

# Steven Gottlieb

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11562032/publications.pdf>

Version: 2024-02-01

117  
papers

10,313  
citations

41344

49  
h-index

31849

101  
g-index

117  
all docs

117  
docs citations

117  
times ranked

6748  
citing authors

#	ARTICLE	IF	CITATIONS
1	The anomalous magnetic moment of the muon in the Standard Model. Physics Reports, 2020, 887, 1-166.	25.6	790
2	Chiral and deconfinement aspects of the QCD transition. Physical Review D, 2012, 85, .	4.7	752
3	Equation of state in ( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50$ ) QCD. Physical Review D, 2014, 90, .	4.7	694
4	FLAG Review 2019. European Physical Journal C, 2020, 80, 1.	3.9	486
5	Review of lattice results concerning low-energy particle physics. European Physical Journal C, 2017, 77, 112.	3.9	439
6	Equation of state and QCD transition at finite temperature. Physical Review D, 2009, 80, .	4.7	424
7	Hybrid-molecular-dynamics algorithms for the numerical simulation of quantum chromodynamics. Physical Review D, 1987, 35, 2531-2542.	4.7	357
8	QCD spectrum with three quark flavors. Physical Review D, 2001, 64, .	4.7	328
9	Nonperturbative QCD simulations with ( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle mml:mo \rangle + \langle /mml:mo \rangle \langle mml:mn \rangle 1 \langle /mml:mn \rangle \langle /mml:mrow \rangle \langle mml:math \rangle$ ) flavors of improved staggered quarks. Reviews of Modern Physics, 2010, 82, 1349-1417.	4.7	315
10	High-Precision Lattice QCD Confronts Experiment. Physical Review Letters, 2004, 92, 022001.	7.8	276
11	Light hadrons with improved staggered quarks: Approaching the continuum limit. Physical Review D, 2004, 70, .	4.7	253
12	Light pseudoscalar decay constants, quark masses, and low energy constants from three-flavor lattice QCD. Physical Review D, 2004, 70, .	4.7	246
13	Fluctuations and correlations of net baryon number, electric charge, and strangeness: A comparison of lattice QCD results with the hadron resonance gas model. Physical Review D, 2012, 86, .	4.7	211
14	QCD thermodynamics with three flavors of improved staggered quarks. Physical Review D, 2005, 71, .	4.7	196
15	Lattice QCD ensembles with four flavors of highly improved staggered quarks. Physical Review D, 2013, 87, .	4.7	173
16	( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mi \rangle B \langle /mml:mi \rangle \langle mml:mo \rangle \hat{\tau} \langle /mml:mo \rangle \langle mml:mi \rangle D \langle /mml:mi \rangle \langle mml:mo \rangle \hat{\alpha}, \langle /mml:mo \rangle \langle mml:mi \rangle \hat{1}/2 \langle /mml:mi \rangle \langle /mml:math \rangle$ ) form factors at nonzero recoil and ( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mo \rangle   \langle /mml:mo \rangle \langle mml:msub \rangle \langle mml:mrow \rangle \langle mml:mi \rangle V \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle mml:mrow \rangle \langle mml:mi \rangle c \langle /mml:mi \rangle \langle mml:mi \rangle m \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ ) meson leptonic decay constants from four-flavor lattice QCD. Physical Review D, 2018, 98, .	4.7	163
17	Quark-number susceptibility of high-temperature QCD. Physical Review Letters, 1987, 59, 2247-2250.	7.8	160
18	( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle B \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ ) - and ( $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mi \rangle D \langle /mml:mi \rangle \langle /mml:math \rangle$ ) -meson leptonic decay constants from four-flavor lattice QCD. Physical Review D, 2018, 98, .	4.7	149

