Paul J Steinhardt

List of Publications by Year
in descending order

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216 papers	37,856 citations	7672 79 h-index	3100 193 g-index
221 all docs	221 docs citations	221 times ranked	9962 citing authors

#	Article	IF	Citations
1	Entropy, black holes, and the new cyclic universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 824, 136823.	1.5	11
2	Rapidly descending dark energy and the end of cosmic expansion. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2200539119.	3.3	11
3	Trace Element Conundrum of Natural Quasicrystals. ACS Earth and Space Chemistry, 2021, 5, 676-689.	1.2	6
4	Accidental synthesis of a previously unknown quasicrystal in the first atomic bomb test. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
5	Ultralocality and slow contraction. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 013.	1.9	10
6	Gap Sensitivity Reveals Universal Behaviors in Optimized Photonic Crystal and Disordered Networks. Physical Review Letters, 2021, 127, 037401.	2.9	12
7	The effects of multiple modes and reduced symmetry on the rapidity and robustness of slow contraction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 820, 136490.	1.5	11
8	Dynamical attractors in contracting spacetimes dominated by kinetically coupled scalar fields. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 030.	1.9	3
9	Dark energy, extra dimensions, and the Swampland. Journal of High Energy Physics, 2020, 2020, 1.	1.6	18
10	Are quasicrystals really so rare in the Universe?. American Mineralogist, 2020, 105, 1121-1125.	0.9	4
11	Robustness of slow contraction to cosmic initial conditions. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 030-030.	1.9	25
12	Supersmoothing through slow contraction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 808, 135690.	1.5	35
13	Phoamtonic designs yield sizeable 3D photonic band gaps. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23480-23486.	3.3	21
14	A new kind of cyclic universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 666-672.	1.5	76
15	Stability and the gauge problem in non-perturbative cosmology. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 015-015.	1.9	16
16	Hyperuniform disordered waveguides and devices for near infrared silicon photonics. Scientific Reports, 2019, 9, 20338.	1.6	22
17	Hyperuniformity and anti-hyperuniformity in one-dimensional substitution tilings. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, 3-13.	0.0	24
18	Cosmic history and a candidate parent asteroid for the quasicrystal-bearing meteorite Khatyrka. Earth and Planetary Science Letters, 2018, 490, 122-131.	1.8	41

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19	How Impossible Crystals Came to Earth: A Short History. Rocks and Minerals, 2018, 93, 50-59.	0.0	29
20	Previously unknown quasicrystal periodic approximant found in space. Scientific Reports, 2018, 8, 16271.	1.6	32
21	Bouncing cosmology made simple. Classical and Quantum Gravity, 2018, 35, 135004.	1.5	68
22	On the cosmological implications of the string Swampland. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 784, 271-276.	1.5	387
23	Light Localization in Local Isomorphism Classes of Quasicrystals. Physical Review Letters, 2018, 120, 247401.	2.9	14
24	Pop Goes the Universe. Scientific American, 2017, 316, 32-39.	1.0	23
25	Fully stable cosmological solutions with a non-singular classical bounce. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 764, 289-294.	1.5	99
26	Hollisterite (Al₃Fe), kryachkoite (Al,Cu)₆(Fe,Cu), and stolperite (AlCu): Three new minerals from the Khatyrka CV3 carbonaceous chondrite. American Mineralogist, 2017, 102, 690-693.	0.9	40
27	Hyperuniformity of quasicrystals. Physical Review B, 2017, 95, .	1.1	50
28	Hyperuniformity variation with quasicrystal local isomorphism class. Journal of Physics Condensed Matter, 2017, 29, 204003.	0.7	11
29	Phase equilibria in the nominally Al 65 Cu 23 Fe 12 system at 3, 5 and 21 GPa: Implications for the quasicrystal-bearing Khatyrka meteorite. Physics of the Earth and Planetary Interiors, 2017, 271, 47-56.	0.7	26
30	Evidence of cross-cutting and redox reaction in Khatyrka meteorite reveals metallic-Al minerals formed in outer space. Scientific Reports, 2017, 7, 1637.	1.6	26
31	Shock Synthesis of Five-component Icosahedral Quasicrystals. Scientific Reports, 2017, 7, 15629.	1.6	22
32	Alan Guth and Paul Stein hardt. , 2017, , 652-666.		0
33	Collisions in outer space produced an icosahedral phase in the Khatyrka meteorite never observed previously in the laboratory. Scientific Reports, 2016, 6, 38117.	1.6	55
34	Local growth of icosahedral quasicrystalline tilings. Physical Review B, 2016, 94, .	1.1	16
35	NEC violation in mimetic cosmology revisited. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 132-138.	1.5	54
36	Classically Stable Nonsingular Cosmological Bounces. Physical Review Letters, 2016, 117, 121304.	2.9	119

