

Arjun Berera

List of Publications by Year in descending order

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98
papers

4,954
citations

117571

34
h-index

88593

70
g-index

98
all docs

98
docs citations

98
times ranked

888
citing authors

#	ARTICLE	IF	CITATIONS
1	Critical transition to a non-chaotic regime in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2022, 930, .	1.4	1
2	On the force of vertical winds in the upper atmosphere: consequences for small biological particles. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, 20210626.	1.0	1
3	Viability of quantum communication across interstellar distances. <i>Physical Review D</i> , 2022, 105, .	1.6	6
4	Effect of spatial dimension on a model of fluid turbulence. <i>Journal of Fluid Mechanics</i> , 2021, 912, .	1.4	2
5	Towards a reliable effective field theory of inflation. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 813, 136055.	1.5	27
6	Thermal, trapped and chromo-natural inflation in light of the swampland criteria and the trans-Planckian censorship conjecture. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	1
7	Chaotic measure of the transition between two- and three-dimensional turbulence. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	3
8	Quantum coherence of photons to cosmological distances. <i>Physical Review D</i> , 2021, 104, .	1.6	6
9	Superfast amplification and superfast nonlinear saturation of perturbations as a mechanism of turbulence. <i>Journal of Fluid Mechanics</i> , 2020, 904, .	1.4	7
10	Role of trans-Planckian modes in cosmology. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	16
11	Homogeneous isotropic turbulence in four spatial dimensions. <i>Physics of Fluids</i> , 2020, 32, 085107.	1.6	6
12	Quantum coherence to interstellar distances. <i>Physical Review D</i> , 2020, 102, .	1.6	8
13	Fluctuations of Lyapunov exponents in homogeneous and isotropic turbulence. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	4
14	Chaos and information in two-dimensional turbulence. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	9
15	Reexamination of the warm inflation curvature perturbations spectrum. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 019-019.	1.9	6
16	Information production in homogeneous isotropic turbulence. <i>Physical Review E</i> , 2019, 100, 041101.	0.8	2
17	Warm inflation within a supersymmetric distributed mass model. <i>Physical Review D</i> , 2019, 99, .	1.6	23
18	Chaotic behavior of Eulerian magnetohydrodynamic turbulence. <i>Physics of Plasmas</i> , 2019, 26, 042303.	0.7	4

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19	Trans-Planckian censorship and other swampland bothers addressed in warm inflation. Physical Review D, 2019, 100, .	1.6	34
20	Formulating the Kramers problem in field theory. Physical Review D, 2019, 100, .	1.6	15
21	Fully resolved array of simulations investigating the influence of the magnetic Prandtl number on magnetohydrodynamic turbulence. Physical Review E, 2019, 99, 013101.	0.8	4
22	Chaotic Properties of a Turbulent Isotropic Fluid. Physical Review Letters, 2018, 120, 024101.	2.9	25
23	The role of fluctuation-dissipation dynamics in setting initial conditions for inflation. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 002-002.	1.9	20
24	Adiabatic out-of-equilibrium solutions to the Boltzmann equation in warm inflation. Journal of High Energy Physics, 2018, 2018, 1.	1.6	9
25	Identifying universality in warm inflation. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 021-021.	1.9	20
26	Dynamical and observational constraints on the warm little inflaton scenario. Physical Review D, 2018, 98, .	1.6	33
27	Reynolds-number dependence of the dimensionless dissipation rate in homogeneous magnetohydrodynamic turbulence. Physical Review E, 2017, 95, 013102.	0.8	15
28	Stanley Mandelstam my graduate supervisor. International Journal of Modern Physics A, 2017, 32, 1740009.	0.5	0
29	Knotty inflation and the dimensionality of spacetime. European Physical Journal C, 2017, 77, 682.	1.4	1
30	Effects of Magnetic and Kinetic Helicities on the Growth of Magnetic Fields in Laminar and Turbulent Flows by Helical Fourier Decomposition. Astrophysical Journal, 2017, 836, 26.	1.6	13
31	Space Dust Collisions as a Planetary Escape Mechanism. Astrobiology, 2017, 17, 1274-1282.	1.5	15
32	Comparison of forcing functions in magnetohydrodynamics. Physical Review Fluids, 2017, 2, .	1.0	12
33	Stanley Mandelstam My Graduate Supervisor. , 2017, , 145-148.		0
34	Stability of the pion string in a thermal and dense medium. Physical Review D, 2016, 94, .	1.6	2
35	Helical mode interactions and spectral transfer processes in magnetohydrodynamic turbulence. Journal of Fluid Mechanics, 2016, 791, 61-96.	1.4	22
36	Warm Little Inflaton. Physical Review Letters, 2016, 117, 151301.	2.9	125

