

David B Kaplan

List of Publications by Year in descending order

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68
papers

9,682
citations

61857

43
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95083

68
g-index

68
all docs

68
docs citations

68
times ranked

5029
citing authors

#	ARTICLE	IF	CITATIONS
1	Effective Field Theory, Black Holes, and the Cosmological Constant. <i>Physical Review Letters</i> , 1999, 82, 4971-4974.	2.9	1,106
2	A method for simulating chiral fermions on the lattice. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1992, 288, 342-347.	1.5	952
3	A new expansion for nucleon-nucleon interactions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1998, 424, 390-396.	1.5	638
4	Two-nucleon systems from effective field theory. <i>Nuclear Physics B</i> , 1998, 534, 329-355.	0.9	566
5	Cosmological implications of dynamical supersymmetry breaking. <i>Physical Review D</i> , 1994, 49, 779-787.	1.6	449
6	Strange matrix elements in the proton from neutral-current experiments. <i>Nuclear Physics B</i> , 1988, 310, 527-547.	0.9	345
7	Nucleon-nucleon scattering from effective field theory. <i>Nuclear Physics B</i> , 1996, 478, 629-659.	0.9	287
8	Single explanation for both baryon and dark matter densities. <i>Physical Review Letters</i> , 1992, 68, 741-743.	2.9	280
9	Opening the axion window. <i>Nuclear Physics B</i> , 1985, 260, 215-226.	0.9	263
10	Thermodynamic generation of the baryon asymmetry. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1987, 199, 251-258.	1.5	243
11	Manifesting the invisible axion at low energies. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1986, 169, 73-78.	1.5	242
12	Current-Mass Ratios of the Light Quarks. <i>Physical Review Letters</i> , 1986, 56, 2004-2007.	2.9	237
13	Strange condensate realignment in relativistic heavy ion collisions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1987, 192, 193-197.	1.5	232
14	Baryogenesis at the weak phase transition. <i>Nuclear Physics B</i> , 1991, 349, 727-742.	0.9	227
15	Weak scale baryogenesis. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 245, 561-564.	1.5	191
16	More effective field theory for non-relativistic scattering. <i>Nuclear Physics B</i> , 1997, 494, 471-483.	0.9	188
17	Counting $4\tilde{f}'$'s in strongly coupled supersymmetry. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 412, 301-308.	1.5	155
18	Spontaneous baryogenesis. <i>Nuclear Physics B</i> , 1988, 308, 913-928.	0.9	154

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19	Emergence of symmetry in homooligomeric biological assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16148-16152.	3.3	153
20	Chern-Simons currents and chiral fermions on the lattice. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 301, 219-223.	1.5	143
21	Supersymmetry on a euclidean spacetime lattice 1. A target theory with four supercharges. Journal of High Energy Physics, 2003, 2003, 024-024.	1.6	134
22	Novel phases and transitions in color flavor locked matter. Physical Review D, 2002, 65, .	1.6	131
23	Exact lattice supersymmetry. Physics Reports, 2009, 484, 71-130.	10.3	131
24	Supersymmetry on a spatial lattice. Journal of High Energy Physics, 2003, 2003, 037-037.	1.6	125
25	Perturbative calculation of the electromagnetic form factors of the deuteron. Physical Review C, 1999, 59, 617-629.	1.1	121
26	A euclidean lattice construction of supersymmetric Yang-Mills theories with sixteen supercharges. Journal of High Energy Physics, 2005, 2005, 042-042.	1.6	119
27	The spin-flavor dependence of nuclear forces from large-N QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 365, 244-251.	1.5	112
28	Flavor unification and discrete non-Abelian symmetries. Physical Review D, 1994, 49, 3741-3750.	1.6	111
29	Nucleon-nucleon potential in the $1/N_c$ expansion. Physical Review C, 1997, 56, 76-83.	1.1	110
30	Deconstructing (2,0) and Little String Theories. Journal of High Energy Physics, 2003, 2003, 083-083.	1.6	107
31	Supersymmetry on a euclidean spacetime lattice 2. Target theories with eight supercharges. Journal of High Energy Physics, 2003, 2003, 031-031.	1.6	106
32	An analysis of parity-violating pion-nucleon couplings. Nuclear Physics A, 1993, 556, 653-671.	0.6	86
33	B-Factory Physics from Effective Supersymmetry. Physical Review Letters, 1997, 78, 2300-2303.	2.9	84
34	Chiral fermions on the lattice. Nuclear Physics, Section B, Proceedings Supplements, 1993, 30, 597-600.	0.5	82
35	Is CP a gauge symmetry?. Nuclear Physics B, 1993, 391, 515-530.	0.9	82
36	Couplings of a light dilaton and violations of the equivalence principle. Journal of High Energy Physics, 2000, 2000, 037-037.	1.6	69