#	ARTICLE	IF	CITATIONS
19	Semileptonic Decays of DMesons in Three-Flavor Lattice QCD. Physical Review Letters, 2005, 94, 011601.	7.8	141
20	Exotic mesons in quenched lattice QCD. Physical Review D, 1997, 56, 7039-7051.	4.7	132
21	Charmed-Meson Decay Constants in Three-Flavor Lattice QCD. Physical Review Letters, 2005, 95, 122002.	7.8	126
22	$\langle B \rangle$ and $\langle D \rangle$ -meson decay constants from three-flavor lattice QCD. Physical Review D, 2012, 85, .	4.7	126
23	Semileptonic and decays in flavor lattice QCD. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 461-463.	0.4	113
24	Scaling studies of QCD with the dynamical highly improved staggered quark action. Physical Review D, 2010, 82, .	4.7	112
25	Update of $\langle V \rangle$ and $\langle c \rangle$ from the $\langle B \rangle$ and $\langle D \rangle$ decays	4.7	107
26	$\langle B \rangle$ and $\langle D \rangle$ decays		



#	ARTICLE	IF	CITATIONS
55	$\langle \text{mml:math xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \text{ display}=\text{"inline"} \rangle \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \text{ stretchy}=\text{"false"} \rangle \hat{\text{+}} \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{€} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{l} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{l} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle \text{Form}$	7.8	45
56	$\langle \text{mml:math xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \text{ display}=\text{"inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{s} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle \hat{\text{+}} \langle \text{mml:mo} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle$ <p>form-factor ratios and their application to</p>		

#	ARTICLE	IF	CITATIONS
73	Topological susceptibility with the asqtad action. Physical Review D, 2010, 81, .	4.7	25
74	Hadron spectrum in QCD with valence Wilson fermions and dynamical staggered fermions at $\beta=5.6$ . Physical Review D, 1992, 46, 2169-2178.	4.7	24
75	Nature of the thermal phase transition with Wilson quarks. Physical Review D, 1994, 49, 3574-3588.	4.7	21
76	Leptonic-Decay-Constant Ratio $\frac{f_K}{f_\pi}$ Lattice QCD with Physical Light Quarks. Physical Review Letters, 2013, 110, 172003.	4.7	21
77	Short-distance matrix elements for $\frac{D}{N}$ -meson mixing from lattice QCD. Physical Review D, 2018, 97, .	4.7	21
78	Neutral B-meson mixing from three-flavor lattice quantum chromodynamics: Determination of the SU(3)-breaking ratio $\frac{1}{4}$ . Physical Review D, 2012, 86, .	4.7	20
79	Properties of charmonium in lattice QCD with 2 + 1 flavors of improved staggered sea quarks. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 340-342.	0.4	19
80	A lattice study of $b \rightarrow s$ semileptonic decay. Nuclear Physics, Section B, Proceedings Supplements, 2003, 119, 644-646.	0.4	17
81	Simple hadronic matrix elements with Wilson valence quarks and dynamical staggered fermions at $\beta=5.6$ . Physical Review D, 1993, 48, 370-387.	4.7	15
82	High temperature QCD with three flavors of improved staggered quarks. Nuclear Physics, Section B, Proceedings Supplements, 2003, 119, 523-528.	0.4	15
83	QCD thermodynamics with eight time slices. Physical Review D, 1990, 41, 622-625.	4.7	13
84	Empirical study of the hybrid-molecular-dynamics approach to the simulation of QCD. Physical Review D, 1987, 36, 3797-3803.	4.7	11
85	Effects of spatial size, lattice doubling, and source operators on the hadron spectrum with dynamical staggered quarks at $\beta=5.6$ . Physical Review D, 1994, 49, 6026-6038.	4.7	10
86	The Bottom-Up Implementation of One MILC Lattice QCD Application on the Cell Blade. International Journal of Parallel Programming, 2009, 37, 488-507.	1.5	10
87	Design of MILC Lattice QCD Application for GPU Clusters. , 2011, , .		10
88	Testing an exact algorithm for simulation of fermionic QCD. Physical Review D, 1987, 35, 2611-2614.	4.7	9
89	Four-flavor QCD with intermediate- and light-mass quarks. Physical Review D, 1989, 40, 2389-2409.	4.7	9
90	Hadronic screening lengths and quark number susceptibility from lattice QCD. Nuclear Physics A, 1989, 498, 435-439.	1.5	9

