

David Wands

List of Publications by Year in descending order

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168
papers

16,999
citations

22132

59
h-index

14197

128
g-index

171
all docs

171
docs citations

171
times ranked

3548
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonsingular cosmology from an interacting vacuum. <i>Physical Review D</i> , 2022, 105, .	1.6	4
2	Revisiting small-scale fluctuations in $\hat{\mu}$ -attractor models of inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 007.	1.9	34
3	Ultra-slow-roll inflation with quantum diffusion. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 080.	1.9	57
4	Fully relativistic predictions in Horndeski gravity from standard Newtonian N-body simulations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 024.	1.9	4
5	Relativistic corrections to the growth of structure in modified gravity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 013-013.	1.9	7
6	Interferometer constraints on the inflationary field content. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 031-031.	1.9	18
7	Growth of structure in interacting vacuum cosmologies. <i>Physical Review D</i> , 2020, 101, .	1.6	13
8	Stochastic collapse. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 026-026.	1.9	7
9	Small-scale tests of inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 005-005.	1.9	17
10	Qualitative dynamics of interacting vacuum cosmologies. <i>Physical Review D</i> , 2020, 102, .	1.6	5
11	Tensor non-gaussianities from non-minimal coupling to the inflaton. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 008-008.	1.9	23
12	Stochastic inflation beyond slow roll. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 031-031.	1.9	53
13	Constraints on the interacting vacuum “geodesic CDM scenario. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3423-3438.	1.6	82
14	A novel way to determine the scale of inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 006-006.	1.9	30
15	Non-Gaussianity from axion-gauge fields interactions during inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 029-029.	1.9	35
16	Tunneling in stochastic inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 032-032.	1.9	19
17	The decisive future of inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 070-070.	1.9	3
18	Measuring the duration of inflation with the curvaton. <i>Physical Review D</i> , 2018, 98, .	1.6	9

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19	The attractive behaviour of ultra-slow-roll inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 048-048.	1.9	41
20	Critical Number of Fields in Stochastic Inflation. <i>Physical Review Letters</i> , 2017, 118, 031301.	2.9	46
21	A quantum window onto early inflation. <i>International Journal of Modern Physics D</i> , 2017, 26, 1743025.	0.9	7
22	General relativistic weak-field limit and Newtonian N-body simulations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 022-022.	1.9	39
23	Quantum diffusion during inflation and primordial black holes. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 046-046.	1.9	115
24	Relativistic initial conditions for N-body simulations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 043-043.	1.9	29
25	The stochastic spectator. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 018-018.	1.9	50
26	The intrinsic matter bispectrum in $\hat{\Lambda}$ CDM. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 058-058.	1.9	26
27	Multiple fields in stochastic inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 043-043.	1.9	54
28	A relativistic signature in large-scale structure. <i>Physics of the Dark Universe</i> , 2016, 13, 30-34.	1.8	26
29	Constraining curvaton reheating. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 042-042.	1.9	20
30	Relativistic interpretation of Newtonian simulations for cosmic structure formation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 031-031.	1.9	36
31	Galaxy bispectrum, primordial non-Gaussianity and redshift space distortions. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 014-014.	1.9	69
32	Inflation with an extra light scalar field after Planck. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 024-024.	1.9	32
33	Reconstruction of the dark matter–vacuum energy interaction. <i>Physical Review D</i> , 2015, 92, .	1.6	32
34	General relativistic corrections to N -body simulations and the Zel’dovich approximation. <i>Physical Review D</i> , 2015, 92, .	1.6	59
35	Encyclopedia curvatonis. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 008-008.	1.9	54
36	Generalised tensor fluctuations and inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 029-029.	1.9	49

