

Pietro Govoni

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2503390/publications.pdf>

Version: 2024-02-01

743
papers

50,880
citations

2427

97
h-index

2895

190
g-index

760
all docs

760
docs citations

760
times ranked

12784
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 716, 30-61. | 4.1 | 6,177 |
| 2 | The CMS experiment at the CERN LHC. Journal of Instrumentation, 2008, 3, S08004-S08004. | 1.2 | 2,192 |
| 3 | Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS Experiments. Physical Review Letters, 2015, 114, 191803 | 7.8 | 1,062 |
| 4 | CMS Physics Technical Design Report, Volume II: Physics Performance. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 995-1579. | 3.6 | 683 |
| 5 | Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 TeV. European Physical Journal C, 2015, 75, 212. | 3.9 | 541 |
| 6 | Observation of long-range, near-side angular correlations in pPb collisions at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 795-814. | 4.1 | 520 |
| 7 | Determination of jet energy calibration and transverse momentum resolution in CMS. Journal of Instrumentation, 2011, 6, P11002-P11002. | 1.2 | 508 |
| 8 | Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155. | 3.9 | 499 |
| 9 | Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC. Journal of High Energy Physics, 2010, 2010, 1. | 4.7 | 497 |
| 10 | Combined results of searches for the standard model Higgs boson in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 710, 26-48. | 4.1 | 477 |
| 11 | Performance of CMS muon reconstruction in pp collision events at $\sqrt{s} = 7$ TeV. Journal of Instrumentation, 2012, 7, P10002-P10002. | 1.2 | 467 |
| 12 | Observation and studies of jet quenching in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review C, 2011, 84, . | 2.9 | 455 |
| 13 | Identification of b-quark jets with the CMS experiment. Journal of Instrumentation, 2013, 8, P04013-P04013. | 1.2 | 418 |
| 14 | Performance of electron reconstruction and selection with the CMS detector in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of Instrumentation, 2015, 10, P06005-P06005. | 1.2 | 410 |
| 15 | Transverse Momentum and Pseudorapidity Distributions of Charged Hadrons in pp Collisions at $\sqrt{s} = 7$ and 8 TeV. Physical Review Letters, 2010, 105, 022002. | 7.8 | 400 |
| 16 | Observation of the rare $B_s^0 \rightarrow \mu^+ \mu^-$ decay from the combined analysis of CMS and LHCb data. Nature, 2015, 522, 68-72. | 27.8 | 390 |
| 17 | Description and performance of track and primary-vertex reconstruction with the CMS tracker. Journal of Instrumentation, 2014, 9, P10009-P10009. | 1.2 | 380 |
| 18 | Study of high-p T charged particle suppression in PbPb compared to pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 369 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 181 |
| 38 | Search for heavy neutrinos and W bosons with right-handed couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2014, 74, 3149. | 3.9 | 179 |
| 39 | Evidence for Collective Multiparticle Correlations in p-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2015, 115, 012301. | 7.8 | 177 |