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37	Fluctuation-dissipation dynamics of cosmological scalar fields. <i>Physical Review D</i> , 2015, 91, .	1.6	15
38	Nonuniversality and Finite Dissipation in Decaying Magnetohydrodynamic Turbulence. <i>Physical Review Letters</i> , 2015, 114, 235001.	2.9	27
39	Exploring the parameter space of warm-inflation models. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 046-046.	1.9	19
40	Self-organization and transition to turbulence in isotropic fluid motion driven by negative damping at low wavenumbers. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 25FT01.	0.7	8
41	Energy transfer and dissipation in forced isotropic turbulence. <i>Physical Review E</i> , 2015, 91, 043013.	0.8	26
42	Delaying the waterfall transition in warm hybrid inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 023-023.	1.9	9
43	Theory of non-Gaussianity in warm inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 008-008.	1.9	43
44	Observational implications of mattergenesis during inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 053-053.	1.9	50
45	Magnetic helicity and the evolution of decaying magnetohydrodynamic turbulence. <i>Physical Review E</i> , 2014, 90, 041003.	0.8	21
46	Spectral analysis of structure functions and their scaling exponents in forced isotropic turbulence. <i>Physical Review E</i> , 2014, 90, 053010.	0.8	18
47	Cosmological fluctuations of a random field and radiation fluid. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 004-004.	1.9	63
48	The importance of being warm (during inflation). <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 732, 116-121.	1.5	135
49	Warming up for Planck. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 025-025.	1.9	22
50	General dissipation coefficient in low-temperature warm inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 016-016.	1.9	125
51	Eulerian field-theoretic closure formalisms for fluid turbulence. <i>Physical Review E</i> , 2013, 87, 013007.	0.8	10
52	Gravitino cosmology in supersymmetric warm inflation. <i>Physical Review D</i> , 2012, 86, .	1.6	18
53	Stability analysis for the background equations for inflation with dissipation and in a viscous radiation bath. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 042-042.	1.9	39
54	Warm baryogenesis. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 712, 425-429.	1.5	56

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55	Warming up brane-antibrane inflation. <i>Physical Review D</i> , 2011, 84, .	1.6	38
56	Dissipation coefficients from scalar and fermion quantum field interactions. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 033-033.	1.9	129
57	Shear viscous effects on the primordial power spectrum from warm inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 030-030.	1.9	98
58	Recent developments in dark matter searches. <i>Pramana - Journal of Physics</i> , 2011, 76, 783-794.	0.9	2
59	Power suppression from disparate mass scales in effective scalar field theories of inflation and quintessence. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 010-010.	1.9	9
60	The gravitino problem in supersymmetric warm inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 020-020.	1.9	11
61	Taylor's (1935) dissipation surrogate reinterpreted. <i>Physics of Fluids</i> , 2010, 22, .	1.6	26
62	Reexamination of the infrared properties of randomly stirred hydrodynamics. <i>Physical Review E</i> , 2010, 82, 066304.	0.8	4
63	WARM INFLATION MODEL BUILDING. <i>International Journal of Modern Physics A</i> , 2009, 24, 2207-2240.	0.5	149
64	Developments in inflationary cosmology. <i>Pramana - Journal of Physics</i> , 2009, 72, 169-182.	0.9	3
65	WHEPP-X: Report of the working group on cosmology. <i>Pramana - Journal of Physics</i> , 2009, 72, 263-267.	0.9	0
66	Hybrid quintessential inflation. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2009, 678, 157-163.	1.5	24
67	Gauge fixing, BRS invariance and Ward identities for randomly stirred flows. <i>Nuclear Physics B</i> , 2009, 814, 522-548.	0.9	16
68	Warm inflation and its microphysical basis. <i>Reports on Progress in Physics</i> , 2009, 72, 026901.	8.1	227
69	Warm hilltop inflation. <i>Physical Review D</i> , 2008, 77, .	1.6	40
70	Gauge Symmetry and Slavnov-Taylor Identities for Randomly Stirred Fluids. <i>Physical Review Letters</i> , 2007, 99, 254501.	2.9	29
71	Local approximations for effective scalar field equations of motion. <i>Physical Review D</i> , 2007, 76, .	1.6	36
72	Warm inflation dynamics in the low temperature regime. <i>Physical Review D</i> , 2007, 76, .	1.6	31