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37	The fully non-linear post-Friedmann frame-dragging vector potential: magnitude and time evolution from N -body simulations. Monthly Notices of the Royal Astronomical Society, 2015, 452, 1727-1742.	1.6	28
38	CMB hemispherical asymmetry from non-linear isocurvature perturbations. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 017-017.	1.9	17
39	Galaxy bias and gauges at second order in general relativity. Classical and Quantum Gravity, 2015, 32, 175019.	1.5	25
40	Non-local bias in the halo bispectrum with primordial non-Gaussianity. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 004-004.	1.9	26
41	Impact of polarization on the intrinsic cosmic microwave background bispectrum. Physical Review D, 2014, 90, .	1.6	22
42	Primordial non-Gaussianity in the bispectra of large-scale structure. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 032-032.	1.9	22
43	The intrinsic B-mode polarisation of the Cosmic Microwave Background. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 011-011.	1.9	28
44	Computing general-relativistic effects from Newtonian N -body simulations: Frame dragging in the post-Friedmann approach. Physical Review D, 2014, 89, .	1.6	60
45	Post-Planck constraints on interacting vacuum energy. Physical Review D, 2014, 90, .	1.6	45
46	NON-GAUSSIAN INITIAL CONDITIONS IN Λ CDM: NEWTONIAN, RELATIVISTIC, AND PRIMORDIAL CONTRIBUTIONS. Astrophysical Journal, 2014, 785, 2.	1.6	51
47	Indications of a Late-Time Interaction in the Dark Sector. Physical Review Letters, 2014, 113, 181301.	2.9	225
48	EINSTEIN'S SIGNATURE IN COSMOLOGICAL LARGE-SCALE STRUCTURE. Astrophysical Journal Letters, 2014, 794, L11.	3.0	36
49	Inhomogeneous and Interacting Vacuum Energy. Thirty Years of Astronomical Discovery With UKIRT, 2014, , 183-196.	0.3	3
50	Cosmological phase space analysis of the $F_X V \hat{\alpha} V \cdot T_j$	1.6	44
51	Cosmological constraints on a decomposed Chaplygin gas. Physical Review D, 2013, 87, .	1.6	79
52	Modulated curvaton decay. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 041-041.	1.9	14
53	Mixed non-Gaussianity in multiple-DBI inflation. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 021-021.	1.9	9
54	The intrinsic bispectrum of the cosmic microwave background. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 003-003.	1.9	50

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55	Implications of the Planck bispectrum constraints for the primordial trispectrum. <i>Europhysics Letters</i> , 2013, 103, 19001.	0.7	13
56	Loop corrections and a new test of inflation. <i>Physical Review D</i> , 2013, 87, .	1.6	12
57	Curvaton and the inhomogeneous end of inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 024-024.	1.9	9
58	Inhomogeneous vacuum energy. <i>Classical and Quantum Gravity</i> , 2012, 29, 145017.	1.5	58
59	Local non-Gaussianity from rapidly varying sound speeds. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 005-005.	1.9	17
60	Primordial non-Gaussianity from mixed inflaton-curvaton perturbations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 028-028.	1.9	30
61	Inhomogeneous non-gaussianity. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 012-012.	1.9	25
62	Disentangling non-Gaussianity, bias, and general relativistic effects in the galaxy distribution. <i>Physical Review D</i> , 2012, 85, .	1.6	106
63	Tilted ekpyrosis. <i>Physical Review D</i> , 2011, 84, .	1.6	5
64	Non-Gaussianity and gravitational waves from a quadratic and self-interacting curvaton. <i>Physical Review D</i> , 2011, 83, .	1.6	19
65	Scale dependence of local f_{NL} . <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 034-034.	1.9	96
66	Scalar field perturbations in H_0 -Lifshitz cosmology. <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 013-013.	1.9	72
67	Local non-Gaussianity from inflation. <i>Classical and Quantum Gravity</i> , 2010, 27, 124002.	1.5	94
68	Large-scale perturbations from the waterfall field in hybrid inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2010, 2010, 012-012.	1.9	28
69	Constraints on primordial density perturbations from induced gravitational waves. <i>Physical Review D</i> , 2010, 81, .	1.6	74
70	Cosmological perturbations. <i>Physics Reports</i> , 2009, 475, 1-51.	10.3	450
71	Designs for an asymmetric universe. <i>Nature Physics</i> , 2009, 5, 89-90.	6.5	2
72	Cosmological matching conditions for gravitational waves at second order. <i>Physical Review D</i> , 2009, 80, .	1.6	24