40

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Energy calibration and resolution of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s} = 7$ TeV. Journal of Instrumentation, 2013, 8, P09009-P09009. | 1.2 | 140 |
| 56 | Evidence for transverse-momentum- and pseudorapidity-dependent event-plane fluctuations in PbPb and Pb collisions. Physical Review C, 2015, 92, . | 2.9 | 140 |
| 57 | Strange particle production in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 139 |
| 58 | Measurement of Long-Range Near-Side Two-Particle Angular Correlations in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2016, 116, 172302. | 7.8 | 139 |
| 59 | CMS Physics Technical Design Report: Addendum on High Density QCD with Heavy Ions. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 2307-2455. | 3.6 | 136 |
| 60 | Prompt and non-prompt J/ψ production in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2011, 71, 1. | 3.9 | 135 |
| 61 | Measurement of higher-order harmonic azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review C, 2014, 89, . | 2.9 | 133 |
| 62 | Studies of jet quenching using isolated-photon + jet correlations in PbPb and pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 773-794. | 4.1 | 130 |
| 63 | A search for a doubly-charged Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 129 |
| 64 | Constraints on the Higgs boson width from off-shell production and decay to Z-boson pairs. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 64-85. | 4.1 | 129 |
| 65 | Search for Dijet Resonances in pp Collisions at CMS. Physical Review Letters, 2010, 105, 211801. | 7.8 | 126 |
| 66 | Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy. Physical Review Letters, 2012, 108, 261803. | 7.8 | 126 |
| 67 | Measurement of the Inclusive Jet Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 107, 152001. | 7.8 | 125 |
| 68 | Measurement of differential top-quark-pair production cross sections in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 1. | 3.9 | 125 |
| 69 | Evidence for the 125 GeV Higgs boson decaying to a pair of τ , leptons. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 123 |
| 70 | Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800. | 3.9 | 123 |
| 71 | Measurements of inclusive W and Z cross sections in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 122 |
| 72 | Measurement of isolated photon production in pp and PbPb collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 710, 256-277. | 4.7 | 122 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Search for diphoton resonances in the mass range from 150 to 850 GeV in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 750, 494-519. | 4.1 | 120 |
| 74 | CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192. | 3.9 | 120 |
| 75 | Search for neutral Higgs bosons decaying to tau pairs in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 713, 68-90. | 4.1 | 120 |
| 76 | The performance of the CMS muon detector in proton-proton collisions at $\sqrt{s} = 7$ TeV at the LHC. Journal of Instrumentation, 2013, 8, P11002-P11002. | 1.2 | 119 |
| 77 | Search for resonances in the dijet mass spectrum from 7 TeV pp collisions at CMS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 704, 123-142. | 4.1 | 118 |
| 78 | Search for New Physics in the Multijet and Missing Transverse Momentum Final State in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2012, 109, 171803. | 7.8 | 118 |
| 79 | Searches for long-lived charged particles in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 118 |
| 80 | Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 117 |
| 81 | Measurements of differential jet cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV. The CMS Collaboration. Physical Review D, 2013, 87, 014005. | 4.7 | 115 |
| 82 | Search for Narrow Resonances Decaying to Dijets in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2016, 116, 071801. | 7.8 | 114 |
| 83 | Observation of a peaking structure in the $\chi\chi$ invariant mass spectrum from pp collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2014, 113, 071801. | 2.9 | 113 |
| 84 | Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.1 | 112 |
| 85 | Measurement of the rapidity and transverse momentum distributions of Higgs bosons in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 729, 149-171. | 4.1 | 110 |
| 86 | Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 108 |
| 87 | Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 7.8 | 108 |
| 88 | Azimuthal Anisotropy of Charged Particles at High Transverse Momenta in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Physical Review Letters, 2012, 109, 022301. | 7.8 | 108 |
| 89 | Charged particle multiplicities in pp interactions at $\sqrt{s} = 0.9$, 2.36, and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 106 |
| 90 | Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 103 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 91 | Missing transverse energy performance of the CMS detector. Journal of Instrumentation, 2011, 6, P09001-P09001. | 1.2 | 102 |
| 92 | Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 101 |
| 93 | Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 100 |
| 94 | Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 99 |
| 95 | Measurement of the prompt J/ψ production and $\psi(2S)$ production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | | |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 109 | Searches for new physics using the \hat{T} -invariant mass distribution in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review Letters, 2013, 111, 211804. | 7.8 | 90 |
| 110 | Search for long-lived neutral particles decaying to quark-antiquark pairs in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2015, 91, 072004. | 4.7 | 90 |
| 111 | Upsilon production cross section in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2014, 113, 132001. | 4.7 | 88 |
| 112 | Search for the standard model Higgs boson decaying to WZ in the fully leptonic final state in pp collisions at $\sqrt{s} = 8$ TeV. Physics Letters B, 2015, 749, 560-582. | 4.1 | 88 |
| 113 | Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 7$ TeV. Physics Letters B, 2013, 722, 5-27. | 4.1 | 88 |
| 114 | Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 147. | 3.9 | 88 |
| 115 | Search for resonant pair production of Higgs bosons decaying to two bottom quark-antiquark pairs in proton-proton collisions at 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 749, 560-582. | 4.1 | 87 |
| 116 | Angular analysis of the decay $B_0 \rightarrow K^* \mu^+ \mu^-$ from pp collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 424-448. | 4.1 | 87 |
| 117 | Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 86 |
| 118 | Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 85 |
| 119 | A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider. Science, 2012, 338, 1569-1575. | 12.6 | 85 |
| 120 | Evidence of b -jet Quenching in PbPb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2014, 113, 132301. | 7.8 | 85 |
| 121 | Study of double parton scattering using $W + 2$ -jet events in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 85 |
| 122 | Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 85 |
| 123 | Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2014, 74, 2847. | 3.9 | 85 |
| 124 | Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017. | 1.2 | 84 |
| 125 | Measurement of the single-top-quark t -channel cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 83 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb and pp collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 4.7 | 83 |
| 128 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 4.7 | 83 |
| 129 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 3.9 | 83 |
| 130 | Measurement of prompt and nonprompt charmonium suppression in $\sqrt{s} = 5.02$ TeV PbPb collisions at $\sqrt{s} = 5.02$ TeV. European Physical Journal C, 2018, 78, 509. | 3.9 | 83 |
| 131 | Search for heavy narrow dilepton resonances in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 7.8 | 82 |
| 132 | Suppression and azimuthal anisotropy of prompt and nonprompt J/ψ production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2017, 77, 252. | 3.9 | 82 |
| 133 | J/ψ and $\Upsilon(2S)$ production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 81 |
| 134 | Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. Journal of High Energy Physics, 2014, 2014, 1. | 4.1 | 81 |
| 135 | Search for a charged Higgs boson in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 81 |
| 136 | Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 81 |
| 137 | Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 709, 28-49. | 7.8 | 80 |
| 138 | Study of Vector Boson Scattering and Search for New Physics in Events with Two Same-Sign Leptons and Two Jets. Physical Review Letters, 2015, 114, 051801. | 7.8 | 80 |
| 139 | Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 709, 28-49. | 7.8 | 80 |
| 140 | Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 78 |
| 141 | Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 75. | 3.9 | 78 |
| 142 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 4.7 | 77 |
| 143 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 4.7 | 77 |
| 144 | Measurement of the muon charge asymmetry in inclusive Z boson production in PbPb collisions at $\sqrt{s} = 2.76$ TeV. European Physical Journal C, 2016, 76, 469. | 4.7 | 77 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Long-range two-particle correlations of strange hadrons with charged particles in pPb and PbPb collisions at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 345, 124-127. | 4.1 | 77 |
| 146 | Inclusive and differential measurements of the Λ^0 charge asymmetry in proton-proton collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2014, 112, 171801. | 4.1 | 76 |
| 147 | Search for Top-Quark Partners with Charge Asymmetry in the Same-Sign Dilepton Final State. Physical Review Letters, 2014, 112, 171801. | 7.8 | 76 |
| 148 | Study of exclusive two-photon production of $W+W\hat{a}^*$ in pp collisions at $\sqrt{s}=7$ TeV and constraints on anomalous quartic gauge couplings. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 75 |
| 149 | Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{NN}}=5.02$ TeV. European Physical Journal C, 2014, 74, 1. | 3.9 | 75 |
| 150 | Search for Neutral Minimal Supersymmetric Standard Model Higgs Bosons Decaying to Tau Pairs in pp Collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2011, 106, 231801. | 7.8 | 74 |
| 151 | Measurement of the W^+W^- cross section in pp collisions at $\sqrt{s}=8$ TeV and limits on anomalous gauge couplings. European Physical Journal C, 2016, 76, 401. | 3.9 | 74 |
| 152 | Measurement of the $X(3872)$ production cross section via decays to $J/\psi\bar{\psi} + \bar{\psi}\hat{a}^*$ in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 73 |
| 153 | Search for physics beyond the standard model in final states with a lepton and missing transverse energy in proton-proton collisions at $\sqrt{s}=7$ TeV. Physical Review D, 2015, 91, 112004. | 4.7 | 73 |
| 154 | Search for a standard model Higgs boson produced in association with a top-quark pair and decaying to bottom quarks using a matrix element method. European Physical Journal C, 2015, 75, 251. | 3.9 | 73 |
| 155 | Search for Resonant Production of High-Mass Photon Pairs in Proton-Proton Collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2016, 117, 051802. | 7.8 | 73 |
| 156 | Search for vectorlike charge $\frac{1}{3}$ fermions in proton-proton collisions at $\sqrt{s}=7$ TeV. Physical Review Letters, 2016, 117, 051802. | | |

