

Paul J Steinhardt

List of Publications by Year in descending order

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216
papers

37,856
citations

6613

79
h-index

2684

193
g-index

221
all docs

221
docs citations

221
times ranked

9026
citing authors

#	ARTICLE	IF	CITATIONS
1	Cosmology for Grand Unified Theories with Radiatively Induced Symmetry Breaking. Physical Review Letters, 1982, 48, 1220-1223.	7.8	3,917
2	Cosmological Imprint of an Energy Component with General Equation of State. Physical Review Letters, 1998, 80, 1582-1585.	7.8	2,967
3	Quintessence, Cosmic Coincidence, and the Cosmological Constant. Physical Review Letters, 1999, 82, 896-899.	7.8	2,039
4	Spontaneous creation of almost scale-free density perturbations in an inflationary universe. Physical Review D, 1983, 28, 679-693.	4.7	1,641
5	Dynamical Solution to the Problem of a Small Cosmological Constant and Late-Time Cosmic Acceleration. Physical Review Letters, 2000, 85, 4438-4441.	7.8	1,572
6	Observational Evidence for Self-Interacting Cold Dark Matter. Physical Review Letters, 2000, 84, 3760-3763.	7.8	1,538
7	Essentials of k-essence. Physical Review D, 2001, 63, .	4.7	1,402
8	Cosmological tracking solutions. Physical Review D, 1999, 59, .	4.7	1,217
9	Ekyrotic universe: Colliding branes and the origin of the hot big bang. Physical Review D, 2001, 64, .	4.7	1,150
10	The Cosmic Triangle: Revealing the State of the Universe. Science, 1999, 284, 1481-1488.	12.6	976
11	Extended Inflationary Cosmology. Physical Review Letters, 1989, 62, 376-378.	7.8	784
12	Cluster Abundance Constraints for Cosmological Models with a Time-varying, Spatially Inhomogeneous Energy Component with Negative Pressure. Astrophysical Journal, 1998, 508, 483-490.	4.5	761
13	Quasicrystals. I. Definition and structure. Physical Review B, 1986, 34, 596-616.	3.2	614
14	Cosmic evolution in a cyclic universe. Physical Review D, 2002, 65, .	4.7	580
15	The observational case for a low-density Universe with a non-zero cosmological constant. Nature, 1995, 377, 600-602.	27.8	570
16	From big crunch to big bang. Physical Review D, 2002, 65, .	4.7	485
17	Reheating an Inflationary Universe. Physical Review Letters, 1982, 48, 1437-1440.	7.8	462
18	Gravitational wave spectrum induced by primordial scalar perturbations. Physical Review D, 2007, 76, .	4.7	417

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19	A Cyclic Model of the Universe. <i>Science</i> , 2002, 296, 1436-1439.	12.6	416
20	Cosmic Concordance and Quintessence. <i>Astrophysical Journal</i> , 2000, 530, 17-35.	4.5	402
21	Phonons, phasons, and dislocations in quasicrystals. <i>Physical Review B</i> , 1986, 34, 3345-3360.	3.2	399
22	On the cosmological implications of the string Swampland. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 784, 271-276.	4.1	387
23	Designer disordered materials with large, complete photonic band gaps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 20658-20663.	7.1	363
24	Icosahedral Bond Orientational Order in Supercooled Liquids. <i>Physical Review Letters</i> , 1981, 47, 1297-1300.	7.8	362
25	Quasicrystals. II. Unit-cell configurations. <i>Physical Review B</i> , 1986, 34, 617-647.	3.2	345
26	Halo Properties in Cosmological Simulations of Self-Interacting Cold Dark Matter. <i>Astrophysical Journal</i> , 2001, 547, 574-589.	4.5	301
27	Hyperextended inflation. <i>Physical Review Letters</i> , 1990, 64, 2740-2743.	7.8	291
28	Distortion and Peak Broadening in Quasicrystal Diffraction Patterns. <i>Physical Review Letters</i> , 1986, 57, 1440-1443.	7.8	252
29	Natural Quasicrystals. <i>Science</i> , 2009, 324, 1306-1309.	12.6	243
30	Inflationary paradigm in trouble after Planck2013. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 723, 261-266.	4.1	239
31	Experimental measurement of the photonic properties of icosahedral quasicrystals. <i>Nature</i> , 2005, 436, 993-996.	27.8	218
32	Prescription for successful new inflation. <i>Physical Review D</i> , 1984, 29, 2162-2171.	4.7	214
33	Challenges for superstring cosmology. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1993, 302, 196-201.	4.1	213
34	Density perturbations in the ekpyrotic scenario. <i>Physical Review D</i> , 2002, 66, .	4.7	207
35	Kasner and mixmaster behavior in universes with equation of state $w > -1$. <i>Physical Review D</i> , 2004, 69, .	4.7	205
36	ASTROPHYSICS: Precision Cosmology? Not Just Yet . . . <i>Science</i> , 2003, 299, 1532-1533.	12.6	195