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73	Scale-dependent bias from primordial non-Gaussianity in general relativity. <i>Physical Review D</i> , 2009, 79, .	1.6	57
74	Gravitational waves from an early matter era. <i>Physical Review D</i> , 2009, 79, .	1.6	87
75	Probing Inflation with CMB Polarization. , 2009, , .		252
76	Cosmological Perturbations Through the Big Bang. <i>Advanced Science Letters</i> , 2009, 2, 194-204.	0.2	24
77	Generalized perturbation equations in bouncing cosmologies. <i>Physical Review D</i> , 2008, 77, .	1.6	17
78	Singularities in Loop Quantum Cosmology. <i>Physical Review Letters</i> , 2008, 101, 251302.	2.9	35
79	Non-linear isocurvature perturbations and non-Gaussianities. <i>Journal of Cosmology and Astroparticle Physics</i> , 2008, 2008, 004.	1.9	116
80	Brane-world inflation: Slow-roll corrections to the spectral index. <i>Physical Review D</i> , 2008, 77, .	1.6	8
81	Primordial non-Gaussianities in new ekpyrotic cosmology. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	3
82	Multiple Field Inflation. , 2008, , 275-304.		105
83	Primordial perturbations from slow-roll inflation on a brane. <i>Journal of Cosmology and Astroparticle Physics</i> , 2007, 2007, 001-001.	1.9	12
84	Diagrammatic approach to non-Gaussianity from inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2007, 2007, 027-027.	1.9	59
85	Cosmological matching conditions. <i>Journal of Cosmology and Astroparticle Physics</i> , 2007, 2007, 014-014.	1.9	19
86	Curvature perturbations from ekpyrotic collapse with multiple fields. <i>Classical and Quantum Gravity</i> , 2007, 24, 3919-3931.	1.5	64
87	Ekpyrotic collapse with multiple fields. <i>Journal of Cosmology and Astroparticle Physics</i> , 2007, 2007, 008-008.	1.9	70
88	Non-Gaussianities from ekpyrotic collapse with multiple fields. <i>Journal of Cosmology and Astroparticle Physics</i> , 2007, 2007, 024-024.	1.9	96
89	Cosmological gravitational wave background from primordial density perturbations. <i>Physical Review D</i> , 2007, 75, .	1.6	390
90	On the dynamics of k-essence models. <i>Journal of Physics: Conference Series</i> , 2007, 66, 012031.	0.3	32

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91	Primordial non-Gaussianity from two curvaton decays. <i>Physical Review D</i> , 2007, 76, .	1.6	51
92	Low-energy effective theory for a Randall-Sundrum scenario with a moving bulk brane. <i>Physical Review D</i> , 2007, 75, .	1.6	7
93	Coupled bulk and brane fields about a de Sitter brane. <i>Physical Review D</i> , 2007, 75, .	1.6	12
94	Curvature and isocurvature perturbations from two-field inflation in a slow-roll expansion. <i>Physical Review D</i> , 2006, 74, .	1.6	113
95	Primordial trispectrum from inflation. <i>Physical Review D</i> , 2006, 74, .	1.6	173
96	Scale-invariant perturbations from chaotic inflation. <i>Physical Review D</i> , 2006, 73, .	1.6	21
97	Inflation dynamics and reheating. <i>Reviews of Modern Physics</i> , 2006, 78, 537-589.	16.4	778
98	Non-Gaussian perturbations from multi-field inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2006, 2006, 006-006.	1.9	54
99	Non-Gaussianities in two-field inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2006, 2006, 019-019.	1.9	235
100	Brane-world Cosmology. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	6
101	Non-Gaussianity of the primordial perturbation in the curvaton model. <i>Physical Review D</i> , 2006, 74, .	1.6	308
102	Braneworld flux inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2005, 2005, 002-002.	1.9	9
103	Slow-roll corrections to inflaton fluctuations on a brane. <i>Journal of Cosmology and Astroparticle Physics</i> , 2005, 2005, 009-009.	1.9	17
104	Adiabatic and entropy perturbations with interacting fluids and fields. <i>Journal of Cosmology and Astroparticle Physics</i> , 2005, 2005, 007-007.	1.9	94
105	Induced gravity with a nonminimally coupled scalar field on the brane. <i>Physical Review D</i> , 2005, 71, .	1.6	44
106	Coupled boundary and bulk fields in anti-de Sitter spacetime. <i>Physical Review D</i> , 2005, 72, .	1.6	13
107	Amplitude of dark energy perturbations. <i>Physical Review D</i> , 2005, 71, .	1.6	16
108	Evolution of second-order cosmological perturbations. <i>Classical and Quantum Gravity</i> , 2004, 21, L65-L71.	1.5	148

