

Martin J Savage

List of Publications by Year in descending order

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80
papers

6,084
citations

47006

47
h-index

66911

78
g-index

81
all docs

81
docs citations

81
times ranked

1755
citing authors

#	ARTICLE	IF	CITATIONS
1	Standard model physics and the digital quantum revolution: thoughts about the interface. Reports on Progress in Physics, 2022, 85, 064301.	20.1	62
2	Nuclear matrix elements from lattice QCD for electroweak and beyond-Standard-Model processes. Physics Reports, 2021, 900, 1-74.	25.6	39
3	Quantum Computer Systems for Scientific Discovery. PRX Quantum, 2021, 2, .	9.2	142
4	Low-energy scattering and effective interactions of two baryons at $\epsilon \ll \Lambda_{\text{QCD}}$ from lattice quantum chromodynamics. Physical Review D, 2021, 103, .	4.7	20
5	Entanglement rearrangement in self-consistent nuclear structure calculations. Physical Review C, 2021, 103, .	2.9	41
6	Geometric quantum information structure in quantum fields and their lattice simulation. Physical Review D, 2021, 103, .	4.7	11
7	Trailhead for quantum simulation of SU(3) Yang-Mills lattice gauge theory in the local multiplet basis. Physical Review D, 2021, 103, .	4.7	96
8	Entanglement Spheres and a UV-IR Connection in Effective Field Theories. Physical Review Letters, 2021, 127, 211602.	7.8	11
9	Hierarchical qubit maps and hierarchically implemented quantum error correction. Physical Review A, 2021, 104, .	2.5	10
10	Minimally entangled state preparation of localized wave functions on quantum computers. Physical Review A, 2020, 102, .	2.5	34
11	Fixed-point quantum circuits for quantum field theories. Physical Review A, 2020, 102, .	2.5	15
12	Systematically localizable operators for quantum simulations of quantum field theories. Physical Review A, 2020, 102, .	2.5	22
13	SU(2) non-Abelian gauge field theory in one dimension on digital quantum computers. Physical Review D, 2020, 101, .	4.7	135
14	Simulations of subatomic many-body physics on a quantum frequency processor. Physical Review A, 2019, 100, .	2.5	87
15	Digitization of scalar fields for quantum computing. Physical Review A, 2019, 99, .	2.5	106
16	Entanglement Suppression and Emergent Symmetries of Strong Interactions. Physical Review Letters, 2019, 122, 102001.	7.8	59
17	Status and future perspectives for lattice gauge theory calculations to the exascale and beyond. European Physical Journal A, 2019, 55, 1.	2.5	37
18	Scalar, Axial, and Tensor Interactions of Light Nuclei from Lattice QCD. Physical Review Letters, 2018, 120, 152002.	7.8	41

#	ARTICLE	IF	CITATIONS
37	leon systems in a finite volume. II. S^3	4.7	56
38	Restoration of rotational symmetry in the continuum limit of lattice field theories. Physical Review D, 2012, 86, .	4.7	45
39	Extracting scattering phase shifts in higher partial waves from lattice QCD calculations. Physical Review D, 2011, 83, .	4.7	57
40	Improving the volume dependence of two-body binding energies calculated with lattice QCD. Physical Review D, 2011, 84, .	4.7	89
41	Nuclear Physics from QCD: The Anticipated Impact of Exa-Scale Computing. , 2011, , .		6
42	Nucleon-nucleon scattering in a harmonic potential. Physical Review C, 2010, 82, .	2.9	40
43	Method to study complex systems of mesons in lattice QCD. Physical Review D, 2010, 82, .	4.7	29
44	High statistics analysis using anisotropic clover lattices: III. Baryon-baryon interactions. Physical Review D, 2010, 81, .	4.7	57
45	High statistics analysis using anisotropic clover lattices. II. Three-baryon systems. Physical Review D, 2009, 80, .	4.7	69
46	High statistics analysis using anisotropic clover lattices: Single hadron correlation functions. Physical Review D, 2009, 79, .	4.7	58
47	Kaon condensation with lattice QCD. Physical Review D, 2008, 78, .	4.7	70
48	K+K scattering length from lattice QCD. Physical Review D, 2008, 77, .	4.7	46
49	Multipion states in lattice QCD and the charged-pion condensate. Physical Review D, 2008, 78, .	4.7	82
50	Precise determination of the $\pi\pi$ scattering length from mixed-action lattice QCD. Physical Review D, 2008, 77, .	4.7	89
51	HADRONIC INTERACTIONS FROM LATTICE QCD. International Journal of Modern Physics E, 2008, 17, 1157-1218.	1.0	48
52	Multipion Systems in Lattice QCD and the Three-Pion Interaction. Physical Review Letters, 2008, 100, 082004.	7.8	98
53	B^3 potentials in quenched lattice QCD. Physical Review D, 2007, 76, .	4.7	48
54	n-boson energies at finite volume and three-boson interactions. Physical Review D, 2007, 76, .	4.7	88