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37	Decagonal and Quasi-Crystalline Tilings in Medieval Islamic Architecture. <i>Science</i> , 2007, 315, 1106-1110.	12.6	185
38	Probing the early universe with inflationary gravitational waves. <i>Physical Review D</i> , 2008, 77, .	4.7	180
39	Gravitational Baryogenesis. <i>Physical Review Letters</i> , 2004, 93, 201301.	7.8	178
40	Limitations in Using Luminosity Distance to Determine the Equation of State of the Universe. <i>Physical Review Letters</i> , 2001, 86, 6-9.	7.8	176
41	Isotropic band gaps and freeform waveguides observed in hyperuniform disordered photonic solids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15886-15891.	7.1	174
42	Measuring the equation of state of the universe: Pitfalls and prospects. <i>Physical Review D</i> , 2002, 65, .	4.7	168
43	Icosahedrite, Al ₆₃ Cu ₂₄ Fe ₁₃ , the first natural quasicrystal. <i>American Mineralogist</i> , 2011, 96, 928-931.	1.9	165
44	Generating ekpyrotic curvature perturbations before the big bang. <i>Physical Review D</i> , 2007, 76, .	4.7	164
45	Cosmic microwave background probes models of inflation. <i>Physical Review Letters</i> , 1992, 69, 1856-1859.	7.8	162
46	Experimental verification of the quasi-unit-cell model of quasicrystal structure. <i>Nature</i> , 1998, 396, 55-57.	27.8	160
47	Designing Cyclic Universe Models. <i>Physical Review Letters</i> , 2004, 92, 031302.	7.8	160
48	Dynamical dark energy: Current constraints and forecasts. <i>Physical Review D</i> , 2005, 72, .	4.7	154
49	Imprint of gravitational waves on the cosmic microwave background. <i>Physical Review Letters</i> , 1993, 71, 324-327.	7.8	141
50	Quasicrystals with arbitrary orientational symmetry. <i>Physical Review B</i> , 1985, 32, 5547-5550.	3.2	138
51	Bubble percolation in extended inflationary models. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1989, 220, 375-378.	4.1	138
52	A Delicate Universe: Compactification Obstacles to D-brane Inflation. <i>Physical Review Letters</i> , 2007, 99, 141601.	7.8	133
53	Measuring the Speed of Sound of Quintessence. <i>Physical Review Letters</i> , 2002, 88, 121301.	7.8	132
54	Q-Ball Candidates for Self-Interacting Dark Matter. <i>Physical Review Letters</i> , 2001, 87, 141301.	7.8	130

