

Hucheng Chen

List of Publications by Year in descending order

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75
papers

6,140
citations

117625

34
h-index

79698

73
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78
all docs

78
docs citations

78
times ranked

6228
citing authors

#	ARTICLE	IF	CITATIONS
1	ColdADC_P2: A 16-Channel Cryogenic ADC ASIC for the Deep Underground Neutrino Experiment. IEEE Transactions on Nuclear Science, 2022, 69, 105-112.	2.0	3
2	Observation of electroweak production of two jets in association with an isolated photon and missing transverse momentum, and search for a Higgs boson decaying into invisible particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, 1.	3.9	8
3	AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1.	2.9	23
4	Measurement of the energy response of the ATLAS calorimeter to charged pions from $W \rightarrow \mu \nu$ events in Run 2 data. European Physical Journal C, 2022, 82, 1.	3.9	4
5	Measurement of the energy asymmetry in $t\bar{t}$ production at $\sqrt{s} = 13$ TeV with the ATLAS experiment and interpretation in the SMEFT framework. European Physical Journal C, 2022, 82, .	3.9	2
6	The Phase-I trigger readout electronics upgrade of the ATLAS Liquid Argon calorimeters. Journal of Instrumentation, 2022, 17, P05024.	1.2	6
7	Measurement of hadronic event shapes in high- p_T multijet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4
8	Differential cross-section measurements for the electroweak production of dijets in association with a Z boson in proton-proton collisions at ATLAS. European Physical Journal C, 2021, 81, 1.	3.9	12
9	Measurements of WH and ZH production in the $H \rightarrow b\bar{b}$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	38
10	Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	14
11	Characterization and QC practice of 16-channel ADC ASIC at cryogenic temperature for Liquid Argon TPC front-end readout electronics system in DUNE experiment. Journal of Instrumentation, 2021, 16, T06005.	1.2	3
12	Measurement of single top-quark production in association with a W boson in the single-lepton channel at $\sqrt{s} = 8$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	3
13	Jet energy scale and resolution measured in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2021, 81, 1.	3.9	64
14	Multiplexing Firmware Prototypes for the Global Trigger Subsystem of ATLAS Phase-II Upgrade. IEEE Transactions on Nuclear Science, 2021, 68, 2421-2428.	2.0	1
15	Development of a High Throughput PCIe Card for DAQ System in the ATLAS and DUNE Experiments. Journal of Instrumentation, 2021, 16, P11004.	1.2	1
16	Volume I. Introduction to DUNE. Journal of Instrumentation, 2020, 15, T08008-T08008.	1.2	168
17	Search for new non-resonant phenomena in high-mass dilepton final states with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	24
18	Measurements of the Higgs boson inclusive and differential fiducial cross sections in the $H \rightarrow b\bar{b}$ decay channel at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 1.	3.9	32

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19	Search for direct production of electroweakinos in final states with one lepton, missing transverse momentum and a Higgs boson decaying into two b-jets in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	34
20	Volume IV. The DUNE far detector single-phase technology. Journal of Instrumentation, 2020, 15, T08010-T08010.	1.2	86
21	Measurements of top-quark pair spin correlations in the em channel at $\sqrt{s} = 13$ TeV using pp collisions in the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	22
22	Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. IEEE Transactions on Nuclear Science, 2020, 67, 2155-2160.	2.0	2
23	Higgs boson production cross-section measurements and their EFT interpretation in the 4ℓ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	41
24	A Generic High Bandwidth Data Acquisition Card for Physics Experiments. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4569-4577.	4.7	16
25	Development of a FELIX based readout system for ITk strip hybrid module demonstrator for ATLAS Phase-II Upgrade. Journal of Instrumentation, 2020, 15, P03013-P03013.	1.2	0
26	Search for $\overline{t}t$ resonances in fully hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
27	Reconstruction and identification of boosted $d\bar{t}$ systems in a search for Higgs boson pairs using 13 TeV proton-proton collision data in ATLAS. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
28	Search for top squarks in events with a Higgs or Z boson using 139 fb^{-1} of pp collision data at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	4
29	Search for heavy diboson resonances in semileptonic final states in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	29
30	Search for a scalar partner of the top quark in the all-hadronic $t\bar{t}$ plus missing transverse momentum final state at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1.	3.9	36
31	ColdADC: A 16-Channel Digitizer ASIC with 186 μV -rms noise and 10.5-bit ENOB at 77 K for the Deep Underground Neutrino Experiment. , 2020, , .		2
32	Design and Evaluation of the LAr Trigger Digitizer Board in the ATLAS Phase-I Upgrade. IEEE Transactions on Nuclear Science, 2019, 66, 2011-2016.	2.0	5
33	Electron reconstruction and identification in the ATLAS experiment using the 2015 and 2016 LHC proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	77
34	Measurement of $VH, \text{H}o\overline{\text{H}}b$ production as a function of the vector-boson transverse momentum in 13 TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
35	A data acquisition system for HV-CMOS sensor research and development in the upgrade of ATLAS experiment. Review of Scientific Instruments, 2019, 90, 064701.	1.3	1
36	Front-end readout electronics system of ProtoDUNE-SP LAr TPC. Radiation Detection Technology and Methods, 2019, 3, 1.	0.8	3