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37	Reflection quasilattices and the maximal quasilattice. Physical Review B, 2016, 94, .	1.1	2
38	Shock synthesis of quasicrystals with implications for their origin in asteroid collisions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7077-7081.	3.3	112
39	Implications of Planck2015 for inflationary, ekpyrotic and anamorphic bouncing cosmologies. Classical and Quantum Gravity, 2016, 33, 044001.	1.5	52
40	Scale-invariant perturbations in ekpyrotic cosmologies without fine-tuning of initial conditions. Physical Review D, 2015, 92, .	1.6	32
41	4. Natural quasicrystals: A new frontier in mineralogy and its impact on our understanding of matter and the origin of the solar system. , 2015, , 109-126.		0
42	The anamorphic universe. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 001-001.	1.9	25
43	SUPERMASSIVE BLACK HOLES FROM ULTRA-STRONGLY SELF-INTERACTING DARK MATTER. Astrophysical Journal, 2015, 804, 131.	1.6	87
44	Quasicrystals at extreme conditions: The role of pressure in stabilizing icosahedral Al₆₃Cu₂₄Fe₁₃at high temperature. American Mineralogist, 2015, 100, 2412-2418.	0.9	17
45	Decagonite, Al₇₁Ni₂₄Fe₅, a quasicrystal with decagonal symmetry from the Khatyrka CV3 carbonaceous chondrite. American Mineralogist, 2015, 100, 2340-2343.	0.9	61
46	Natural quasicrystal with decagonal symmetry. Scientific Reports, 2015, 5, 9111.	1.6	81
47	Hyperuniform disordered photonic band gap devices for silicon photonics. , 2014, , .		1
48	Isotropic band gaps, optical cavities, and freeform waveguides in hyperuniform disordered photonic solids. Proceedings of SPIE, 2014, , .	0.8	1
49	Scale-free primordial cosmology. Physical Review D, 2014, 89, .	1.6	14
50	Sailing through the big crunch-big bang transition. Physical Review D, 2014, 89, .	1.6	44
51	General mechanism for producing scale-invariant perturbations and small non-Gaussianity in ekpyrotic models. Physical Review D, 2014, 89, .	1.6	44
52	Hyperuniform disordered photonic band gap silicon devices for optical interconnects. , 2014, , .		0
53	Local conformal symmetry in physics and cosmology. Physical Review D, 2014, 89, .	1.6	122
54	Inflationary schism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 142-146.	1.5	107