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55	New Light on Dark Matter. <i>Science</i> , 2003, 300, 1909-1913.	12.6	129
56	Resolving the cosmological missing energy problem. <i>Physical Review D</i> , 1999, 59, .	4.7	128
57	Modular cosmology. <i>Physical Review D</i> , 1995, 52, 3548-3562.	4.7	126
58	Local conformal symmetry in physics and cosmology. <i>Physical Review D</i> , 2014, 89, .	4.7	122
59	Classically Stable Nonsingular Cosmological Bounces. <i>Physical Review Letters</i> , 2016, 117, 121304.	7.8	119
60	Shock synthesis of quasicrystals with implications for their origin in asteroid collisions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 7077-7081.	7.1	112
61	Why the Cosmological Constant Is Small and Positive. <i>Science</i> , 2006, 312, 1180-1183.	12.6	110
62	Photonic band gap in isotropic hyperuniform disordered solids with low dielectric contrast. <i>Optics Express</i> , 2013, 21, 19972.	3.4	110
63	Complete band gaps in two-dimensional photonic quasicrystals. <i>Physical Review B</i> , 2009, 80, .	3.2	109
64	Quasi-Unit-Cell Model for an Al-Ni-Co Ideal Quasicrystal based on Clusters with Broken Tenfold Symmetry. <i>Physical Review Letters</i> , 2000, 84, 4609-4612.	7.8	107
65	Effects of the sound speed of quintessence on the microwave background and large scale structure. <i>Physical Review D</i> , 2003, 67, .	4.7	107
66	Inflationary schism. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 736, 142-146.	4.1	107
67	A quintessential introduction to dark energy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003, 361, 2497-2513.	3.4	106
68	Growing Perfect Quasicrystals. <i>Physical Review Letters</i> , 1988, 60, 2653-2656.	7.8	105
69	Cosmological perturbations in a big-crunchâ€“big-bang space-time. <i>Physical Review D</i> , 2004, 69, .	4.7	102
70	Cosmic gravitational-wave background in a cyclic universe. <i>Physical Review D</i> , 2004, 69, .	4.7	100
71	Fully stable cosmological solutions with a non-singular classical bounce. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 764, 289-294.	4.1	99
72	Measuring cosmological parameters with cosmic microwave background experiments. <i>Physical Review Letters</i> , 1994, 72, 13-16.	7.8	98

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73	Optimized Structures for Photonic Quasicrystals. <i>Physical Review Letters</i> , 2008, 101, 073902.	7.8	96
74	Evidence for the extraterrestrial origin of a natural quasicrystal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1396-1401.	7.1	94
75	Non-Gaussian density fluctuations from entropically generated curvature perturbations in ekpyrotic models. <i>Physical Review D</i> , 2008, 77, .	4.7	93
76	Antigravity and the big crunch/big bang transition. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 715, 278-281.	4.1	88
77	SUPERMASSIVE BLACK HOLES FROM ULTRA-STRONGLY SELF-INTERACTING DARK MATTER. <i>Astrophysical Journal</i> , 2015, 804, 131.	4.5	87
78	Constructing Penrose-like tilings from a single prototile and the implications for quasicrystals. <i>Physical Review B</i> , 1997, 55, 3520-3532.	3.2	84
79	A cosmological mechanism for stabilizing moduli. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 476, 379-386.	4.1	82
80	Natural quasicrystal with decagonal symmetry. <i>Scientific Reports</i> , 2015, 5, 9111.	3.3	81
81	The cyclic model simplified. <i>New Astronomy Reviews</i> , 2005, 49, 43-57.	12.8	80
82	On the problem of predicting inflationary perturbations. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 414, 18-27.	4.1	77
83	Inflationary Predictions for Scalar and Tensor Fluctuations Reconsidered. <i>Physical Review Letters</i> , 2006, 96, 111301.	7.8	77
84	Conditions for generating scale-invariant density perturbations. <i>Physical Review D</i> , 2004, 69, .	4.7	76
85	A new kind of cyclic universe. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 795, 666-672.	4.1	76
86	Inflation versus Cyclic Predictions for Spectral Tilt. <i>Physical Review Letters</i> , 2003, 91, 161301.	7.8	75
87	A tracker solution to the cold dark matter cosmic coincidence problem. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 459, 570-574.	4.1	73
88	Constraints on the interactions between dark matter and baryons from the x-ray quantum calorimetry experiment. <i>Physical Review D</i> , 2007, 76, .	4.7	73
89	Evolution to a smooth universe in an ekpyrotic contracting phase with $w < -1$. <i>Physical Review D</i> , 2008, 78, .	4.7	73
90	Intuitive understanding of non-Gaussianity in ekpyrotic and cyclic models. <i>Physical Review D</i> , 2008, 78, .	4.7	72