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37	Electron and photon energy calibration with the ATLAS detector using 2015â€“2016 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P03017-P03017.	1.2	37
38	Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run 2 data collected in 2015 and 2016. European Physical Journal C, 2019, 79, 1.	3.9	46
39	Measurement of fiducial and differential W^+W^- production cross-sections at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1.	3.9	24
40	ATLAS b-jet identification performance and efficiency measurement with $t\bar{t}$ events in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 1.	3.9	130
41	Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1.	4.7	46
42	Testbeam results of irradiated ams H18 HV-CMOS pixel sensor prototypes. Journal of Instrumentation, 2018, 13, P02011-P02011.	1.2	46
43	Performance of missing transverse momentum reconstruction with the ATLAS detector using protonâ€“proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 903.	3.9	181
44	Measurements of b-jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	40
45	Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490.	3.9	325
46	Measurements of electroweak W_{jj} production and constraints on anomalous gauge couplings with the ATLAS detector. European Physical Journal C, 2017, 77, 474.	3.9	26
47	Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466.	3.9	145
48	Power distribution in Harsh environment: Measurement on commercial power brick. , 2017, , .		1
49	Optimization on fixed low latency implementation of the GBT core in FPGA. Journal of Instrumentation, 2017, 12, P07011-P07011.	1.2	10
50	Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel in pp collisions at $s = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
51	Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317.	3.9	489
52	Reconstruction of primary vertices at the ATLAS experiment in Run 1 protonâ€“proton collisions at the LHC. European Physical Journal C, 2017, 77, 332.	3.9	71
53	Search for direct top squark pair production in final states with two leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2017, 77, 898.	3.9	50
54	Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in $s = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	8

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55	Development of a modular test system for the silicon sensor R&D of the ATLAS Upgrade. Journal of Instrumentation, 2017, 12, P01008-P01008.	1.2	10
56	Evidence for the $H \rightarrow b \bar{b}$ decay with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1.	4.7	64
57	FELIX: a PCIe based high-throughput approach for interfacing front-end and trigger electronics in the ATLAS Upgrade framework. Journal of Instrumentation, 2016, 11, C12023-C12023.	1.2	35
58	Muon reconstruction performance of the ATLAS detector in proton-proton collision data at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 292.	3.9	453
59	Test of CP invariance in vector-boson fusion production of the Higgs boson using the Optimal Observable method in the ditau decay channel with the ATLAS detector. European Physical Journal C, 2016, 76, 658.	3.9	48
60	Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment. European Physical Journal C, 2016, 76, 295.	3.9	50
61	Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 581.	3.9	298
62	Luminosity determination in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector at the LHC. European Physical Journal C, 2016, 76, 653.	3.9	279
63	Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at $\sqrt{s} = 7$ and 8 TeV in the ATLAS experiment. European Physical Journal C, 2016, 76, 6.	3.9	274
64	FELIX: a High-Throughput Network Approach for Interfacing to Front End Electronics for ATLAS Upgrades. Journal of Physics: Conference Series, 2015, 664, 082050.	0.4	34
65	Evaluation of commercial ADC radiation tolerance for accelerator experiments. Journal of Instrumentation, 2015, 10, P08009-P08009.	1.2	11
66	Search for the $b \bar{b}$ decay of the Standard Model Higgs boson in associated (W/Z)H production with the ATLAS detector. Journal of High Energy Physics, 2015, 2015, 1.	4.7	89
67	Study of the spin and parity of the Higgs boson in diboson decays with the ATLAS detector. European Physical Journal C, 2015, 75, 476.	3.9	174
68	Measurement of the $Z/\bar{\nu}$ boson transverse momentum distribution in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	131
69	Measurement of the electroweak production of dijets in association with a Z-boson and distributions sensitive to vector boson fusion in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	22
70	Search for direct top squark pair production in events with a Z boson, b -jets and missing transverse momentum in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2014, 74, 2883.	3.9	55
71	Jet energy resolution in proton-proton collisions at $\sqrt{s} = 7$ TeV recorded in 2010 with the ATLAS detector. European Physical Journal C, 2013, 73, 2306.	3.9	209
72	Measurement of the top quark-pair production cross section with ATLAS in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2011, 71, 1.	3.9	146

#	ARTICLE	IF	CITATIONS
73	Performance of the electronic readout of the ATLAS liquid argon calorimeters. Journal of Instrumentation, 2010, 5, P09003-P09003.	1.2	35
74	The ATLAS Simulation Infrastructure. European Physical Journal C, 2010, 70, 823-874.	3.9	1,187
75	Front-end ASIC for a liquid argon TPC. , 2010, , .		9