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73	The warm inflationary universe. Contemporary Physics, 2006, 47, 33-49.	0.8	54
74	Asymmetric inflation: Exact solutions. Physical Review D, 2006, 73, .	1.6	45
75	Absence of isentropic expansion in various inflation models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 607, 1-7.	1.5	31
76	Galilean invariance and homogeneous anisotropic randomly stirred flows. Physical Review E, 2005, 72, 057301.	0.8	6
77	Dynamics of interacting scalar fields in expanding space-time. Physical Review D, 2005, 71, .	1.6	48
78	Sneutrino warm inflation in the minimal supersymmetric model. Physical Review D, 2005, 72, .	1.6	16
79	Determining the regimes of cold and warm inflation in the supersymmetric hybrid model. Physical Review D, 2005, 71, .	1.6	45
80	Constraining warm inflation with the cosmic microwave background. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 589, 1-6.	1.5	33
81	Scalar perturbation spectra from warm inflation. Physical Review D, 2004, 69, .	1.6	241
82	Construction of a robust warm inflation mechanism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 567, 294-304.	1.5	88
83	Non-Gaussian signatures in the cosmic background radiation from warm inflation. Physical Review D, 2002, 66, .	1.6	82
84	Inflationary initial conditions consistent with causality. Physical Review D, 2001, 63, .	1.6	32
85	Affinity for scalar fields to dissipate. Physical Review D, 2001, 63, .	1.6	89
86	Detection limits for super-Hubble suppression of causal fluctuations. Physical Review D, 2000, 62, .	1.6	9
87	Warm inflation in the adiabatic regime "a model, an existence proof for inflationary dynamics in quantum field theory. Nuclear Physics B, 2000, 585, 666-714.	0.9	219
88	Perturbation spectra in the warm inflationary scenario. Physical Review D, 2000, 62, .	1.6	153
89	Ubiquitous Inflaton in String-Inspired Models. Physical Review Letters, 1999, 83, 1084-1087.	2.9	47
90	The interaction structure and cosmological relevance of mass scales in string motivated supersymmetric theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 456, 135-140.	1.5	22

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91	A First Principles Warm Inflation Model that Solves the Cosmological Horizon and Flatness Problems. Physical Review Letters, 1999, 83, 264-267.	2.9	132
92	Strong dissipative behavior in quantum field theory. Physical Review D, 1998, 58, .	1.6	204
93	Attempt to determine the largest scale of primordial density perturbations in the universe. Physical Review D, 1998, 57, 2207-2212.	1.6	36
94	Interpolating the stage of exponential expansion in the early universe: Possible alternative with no reheating. Physical Review D, 1997, 55, 3346-3357.	1.6	188
95	Factorization and non-factorization in diffractive hard scattering. , 1997, , .		0
96	Thermal properties of an inflationary universe. Physical Review D, 1996, 54, 2519-2534.	1.6	162
97	Warm Inflation. Physical Review Letters, 1995, 75, 3218-3221.	2.9	587
98	Thermally Induced Density Perturbations in the Inflation Era. Physical Review Letters, 1995, 74, 1912-1915.	2.9	312