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55	The quest for forbidden crystals. Mineralogical Magazine, 2014, 78, 467-482.	0.6	15
56	Impact-induced shock and the formation of natural quasicrystals in the early solar system. Nature Communications, 2014, 5, 4040.	5.8	71
57	Big Bang blunder bursts the multiverse bubble. Nature, 2014, 510, 9-9.	13.7	25
58	Silicon waveguides and filters in hyperuniform disordered photonic solids for the near-infrared. , 2014, , .		1
59	Icosahedral AlCuFe quasicrystal at high pressure and temperature and its implications for the stability of icosahedrite. Scientific Reports, 2014, 4, 5869.	1.6	24
60	Planck 2013 results support the cyclic universe. Physical Review D, 2013, 87, .	1.6	54
61	Cyclic cosmology, conformal symmetry and the metastability of the Higgs. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 50-55.	1.5	57
62	Quasicrystals: a brief history of the impossible. Rendiconti Lincei, 2013, 24, 85-91.	1.0	12
63	Publisher's Note: Optical cavities and waveguides in hyperuniform disordered photonic solids [Phys. Rev. B87, 165116 (2013)]. Physical Review B, 2013, 87, .	1.1	1
64	Inflationary paradigm in trouble after Planck2013. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 261-266.	1.5	239
65	New designer dielectric metamaterial with isotropic photonic band gap. , 2013, , .		0
66	Photonic band gap in isotropic hyperuniform disordered solids with low dielectric contrast. Optics Express, 2013, 21, 19972.	1.7	110
67	Isotropic band gaps and freeform waveguides observed in hyperuniform disordered photonic solids. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15886-15891.	3.3	174
68	Hyperuniformity in amorphous silicon based on the measurement of the infinite-wavelength limit of the structure factor. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13250-13254.	3.3	65
69	Nearly hyperuniform network models of amorphous silicon. Physical Review B, 2013, 87, .	1.1	53
70	Khatyrka, a new <scp>CV</scp>3 find from the Koryak Mountains, Eastern Russia. Meteoritics and Planetary Science, 2013, 48, 1499-1514.	0.7	44
71	Nonperturbative analysis of the evolution of cosmological perturbations through a nonsingular bounce. Physical Review D, 2013, 88, .	1.6	52
72	Optical cavities and waveguides in hyperuniform disordered photonic solids. Physical Review B, 2013, 87, .	1.1	66

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73	Freeform wave-guiding at infrared regime in two dimensional disordered photonic bandgap materials. , 2013, , .		1
74	Evidence for the extraterrestrial origin of a natural quasicrystal. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1396-1401.	3.3	94
75	Antigravity and the big crunch/big bang transition. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 715, 278-281.	1.5	88
76	Complete set of homogeneous isotropic analytic solutions in scalar-tensor cosmology with radiation and curvature. Physical Review D, 2012, 86, .	1.6	36
77	In search of natural quasicrystals. Reports on Progress in Physics, 2012, 75, 092601.	8.1	40
78	Freeform wave-guiding and tunable frequency splitting in isotropic disordered photonic band gap materials. , 2012, , .		0
79	Cavity Modes Study in Hyperuniform Disordered Photonic Bandgap Materials. , 2012, , .		0
80	Photonic Band Gaps and Unusual Photon Transport in Hyperuniform Disordered Structures. , 2012, , .		0
81	Evolution of curvature and anisotropy near a nonsingular bounce. Physical Review D, 2011, 84, .	1.6	46
82	Icosahedrite, Al63Cu24Fe13, the first natural quasicrystal. American Mineralogist, 2011, 96, 928-931.	0.9	165
83	The Inflation Debate. Scientific American, 2011, 304, 36-43.	1.0	59
84	Cosmological problems with multiple axion-like fields. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 001-001.	1.9	16
85	Dynamical Selection of the Primordial Density Fluctuation Amplitude. Physical Review Letters, 2011, 106, 081301.	2.9	13
86	Generating scale-invariant perturbations from rapidly-evolving equation of state. Physical Review D, 2011, 83, .	1.6	40
87	Once upon a time in Kamchatka: the search for natural quasicrystals. Philosophical Magazine, 2011, 91, 2421-2426.	0.7	6
88	Effects of random link removal on the photonic band gaps of honeycomb networks. Applied Physics Letters, 2010, 97, .	1.5	23
89	Testing Inflation: A Bootstrap Approach. Physical Review Letters, 2010, 105, 241301.	2.9	4
90	Unstable Growth of Curvature Perturbations in Nonsingular Bouncing Cosmologies. Physical Review Letters, 2010, 105, 261301.	2.9	41