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109	Cosmological perturbations through a simple bounce. <i>Physical Review D</i> , 2004, 70, .	1.6	127
110	Curvature and isocurvature perturbations in a three-fluid model of curvaton decay. <i>Physical Review D</i> , 2004, 69, .	1.6	42
111	Scalar perturbations from brane-world inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2004, 2004, 002-002.	1.9	35
112	Gravitational waves from brane-world inflation with induced gravity. <i>Physical Review D</i> , 2004, 70, .	1.6	39
113	Inflationary parameters and primordial perturbation spectra. <i>New Astronomy Reviews</i> , 2003, 47, 781-786.	5.2	8
114	Large-scale curvature and entropy perturbations for multiple interacting fluids. <i>Physical Review D</i> , 2003, 67, .	1.6	160
115	Cold dark matter isocurvature perturbation in the curvaton scenario. <i>Physical Review D</i> , 2003, 68, .	1.6	84
116	Conserved cosmological perturbations. <i>Physical Review D</i> , 2003, 68, .	1.6	113
117	Primordial density perturbation in the curvaton scenario. <i>Physical Review D</i> , 2003, 67, .	1.6	609
118	Evolution of gravitational waves in Randall-Sundrum cosmology. <i>Journal of Cosmology and Astroparticle Physics</i> , 2003, 2003, 014-014.	1.9	32
119	Cosmological perturbations in the bulk and on the brane. <i>Physical Review D</i> , 2002, 65, .	1.6	78
120	Conservation Laws for Collisions of Branes and Shells in General Relativity. <i>Physical Review Letters</i> , 2002, 88, 181301.	2.9	42
121	String-inspired cosmology. <i>Classical and Quantum Gravity</i> , 2002, 19, 3403-3416.	1.5	19
122	Cosmology with positive and negative exponential potentials. <i>Classical and Quantum Gravity</i> , 2002, 19, 5435-5447.	1.5	107
123	Correlated Perturbations from Inflation and the Cosmic Microwave Background. <i>Physical Review Letters</i> , 2002, 88, 211302.	2.9	97
124	Observational test of two-field inflation. <i>Physical Review D</i> , 2002, 66, .	1.6	185
125	Generating the curvature perturbation without an inflaton. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2002, 524, 5-14.	1.5	1,102
126	Superhorizon perturbations and preheating. <i>AIP Conference Proceedings</i> , 2001, , .	0.3	1

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127	Cosmic vorticity on the brane. <i>Physical Review D</i> , 2001, 63, .	1.6	24
128	Large-scale cosmological perturbations on the brane. <i>Physical Review D</i> , 2001, 63, .	1.6	128
129	Enhancement of superhorizon scale inflationary curvature perturbations. <i>Physical Review D</i> , 2001, 64, .	1.6	152
130	Gravitational waves from inflation on the brane. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 489, 259-267.	1.5	252
131	Superstring cosmology. <i>Physics Reports</i> , 2000, 337, 343-492.	10.3	390
132	Super-horizon perturbations and preheating. <i>Physical Review D</i> , 2000, 61, .	1.6	71
133	Cosmological perturbation spectra from $SL(4, R)$ -invariant effective actions. <i>Physical Review D</i> , 2000, 61, .	1.6	7
134	Self-similar cosmological solutions with a nonminimally coupled scalar field. <i>Physical Review D</i> , 2000, 61, .	1.6	136
135	Dilaton gravity on the brane. <i>Physical Review D</i> , 2000, 62, .	1.6	148
136	Chaotic inflation on the brane. <i>Physical Review D</i> , 2000, 62, .	1.6	419
137	New approach to the evolution of cosmological perturbations on large scales. <i>Physical Review D</i> , 2000, 62, .	1.6	631
138	Adiabatic and entropy perturbations from inflation. <i>Physical Review D</i> , 2000, 63, .	1.6	581
139	Duality invariance of cosmological perturbation spectra. <i>Physical Review D</i> , 1999, 60, .	1.6	275
140	Dynamics of assisted inflation. <i>Physical Review D</i> , 1999, 59, .	1.6	109
141	Axion perturbation spectra in string cosmologies. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1998, 443, 97-103.	1.5	18
142	Phase-plane analysis of Friedmann-Robertson-Walker cosmologies in Brans-Dicke gravity. <i>Classical and Quantum Gravity</i> , 1998, 15, 3271-3290.	1.5	45
143	Black holes and gravitational waves in string cosmology. <i>Physical Review D</i> , 1998, 58, .	1.6	28
144	Cosmology of the type IIB superstring. <i>Physical Review D</i> , 1998, 57, R625-R629.	1.6	13