| # | ARTICLES | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 69 |
| 164 | Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 69 |
| 165 | Search for anomalous production of multilepton events in pp collisions at $\sqrt{s} = 7$, TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 68 |
| 166 | Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC. European Physical Journal C, 2013, 73, 2469. | 3.9 | 68 |
| 167 | Measurement of the differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 68 |
| 168 | Search for heavy Majorana neutrinos in $pp \rightarrow \tau^+ \tau^- + \text{jets}$ events in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 697, 434-453. | 4.1 | 68 |
| 169 | Measurement of the inclusive 3-jet production differential cross section in proton-proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range. European Physical Journal C, 2015, 75, 186. | 3.9 | 68 |
| 170 | Measurement of the $t\bar{t}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s} = 7$ TeV. Physical Journal C, 2019, 79, 368. | 3.9 | 68 |
| 171 | Search for a light pseudoscalar Higgs boson in the $pp \rightarrow \tau^+ \tau^- + \text{jets}$ channel in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 697, 434-453. | 4.1 | 67 |
| 172 | Measurement of the differential cross section for isolated prompt photon production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2011, 84, 1. | 4.7 | 65 |
| 173 | Long-range and short-range dihadron angular correlations in central PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 65 |
| 174 | Search for microscopic black hole signatures at the Large Hadron Collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 697, 434-453. | 4.1 | 65 |
| 175 | Search for a light pseudoscalar Higgs boson in the dimuon decay channel in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2012, 108, 252002. | 7.8 | 65 |
| 176 | Observation of a New Λ_b^0 Baryon. Physical Review Letters, 2012, 108, 252002. | 7.8 | 65 |
| 177 | Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2014, 74, 3129. | 3.9 | 65 |
| 178 | Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2283. | 3.9 | 64 |
| 179 | Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 439. | 3.9 | 64 |
| 180 | Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 439. | 3.9 | 64 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Search for narrow resonances in dilepton mass spectra in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 714, 150-170. | 7.8 | 63 |
| 182 | Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider. Physical Review Letters, 2012, 108, 111801. | 7.8 | 63 |
| 183 | Spin Correlations and Top-Quark Polarization Using Dilepton Final States in $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 747, 98-119. | 4.1 | 63 |
| 184 | Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 749, 187-209. | 4.1 | 63 |
| 186 | Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 63 |
| 187 | Collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 7.8 | 62 |
| 188 | Measurement of the Pseudorapidity and Centrality Dependence of the Transverse Energy Density in Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review Letters, 2012, 109, 152303. | 7.8 | 62 |
| 189 | Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 710, 204-206. | 3.9 | 62 |
| 190 | Measurement of the $W+W\tilde{a}$ cross section in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous $WW\tilde{a}$ and WWZ couplings. European Physical Journal C, 2013, 73, 1. | 3.9 | 62 |
| 191 | Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 13. | 4.7 | 62 |
| 192 | Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 62 |
| 193 | Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 62 |
| 194 | Production Cross Section in $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 7.8 | 61 |
| 195 | Evidence for Associated Production of a Single Top Quark and W Boson in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2013, 110, 022003. | 7.8 | 61 |
| 196 | Measurement of prompt J/ψ pair production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 61 |
| 197 | Search for pair production of third-generation scalar leptoquarks and top squarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 710, 204-206. | 4.7 | 61 |
| 198 | Search for resonant production in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 61 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Dijet Azimuthal Decorrelations in pp Collisions at $\sqrt{s} = 7$ TeV. <i>Physical Review Letters</i> , 2011, 106, 102003. | 7.8 | 60 |
| 200 | Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV and first determination of the strong coupling constant in the TeV range. <i>European Physical Journal C</i> , 2013, 73, 13001. | 3.9 | 60 |
| 201 | Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV and first determination of the strong coupling constant in the TeV range. <i>European Physical Journal C</i> , 2013, 73, 13001. | 7.8 | 60 |
| 202 | Performance and operation of the CMS electromagnetic calorimeter. <i>Journal of Instrumentation</i> , 2010, 5, T03010-T03010. | 1.2 | 59 |
| 203 | Alignment of the CMS silicon tracker during commissioning with cosmic rays. <i>Journal of Instrumentation</i> , 2010, 5, T03009-T03009. | 1.2 | 59 |
| 204 | Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2011, 2011, 1. | 4.7 | 59 |
| 205 | Search for a technicolor Quark with Charge $\pm 2/3$. <i>Journal of High Energy Physics</i> , 2011, 2011, 1. | 7.8 | 59 |
| 206 | A search for pair production of new light bosons decaying into muons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 752, 146-168. | 4.1 | 59 |
| 207 | Search for anomalous t production in the highly-boosted all-hadronic final state. <i>Journal of High Energy Physics</i> , 2012, 2012, 1. | 4.7 | 58 |
| 208 | Jet production rates in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2012, 2012, 1. | 4.7 | 58 |
| 209 | Studies of jet mass in dijet and $W/Z + \text{jet}$ events. <i>Journal of High Energy Physics</i> , 2013, 2013, 1. | 4.7 | 58 |
| 210 | Interpretation of searches for supersymmetry with simplified models. <i>Physical Review D</i> , 2013, 88, . | 4.7 | 58 |
| 211 | Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. <i>European Physical Journal C</i> , 2015, 75, 237. | 3.9 | 58 |
| 212 | Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at 8 TeV. <i>European Physical Journal C</i> , 2018, 78, 701. | 3.9 | 58 |
| 213 | Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter. <i>Journal of Instrumentation</i> , 2010, 5, T03014-T03014. | 1.2 | 57 |
| 214 | | | |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Differential cross section measurements for the production of a W boson in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 741, 12-37. | 4.1 | 57 |
| 218 | Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 578. | 4.1 | 57 |
| 219 | Search for physics beyond the standard model in events with two leptons of same sign, missing transverse momentum, and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 578. | 3.9 | 57 |
| 220 | Combined search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 57 |
| 221 | Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 57 |
| 222 | Charged particle transverse momentum spectra in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 56 |
| 223 | Exclusive $\hat{p}^{\uparrow} \hat{p}^{\downarrow} + \hat{p}^{\downarrow} \hat{p}^{\uparrow}$ production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 56 |