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37	Lattice Theory for Low Energy Fermions at Nonzero Chemical Potential. Physical Review Letters, 2004, 92, 257002.	2.9	62
38	Entanglement Suppression and Emergent Symmetries of Strong Interactions. Physical Review Letters, 2019, 122, 102001.	2.9	59
39	The role of a massive strange quark in the Large-N Skyrme model. Nuclear Physics B, 1990, 335, 45-66.	0.9	57
40	Role of the electron mass in damping chiral plasma instability in Supernovae and neutron stars. Physical Review D, 2015, 91, .	1.6	54
41	An effective field theory calculation of the parity violating asymmetry in. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 449, 1-5.	1.5	48
42	Perturbative nuclear physics. Physical Review C, 2009, 80, .	1.1	48
43	New Field-Theoretic Method for the Virial Expansion. Physical Review Letters, 2011, 107, 030601.	2.9	47
44	Gauss's law, duality, and the Hamiltonian formulation of U(1) lattice gauge theory. Physical Review D, 2020, 102, .	1.6	44
45	Lattice Monte Carlo calculations for unitary fermions in a finite box. Physical Review A, 2013, 87, .	1.0	43
46	Noise, Sign Problems, and Statistics. Physical Review Letters, 2011, 107, 201601.	2.9	39
47	Lattice Monte Carlo calculations for unitary fermions in a harmonic trap. Physical Review A, 2011, 84, .	1.0	36
48	Domain wall fermions and the $\hat{\mu}$ -invariant. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 368, 44-52.	1.5	34
49	Lattice formulation of (2,2) supersymmetric gauge theories with matter fields. Journal of High Energy Physics, 2006, 2006, 076-076.	1.6	34
50	Dynamical generation of supersymmetry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 136, 162-164.	1.5	33
51	Constituent quarks as collective excitations of QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 235, 163-169.	1.5	30
52	Spacetime as a Topological Insulator: Mechanism for the Origin of the Fermion Generations. Physical Review Letters, 2012, 108, 181807.	2.9	30
53	Charged and Superconducting Vortices in Dense Quark Matter. Physical Review Letters, 2002, 88, 132302.	2.9	27
54	Nonperturbative Regulator for Chiral Gauge Theories?. Physical Review Letters, 2016, 116, 211602.	2.9	26

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55	Qualitons. Nuclear Physics B, 1991, 351, 137-160.	0.9	25
56	Long and short of nuclear effective field theory expansions. Physical Review C, 1999, 60, .	1.1	24
57	Energy conservation and the chiral magnetic effect. Physical Review D, 2017, 96, .	1.6	20
58	Sign problems, noise, and chiral symmetry breaking in a QCD-like theory. Physical Review D, 2013, 87, .	1.6	17
59	Flavor from strongly coupled supersymmetry. Physical Review D, 1997, 56, 7193-7206.	1.6	15
60	Convergence of nuclear effective field theory with perturbative pions. Physical Review C, 2020, 102, .	1.1	15
61	Chiral solution to the Ginsparg-Wilson equation. Physical Review D, 2016, 94, .	1.6	14
62	Kaon condensation in heavy ion collisions. Nuclear Physics A, 1988, 479, 285-290.	0.6	12
63	Elucidating the sign problem through noise distributions. Journal of Physics: Conference Series, 2013, 432, 012032.	0.3	7
64	Fractional Quantum Hall Effect in a Relativistic Field Theory. Physical Review Letters, 2020, 124, 131601.	2.9	6
65	Strong evidence for a new strange matrix element. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 275, 137-143.	1.5	5
66	Little flavor: A model of weak-scale flavor physics. Physical Review D, 2013, 87, .	1.6	4
67	Index Theorems, Generalized Hall Currents, and Topology for Gapless Defect Fermions. Physical Review Letters, 2022, 128, .	2.9	4
68	Effective field theory for nuclear physics. Nuclear Physics A, 2000, 663-664, 155c-164c.	0.6	2