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91	Adiabatic Ekpyrosis: Scale-Invariant Curvature Perturbations from a Single Scalar Field in a Contracting Universe. Physical Review Letters, 2010, 104, 091301.	2.9	50
92	Experimental observation of photonic bandgaps in hyperuniform disordered material. , 2010, , .		1
93	THE RETURN OF THE PHOENIX UNIVERSE. International Journal of Modern Physics D, 2009, 18, 2231-2235.	0.9	29
94	Designer disordered materials with large, complete photonic band gaps. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20658-20663.	3.3	363
95	Natural Quasicrystals. Science, 2009, 324, 1306-1309.	6.0	243
96	Complete band gaps in two-dimensional photonic quasicrystals. Physical Review B, 2009, 80, .	1.1	109
97	Non-Gaussianity generated by the entropic mechanism in bouncing cosmologies made simple. Physical Review D, 2009, 80, .	1.6	34
98	Dark energy, inflation, and extra dimensions. Physical Review D, 2009, 79, .	1.6	53
99	Dark energy and the return of the phoenix universe. Physical Review D, 2009, 79, .	1.6	40
100	How does your quasicrystal grow?. Nature, 2008, 452, 43-44.	13.7	33
101	Non-Gaussian density fluctuations from entropically generated curvature perturbations in ekpyrotic models. Physical Review D, 2008, 77, .	1.6	93
102	Probing the early universe with inflationary gravitational waves. Physical Review D, 2008, 77, .	1.6	180
103	Intuitive understanding of non-Gaussianity in ekpyrotic and cyclic models. Physical Review D, 2008, 78, .	1.6	72
104	Optimized Structures for Photonic Quasicrystals. Physical Review Letters, 2008, 101, 073902.	2.9	96
105	Evolution to a smooth universe in an ekpyrotic contracting phase with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>w</mml:mi><mml:mo>></mml:mo><mml:mn>1</mml:mn></mml:math>. Physical Review D, 2008, 78, .	1.6	73
106	Further Notes on Quasi-Crystal Tilings. Science, 2007, 316, 981-982.	6.0	11
107	Constraints on the interactions between dark matter and baryons from the x-ray quantum calorimetry experiment. Physical Review D, 2007, 76, .	1.6	73
108	Solution of a braneworld big crunch/big bang cosmology. Physical Review D, 2007, 76, .	1.6	20

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109	Decagonal and Quasi-Crystalline Tilings in Medieval Islamic Architecture. Science, 2007, 315, 1106-1110.	6.0	185
110	Response to Comment on "Decagonal and Quasi-Crystalline Tilings in Medieval Islamic Architecture". Science, 2007, 318, 1383-1383.	6.0	12
111	Gravitational wave spectrum induced by primordial scalar perturbations. Physical Review D, 2007, 76, .	1.6	417
112	Cosmic perturbations through the cyclic ages. Physical Review D, 2007, 75, .	1.6	34
113	Generating ekpyrotic curvature perturbations before the big bang. Physical Review D, 2007, 76, .	1.6	164
114	A Delicate Universe: Compactification Obstacles to D-brane Inflation. Physical Review Letters, 2007, 99, 141601.	2.9	133
115	Why the Cosmological Constant Is Small and Positive. Science, 2006, 312, 1180-1183.	6.0	110
116	Inflationary Predictions for Scalar and Tensor Fluctuations Reconsidered. Physical Review Letters, 2006, 96, 111301.	2.9	77
117	Quintessential Ideas. Physica Scripta, 2005, , 34.	1.2	3
118	The cyclic model simplified. New Astronomy Reviews, 2005, 49, 43-57.	5.2	80
119	Experimental measurement of the photonic properties of icosahedral quasicrystals. Nature, 2005, 436, 993-996.	13.7	218
120	Publisher's Note: M theory model of a big crunch/big bang transition [Phys. Rev. D70, 106004 (2004)]. Physical Review D, 2005, 71, .	1.6	35
121	Controlling chaos through compactification in cosmological models with a collapsing phase. Physical Review D, 2005, 72, .	1.6	18
122	Dynamical dark energy: Current constraints and forecasts. Physical Review D, 2005, 72, .	1.6	154
123	Beyond Inflation A Cyclic Universe Scenario. Physica Scripta, 2005, , 76.	1.2	23
124	Beyond Inflation: A Cyclic Universe Scenario. , 2005, , .		1
125	Quintessential Ideas. , 2005, , .		0
126	New duality relating density perturbations in expanding and contracting Friedmann cosmologies. Physical Review D, 2004, 70, .	1.6	49