| 224 | Measurement of the ratio of inclusive jet cross sections using the anti-k algorithm with radius parameters R and $R = 0.5$ and event activity dependence of Y (nS) production in $\sqrt{s} = 5.02$ TeV pPb and $\sqrt{s} = 2.76$ TeV pp collisions. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 56 |
| 225 | Search for heavy long-lived charged particles in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 713, 408-433. | 4.7 | 56 |
| 226 | Measurement of masses in the \overline{tt} system by kinematic endpoints in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2494. | 3.9 | 55 |
| 227 | Measurement of associated W + charm production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 55 |
| 228 | Measurement of associated W + charm production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 55 |
| 229 | Limits on the Higgs boson lifetime and width from its decay to four charged leptons. Physical Review D, 2015, 92, . | 4.7 | 55 |
| 230 | Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 451. | 3.9 | 55 |
| 231 | Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 106, 201104. | 7.8 | 54 |
| 232 | Search for gluino mediated bottom- and top-squark production in multijet final states in pp collisions at 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 725, 243-270. | 4.1 | 54 |
| 233 | Measurement of the T cross section in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2494. | 4.1 | 54 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $\sqrt{s} = 8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 54 |
| 236 | Measurement of the $t\bar{t}$ production cross section and the top quark mass in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 53 |
| 237 | Search for New Physics with a Missing Transverse Energy in Simultaneous Collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 7.8 | 53 |
| 238 | Search for Heavy Neutrinos and $\nu\bar{\nu}$ production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 7.8 | 53 |
| 239 | Search for Right-Handed Couplings in a Left-Right Symmetric Model in $t\bar{t}$ Collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.1 | 53 |
| 240 | Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with h \rightarrow $l\bar{l}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 755, 217-244. | 4.1 | 53 |
| 241 | Measurement of prompt and nonprompt $\psi(2S)$ production in pp collisions at $\sqrt{s} = 5.02$ TeV. European Physical Journal C, 2017, 77, 269. | 3.9 | 53 |
| 242 | Performance of CMS muon reconstruction in cosmic-ray events. Journal of Instrumentation, 2010, 5, T03022-T03022. | 1.2 | 52 |
| 243 | Measurement of the $t\bar{t}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 52 |
| 244 | Measurement of the ZZ production cross section and constraints on anomalous triple gauge couplings in four-lepton final states at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2018, 78, 165. | 4.1 | 52 |
| 245 | Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV and impact on parton distribution functions. European Physical Journal C, 2017, 77, 459. | 3.9 | 52 |
| 246 | Measurements of the $pp \rightarrow ZZ$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2018, 78, 165. | 3.9 | 52 |
| 247 | Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC. Physical Review D, 2011, 84, . | 4.7 | 51 |
| 248 | Search for exclusive or semi-exclusive $\tau^+\tau^-$ production and observation of exclusive and semi-exclusive e^+e^- production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 51 |
| 249 | Searches for heavy Higgs bosons in two-Higgs-doublet models and $h \rightarrow \gamma\gamma$ decay using multilepton and diphoton final states in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2014, 90, . | 4.7 | 51 |
| 250 | Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 51 |
| 251 | First measurement of the underlying event activity at the LHC with $\sqrt{s} = 0.9$ TeV. European Physical Journal C, 2010, 70, 555-572. | 3.9 | 50 |
| 252 | Search for $B_s \rightarrow \tau^+\tau^-$ and $B \rightarrow \tau^+\tau^-$ Decays in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 107, 101802. | 4.1 | 50 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 253 | Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s}=0.9, 2.76, \text{and } 7 \text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 50 |
| 254 | Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s}=13, \text{ext } \{V\}$. European Physical Journal C, 2019, 79, 564. | 3.9 | 50 |
| 255 | First Measurement of Bose-Einstein Correlations in Proton-Proton Collisions at $\sqrt{s}=0.9, 2.36 \text{ TeV}$ at the LHC. Physical Review Letters, 2010, 105, 032001. | 7.8 | 49 |
| 256 | Search for new physics with jets and missing transverse momentum in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 49 |
| 257 | Search for New Physics with Same-Sign Isolated Dilepton Events with Jets and Missing Transverse Energy. Physical Review Letters, 2012, 109, 071803. | 7.8 | 49 |
| 258 | Search for leptonic decays of $W \rightarrow e\bar{e}$ bosons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 49 |
| 259 | Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$ by the CMS and TOTEM experiments. European Physical Journal C, 2014, 74, 1. | 3.9 | 49 |
| 260 | Search for new resonances decaying via WZ to leptons in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 700, 187-206. | 4.7 | 48 |
| 261 | Measurement of the di-hadron pair production cross section in proton-proton collisions at $\sqrt{s} = 7 \text{ TeV}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 700, 187-206. | 4.7 | 48 |
| 262 | Search for new physics in events with same-sign dileptons and jets in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 48 |
| 263 | Observation of $Y(1S)$ pair production in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 48 |
| 264 | Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{V\}$. European Physical Journal C, 2019, 79, 364. | 3.9 | 48 |
| 265 | Search for Supersymmetry in pp Collisions at $\sqrt{s} = 7 \text{ TeV}$ in Events with Two Photons and Missing Transverse Energy. Physical Review Letters, 2011, 106, 211802. | 7.8 | 47 |
| 266 | Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 47 |
| 267 | Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2013, 2013, 1. | 4.1 | 47 |
| 268 | Search for Top Squarks in Parity-Violating Supersymmetry Using Three or More Leptons and Tagged Jets. Physical Review Letters, 2013, 111, 221801. | 7.8 | 47 |
| 269 | Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Physical Review D, 2016, 94, . | 7.8 | 47 |
| 270 | Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Physical Review D, 2016, 94, . | 4.7 | 47 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 271 | Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC. Journal of High Energy Physics, 2011, 2011, 1. Measurement of the Polarization of W Bosons with Large Transverse Momenta | 4.7 | 46 |
| 272 | in W in W Events at the LHC. Physical Review Letters, 2011, 107, 021802. | 7.8 | 46 |
| 273 | Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. Measurement of the ratio B | 4.7 | 46 |
| 274 | Measurement of the ratio B | | |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 289 | Pseudorapidity distribution of charged hadrons in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 143-163. | 4.1 | 45 |
| 290 | Search for microscopic black holes in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 44 |
| 291 | Search for Pair Production of Third-Generation Leptoquarks and Top Squarks in Collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1-37. | 7.8 | 44 |