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91	Impact-induced shock and the formation of natural quasicrystals in the early solar system. <i>Nature Communications</i> , 2014, 5, 4040.	12.8	71
92	Bouncing cosmology made simple. <i>Classical and Quantum Gravity</i> , 2018, 35, 135004.	4.0	68
93	Cluster Approach for Quasicrystals. <i>Physical Review Letters</i> , 1994, 73, 1943-1946.	7.8	67
94	Optical cavities and waveguides in hyperuniform disordered photonic solids. <i>Physical Review B</i> , 2013, 87, .	3.2	66
95	A simpler approach to Penrose tiling with implications for quasicrystal formation. <i>Nature</i> , 1996, 382, 431-433.	27.8	65
96	M theory model of a big crunch/big bang transition. <i>Physical Review D</i> , 2004, 70, .	4.7	65
97	Hyperuniformity in amorphous silicon based on the measurement of the infinite-wavelength limit of the structure factor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13250-13254.	7.1	65
98	Decagonite, Al ₇₁ Ni ₂₄ Fe ₅ , a quasicrystal with decagonal symmetry from the Khatyrka CV3 carbonaceous chondrite. <i>American Mineralogist</i> , 2015, 100, 2340-2343.	1.9	61
99	Density perturbations in multifield inflationary models. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1998, 422, 52-60.	4.1	59
100	Imprint of gravitational waves in models dominated by a dynamical cosmic scalar field. <i>Physical Review D</i> , 1998, 57, 6057-6064.	4.7	59
101	The Inflation Debate. <i>Scientific American</i> , 2011, 304, 36-43.	1.0	59
102	Cyclic cosmology, conformal symmetry and the metastability of the Higgs. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 726, 50-55.	4.1	57
103	Sensitivity of the cosmic microwave background anisotropy to initial conditions in quintessence cosmology. <i>Physical Review D</i> , 2002, 66, .	4.7	56
104	Collisions in outer space produced an icosahedral phase in the Khatyrka meteorite never observed previously in the laboratory. <i>Scientific Reports</i> , 2016, 6, 38117.	3.3	55
105	Planck 2013 results support the cyclic universe. <i>Physical Review D</i> , 2013, 87, .	4.7	54
106	NEC violation in mimetic cosmology revisited. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 760, 132-138.	4.1	54
107	Dark energy, inflation, and extra dimensions. <i>Physical Review D</i> , 2009, 79, .	4.7	53
108	Nearly hyperuniform network models of amorphous silicon. <i>Physical Review B</i> , 2013, 87, .	3.2	53

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109	Nonperturbative analysis of the evolution of cosmological perturbations through a nonsingular bounce. <i>Physical Review D</i> , 2013, 88, .	4.7	52
110	Implications of Planck2015 for inflationary, ekpyrotic and anamorphic bouncing cosmologies. <i>Classical and Quantum Gravity</i> , 2016, 33, 044001.	4.0	52
111	Adiabatic Ekpyrosis: Scale-Invariant Curvature Perturbations from a Single Scalar Field in a Contracting Universe. <i>Physical Review Letters</i> , 2010, 104, 091301.	7.8	50
112	Hyperuniformity of quasicrystals. <i>Physical Review B</i> , 2017, 95, .	3.2	50
113	New duality relating density perturbations in expanding and contracting Friedmann cosmologies. <i>Physical Review D</i> , 2004, 70, .	4.7	49
114	Evolution of curvature and anisotropy near a nonsingular bounce. <i>Physical Review D</i> , 2011, 84, .	4.7	46
115	Khatyrka, a new CV_3 find from the Koryak Mountains, Eastern Russia. <i>Meteoritics and Planetary Science</i> , 2013, 48, 1499-1514.	1.6	44
116	Sailing through the big crunch-big bang transition. <i>Physical Review D</i> , 2014, 89, .	4.7	44
117	General mechanism for producing scale-invariant perturbations and small non-Gaussianity in ekpyrotic models. <i>Physical Review D</i> , 2014, 89, .	4.7	44
118	Unstable Growth of Curvature Perturbations in Nonsingular Bouncing Cosmologies. <i>Physical Review Letters</i> , 2010, 105, 261301.	7.8	41
119	Cosmic history and a candidate parent asteroid for the quasicrystal-bearing meteorite Khatyrka. <i>Earth and Planetary Science Letters</i> , 2018, 490, 122-131.	4.4	41
120	Dark energy and the return of the phoenix universe. <i>Physical Review D</i> , 2009, 79, .	4.7	40
121	Generating scale-invariant perturbations from rapidly-evolving equation of state. <i>Physical Review D</i> , 2011, 83, .	4.7	40
122	In search of natural quasicrystals. <i>Reports on Progress in Physics</i> , 2012, 75, 092601.	20.1	40
123	Hollisterite (Al_3Fe), kryachkoite ($Al_6Cu_6(Fe,Cu)$), and stolperite ($AlCu$): Three new minerals from the Khatyrka CV_3 carbonaceous chondrite. <i>American Mineralogist</i> , 2017, 102, 690-693.	1.9	40
124	Can oscillating physics explain an apparently periodic universe?. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 252, 343-348.	4.1	38
125	General considerations of the cosmological constant and the stabilization of moduli in the brane-world picture. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 462, 41-47.	4.1	38
126	High-frequency oscillations of Newton's constant induced by inflation. <i>Physical Review D</i> , 1995, 52, 628-639.	4.7	36