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127	Kasner and mixmaster behavior in universes with equation of statew›~1. Physical Review D, 2004, 69, .	1.6	205
128	Cosmological perturbations in a big-crunchâ€“big-bang space-time. Physical Review D, 2004, 69, .	1.6	102
129	Conditions for generating scale-invariant density perturbations. Physical Review D, 2004, 69, .	1.6	76
130	COSMOLOGICAL PERTURBATIONS: MYTHS AND FACTS. Modern Physics Letters A, 2004, 19, 967-982.	0.5	6
131	Gravitational Baryogenesis. Physical Review Letters, 2004, 93, 201301.	2.9	178
132	M theory model of a big crunch/big bang transition. Physical Review D, 2004, 70, .	1.6	65
133	Designing Cyclic Universe Models. Physical Review Letters, 2004, 92, 031302.	2.9	160
134	Cosmic gravitational-wave background in a cyclic universe. Physical Review D, 2004, 69, .	1.6	100
135	ASTROPHYSICS: Precision Cosmology? Not Just Yet . . .. Science, 2003, 299, 1532-1533.	6.0	195
136	Beyond the inflationary border. Nature, 2003, 423, 817-818.	13.7	3
137	New Light on Dark Matter. Science, 2003, 300, 1909-1913.	6.0	129
138	Rules for computing symmetry, density, and stoichiometry in a quasi-unit-cell model of quasicrystals. Physical Review B, 2003, 68, .	1.1	8
139	Effects of the sound speed of quintessence on the microwave background and large scale structure. Physical Review D, 2003, 67, .	1.6	107
140	Inflation versus Cyclic Predictions for Spectral Tilt. Physical Review Letters, 2003, 91, 161301.	2.9	75
141	A quintessential introduction to dark energy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 2497-2513.	1.6	106
142	From big crunch to big bang. Physical Review D, 2002, 65, .	1.6	485
143	Sensitivity of the cosmic microwave background anisotropy to initial conditions in quintessence cosmology. Physical Review D, 2002, 66, .	1.6	56
144	Density perturbations in the ekpyrotic scenario. Physical Review D, 2002, 66, .	1.6	207

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145	Is vacuum decay significant in ekpyrotic and cyclic models?. Physical Review D, 2002, 66, .	1.6	9
146	Measuring the Speed of Sound of Quintessence. Physical Review Letters, 2002, 88, 121301.	2.9	132
147	A Cyclic Model of the Universe. Science, 2002, 296, 1436-1439.	6.0	416
148	Cosmic evolution in a cyclic universe. Physical Review D, 2002, 65, .	1.6	580
149	Measuring the equation of state of the universe: Pitfalls and prospects. Physical Review D, 2002, 65, .	1.6	168
150	Ekpyrotic universe: Colliding branes and the origin of the hot big bang. Physical Review D, 2001, 64, .	1.6	1,150
151	Essentials ofk-essence. Physical Review D, 2001, 63, .	1.6	1,402
152	Limitations in Using Luminosity Distance to Determine the Equation of State of the Universe. Physical Review Letters, 2001, 86, 6-9.	2.9	176
153	Halo Properties in Cosmological Simulations of Selfâ€interacting Cold Dark Matter. Astrophysical Journal, 2001, 547, 574-589.	1.6	301
154	A Simple Method for Computing the Nonlinear Mass Correlation Function with Implications for Stable Clustering. Astrophysical Journal, 2001, 547, L93-L96.	1.6	7
155	The quintessential universe. AIP Conference Proceedings, 2001, , .	0.3	2
156	The Quintessential Universe. Scientific American, 2001, 284, 46-53.	1.0	29
157	Q-Ball Candidates for Self-Interacting Dark Matter. Physical Review Letters, 2001, 87, 141301.	2.9	130
158	Inflationary solutions in the brane world and their geometrical interpretation. Physical Review D, 2001, 63, .	1.6	10
159	Identifying and Indexing Icosahedral Quasicrystals from Powder Diffraction Patterns. Physical Review Letters, 2001, 87, 275507.	2.9	31
160	Self-Interacting Dark Matter. , 2001, , 263-274.		21
161	Quintessence and Cosmic Acceleration. , 2001, , 143-176.		2
162	Quintessence and the Missing Energy Problem. , 2001, , .		0