| 292 | Search for Displaced Supersymmetry in Events with an Electron and a Muon with Large Impact Parameters. Physical Review Letters, 2015, 114, 061801. | 7.8 | 44 |
| 293 | Search for decays of stopped long-lived particles produced in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 151. | 3.9 | 44 |
| 294 | Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 140. | 3.9 | 44 |
| 295 | Search for pair production of first and second generation leptoquarks in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2014, 74, 3060. | 7.8 | 43 |
| 296 | Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2014, 74, 3060. | 3.9 | 43 |
| 297 | Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 43 |
| 298 | Search for the standard model Higgs boson produced through vector boson fusion and decaying to $b\bar{b}$. Physical Review D, 2015, 92, . | 4.7 | 43 |
| 299 | Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 325. | 3.9 | 43 |
| 300 | Search for pair production of first and second generation leptoquarks in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2016, 93, . | 4.7 | 43 |
| 301 | Search for new phenomena in monophoton final states in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 755, 102-124. | 4.1 | 43 |
| 302 | Search for natural and split supersymmetry in proton-proton collisions at $\sqrt{s} = 13$ TeV in final states with jets and missing transverse momentum. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 43 |
| 303 | Measurement of the top-quark mass in $t\bar{t}$ events with dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 42 |
| 304 | Evidence for exclusive $\tilde{\chi}_1^0 \tilde{\chi}_1^0 W + W \tilde{\chi}_1^0$ production and constraints on anomalous quartic gauge couplings in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 42 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 307 | Precise predictions for same-sign W -boson scattering at the LHC. European Physical Journal C, 2018, 78, 671. | 3.9 | 42 |
| 308 | Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. Search for Quark Compositeness with the Dijet Centrality Ratio in pp Collisions | 4.7 | 42 |
| 309 | Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. Search for Stopped Gluinos in pp Collisions at $\sqrt{s}=13$ TeV | 7.8 | 41 |
| 310 | Collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. Search for Stopped Gluinos in pp Collisions at $\sqrt{s}=13$ TeV | 7.8 | 41 |
| 311 | Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. Event shapes and azimuthal correlations in pp collisions at $\sqrt{s}=7$ TeV | 4.7 | 41 |
| 312 | Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. Event shapes and azimuthal correlations in pp collisions at $\sqrt{s}=7$ TeV | 4.7 | 41 |
| 313 | Search for fractionally charged particles in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. Search for pair-produced vectorlike quarks in proton-proton collisions at $\sqrt{s}=13$ TeV | 4.1 | 41 |
| 314 | Search for pair-produced vectorlike quarks in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. Search for pair-produced vectorlike quarks in proton-proton collisions at $\sqrt{s}=13$ TeV | 4.7 | 41 |
| 315 | Search for pair-produced vectorlike quarks in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. Search for pair-produced vectorlike quarks in proton-proton collisions at $\sqrt{s}=13$ TeV | 4.7 | 41 |
| 316 | Measurement of the $t\bar{t}$ production cross section in the $e\bar{\nu}_\tau$ channel in proton-proton collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 41 |
| 317 | Measurement of the $t\bar{t}$ production cross section in the all-jets final state in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 128. | 3.9 | 41 |
| 318 | Search for third-generation scalar leptoquarks and heavy right-handed neutrinos in final states with two tau leptons and two jets in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 41 |
| 319 | Search for same-sign top-quark pair production at $\sqrt{s}=7$ TeV and limits on flavour changing neutral currents in the top sector. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 40 |
| 320 | Measurement of four-jet production in proton-proton collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2014, 89, 1. | 4.7 | 40 |
| 321 | Measurement of the $t\bar{t}$ production cross section using events in the $e\bar{\nu}_\tau$ final state in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 172. | 3.9 | 40 |
| 322 | Search for new physics in dijet angular distributions using proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter and other models. European Physical Journal C, 2018, 78, 789. | 3.9 | 40 |
| 323 | Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV and combination with the lepton+jets channel. European Physical Journal C, 2019, 79, 313. | 3.9 | 40 |
| 324 | Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s}=13$ TeV. European Physical Journal C, 2021, 81, 378. | 3.9 | 40 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 325 | Energy resolution of the barrel of the CMS Electromagnetic Calorimeter. Journal of Instrumentation, 2007, 2, P04004-P04004. | 1.2 | 39 |
| 326 | Measurement of $W\hat{1}^3$ and $Z\hat{1}^3$ production in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 701, 535-555. | 4.1 | 39 |
| 327 | Search for resonances in the dilepton mass distribution in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 39 |
| 328 | Inclusive b-jet production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 39 |
| 329 | Measurement of the $Z\hat{1}^3$ b-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 39 |
| 330 | Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 39 |
| 331 | Measurement of the ZZ production cross section and search for anomalous couplings in $2\hat{1}, 2\hat{1}, \hat{1}^2$ final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 39 |
| 332 | Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 39 |
| 333 | Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965. | 3.9 | 39 |
| 334 | Results of the first performance tests of the CMS electromagnetic calorimeter. European Physical Journal C, 2006, 44, 1-10. | 3.9 | 38 |
| 335 | Search for heavy stable charged particles in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 38 |
| 336 | First measurement of hadronic event shapes in pp collisions at $\sqrt{s} = 7$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 699, 48-67. | 4.1 | 38 |
| 337 | Measurement of the top-quark mass in $t\bar{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 38 |
| 338 | Search for pair produced fourth-generation up-type quarks in pp collisions at $\sqrt{s} = 7$ TeV with a lepton in the final state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 307-328. | 4.1 | 38 |
| 339 | Search for dark matter produced in association with heavy-flavor quark pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 845. | 3.9 | 38 |
| 340 | Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 636. | 3.9 | 38 |
| 341 | Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\hat{1}$, leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 38 |
| 342 | Reconstruction of the signal amplitude of the CMS electromagnetic calorimeter. European Physical Journal C, 2006, 46, 23-35. | 3.9 | 37 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 343 | Commissioning of the CMS experiment and the cosmic run at four tesla. Journal of Instrumentation, 2010, 5, T03001-T03001. | 1.2 | 37 |