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145	Exponential potentials and cosmological scaling solutions. <i>Physical Review D</i> , 1998, 57, 4686-4690.	1.6	1,065
146	Symmetries for generating string cosmologies. <i>Physical Review D</i> , 1998, 58, .	1.6	9
147	AXION-DILATON FLUCTUATIONS IN STRING COSMOLOGY. , 1998, , .		0
148	Vacuum fluctuations in axion-dilaton cosmologies. <i>Physical Review D</i> , 1997, 56, 874-888.	1.6	101
149	Normalization of modes in an open universe. <i>Physical Review D</i> , 1997, 55, 4596-4602.	1.6	12
150	S-duality-invariant perturbations in string cosmology. <i>Nuclear Physics B</i> , 1997, 506, 407-420.	0.9	47
151	Tree-level string cosmology. <i>Physical Review D</i> , 1996, 53, 4247-4256.	1.6	96
152	Density perturbations and black hole formation in hybrid inflation. <i>Physical Review D</i> , 1996, 54, 6040-6058.	1.6	547
153	Metric perturbations in two-field inflation. <i>Physical Review D</i> , 1996, 53, 5437-5445.	1.6	214
154	Spectrum of curvature perturbations from hybrid inflation. <i>Physical Review D</i> , 1996, 54, 7181-7185.	1.6	33
155	Open universe Grishchuk-Zelâ€™dovich effect. <i>Physical Review D</i> , 1995, 52, 6750-6759.	1.6	34
156	General relativity as an attractor in scalar-tensor stochastic inflation. <i>Physical Review D</i> , 1995, 52, 5636-5642.	1.6	21
157	String cosmology with a time-dependent antisymmetric tensor potential. <i>Physical Review D</i> , 1995, 51, 1569-1576.	1.6	76
158	Anisotropic scalar-tensor cosmologies. <i>Physical Review D</i> , 1995, 52, 5612-5627.	1.6	55
159	Constraints from inflation on scalar-tensor gravity theories. <i>Physical Review D</i> , 1995, 52, 6739-6749.	1.6	113
160	Massless fields in scalar-tensor cosmologies. <i>Physical Review D</i> , 1995, 51, 477-489.	1.6	75
161	First-order inflation in general relativity. , 1995, , 159-162.		0
162	Extended gravity theories and the Einstein-Hilbert action. <i>Classical and Quantum Gravity</i> , 1994, 11, 269-279.	1.5	312

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163	False vacuum inflation with Einstein gravity. <i>Physical Review D</i> , 1994, 49, 6410-6433.	1.6	881
164	Low energy effective string cosmology. <i>Physical Review D</i> , 1994, 50, 4868-4880.	1.6	150
165	Exponential Potentials, Scaling Solutions and Inflation. <i>Annals of the New York Academy of Sciences</i> , 1993, 688, 647-652.	1.8	99
166	Hyperextended inflation: Dynamics and constraints. <i>Physical Review D</i> , 1992, 45, 2665-2673.	1.6	64
167	There is a big-bubble problem in extended inflation. <i>Physical Review D</i> , 1992, 46, 3655-3658.	1.6	7
168	Observational limits on true vacuum bubbles. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1992, 276, 18-23.	1.5	7