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163	A cosmological mechanism for stabilizing moduli. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 476, 379-386.	1.5	82
164	Atomic structure of the quasicrystal Al72Ni20Co8. Nature, 2000, 403, 267-267.	13.7	18
165	Penrose tilings, cluster models and the quasi-unit cell picture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 294-296, 205-210.	2.6	8
166	Quasi-Unit-Cell Model for an Al-Ni-Co Ideal Quasicrystal based on Clusters with Broken Tenfold Symmetry. Physical Review Letters, 2000, 84, 4609-4612.	2.9	107
167	Dynamical Solution to the Problem of a Small Cosmological Constant and Late-Time Cosmic Acceleration. Physical Review Letters, 2000, 85, 4438-4441.	2.9	1,572
168	Observational Evidence for Self-Interacting Cold Dark Matter. Physical Review Letters, 2000, 84, 3760-3763.	2.9	1,538
169	Cosmic Concordance and Quintessence. Astrophysical Journal, 2000, 530, 17-35.	1.6	402
170	Resolving the cosmological missing energy problem. Physical Review D, 1999, 59, .	1.6	128
171	A tracker solution to the cold dark matter cosmic coincidence problem. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 459, 570-574.	1.5	73
172	General considerations of the cosmological constant and the stabilization of moduli in the brane-world picture. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 462, 41-47.	1.5	38
173	Quintessence, Cosmic Coincidence, and the Cosmological Constant. Physical Review Letters, 1999, 82, 896-899.	2.9	2,039
174	The Cosmic Triangle: Revealing the State of the Universe. Science, 1999, 284, 1481-1488.	6.0	976
175	A New Paradigm for the Structure of Quasicrystals. Series on Directions in Condensed Matter Physics, 1999, , 603-618.	0.1	4
176	Cosmological tracking solutions. Physical Review D, 1999, 59, .	1.6	1,217
177	Experimental verification of the quasi-unit-cell model of quasicrystal structure. Nature, 1998, 396, 55-57.	13.7	160
178	Density perturbations in multifield inflationary models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 422, 52-60.	1.5	59
179	Cosmological Imprint of an Energy Component with General Equation of State. Physical Review Letters, 1998, 80, 1582-1585.	2.9	2,967
180	Parametric resonance in an expanding universe. Physical Review D, 1998, 57, 2152-2157.	1.6	36

