Christian W Bauer

List of Publications by Year
in descending order

49 papers	5,497 citations	186265 28 h-index	197818 49 g-index
49 all docs	49 docs citations	49 times ranked	2781 citing authors

#	ARTICLE	IF	CITATIONS
1	An effective field theory for collinear and soft gluons:‍ Heavy to light decays. Physical Review D, 2001, 63, .	4.7	1,088
2	Soft-collinear factorization in effective field theory. Physical Review D, 2002, 65, .	4.7	964
3	Summing Sudakov logarithms inB→Xsγ in effective field theory. Physical Review D, 2000, 63, .	4.7	666
4	Invariant operators in collinear effective theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 516, 134-142.	4.1	632
5	Hard scattering factorization from effective field theory. Physical Review D, 2002, 66, .	4.7	423
6	Factorization and end point singularities in heavy-to-light decays. Physical Review D, 2003, 67, .	4.7	149
7	Shape function effects inB→Xsγ andB→Xulν̄ decays. Physical Review D, 2004, 70, .	4.7	114
8	Combining higher-order resummation with multiple NLO calculations and parton showers in GENEVA. Journal of High Energy Physics, 2013, 2013, 1.	4.7	85
9	Zero-noise extrapolation for quantum-gate error mitigation with identity insertions. Physical Review A, 2020, 102, .	2.5	81
10	Enhanced nonperturbative effects inZdecays to hadrons. Physical Review D, 2004, 70, .	4.7	75
11	Factorization of e^+e^- shape distributions with hadronic final states in soft collinear effective theory. Physical Review D, 2008, 78, .	4.7	73
12	Drell-Yan production at $NNLL'$ to parton showers. Physical Review D, 2015, 92, .	4.7	73
13	Matching fully differential NNLO calculations and parton showers. Journal of High Energy Physics, 2014, 2014, 1.	4.7	71
14	Quantum Algorithm for High Energy Physics Simulations. Physical Review Letters, 2021, 126, 062001.	7.8	67
15	Unfolding quantum computer readout noise. Npj Quantum Information, 2020, 6, .	6.7	65
16	Bdecay shape variables and the precision determination of |Vcb| andmb. Physical Review D, 2003, 67, .	4.7	58
17	Power suppressed operators and gauge invariance in soft-collinear effective theory. Physical Review D, 2003, 68, .	4.7	56
18	Mitigating Depolarizing Noise on Quantum Computers with Noise-Estimation Circuits. Physical Review Letters, 2021, 127, 270502.	7.8	56

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19	Enhanced Nonperturbative Effects in Jet Distributions. Physical Review Letters, 2003, 91, 122001.	7.8	55
20	Factorization and resummation for dijet invariant mass spectra. Physical Review D, 2012, 85, .	4.7	51
21	Dark matter spectra from the electroweak to the Planck scale. Journal of High Energy Physics, 2021, 2021, 1.	4.7	42
22	Standard Model parton distributions at very high energies. Journal of High Energy Physics, 2017, 2017, 1.	4.7	41
23	On Glauber modes in soft-collinear effective theory. Journal of High Energy Physics, 2011, 2011, 1.	4.7	36
24	Resumming the color-octet contribution to radiativeÎ¥decay. Physical Review D, 2001, 64, .	4.7	33
25	Event generation from effective field theory. Physical Review D, 2007, 76, .	4.7	32
26	Power counting in the soft-collinear effective theory. Physical Review D, 2002, 66, .	4.7	31
27	Improving Jet Distributions with Effective Field Theory. Physical Review Letters, 2006, 97, 142001.	7.8	31
28	GenEvA (I): a new framework for event generation. Journal of High Energy Physics, 2008, 2008, 010-010.	4.7	29
29	Heavy quark fragmenting jet functions. Journal of High Energy Physics, 2014, 2014, 1.	4.7	28
30	Simulating Collider Physics on Quantum Computers Using Effective Field Theories. Physical Review Letters, 2021, 127, 212001.	7.8	28
31	Factorization for generic jet production. Physical Review D, 2009, 79, .	4.7	26
32	Non-cancellation of electroweak logarithms in high-energy scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 740, 179-187.	4.1	25
33	Matching NNLO predictions to parton showers using N^3LL color-singlet transverse momentum resummation in geneva. Physical Review D, 2021, 104, .	4.7	23
34	GenEvA (II): a phase space generator from a reweighted parton shower. Journal of High Energy Physics, 2008, 2008, 011-011.	4.7	21
35	Standard Model fragmentation functions at very high energies. Journal of High Energy Physics, 2018, 2018, 1.	4.7	21
36	Readout rebalancing for near-term quantum computers. Physical Review A, 2021, 103, .	2.5	17

#	Article	IF	Citations
37	Computationally efficient zero-noise extrapolation for quantum-gate-error mitigation. Physical Review A, 2022, 105, .	2.5	17
38	Polarization effects in standard model parton distributions at very high energies. Journal of High Energy Physics, 2019, 2019, 1.	4.7	16
39	Active readout-error mitigation. Physical Review A, 2022, 105, .	2.5	16
40	Underlying-event sensitive observables in Drell–Yan production using GENEVA. European Physical Journal C, 2016, 76, 1.	3.9	15
41	Resummation of electroweak Sudakov logarithms for real radiation. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
42	Combining initial-state resummation with fixed-order calculations of electroweak corrections. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
43	Factorization of boosted multijet processes for threshold resummation. Physical Review D, 2010, 82, .	4.7	8
44	Quantum Gate Pattern Recognition and Circuit Optimization for Scientific Applications. EPJ Web of Conferences, 2021, 251, 03023.	0.3	8
45	Gaining analytic control of parton showers. Physical Review D, 2007, 76, .	4.7	7
46	A numerical formulation of resummation in effective field theory. Journal of High Energy Physics, 2019, 2019, 1.	4.7	6
47	A quantum algorithm to efficiently sample from interfering binary trees. Quantum Science and Technology, 2020, 5, 035004.	5.8	5
48	A formalism for the resummation of non-factorizable observables in SCET. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
49	Disentangling observable dependence in SCETI and SCETII anomalous dimensions: angularities at two loops. Journal of High Energy Physics, 2021, 2021, 1.	4.7	3