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55	Hyperon-nucleon scattering from fully-dynamical lattice QCD. Nuclear Physics A, 2007, 794, 62-72.	1.5	83
56	π scattering in full QCD with domain-wall valence quarks. Physical Review D, 2006, 74, .	4.7	58
57	π scattering from fully-dynamical mixed-action lattice QCD. Physical Review D, 2006, 73, .	4.7	106
58	Electroweak matrix elements in the two-nucleon sector from lattice QCD. Nuclear Physics A, 2004, 743, 170-193.	1.5	72
59	Variation of fundamental couplings and nuclear forces. Nuclear Physics A, 2003, 713, 148-164.	1.5	109
60	The quark-mass dependence of two-nucleon systems. Nuclear Physics A, 2003, 717, 91-103.	1.5	116
61	Baryons in partially quenched chiral perturbation theory. Physical Review D, 2002, 65, .	4.7	73
62	Nucleons in two-flavor partially-quenched chiral perturbation theory. Nuclear Physics A, 2002, 709, 319-344.	1.5	61
63	The anapole form factor of the deuteron. Nuclear Physics A, 2001, 686, 413-428.	1.5	22
64	Rearranging pionless effective field theory. Nuclear Physics A, 2001, 694, 511-524.	1.5	133
65	EFFECTIVE FIELD THEORY IN NUCLEAR PHYSICS. , 2001, , .		0
66	Improving the convergence of NN effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 473, 209-218.	4.1	110
67	Pionic matrix elements in neutrinoless double- β decay. Physical Review C, 1999, 59, 2293-2296.	2.9	17
68	n and d for big-bang nucleosynthesis. Physical Review C, 1999, 60, .	2.9	86
69	Nucleon-nucleon effective field theory without pions. Nuclear Physics A, 1999, 653, 386-412.	1.5	254
70	A new expansion for nucleon-nucleon interactions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 424, 390-396.	4.1	638
71	Parity violation in effective field theory and the deuteron anapole moment. Nuclear Physics A, 1998, 644, 235-244.	1.5	45
72	Two-nucleon systems from effective field theory. Nuclear Physics B, 1998, 534, 329-355.	2.5	566

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73	Power counting in dimensionally regularized nonrelativistic QCD. Physical Review D, 1998, 57, 413-423.	4.7	62
74	Nucleon-nucleon scattering from effective field theory. Nuclear Physics B, 1996, 478, 629-659.	2.5	287
75	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.	4.1	112
76	Hyperon masses in nuclear matter. Physical Review D, 1996, 53, 349-354.	4.7	40
77	Chiral perturbation theory analysis of the baryon magnetic moments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 302, 482-490.	4.1	140
78	A comment on the strong interactions of color-neutral technibaryons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 298, 380-382.	4.1	14
79	An analysis of parity-violating pion-nucleon couplings. Nuclear Physics A, 1993, 556, 653-671.	1.5	86
80	Low energy effective hamiltonian for $\hat{I}^3 = 1$ nuclear parity violation and nucleonic strangeness. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 271, 403-409.	4.1	36