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181	Imprint of gravitational waves in models dominated by a dynamical cosmic scalar field. Physical Review D, 1998, 57, 6057-6064.	1.6	59
182	Cluster Abundance Constraints for Cosmological Models with a Timeâ€varying, Spatially Inhomogeneous Energy Component with Negative Pressure. Astrophysical Journal, 1998, 508, 483-490.	1.6	761
183	Constructing Penrose-like tilings from a single prototile and the implications for quasicrystals. Physical Review B, 1997, 55, 3520-3532.	1.1	84
184	On the problem of predicting inflationary perturbations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 414, 18-27.	1.5	77
185	New perspectives on forbidden symmetries, quasicrystals, and Penrose tilings. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 14267-14270.	3.3	17
186	A simpler approach to Penrose tiling with implications for quasicrystal formation. Nature, 1996, 382, 431-433.	13.7	65
187	Missing energy and cosmic expansion. Nature, 1996, 382, 768-768.	13.7	16
188	The observational case for a low-density Universe with a non-zero cosmological constant. Nature, 1995, 377, 600-602.	13.7	570
189	Modular cosmology. Physical Review D, 1995, 52, 3548-3562.	1.6	126
190	High-frequency oscillations of Newtonâ€™s constant induced by inflation. Physical Review D, 1995, 52, 628-639.	1.6	36
191	COSMOLOGY CONFRONTS THE COSMIC MICROWAVE BACKGROUND. International Journal of Modern Physics A, 1995, 10, 1091-1124.	0.5	18
192	Measuring cosmological parameters with cosmic microwave background experiments. Physical Review Letters, 1994, 72, 13-16.	2.9	98
193	Cluster Approach for Quasicrystals. Physical Review Letters, 1994, 73, 1943-1946.	2.9	67
194	Challenges for superstring cosmology. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 302, 196-201.	1.5	213
195	Cosmic Microwave Background Probes Models of Inflation. Physical Review Letters, 1993, 70, 1733-1733.	2.9	12
196	Imprint of gravitational waves on the cosmic microwave background. Physical Review Letters, 1993, 71, 324-327.	2.9	141
197	Cosmic microwave background probes models of inflation. Physical Review Letters, 1992, 69, 1856-1859.	2.9	162
198	New constraints and improvements on oscillating physics. Astrophysical Journal, 1992, 395, 360.	1.6	14

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199	Cosmological consequences of high-frequency oscillations of Newtonâ€™s constant. Physical Review Letters, 1991, 67, 298-301.	2.9	15
200	Can oscillating physics explain an apparently periodic universe?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 252, 343-348.	1.5	38
201	Matching rules and growth rules for pentagonal quasicrystal tilings. Physical Review Letters, 1990, 64, 2034-2037.	2.9	20
202	Hyperextended inflation. Physical Review Letters, 1990, 64, 2740-2743.	2.9	291
203	Bubble percolation in extended inflationary models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 220, 375-378.	1.5	138
204	Extended Inflationary Cosmology. Physical Review Letters, 1989, 62, 376-378.	2.9	784
205	Growing Perfect Quasicrystals. Physical Review Letters, 1988, 60, 2653-2656.	2.9	105
206	Quasicrystals. II. Unit-cell configurations. Physical Review B, 1986, 34, 617-647.	1.1	345
207	Quasicrystals. I. Definition and structure. Physical Review B, 1986, 34, 596-616.	1.1	614
208	Phonons, phasons, and dislocations in quasicrystals. Physical Review B, 1986, 34, 3345-3360.	1.1	399
209	Distortion and Peak Broadening in Quasicrystal Diffraction Patterns. Physical Review Letters, 1986, 57, 1440-1443.	2.9	252
210	Quasicrystals with arbitrary orientational symmetry. Physical Review B, 1985, 32, 5547-5550.	1.1	138
211	Prescription for successful new inflation. Physical Review D, 1984, 29, 2162-2171.	1.6	214
212	Spontaneous creation of almost scale-free density perturbations in an inflationary universe. Physical Review D, 1983, 28, 679-693.	1.6	1,641
213	Displacement vector and energy of a screw dislocation in a Lennard-Jones amorphous solid. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1982, 46, 25-30.	0.8	10
214	Reheating an Inflationary Universe. Physical Review Letters, 1982, 48, 1437-1440.	2.9	462
215	Cosmology for Grand Unified Theories with Radiatively Induced Symmetry Breaking. Physical Review Letters, 1982, 48, 1220-1223.	2.9	3,917
216	Icosahedral Bond Orientational Order in Supercooled Liquids. Physical Review Letters, 1981, 47, 1297-1300.	2.9	362