

Zhiqing Zhang

List of Publications by Year in descending order

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106
papers

9,833
citations

53660

45
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33814

99
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108
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108
docs citations

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times ranked

7917
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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Performance of the ATLAS Level-1 topological trigger in Run 2. European Physical Journal C, 2022, 82, 1. | 1.4 | 6 |
| 2 | Measurement of the c-jet mistagging efficiency in $\sqrt{s} = 13$ TeV events using pp collision data at $\sqrt{s} = 13$ TeV collected with the ATLAS detector. European Physical Journal C, 2022, 82, . | 1.4 | 14 |
| 3 | Search for exotic decays of the Higgs boson into $b\bar{b}$ and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2022, 2022, 1. | 1.6 | 2 |
| 4 | 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. | 1.4 | 8 |
| 5 | Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 153. | 1.4 | 14 |
| 6 | Search for Higgs bosons decaying into new spin-0 or spin-1 particles in four-lepton final states with the ATLAS detector with 139 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 1.6 | 10 |
| 7 | AtlFast3: The Next Generation of Fast Simulation in ATLAS. Computing and Software for Big Science, 2022, 6, 1. | 1.3 | 23 |
| 8 | Measurement of the energy response of the ATLAS calorimeter to charged pions from $W^{\pm} \rightarrow \mu^{\pm} \nu_{\mu} \rightarrow \mu^{\pm} \pi^{\pm} \nu_{\mu} \nu_{\tau}$ events in Run 2 data. European Physical Journal C, 2022, 82, 1. | 1.4 | 4 |
| 9 | The ATLAS inner detector trigger performance in pp collisions at $\sqrt{s} = 13$ TeV during LHC Run 2. European Physical Journal C, 2022, 82, 1. | 1.4 | 5 |
| 10 | Search for flavour-changing neutral-current interactions of a top quark and a gluon in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. European Physical Journal C, 2022, 82, . | 1.4 | 7 |
| 11 | 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, . | 1.4 | 2 |
| 12 | Determination of the parton distribution functions of the proton using diverse ATLAS data from pp collisions at $\sqrt{s} = 7, 8$ and 13 TeV. European Physical Journal C, 2022, 82, 1. | 1.4 | 12 |
| 13 | Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb^{-1} of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 37 |
| 14 | Search for Higgs boson production in association with a high-energy photon via vector-boson fusion with decay into bottom quark pairs at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 6 |
| 15 | Optimisation of large-radius jet reconstruction for the ATLAS detector in $\sqrt{s} = 13$ TeV proton-proton collisions. European Physical Journal C, 2021, 81, 1. | 1.4 | 15 |
| 16 | Search for new phenomena in final states with b-jets and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 18 |
| 17 | Search for doubly and singly charged Higgs bosons decaying into vector bosons in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 23 |
| 18 | Measurements of $W+W^{\pm} + \geq 1$ jet production cross-sections in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 8 |

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|----|---|------|-----------|
| 19 | Measurements of Higgs bosons decaying to bottom quarks from vector boson fusion production with the ATLAS experiment at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 1. | 1.4 | 14 |
| 20 | Determination of the parton distribution functions of the proton from ATLAS measurements of differential W^{\pm} and Z boson production in association with jets. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 10 |
| 21 | A search for the decays of stopped long-lived particles at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 5 |
| 22 | Muon reconstruction and identification efficiency in ATLAS using the full Run 2 pp collision data set at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 1. | 1.4 | 82 |
| 23 | 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. | 1.4 | 64 |
| 24 | Search for dark matter in events with missing transverse momentum and a Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 12 |
| 25 | Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using $\sqrt{s} = 13$ TeV proton-proton collision data. European Physical Journal C, 2021, 81, 1. | 1.4 | 7 |
| 26 | Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 10 |
| 27 | Search for dark matter produced in association with a Standard Model Higgs boson decaying into b-quarks using the full Run 2 dataset from the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 10 |
| 28 | Measurement of the production cross section of pairs of isolated photons in pp collisions at 13 TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 4 |
| 29 | Search for exotic decays of the Higgs boson into long-lived particles in pp collisions at $\sqrt{s} = 13$ TeV using displaced vertices in the ATLAS inner detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 4 |
| 30 | Search for chargino-neutralino pair production in final states with three leptons and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector. European Physical Journal C, 2021, 81, 1. | 1.4 | 28 |
| 31 | Configuration and performance of the ATLAS b-jet triggers in Run 2. European Physical Journal C, 2021, 81, 1. | 1.4 | 7 |
| 32 | Measurement of b-quark fragmentation properties in jets using the decay $B^{\pm} \rightarrow J/\psi K^{\pm}$ in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2021, 2021, 1. | 1.6 | 3 |
| 33 | Dark Matter benchmark models for early LHC Run-2 Searches: Report of the ATLAS/CMS Dark Matter Forum. Physics of the Dark Universe, 2020, 27, 100371. | 1.8 | 126 |
| 34 | Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking. Journal of High Energy Physics, 2020, 2020, 1. | 1.6 | 17 |
| 35 | Search for the $HH \rightarrow b\bar{b}$ process via vector-boson fusion production using proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2020, 2020, 1. | 1.6 | 17 |
| 36 | The anomalous magnetic moment of the muon in the Standard Model. Physics Reports, 2020, 887, 1-166. | 10.3 | 790 |

