Zhen Liu

List of Publications by Year
in descending order

47 papers	2,357 citations	172443 29 h-index	233409 45 g-index
47 all docs	47 docs citations	47 times ranked	6243 citing authors

#	Article	IF	Citations
1	Simplified models for LHC new physics searches. Journal of Physics G: Nuclear and Particle Physics, 2012, 39, 105005.	3.6	273
2	Long-lived particles at the energy frontier: the MATHUSLA physics case. Reports on Progress in Physics, 2019, 82, 116201.	20.1	220
3	Exotic decays of the 125ÂGeV Higgs boson. Physical Review D, 2014, 90, .	4.7	209
4	Searching for long-lived particles beyond the Standard Model at the Large Hadron Collider. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 090501.	3.6	133
5	Colored resonant signals at the LHC: largest rate and simplest topology. Journal of High Energy Physics, 2010, 2010, 1.	4.7	122
6	Precision Higgs physics at the CEPC *. Chinese Physics C, 2019, 43, 043002.	3.7	89
7	Light neutralino dark matter: direct/indirect detection and collider searches. Journal of High Energy Physics, 2014, 2014, 1.	4.7	72
8	A global view on the Higgs self-coupling at lepton colliders. Journal of High Energy Physics, 2018, 2018, 1.	4.7	69
9	Low-mass Higgs bosons in the NMSSM and their LHC implications. Journal of High Energy Physics, 2013, 2013, 1.	4.7	60
10	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>W</mml:mi><mml:mo>â€²</mml:mo></mml:msup></mml:math>Boson near 2ÂTeV: Predictions for Run 2 of the LHC. Physical Review Letters, 2015, 115, 211802.	7.8	59
11	High Quality QCD Axion and the LHC. Physical Review Letters, 2020, 124, 221801.	7.8	59
12	Enhancing Long-Lived Particles Searches at the LHC with Precision Timing Information. Physical Review Letters, 2019, 122, 131801.	7.8	57
13	The Forward Physics Facility: Sites, experiments, and physics potential. Physics Reports, 2022, 968, 1-50.	25.6	57
14	The muon Smasherâ€™s guide. Reports on Progress in Physics, 2022, 85, 084201.	20.1	56
15	The fate of long-lived superparticles with hadronic decays after LHC Run 1. Journal of High Energy Physics, 2015, 2015, 1.	4.7	54
16	Challenges and opportunities for heavy scalar searches in the t t Â¯ $$ toverline{t} $$ channel at the LHC. Journal of High Energy Physics, 2016, 2016, 1.	4.7	54
17	WIMPs at high energy muon colliders. Physical Review D, 2021, 103, .	4.7	52
18	Exotic decays of the 125 GeV Higgs boson at future e ⁺ e ^{â^'} colliders. Chinese Physics C, 2017, 41, 063102.	3.7	46

#	Article	IF	Citations
19	Heavy Higgs bosons and the 2 TeV W â€² boson. Journal of High Energy Physics, 2015, 2015, 1.	4.7	45
20	Dark matter and Higgs bosons in the MSSM. Journal of High Energy Physics, 2013, 2013, 1.	4.7	44
21	Learning from Higgs physics at future Higgs factories. Journal of High Energy Physics, 2017, 2017, 1.	4.7	44
22	Physics implications of the diphoton excess from the perspective of renormalization group flow. Physical Review D, 2016, 93, .	4.7	41
23	Electroweak phase transition with spontaneous Z2-breaking. Journal of High Energy Physics, 2020, 2020, 1.	4.7	40
24	Beyond Higgs couplings: probing the Higgs with angular observables at future e + e â^’ colliders. Journal of High Energy Physics, 2016, 2016, 1.	4.7	35
25	Heavy axion opportunities at the DUNE near detector. Physical Review D, 2021, 103, .	4.7	35
26	Ultralight dark matter detection with mechanical quantum sensors. New Journal of Physics, 2021, 23, 023041.	2.9	33
27	ISR effects for resonant Higgs production at future lepton colliders. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 763, 409-415.	4.1	32
28	Probing the electroweak phase transition via enhanced di-Higgs boson production. Physical Review D, 2018, 97, .	4.7	31
29	Seeking for sterile neutrinos with displaced leptons at the LHC. Journal of High Energy Physics, 2019, 2019, 1.	4.7	30
30	Millicharged particles in liquid argon neutrino experiments. Journal of High Energy Physics, 2019, 2019, 1.	4.7	30
31	Radiative return for heavy Higgs boson at a muon collider. Physical Review D, 2015, 91, .	4.7	26
32	Potential precision of a direct measurement of the Higgs boson total width at a muon collider. Physical Review D, 2013, 87, .	4.7	24
33	Enhancing sensitivities to long-lived particles with high granularity calorimeters at the LHC. Journal of High Energy Physics, 2020, 2020, 1.	4.7	19
34	Potential precision on Higgs couplings and total width at the ILC. Physical Review D, 2014, 89, .	4.7	18
35	Interference in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi><mml:mi>g</mml:mi><mml:mo stretchy="false">â†’</mml:mo><mml:mi>h</mml:mi><mml:mo stretchy="false">â†’</mml:mo><mml:mi>Î³</mml:mi><mml:mi>Î³</mml:mi></mml:math> On-Shell Rate and the Higgs Boson Total Width. Physical Review Letters, 2017, 119, 181801.	7.8	18
36	Heavy Higgs as a portal to the supersymmetric electroweak sector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14

#	Article	IF	Citations
37	New approach to electroweak symmetry nonrestoration. Physical Review D, 2021, 104, .	4.7	14
38	Improving Higgs coupling measurements throughZZfusion at the ILC. Physical Review D, 2015, 91, .	4.7	11
39	Neutrino masses from low scale partial compositeness. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
40	New physics implication of Higgs precision measurements. International Journal of Modern Physics A, 2019, 34, 1940012.	1.5	6
41	Jet timing. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
42	Probing Higgs boson exotic decays at the LHC with machine learning. Physical Review D, 2022, 105, .	4.7	4
43	Probing the Higgs with angular observables at future e+eâ¯ colliders. International Journal of Modern Physics A, 2016, 31, 1644005.	1.5	3
44	Probing flavor nonuniversal theories through Higgs physics at the LHC and future colliders. Physical Review D, 2020, 101, .	4.7	3
45	Electroweak restoration at the LHC and beyond: The Vh channel. Physical Review D, 2021, 103, .	4.7	1
46	Probing the Higgs with Angular Observables at Future e⁺e^{â¯} Colliders. , 2017, , 71-82.		0
47	ISR effects for resonant Higgs production at future lepton colliders. , 2019, , 81-87.		0