, 6, 3-5.	0.2	0
48	Issues in the statistical mechanics of steady sedimentation. Advances in Physics, 2001, 50, 297-341.	35.9	98
49	Weak and strong dynamic scaling in a one-dimensional driven coupled-field model: Effects of kinematic waves. Physical Review E, 2001, 64, 021402.	0.8	29
50	Pollen grains, random walks and einstein. Resonance, 2000, 5, 16-34.	0.2	3
51	Strong phase separation in a model of sedimenting lattices. Physical Review E, 2000, 61, 1648-1658.	0.8	51
52	Nonequilibrium Fluctuations, Traveling Waves, and Instabilities in Active Membranes. Physical Review Letters, 2000, 84, 3494-3497.	2.9	205
53	Inequivalence of dynamical ensembles in a generalized driven diffusive lattice gas. Physical Review E, 2000, 61, 1139-1143.	0.8	3
54	Traveling Waves in a Drifting Flux Lattice. Physical Review Letters, 1999, 83, 3285-3288.	2.9	10

#	Article	IF	Citations
55	Nonequilibrium noise and instabilities in membranes with active pumps. Pramana - Journal of Physics, 1999, 53, 237-242.	0.9	19
56	Screened and Unscreened Phases in Sedimenting Suspensions. Physical Review Letters, 1998, 81, 5944-5947.	2.9	70
57	Are Steadily Moving Crystals Unstable?. Physical Review Letters, 1997, 79, 1150-1153.	2.9	85
58	Sponge Phase Transitions from a Lattice Mode. Molecular Crystals and Liquid Crystals, 1996, 288, 93-104.	0.3	0
59	Power-Law Forces Between Particles in a Nematic. Molecular Crystals and Liquid Crystals, 1996, 288, 175-180.	0.3	149
60	Indrani and Ramaswamy Reply:. Physical Review Letters, 1995, 74, 1491-1491.	2.9	8
61	Shear-Induced Melting and Reentrance: A Model. Physical Review Letters, 1994, 73, 1043-1046.	2.9	14
62	How to see the Burgers vector of a quasicrystal dislocation. Philosophical Magazine Letters, 1990, 61, 169-172.	0.5	11
63	Dislocations and grain boundaries in quasicrystals. Phase Transitions, 1989, 16, 575-588.	0.6	3
64	The nature of dislocation motion in quasicrystals. Bulletin of Materials Science, 1988, 10, 75-76.	0.8	0
65	Hydrodynamics of icosahedral quasicrystals. Physical Review B, 1985, 32, 7444-7452.	1.1	309
66	Breakdown of conventional hydrodynamics for smectic-A, hexatic-B, and cholesteric liquid crystals. Physical Review A, 1983, 28, 1618-1636.	1.0	90
67	Viscosities Diverge as1Ï‰in Smectic-ALiquid Crystals. Physical Review Letters, 1982, 49, 51-53.	2.9	66