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|----|---|-----|-----------|
| 37 | A new evaluation of the hadronic vacuum polarisation contributions to the muon anomalous magnetic moment and to $\vec{\alpha}(\vec{m})_{\vec{Z}}^2$. European Physical Journal C, 2020, 80, 1. | 1.4 | 318 |
| 38 | Performance of electron and photon triggers in ATLAS during LHC Run 2. European Physical Journal C, 2020, 80, 1. | 1.4 | 93 |
| 39 | Evidence for $t\bar{t}$ production in the multilepton final state in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 1.4 | 30 |
| 40 | 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. | 1.4 | 36 |
| 41 | Alignment of the ATLAS Inner Detector in Run 2. European Physical Journal C, 2020, 80, 1. | 1.4 | 12 |
| 42 | Determination of jet calibration and energy resolution in proton-proton collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector. European Physical Journal C, 2020, 80, 1. | 1.4 | 15 |
| 43 | Measurement of the cross-section and charge asymmetry of W bosons produced in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 1.4 | 24 |
| 44 | Performance of top-quark and W-boson tagging with ATLAS in Run 2 of the LHC. European Physical Journal C, 2019, 79, 1. | 1.4 | 42 |
| 45 | Electron and photon energy calibration with the ATLAS detector using 2015-2016 LHC proton-proton collision data. Journal of Instrumentation, 2019, 14, P03017-P03017. | 0.5 | 37 |
| 46 | 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. | 1.4 | 46 |
| 47 | Measurement of the ratio of cross sections for inclusive isolated-photon production in pp collisions at $\sqrt{s} = 13$ and 8 TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 1.6 | 6 |
| 48 | Search for pair production of Higgs bosons in the $b\bar{b}$ final state using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2019, 2019, 1. | 1.6 | 55 |
| 49 | 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. | 1.4 | 24 |
| 50 | Measurement of the inclusive cross-section for the production of jets in association with a Z boson in proton-proton collisions at 8 TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 1.4 | 9 |
| 51 | 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. | 1.4 | 130 |
| 52 | Measurements of top-quark pair differential and double-differential cross-sections in the $t\bar{t}+jets$ channel with pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector. European Physical Journal C, 2019, 79, 1. | 1.4 | 34 |
| 53 | Search for dark photons in decays of Higgs bosons produced in association with Z bosons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1. | 1.6 | 13 |
| 54 | Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 903. | 1.4 | 181 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Prompt and non-prompt J/ψ and $\psi(2S)$ suppression at high transverse momentum in $\sqrt{s}=5.02$ TeV Pb+Pb collisions with the ATLAS experiment. European Physical Journal C, 2018, 78, 762. | 1.4 | 61 |
| 56 | Combination and QCD analysis of charm and beauty production cross-section measurements in deep inelastic ep scattering at HERA. European Physical Journal C, 2018, 78, 1. | 1.4 | 49 |
| 57 | 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. | 1.6 | 40 |
| 58 | Electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 1. | 1.4 | 17 |
| 59 | Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 1.6 | 17 |
| 60 | Measurement of differential cross sections and W^+/W^0 cross-section ratios for W boson production in association with jets at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2018, 2018, 1. | 1.6 | 16 |
| 61 | A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp-collision data with the ATLAS detector. European Physical Journal C, 2017, 77, 26. | 1.4 | 29 |
| 62 | Measurement of the cross section for electroweak production of $Z\gamma$ in association with two jets and constraints on anomalous quartic gauge couplings in proton-proton collisions at $\sqrt{s}=13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 770, 380-402. | 1.5 | 34 |
