Pierre Sikivie

List of Publications by Year in descending order

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96 papers 11,764 citations

³⁸⁷⁴²
50
h-index

90 g-index

99 all docs 99 docs citations 99 times ranked 3996 citing authors

#	Article	IF	CITATIONS
1	A cosmological bound on the invisible axion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 120, 133-136.	4.1	2,005
2	Experimental Tests of the "Invisible" Axion. Physical Review Letters, 1983, 51, 1415-1417.	7.8	1,255
3	Axions, Domain Walls, and the Early Universe. Physical Review Letters, 1982, 48, 1156-1159.	7.8	559
4	SQUID-Based Microwave Cavity Search for Dark-Matter Axions. Physical Review Letters, 2010, 104, 041301.	7.8	529
5	Search for Invisible Axion Dark Matter with the Axion Dark Matter Experiment. Physical Review Letters, 2018, 120, 151301.	7.8	384
6	Bose-Einstein Condensation of Dark Matter Axions. Physical Review Letters, 2009, 103, 111301.	7.8	361
7	Gravitationally repulsive domain wall. Physical Review D, 1984, 30, 712-719.	4.7	313
8	Detection rates for â€~â€~invisible''-axion searches. Physical Review D, 1985, 32, 2988-2991.	4.7	288
9	Extended Search for the Invisible Axion with the Axion Dark Matter Experiment. Physical Review Letters, 2020, 124, 101303.	7.8	275
10	EXPERIMENTAL TESTS OF THE "INVISIBLE" AXION. Physical Review Letters, 1984, 52, 695-695.	7.8	266
11	E7as a Universal Gauge Group. Physical Review Letters, 1976, 36, 775-778.	7.8	239
12	Results from a search for cosmic axions. Physical Review D, 1990, 42, 1297-1300.	4.7	239
13	Axion Cosmology. Lecture Notes in Physics, 2008, , 19-50.	0.7	234
14	Microwave cavity searches for dark-matter axions. Reviews of Modern Physics, 2003, 75, 777-817.	45.6	209
15	Conceptual design of the International Axion Observatory (IAXO). Journal of Instrumentation, 2014, 9, T05002-T05002.	1.2	201
16	Effects of a Nambu-Goldstone boson on the polarization of radio galaxies and the cosmic microwave background. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 289, 67-72.	4.1	184
17	Can Galactic Halos Be Made of Axions?. Physical Review Letters, 1983, 50, 925-927.	7.8	183
18	Invisible axion search methods. Reviews of Modern Physics, 2021, 93, .	45.6	181

#	Article	IF	Citations
19	Can one test technicolour?. Nuclear Physics B, 1981, 182, 529-545.	2.5	163
20	Results from a High-Sensitivity Search for Cosmic Axions. Physical Review Letters, 1998, 80, 2043-2046.	7.8	162
21	Large-scale microwave cavity search for dark-matter axions. Physical Review D, 2001, 64, .	4.7	154
22	Improved rf cavity search for halo axions. Physical Review D, 2004, 69, .	4.7	153
23	Proposal for Axion Dark Matter Detection Using an <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mi>L</mml:mi><mml:mi>C</mml:mi></mml:math> Circuit. Physical Review Letters, 2014. 112. 131301.	7.8	153
24	High resolution search for dark-matter axions. Physical Review D, 2006, 74, .	4.7	147
25	Constraints on charged-Higgs-boson couplings. Physical Review D, 1980, 21, 1393-1403.	4.7	143
26	Secondary infall model of galactic halo formation and the spectrum of cold dark matter particles on Earth. Physical Review D, 1997, 56, 1863-1878.	4.7	136
27	Search for Invisible Axion Dark Matter in the <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn><mml:mn><mml:mn><mml:mo><mml:mn><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mo><mml:mn><mml:mn><mml:mn><mml:mn><mml:mo><mml:mn><mml:mn><mml:mo><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:mn><mml:< td=""><td>l:mtext>â•</td><td>€‰<7mml:m</td></mml:<></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mn></mml:mo></mml:mn></mml:mn></mml:mo></mml:mn></mml:mn></mml:mn></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mo></mml:mn></mml:mn></mml:mo></mml:mn></mml:mn></mml:mn></mml:math>	l:mtext>â•	€‰<7mml:m
28	Searches for Astrophysical and Cosmological Axions. Annual Review of Nuclear and Particle Science, 2006, 56, 293-326.	10.2	109
29	Cosmic axion thermalization. Physical Review D, 2012, 85, .	4.7	106
30	Velocity Peaks in the Cold Dark Matter Spectrum on Earth. Physical Review Letters, 1995, 75, 2911-2915.	7.8	96
31	Resonantly Enhanced Axion-Photon Regeneration. Physical Review Letters, 2007, 98, .	7.8	91
32	Piezoelectrically Tuned Multimode Cavity Search for Axion Dark Matter. Physical Review Letters, 2018, 121, 261302.	7.8	91
33	Classical Yang-Mills theory in the presence of external sources. Physical Review D, 1978, 18, 3809-3821.	4.7	90
34	Phase-space structure of cold dark matter halos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 291, 288-292.	4.1	89
35	Screening Solutions to Classical Yang-Mills Theory. Physical Review Letters, 1978, 40, 1411-1413.	7.8	88
36	On the interaction of magnetic monopoles with axionic domain walls. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 137, 353-356.	4.1	83