#	ARTICLE	IF	CITATIONS
91	Electromagnetic effects on the light hadron spectrum. Journal of Physics: Conference Series, 2015, 640, 012052.	0.4	9
92	Comparison of lattice Coulomb-gauge wave functions in the quenched approximation and with dynamical fermions. Physical Review D, 1993, 47, 285-294.	4.7	7
93	Baryon density correlations in high temperature hadronic matter. Physical Review D, 1994, 49, 6051-6062.	4.7	7
94	Exotic hybrid mesons from improved Kogut-Susskind fermions. Nuclear Physics, Section B, Proceedings Supplements, 2003, 119, 260-262.	0.4	7
95	Results for light pseudoscalars from three-flavor simulations. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 231-233.	0.4	7
96	The phase diagram of high temperature QCD with three flavors of improved staggered quarks. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 626-628.	0.4	6
97	PREDICTIVE LATTICE QCD. International Journal of Modern Physics A, 2006, 21, 713-719.	1.5	5
98	The $\hat{\chi}^2$ function and equation of state of two flavor QCD. Nuclear Physics, Section B, Proceedings Supplements, 1995, 42, 460-465.	0.4	4
99	Excited states in staggered meson propagators. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 230-232.	0.4	4
100	$\langle B_s \rangle$ form factors with 2+1 flavors. EPJ Web of Conferences, 2018, 175, 13008.	0.3	4
101	Finite temperature QCD with dynamical fermions – quark number susceptibility and chiral symmetry restoration. Nuclear Physics, Section B, Proceedings Supplements, 1988, 4, 294-298.	0.4	3
102	Two-flavor staggered-fermion thermodynamics at $N_t = 12$ . Nuclear Physics, Section B, Proceedings Supplements, 1996, 47, 499-502.	0.4	3
103	The $N_t = 6$ equation of state for two flavor QCD. Nuclear Physics, Section B, Proceedings Supplements, 1996, 47, 503-510.	0.4	3
104	Diquark representations for single heavy baryons with light staggered quarks. Physical Review D, 2008, 77, .	4.7	3
105	More on the spectrum with Kogut-Susskind fermions. Nuclear Physics, Section B, Proceedings Supplements, 1989, 9, 259-263.	0.4	2
106	Hadron spectrum with staggered dynamical quarks. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 404-407.	0.4	2
107	Phase diagram of four flavor QCD. Nuclear Physics, Section B, Proceedings Supplements, 1989, 9, 326-330.	0.4	1
108	Benchmarking and tuning the MILC code on clusters and supercomputers. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 1031-1033.	0.4	1

#	ARTICLE	IF	CITATIONS
109	Computing nucleon charges with highly improved staggered quarks. Physical Review D, 2021, 103, .	4.7	1
110	Finite size scaling and the QCD high temperature phase transition. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 173-176.	0.4	0
111	Lattice gauge theory on the Intel parallel scientific computer. AIP Conference Proceedings, 1990, , .	0.4	0
112	B mixing on the lattice: $f_{\text{sub B}}$ , $f_{\text{sub B[sub s]}}$ and related quantities. , 1998, , .		0
113	Properties of light quarks from lattice QCD simulations1. Journal of Physics: Conference Series, 2005, 16, 160-164.	0.4	0
114	Three Flavor QCD at High Temperatures. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 538-540.	0.4	0
115	Future of Lattice Calculations with Staggered Sea Quarks. , 2011, , .		0
116	The Fat-Link Computation on Large GPU Clusters for Lattice QCD. , 2012, , .		0
117	Lattice QCD Impact on Determination of the CKM Matrix. Springer Proceedings in Physics, 2019, , 235-244.	0.2	0