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127	Parametric resonance in an expanding universe. <i>Physical Review D</i> , 1998, 57, 2152-2157.	4.7	36
128	Complete set of homogeneous isotropic analytic solutions in scalar-tensor cosmology with radiation and curvature. <i>Physical Review D</i> , 2012, 86, .	4.7	36
129	Publisher's Note: M theory model of a big crunch/big bang transition [<i>Phys. Rev. D</i> 70, 106004 (2004)]. <i>Physical Review D</i> , 2005, 71, .	4.7	35
130	Supersmoothing through slow contraction. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 808, 135690.	4.1	35
131	Cosmic perturbations through the cyclic ages. <i>Physical Review D</i> , 2007, 75, .	4.7	34
132	Non-Gaussianity generated by the entropic mechanism in bouncing cosmologies made simple. <i>Physical Review D</i> , 2009, 80, .	4.7	34
133	How does your quasicrystal grow?. <i>Nature</i> , 2008, 452, 43-44.	27.8	33
134	Scale-invariant perturbations in ekpyrotic cosmologies without fine-tuning of initial conditions. <i>Physical Review D</i> , 2015, 92, .	4.7	32
135	Previously unknown quasicrystal periodic approximant found in space. <i>Scientific Reports</i> , 2018, 8, 16271.	3.3	32
136	Identifying and Indexing Icosahedral Quasicrystals from Powder Diffraction Patterns. <i>Physical Review Letters</i> , 2001, 87, 275507.	7.8	31
137	The Quintessential Universe. <i>Scientific American</i> , 2001, 284, 46-53.	1.0	29
138	THE RETURN OF THE PHOENIX UNIVERSE. <i>International Journal of Modern Physics D</i> , 2009, 18, 2231-2235.	2.1	29
139	How Impossible Crystals Came to Earth: A Short History. <i>Rocks and Minerals</i> , 2018, 93, 50-59.	0.1	29
140	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. <i>Physics of the Earth and Planetary Interiors</i> , 2017, 271, 47-56.	1.9	26
141	Evidence of cross-cutting and redox reaction in Khatyrka meteorite reveals metallic-Al minerals formed in outer space. <i>Scientific Reports</i> , 2017, 7, 1637.	3.3	26
142	Big Bang blunder bursts the multiverse bubble. <i>Nature</i> , 2014, 510, 9-9.	27.8	25
143	The anamorphic universe. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 001-001.	5.4	25
144	Robustness of slow contraction to cosmic initial conditions. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 030-030.	5.4	25