| 344 | Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ production cross section in pp collisions at $\sqrt{s}=7$ TeV using the kinematic properties of events with leptons and jets. European Physical Journal C, 2011, 71, 1. | 3.9 | 37 |
| 345 | Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ production cross section and the search for a new bottomonium state decaying to $\mu^+\mu^-$. Journal of High Energy Physics, 2015, 2015, 1. | 4.1 | 37 |
| 346 | Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.1 | 37 |
| 347 | Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.1 | 37 |
| 348 | Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 37 |
| 349 | Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 37 |
| 350 | Measurement of the WZ production cross section in pp collisions at $\sqrt{s}=7$ and $\sqrt{s}=8$ TeV and search for anomalous triple gauge couplings at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 236. | 3.9 | 37 |
| 351 | Performance of the CMS hadron calorimeter with cosmic ray muons and LHC beam data. Journal of Instrumentation, 2010, 5, T03012-T03012. | 1.2 | 36 |
| 352 | Precise mapping of the magnetic field in the CMS barrel yoke using cosmic rays. Journal of Instrumentation, 2010, 5, T03021-T03021. | 1.2 | 36 |
| 353 | Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 36 |
| 354 | Search for heavy lepton partners of neutrinos in proton-proton collisions in the context of the type III seesaw mechanism. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 348-368. | 4.1 | 36 |
| 355 | Search for heavy-flavour three-jet resonances in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.1 | 36 |
| 356 | Search for Monotop Signatures in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. Physical Review Letters, 2015, 114, 101801. | 7.8 | 36 |
| 357 | Search for resonant and nonresonant Higgs boson pair production in the $b\bar{b}\gamma\gamma$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 36 |
| 358 | Commissioning and performance of the CMS pixel tracker with cosmic ray muons. Journal of Instrumentation, 2010, 5, T03007-T03007. | 1.2 | 35 |
| 359 | Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 35 |
| 360 | Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 361 | Measurement of the top-quark mass in all-jets $t\bar{t}$ events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2014, 74, 2758. | 3.9 | 35 |
| 362 | Search for heavy Majorana neutrinos in e^+e^- jets and $e^+e^- \rightarrow \frac{1}{4} \nu\bar{\nu}$ jets events in proton-proton collisions at $s = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 35 |
| 363 | Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at $s = 7$ and 8 TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 35 |
| 364 | Measurement of exclusive Υ photoproduction from protons in $p\bar{p}$ collisions at $\sqrt{s_{NN}} = 5.02$, ext {TeV}. European Physical Journal C, 2019, 79, 277. | 3.9 | 35 |
| 365 | Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$, ext {TeV}. European Physical Journal C, 2021, 81, 488. | 3.9 | 35 |
| 366 | Search for Three-Jet Resonances in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 107, 101801. | 7.8 | 34 |
| 367 | Observation of Z decays to four leptons with the CMS detector at the LHC. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 34 |
| 368 | Search for microscopic black holes in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 34 |
| 369 | Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or ≥ 3 b-quark jets in 7 TeV pp collisions using the variable ΔE_T . Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 34 |
| 370 | Search for a W boson decaying to a bottom quark and a top quark in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 107, 101801. | 4.1 | 34 |
| 371 | Search for Z resonances decaying to dilepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2013, 87. | 4.7 | 34 |
| 372 | Search for Z resonances decaying to dilepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2013, 87. | 4.7 | 34 |
| 373 | Searches for supersymmetry using the M_{T2} variable in hadronic events produced in pp collisions at 8 TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 34 |
| 374 | Measurements of the $t\bar{t}$ production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections. European Physical Journal C, 2017, 77, 15. | 4.1 | 34 |
| 375 | Measurement of the Top Quark Pair Production Cross Section in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2016, 116, 052002. | 7.8 | 34 |
| 376 | Measurement of $t\bar{t}$ production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8$, ext {TeV}. European Physical Journal C, 2016, 76, 379. | 3.9 | 34 |
| 377 | Measurements of the $t\bar{t}$ production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections. European Physical Journal C, 2017, 77, 15. | 3.9 | 34 |
| 378 | Measurement of the top quark mass with lepton+jets final states using $p\bar{p}$ collisions at $\sqrt{s} = 13$, ext {TeV}. European Physical Journal C, 2018, 78, 891. | 3.9 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 379 | Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 90. | 3.9 | 34 |
| 380 | Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 33 |
| 381 | Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 33 |
| 382 | Search for narrow high-mass resonances in proton-proton collisions at $\sqrt{s} = 8$ TeV decaying to a Z and a Higgs boson. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 748, 255-277. | 4.1 | 33 |
| 383 | Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks. European Physical Journal C, 2016, 76, 371. | 3.9 | 33 |
| 384 | Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 758, 152-180. | 4.1 | 33 |
| 385 | Measurement of exclusive ρ^0 photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2019, 79, 702. | 3.9 | 33 |
| 386 | Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 13. | 3.9 | 33 |
| 387 | Search for top squark pair production using dilepton final states in pp collision data collected at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3. | 3.9 | 33 |
| 388 | Measurement of normalised multi-differential cross sections in pp collisions at $\sqrt{s} = 13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1. | 3.9 | 33 |
| 389 | Measurement of $\overline{B}B$ angular correlations based on secondary vertex reconstruction at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 32 |
| 390 | Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in events with a single lepton, jets, and missing transverse momentum. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 32 |
| 391 | Search for pair production of first- and second-generation scalar leptoquarks in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 3. | 4.7 | 32 |
| 392 | Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 32 |
| 393 | Jet and underlying event properties as a function of charged-particle multiplicity in proton-proton collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2674. | 3.9 | 32 |
| 394 | Search for a non-standard-model Higgs boson decaying to a pair of new light bosons in four-muon final states. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 564-586. | 4.1 | 32 |
| 395 | Alignment of the CMS tracker with LHC and cosmic ray data. Journal of Instrumentation, 2014, 9, P06009-P06009. | 1.2 | 32 |
| 396 | Measurements of the Z production cross sections in the 2μ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. European Physical Journal C, 2015, 75, 511. | 3.9 | 32 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 397 | Searches for pair production of third-generation squarks in $\sqrt{s}=13$ s = 13 TeV, ext {TeV} TeV pp collisions. European Physical Journal C, 2017, 77, 327. | 3.9 | 32 |
