Karim A Malik

List of Publications by Year
in descending order

63	3,662	236925 25	138484 58
papers	citations	h-index	g-index

63	63	63	1162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New approach to the evolution of cosmological perturbations on large scales. Physical Review D, 2000, 62, .	4.7	631
2	A general proof of the conservation of the curvature perturbation. Journal of Cosmology and Astroparticle Physics, 2005, 2005, 004-004.	5.4	576
3	Cosmological perturbations. Physics Reports, 2009, 475, 1-51.	25.6	450
4	Large-scale curvature and entropy perturbations for multiple interacting fluids. Physical Review D, 2003, 67, .	4.7	160
5	Generalized constraints on the curvature perturbation from primordial black holes. Physical Review D, 2009, 79, .	4.7	157
6	Evolution of second-order cosmological perturbations. Classical and Quantum Gravity, 2004, 21, L65-L71.	4.0	148
7	New calculation of the mass fraction of primordial black holes. Physical Review D, 2004, 70, .	4.7	128
8	A numerical study of non-Gaussianity in the curvaton scenario. Journal of Cosmology and Astroparticle Physics, 2006, 2006, 008-008.	5.4	112
9	Dynamics of assisted inflation. Physical Review D, 1999, 59, .	4.7	109
10	Adiabatic and entropy perturbations with interacting fluids and fields. Journal of Cosmology and Astroparticle Physics, 2005, 2005, 007-007.	5.4	94
11	Cosmological perturbations in the bulk and on the brane. Physical Review D, 2002, 65, .	4.7	78
12	Dissecting the growth of the power spectrum for primordial black holes. Physical Review D, 2019, 100, .	4.7	73
13	Super-horizon perturbations and preheating. Physical Review D, 2000, 61, .	4.7	71
14	The non-adiabatic pressure in general scalar field systems. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 675, 159-163.	4.1	71
15	Primordial black hole production due to preheating. Physical Review D, 2001, 64, .	4.7	69
16	Gauge-invariant perturbations at second order: multiple scalar fields on large scales. Journal of Cosmology and Astroparticle Physics, 2005, 2005, 005-005.	5.4	52
17	Non-Gaussianity of inflationary field perturbations from the field equation. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 014.	5.4	47
18	WMAP, neutrino degeneracy, and non-Gaussianity constraints on isocurvature perturbations in the curvaton model of inflation. Physical Review D, 2004, 69, .	4.7	44

#	Article	IF	Citations
19	Curvature and isocurvature perturbations in a three-fluid model of curvaton decay. Physical Review D, 2004, 69, .	4.7	42
20	Constraints on the primordial curvature perturbation from primordial black holes. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 010-010.	5.4	38
21	Vorticity generation at second order in cosmological perturbation theory. Physical Review D, 2009, 79, .	4.7	38
22	Forming sub-horizon black holes at the end of inflation. Journal of Cosmology and Astroparticle Physics, 2006, 2006, 011-011.	5.4	34
23	A not so short note on the Kleinâ€“Gordon equation at second order. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 004-004.	5.4	32
24	A concise introduction to perturbation theory in cosmology. Classical and Quantum Gravity, 2008, 25, 193001.	4.0	32
25	Can cosmological perturbations produce early universe vorticity?. Classical and Quantum Gravity, 2011, 28, 114004.	4.0	29
26	Gauges and cosmological backreaction. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 027-027.	5.4	26
27	Cosmic vorticity on the brane. Physical Review D, 2001, 63, .	4.7	24
28	Numerical calculation of second order perturbations. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 019-019.	5.4	24
29	Estimating the amount of vorticity generated by cosmological perturbations in the early universe. Physical Review D, 2011, 83, .	4.7	21
30	Formation of subhorizon black holes from preheating. Physical Review D, 2014, 89, .	4.7	21
31	Cosmology on all scales: A two-parameter perturbation expansion. Physical Review D, 2017, 95, .	4.7	20
32	Modelling non-dust fluids in cosmology. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 002-002.	5.4	18
33	The Poisson equation at second order in relativistic cosmology. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 026-026.	5.4	16
34	Viable gauge choices in cosmologies with nonlinear structures. Physical Review D, 2020, 101, .	4.7	15
35	How the curvaton scenario, modulated reheating and an inhomogeneous end of inflation are related. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 037-037.	5.4	14
36	Second order perturbations during inflation beyond slow-roll. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 029-029.	5.4	13

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37	Vector and tensor contributions to the curvature perturbation at second order. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 021-021.	5.4	13
38	Effects of non-linearities on magnetic field generation. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 023-023.	5.4	12
39	Second-order cosmological perturbation theory and initial conditions for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-body simulations. Physical Review D, 2016, 93, .	4.7	12
40	Comparing two different formulations of metric cosmological perturbation theory. Classical and Quantum Gravity, 2011, 28, 225024.	4.0	11
41	Practical tools for third order cosmological perturbations. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 012-012.	5.4	9
42	The magnitude of the non-adiabatic pressure in the cosmic fluid. Monthly Notices of the Royal Astronomical Society, 2012, 423, 1411-1415.	4.4	9
43	Different approaches to the second-order Kleinâ€“Gordon equation. Classical and Quantum Gravity, 2008, 25, 175008.	4.0	8
44	Linear density perturbations in multifield coupled quintessence. Physical Review D, 2017, 95, .	4.7	8
45	Comments on gauge-invariance in cosmology. General Relativity and Gravitation, 2013, 45, 1989-2001.	2.0	7
46	Quantifying the behaviour of curvature perturbations during inflation. Classical and Quantum Gravity, 2013, 30, 065008.	4.0	6
47	Isocurvature initial conditions for second order Boltzmann solvers. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 020-020.	5.4	6
48	Conserved quantities in Lemaitreâ€“Tolmanâ€“Bondi cosmology. Classical and Quantum Gravity, 2015, 32, 015010.	4.0	5
49	A short note on the curvature perturbation at second order. Classical and Quantum Gravity, 2015, 32, 075005.	4.0	5
50	Effect of curvaton decay on the primordial power spectrum. Physical Review D, 2013, 87, .	4.7	4
51	Magnetogenesis from isocurvature initial conditions. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 028-028.	5.4	4
52	Defining perturbations on submanifolds. Physical Review D, 2003, 68, .	4.7	3
53	Relativistic and non-Gaussianity contributions to the one-loop power spectrum. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 028-028.	5.4	3
54	Galaxy number counts at second order: an independent approach. Classical and Quantum Gravity, 2021, 38, 065014.	4.0	3

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55	How Cosmologists Explain the Universe to Friends and Family. Astronomers' Universe, 2019, , .	0.0	2
56	Superhorizon perturbations and preheating. AIP Conference Proceedings, 2001, , .	0.4	1
57	Galaxy number counts at second order in perturbation theory: a leading-order term comparison. Classical and Quantum Gravity, 0, , .	4.0	1
58	The intrinsic bispectrum of the CMB from isocurvature initial conditions. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 046.	5.4	1
59	VORTICITY FROM ISOCURVATURE IN THE EARLY UNIVERSE. , 2015, , .		1
60	Contributions from primordial non-Gaussianity and general relativity to the galaxy power spectrum. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 025.	5.4	1
61	Scaling cosmologies from duality twisted compactifications. Classical and Quantum Gravity, 2008, 25, 065004.	4.0	0
62	Double power series method for approximating cosmological perturbations. Physical Review D, 2017, 95, .	4.7	0
63	QUANTIFYING THE BEHAVIOUR OF CURVATURE PERTURBATIONS NEAR HORIZON CROSSING. , 2015, , .		0