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145	Icosahedral AlCuFe quasicrystal at high pressure and temperature and its implications for the stability of icosahedrite. <i>Scientific Reports</i> , 2014, 4, 5869.	3.3	24
146	Hyperuniformity and anti-hyperuniformity in one-dimensional substitution tilings. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, 3-13.	0.1	24
147	Effects of random link removal on the photonic band gaps of honeycomb networks. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	23
148	Pop Goes the Universe. <i>Scientific American</i> , 2017, 316, 32-39.	1.0	23
149	Beyond Inflation A Cyclic Universe Scenario. <i>Physica Scripta</i> , 2005, , 76.	2.5	23
150	Shock Synthesis of Five-component Icosahedral Quasicrystals. <i>Scientific Reports</i> , 2017, 7, 15629.	3.3	22
151	Hyperuniform disordered waveguides and devices for near infrared silicon photonics. <i>Scientific Reports</i> , 2019, 9, 20338.	3.3	22
152	Phoamtonic designs yield sizeable 3D photonic band gaps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 23480-23486.	7.1	21
153	Self-Interacting Dark Matter. , 2001, , 263-274.		21
154	Matching rules and growth rules for pentagonal quasicrystal tilings. <i>Physical Review Letters</i> , 1990, 64, 2034-2037.	7.8	20
155	Solution of a braneworld big crunch/big bang cosmology. <i>Physical Review D</i> , 2007, 76, .	4.7	20
156	COSMOLOGY CONFRONTS THE COSMIC MICROWAVE BACKGROUND. <i>International Journal of Modern Physics A</i> , 1995, 10, 1091-1124.	1.5	18
157	Atomic structure of the quasicrystal Al ₇₂ Ni ₂₀ Co ₈ . <i>Nature</i> , 2000, 403, 267-267.	27.8	18
158	Controlling chaos through compactification in cosmological models with a collapsing phase. <i>Physical Review D</i> , 2005, 72, .	4.7	18
159	Dark energy, extra dimensions, and the Swampland. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	18
160	New perspectives on forbidden symmetries, quasicrystals, and Penrose tilings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 14267-14270.	7.1	17
161	Quasicrystals at extreme conditions: The role of pressure in stabilizing icosahedral Al ₆₃ Cu ₂₄ Fe ₁₃ at high temperature. <i>American Mineralogist</i> , 2015, 100, 2412-2418.	1.9	17
162	Missing energy and cosmic expansion. <i>Nature</i> , 1996, 382, 768-768.	27.8	16

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163	Cosmological problems with multiple axion-like fields. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 001-001.	5.4	16
164	Local growth of icosahedral quasicrystalline tilings. <i>Physical Review B</i> , 2016, 94, .	3.2	16
165	Stability and the gauge problem in non-perturbative cosmology. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 015-015.	5.4	16
166	Accidental synthesis of a previously unknown quasicrystal in the first atomic bomb test. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	16
167	Cosmological consequences of high-frequency oscillations of Newton's constant. <i>Physical Review Letters</i> , 1991, 67, 298-301.	7.8	15
168	The quest for forbidden crystals. <i>Mineralogical Magazine</i> , 2014, 78, 467-482.	1.4	15
169	Scale-free primordial cosmology. <i>Physical Review D</i> , 2014, 89, .	4.7	14
170	Light Localization in Local Isomorphism Classes of Quasicrystals. <i>Physical Review Letters</i> , 2018, 120, 247401.	7.8	14
171	New constraints and improvements on oscillating physics. <i>Astrophysical Journal</i> , 1992, 395, 360.	4.5	14
172	Dynamical Selection of the Primordial Density Fluctuation Amplitude. <i>Physical Review Letters</i> , 2011, 106, 081301.	7.8	13
173	Cosmic Microwave Background Probes Models of Inflation. <i>Physical Review Letters</i> , 1993, 70, 1733-1733.	7.8	12
174	Response to Comment on "Decagonal and Quasi-Crystalline Tilings in Medieval Islamic Architecture". <i>Science</i> , 2007, 318, 1383-1383.	12.6	12
175	Quasicrystals: a brief history of the impossible. <i>Rendiconti Lincei</i> , 2013, 24, 85-91.	2.2	12
176	Gap Sensitivity Reveals Universal Behaviors in Optimized Photonic Crystal and Disordered Networks. <i>Physical Review Letters</i> , 2021, 127, 037401.	7.8	12
177	Further Notes on Quasi-Crystal Tilings. <i>Science</i> , 2007, 316, 981-982.	12.6	11
178	Hyperuniformity variation with quasicrystal local isomorphism class. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 204003.	1.8	11
179	The effects of multiple modes and reduced symmetry on the rapidity and robustness of slow contraction. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 820, 136490.	4.1	11
180	Entropy, black holes, and the new cyclic universe. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 824, 136823.	4.1	11

#	ARTICLE	IF	CITATIONS
181	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.	7.1	11
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