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37	Axion Dark Matter Detection Using Atomic Transitions. Physical Review Letters, 2014, 113, 201301.	7.8	80
38	Diurnal and annual modulation of cold dark matter signals. Physical Review D, 2004, 70, .	4.7	78
39	Gravitational field of a global string. Physical Review D, 1988, 37, 3438-3440.	4.7	72
40	Experimental Constraints on the Axion Dark Matter Halo Density. Astrophysical Journal, 2002, 571, L27-L30.	4.5	71
41	Caustic ring model of the MilkyÂWay halo. Physical Review D, 2008, 78, .	4.7	71
42	Search for nonvirialized axionic dark matter. Physical Review D, 2011, 84, .	4.7	71
43	Search for Hidden Sector Photons with the ADMX Detector. Physical Review Letters, 2010, 105, 171801.	7.8	68
44	Structure of axionic domain walls. Physical Review D, 1985, 32, 1560-1568.	4.7	67
45	DARK MATTER AXIONS. International Journal of Modern Physics A, 2010, 25, 554-563.	1.5	65
46	ADMX SLIC: Results from a Superconducting <i>LC</i> Circuit Investigating Cold Axions. Physical Review Letters, 2020, 124, 241101.	7.8	63
47	Evidence for ring caustics in the Milky Way. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 567, 1-8.	4.1	59
48	The emerging case for axion dark matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 22-25.	4.1	58
49	Long-range forces from two-neutrino exchange reexamined. Physical Review D, 1994, 49, 4951-4953.	4.7	51
50	Results of a Search for Cold Flows of Dark Matter Axions. Physical Review Letters, 2005, 95, 091304.	7.8	51
51	Cavity design for a cosmic axion detector. Review of Scientific Instruments, 1990, 61, 1076-1085.	1.3	47
52	Prospects for searching axionlike particle dark matter with dipole, toroidal, and wiggler magnets. Physical Review D, 2012, 85, .	4.7	41
53	Quark and lepton assignments in theE7model. Physical Review D, 1977, 16, 816-834.	4.7	39
54	Detailed design of a resonantly enhanced axion-photon regeneration experiment. Physical Review D, 2009, 80, .	4.7	38