| 63 | Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1. European Physical Journal C, 2017, 77, 490. | 1.4 | 325 |
| 64 | Jet reconstruction and performance using particle flow with the ATLAS Detector. European Physical Journal C, 2017, 77, 466. | 1.4 | 145 |
| 65 | Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2. European Physical Journal C, 2017, 77, 673. | 1.4 | 75 |
| 66 | Performance of the ATLAS trigger system in 2015. European Physical Journal C, 2017, 77, 317. | 1.4 | 489 |
| 67 | Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC. European Physical Journal C, 2017, 77, 332. | 1.4 | 71 |
| 68 | Precision measurement and interpretation of inclusive W^+W^+ , W^+W^- . European Physical Journal C, 2017, 77, 367. | 1.4 | 145 |
| 69 | Search for dark matter at $\sqrt{s}=13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector. European Physical Journal C, 2017, 77, 393. | 1.4 | 80 |
| 70 | Measurement of the inclusive jet cross-sections in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector. Journal of High Energy Physics, 2017, 2017, 1. | 1.6 | 23 |
| 71 | Reevaluation of the hadronic vacuum polarisation contributions to the Standard Model predictions of the muon $g-2$ and $\alpha(m_Z^2)$ using newest hadronic cross-section data. European Physical Journal C, 2017, 77, 1. | 1.4 | 446 |
| 72 | Measurement of the Drell-Yan triple-differential cross section in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 1.6 | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC. European Physical Journal C, 2013, 73, 1. | 1.4 | 45 |
| 92 | Performance of the ATLAS Trigger System in 2010. European Physical Journal C, 2012, 72, 1. | 1.4 | 259 |
| 93 | Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ {TeV}. Journal of High Energy Physics, 2012, 2012, 1. | 1.6 | 58 |
| 94 | Extraction of top backgrounds in the Higgs boson search with the $H \rightarrow WW \rightarrow \mu\mu + \text{ETmiss}$ decay with a full-jet veto at the LHC. Physical Review D, 2011, 84, . | 1.6 | 5 |
| 95 | Reevaluation of the hadronic contributions to the muon g^2 and to $\alpha(M^2_Z)$. European Physical Journal C, 2011, 71, 1. | 1.4 | 628 |
| 96 | Measurement of the inclusive and dijet cross-sections of b-jets in pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector. European Physical Journal C, 2011, 71, 1. | 1.4 | 73 |
| 97 | Reevaluation of the hadronic contributions to the muon g^2 and to $(\alpha(M^2_Z))$. , 2011, 71, 1. | | 1 |
| 98 | The discrepancy between \tilde{J}_μ and $e + e^-$ spectral functions revisited and the consequences for the muon magnetic anomaly. European Physical Journal C, 2010, 66, 127-136. | 1.4 | 110 |
| 99 | Reevaluation of the hadronic contribution to the muon magnetic anomaly using new $e + e^- \rightarrow \mu^+ \mu^- + \text{hadrons}$ cross section data from BABAR. European Physical Journal C, 2010, 66, 1-9. | 1.4 | 128 |
| 100 | Combined measurement and QCD analysis of the inclusive $e^+ e^- p$ scattering cross sections at HERA. Journal of High Energy Physics, 2010, 2010, 1. | 1.6 | 458 |
| 101 | A precision measurement of the inclusive ep scattering cross section at HERA. European Physical Journal C, 2009, 64, 561-587. | 1.4 | 71 |
| 102 | The determination of $\hat{\Gamma}_S$ from \tilde{J}_μ decays revisited. European Physical Journal C, 2008, 56, 305-322. | 1.4 | 149 |
| 103 | Detector and trigger challenge for supersymmetrical dark matter scenarios at the international linear collider. Pramana - Journal of Physics, 2007, 69, 1195-1198. | 0.9 | 0 |
| 104 | The physics of hadronic tau decays. Reviews of Modern Physics, 2006, 78, 1043-1109. | 16.4 | 214 |
| 105 | Confronting spectral functions from ee annihilation and τ decays: consequences for the muon magnetic moment. European Physical Journal C, 2003, 27, 497-521. | 1.4 | 213 |
| 106 | Updated estimate of the muon magnetic moment using revised results from $e + e^-$ annihilation. European Physical Journal C, 2003, 31, 503-510. | 1.4 | 263 |