| 398 | Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 31 |
| 399 | Measurement of the triple-differential cross section for photon + jets production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 31 |
| 400 | Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=8$, ext {TeV} s = 8 TeV. European Physical Journal C, 2015, 75, 66. | 3.9 | 31 |
| 401 | Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 31 |
| 402 | Search for top squark pair production in pp collisions at s = 13 TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 31 |
| 403 | A multi-dimensional search for new heavy resonances decaying to boosted W , Z , or Z boson pairs in the dijet final state at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 237. | 3.9 | 31 |
| 404 | Measurement of Bose-Einstein correlations in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 30 |
| 405 | Search for a heavy bottom-like quark in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.1 | 30 |
| 406 | Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 30 |
| 407 | Search for a Higgs boson in the decay channel $H \rightarrow ZZ^* \rightarrow q\bar{q}$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 30 |
| 408 | Measurement of the W-boson helicity in top-quark decays from W production in lepton+jets events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 30 |
| 409 | Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 30 |
| 410 | Measurements of $\langle \cos \Delta\phi \rangle$ and $\langle \cos \Delta\phi \rangle$ spin correlations and top quark polarization using dilepton final states in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 30 |
| 411 | Search for massive WH resonances decaying into the $b\bar{b}$ final state at $\sqrt{s}=8$ s = 8 TeV, ext {TeV} TeV. European Physical Journal C, 2016, 76, 237. | 3.9 | 30 |
| 412 | Measurement of the CP-violating weak phase β_s and the decay width difference Γ_1 using the $B_s \rightarrow B_s^0 \mu^+ \mu^-$ decay. Journal of High Energy Physics, 2017, 2017, 1. | 4.1 | 30 |
| 413 | Measurement of the CP-violating weak phase β_s and the decay width difference Γ_1 using the $B_s \rightarrow B_s^0 \mu^+ \mu^-$ decay. Journal of High Energy Physics, 2017, 2017, 1. | 4.1 | 30 |
| 414 | Measurements of the associated production of a Z boson and b jets in pp collisions at $\sqrt{s} = 8$, ext {TeV} s = 8 TeV. European Physical Journal C, 2017, 77, 751. | 3.9 | 30 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 415 | The CMS barrel calorimeter response to particle beams from $\sqrt{s} = 350$ GeV/c. European Physical Journal C, 2009, 60, 359-373. | 3.9 | 29 |
| 416 | Search for supersymmetry in events with b jets and missing transverse momentum at the LHC. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 29 |
| 417 | Search for high-mass resonances decaying into $\tau^+\tau^-$ pairs in pp collisions at $\sqrt{s} = 13$ TeV in final states with missing transverse momentum and at least one jet using the α_T variable. European Physical Journal C, 2017, 77, 294. | 7.8 | 29 |
| 418 | Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. European Physical Journal C, 2016, 76, 372. | 4.1 | 29 |
| 419 | Correlations between jets and charged particles in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 3.9 | 29 |
| 420 | A search for new phenomena in pp collisions at $\sqrt{s} = 13$ TeV in final states with missing transverse momentum and at least one jet using the α_T variable. European Physical Journal C, 2017, 77, 294. | 4.7 | 29 |
| 421 | Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 29 |
| 422 | Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 280. | 3.9 | 29 |
| 423 | Search for physics beyond the standard model using multilepton signatures in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 752-772. | 4.1 | 28 |
| 424 | Search for long-lived particles in events with photons and missing energy in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 752-772. | 4.1 | 28 |
| 425 | Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 2019, 1. | 4.7 | 28 |
| 426 | Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 28 |
| 427 | Study of Z production in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV in the dimuon and dielectron decay channels. Journal of High Energy Physics, 2015, 2015, 1. | 4.1 | 27 |
| 428 | Study of Z production in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV in the dimuon and dielectron decay channels. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 27 |
| 429 | Search for anomalous single top quark production in association with a photon in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 27 |
| 430 | Search for single production of scalar leptoquarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2016, 93, . | 4.7 | 27 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 433 | Transverse momentum spectra of inclusive b jets in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Letters Section B: Nuclear, Elementary Particle and Hadron Energy Physics</i> , 2016, 754, 50-59. | 4.7 | 27 |
| 434 | Search for pair production of vector-like T and B quarks in single-lepton final states using boosted jet substructure in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1. | 4.7 | 27 |
| 435 | Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2018, 78, 291. | 3.9 | 27 |
| 436 | Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2020, 15, P02027-P02027. | 1.2 | 27 |
| 437 | Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2021, 2021, 1. | 4.7 | 27 |
| 438 | Intercalibration of the barrel electromagnetic calorimeter of the CMS experiment at start-up. <i>Journal of Instrumentation</i> , 2008, 3, P10007-P10007. | 1.2 | 26 |
| 439 | Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2011, 2011, 1. | 4.7 | 26 |
| 440 | Search for a heavy gauge boson. <i>Physical Letters Section B: Nuclear, Elementary Particle and Hadron Energy Physics</i> , 2012, 754, 50-59. | 4.1 | 26 |
| 441 | Combined search for the quarks of a sequential fourth generation. <i>Physical Review D</i> , 2012, 86, . | 4.7 | 26 |
| 442 | Search for resonant $\overline{t}t$ production in lepton+jets events in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2012, 2012, 1. | 4.7 | 26 |
| 443 | Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at $\sqrt{s} = 7$ TeV. <i>European Physical Journal C</i> , 2012, . | 3.9 | 26 |
| 444 | Search for three-jet resonances in pp collisions at $\sqrt{s} = 7$ TeV. <i>Physical Letters Section B: Nuclear, Elementary Particle and Hadron Energy Physics</i> , 2012, 754, 50-59. | 4.1 | 26 |
| 445 | Search for the standard model Higgs boson in the $ZZ\gamma\gamma$ channel in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2012, 2012, 1. | 4.7 | 26 |
| 446 | Measurement of the production cross section for pairs of isolated photons in pp collisions at $\sqrt{s} = 7$ TeV. <i>Journal of High Energy Physics</i> , 2012, 2012, 1. | 4.7 | 26 |
| 447 | Search for $W \rightarrow tb$ decays in the lepton + jets final state in pp collisions at $\sqrt{s} = 8$ TeV. <i>Journal of High Energy Physics</i> , 2014, 2014, 1. | 4.7 | 26 |
| 448 | Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at $\sqrt{s} = 8$ TeV. <i>Journal of High Energy Physics</i> , 2015, 2015, 1. | 4.7 | 26 |