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55	Evidence for a Nambu-Goldstone Boson. Physical Review Letters, 1988, 61, 783-786.	7.8	33
56	Estimates of the density of dark matter near the center of the Galaxy. Physical Review D, 1987, 35, 3695-3704.	4.7	32
57	Production and Detection of an Axion Dark Matter Echo. Physical Review Letters, 2019, 123, 131804.	7.8	32
58	Cavity design for high-frequency axion dark matter detectors. Review of Scientific Instruments, 2015, 86, 123305.	1.3	31
59	Towards a medium-scale axion helioscope and haloscope. Journal of Instrumentation, 2017, 12, P11019-P11019.	1.2	29
60	Robustness of discrete flows and caustics in cold dark matter cosmology. Physical Review D, 2005, 72,	4.7	27
61	Static sources in classical Yang-Mills theory. Physical Review D, 1979, 20, 487-490.	4.7	26
62	Wiggly relativistic strings. Physical Review Letters, 1992, 69, 2611-2614.	7.8	26
63	Cabibbo-suppressed nonleptonicDdecays. Physical Review D, 1980, 21, 768-771.	4.7	25
64	Six-quark model for the suppression of "S=1neutral currents. Physical Review D, 1975, 12, 2166-2168.	4.7	24
65	Does the second caustic ring of dark matter cause the Monoceros Ring of stars?. Physical Review D, 2007, 76, .	4.7	21
66	Instability of Abelian field configurations in Yang-Mills theory. Physical Review D, 1979, 20, 877-880.	4.7	20
67	Axion detection in the 10â^'4eV mass range. Physical Review D, 1994, 50, 4744-4748.	4.7	20
68	Modulation sensitive search for nonvirialized dark-matter axions. Physical Review D, 2016, 94, .	4.7	18
69	Axion Dark Matter Experiment: Detailed designÂand operations. Review of Scientific Instruments, 2021, 92, 124502.	1.3	18
70	New astrophysical bounds on ultralight axionlike particles. Physical Review D, 2017, 95, .	4.7	17
71	Gravitational lensing by dark matter caustics. Physical Review D, 2003, 67, .	4.7	15
72	Axion dark matter and the 21-cm signal. Physics of the Dark Universe, 2019, 24, 100289.	4.9	14

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73	Casimir forces between beads on strings. Physical Review Letters, 1993, 71, 1136-1139.	7.8	13
74	Further look at particle annihilation in dark matter caustics. Physical Review D, 2008, 77, .	4.7	12
75	Stretching wiggly strings. Physical Review D, 1994, 50, 7410-7420.	4.7	10
76	DARK MATTER AXIONS. International Journal of Modern Physics D, 1994, 03, 1-20.	2.1	9
77	Evolution of velocity dispersion along cold collisionless flows. Physical Review D, 2016, 93, .	4.7	9
78	A NEXT-GENERATION CAVITY MICROWAVE EXPERIMENT TO SEARCH FOR DARK-MATTER AXIONS. International Journal of Modern Physics D, 1994, 03, 33-42.	2.1	8
79	Nuclear dipole radiation from \hat{l} , \hat{A}^- oscillations. Physical Review D, 1990, 42, 1847-1850.	4.7	6
80	Implications of triangular features in the Gaia skymap for the Caustic Ring Model of the Milky Way halo. Physics of the Dark Universe, 2021, 33, 100838.	4.9	6
81	Microwave Detector for Galactic Halo Axions. Japanese Journal of Applied Physics, 1987, 26, 1705.	1.5	6
82	Resonant excitation of the axion field during the QCD phase transition. Physical Review D, 2022, 105, .	4.7	6
83	Lepton assignments in theE7model and trimuon events in neutrino scattering. Physical Review D, 1978, 18, 3164-3171.	4.7	4
84	Resonantly-enhanced axion-photon regeneration. , 2010, , .		2
85	Reply to "Characterization of sources and solutions in Yang-Mills theories". Physical Review D, 1982, 26, 533-533.	4.7	1
86	Search for dark matter axions. AIP Conference Proceedings, 1989, , .	0.4	1
87	The Big Flow. AIP Conference Proceedings, 2002, , .	0.4	1
88	Dark Matter Caustics. Annals of the New York Academy of Sciences, 2001, 927, 102-109.	3.8	1
89	DARK MATTER CAUSTICS., 2000, , .		1
90	AXIONS AND THEIR DISTRIBUTION IN GALACTIC HALOS. , 2003, , .		1

#	Article	IF	CITATIONS
91	COLD DARK MATTER FLOWS AND CAUSTICS., 2005, , .		O
92	Dark Matter Axions. , 2010, , .		0
93	DARK MATTER CAUSTICS., 2001,,.		0
94	COLD DARK MATTER FLOWS AND CAUSTICS., 2005,,.		0
95	Dark matter caustics. Annals of the New York Academy of Sciences, 2001, 927, 102-9.	3.8	0
96	Clean Energy from Dark Matter?., 2022,, 225-230.		0