| 449 | Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s} = 2.76$ TeV. <i>European Physical Journal C</i> , 2016, 76, 1. | 3.9 | 26 |
| 450 | Performance study of the CMS barrel resistive plate chambers with cosmic rays. <i>Journal of Instrumentation</i> , 2010, 5, T03017-T03017. | 1.2 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 451 | Measurement of the muon stopping power in lead tungstate. Journal of Instrumentation, 2010, 5, P03007-P03007. | 1.2 | 25 |
| 452 | Commissioning and performance of the CMS silicon strip tracker with cosmic ray muons. Journal of Instrumentation, 2010, 5, T03008-T03008. | 1.2 | 25 |
| 453 | Measurement of energy flow at large pseudorapidities in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 25 |
| 454 | Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.1 | 25 |
| 455 | Response of microchannel plates to single particles and to electromagnetic showers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 216-221. | 1.6 | 25 |
| 456 | Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 325. | 3.9 | 25 |
| 457 | Search for a low-mass pseudoscalar Higgs boson produced in association with a W boson in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 325. | 4.1 | 25 |
| 458 | Search for high-mass resonances in final states with a lepton and missing transverse momentum at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 25 |
| 459 | Performance of the CMS drift tube chambers with cosmic rays. Journal of Instrumentation, 2010, 5, T03015-T03015. | 1.2 | 24 |
| 460 | Performance of the CMS Level-1 trigger during commissioning with cosmic ray muons and LHC beams. Journal of Instrumentation, 2010, 5, T03002-T03002. | 1.2 | 24 |
| 461 | Observation of a diffractive contribution to dijet production in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2013, 87, . | 4.7 | 24 |
| 462 | Measurement of the $t\bar{t}$ production cross section in the $t\bar{t} + \text{jets}$ channel in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 1. | 3.9 | 24 |
| 463 | Search for physics beyond the standard model in events with two leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 24 |
| 464 | Search for third-generation scalar leptoquarks in the $t\bar{t}$ channel in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 24 |
| 465 | Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 24 |
| 466 | Search for quark contact interactions and extra spatial dimensions using dijet angular distributions in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 345, 277-281. | 4.1 | 24 |
| 467 | Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2016, 93, . | 4.7 | 24 |
| 468 | Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2016, 93, . | 4.7 | 24 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 469 | Measurements of $\sigma(\text{pp} \rightarrow \text{Z} \text{jet})$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13, \text{ext} \{ \text{TeV} \}$. European Physical Journal C, 2021, 81, 200. | 4.1 | 24 |
| 471 | Alignment of the CMS muon system with cosmic-ray and beam-halo muons. Journal of Instrumentation, 2010, 5, T03020-T03020. | 1.2 | 23 |
| 472 | Inclusive b-hadron production cross section with muons in pp collisions at $\sqrt{s} = 7; \text{ext} \{ \text{TeV} \}$. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 23 |
| 473 | Search for excited quarks in the $\text{jet} + \text{proton}$ final state in proton-proton collisions at $\sqrt{s} = 8, \text{ext} \{ \text{TeV} \}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 738, 274-293. | 4.1 | 23 |
| 474 | Measurement of WZ and ZZ production in pp collisions at $\sqrt{s} = 8, \text{ext} \{ \text{TeV} \}$ $s = 8 \text{ TeV}$ in final states with b-tagged jets. European Physical Journal C, 2014, 74, 2973. | 3.9 | 23 |
| 475 | Observation of top quark pairs produced in association with a vector boson in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 23 |
| 476 | Measurement of the jet mass in highly boosted $\overline{\text{t}}\text{t}$ events from pp collisions at $\sqrt{s} = 8, \text{ext} \{ \text{TeV} \}$. European Physical Journal C, 2017, 77, 467. | 3.9 | 23 |
| 477 | Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 478 | Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 479 | Measurement of the top quark mass using single top quark events in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. European Physical Journal C, 2017, 77, 354. | 3.9 | 23 |
| 480 | Measurement of the triple-differential dijet cross section in proton-proton collisions at $\sqrt{s} = 8, \text{ext} \{ \text{TeV} \}$ $s = 8 \text{ TeV}$ and constraints on parton distribution functions. European Physical Journal C, 2017, 77, 746. | 3.9 | 23 |
| 481 | Search for physics beyond the standard model in events with jets and two same-sign or at least three charged leptons in proton-proton collisions at $\sqrt{s} = 13, \text{ext} \{ \text{TeV} \}$. European Physical Journal C, 2020, 80, 752. | 3.9 | 23 |
| 482 | Search for dark matter and unparticles in events with a Z boson and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 483 | Search for large extra dimensions in the diphoton final state at the Large Hadron Collider. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 22 |
| 484 | Search for supersymmetry in events with photons and low missing transverse energy in pp collisions at $\sqrt{s} = 7, \text{ext} \{ \text{TeV} \}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 719, 42-61. | 4.1 | 22 |
| 485 | Search for physics beyond the standard model in events with \tilde{l} , leptons, jets, and large transverse momentum imbalance in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. European Physical Journal C, 2013, 73, 2493. | 3.9 | 22 |
| 486 | Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7, \text{ext} \{ \text{TeV} \}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 815-840. | 4.1 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 487 | Search for $t\bar{t}\hat{A}$ resonances in highly boosted lepton+jets and fully hadronic final states in proton-proton collisions at $s = 13\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 22 |
| 488 | Search for massive resonances decaying into WW, WZ or ZZ bosons in proton-proton collisions at $s = 13\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 22 |
| 489 | Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $s = 13\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 22 |
| 490 | Search for heavy neutrinos or third-generation leptoquarks in final states with two hadronically decaying \tilde{l} , leptons and two jets in proton-proton collisions at $s = 13\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 22 |
| 491 | Search for direct pair production of supersymmetric partners to the τ_{\pm} lepton in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 189. | 3.9 | 22 |
| 492 | Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2020, 80, 370. | 3.9 | 22 |
| 493 | Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $s = 13\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 7.8 | 21 |
| 494 | Searches for supersymmetry based on events with b jets and four W bosons in pp collisions at 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 745, 5-28. | 4.1 | 21 |
| 495 | Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at $s = 8\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 21 |
| 496 | A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10. | 2.9 | 21 |
| 497 | Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 21 |
| 498 | Laser-based calibration for the HARP time of flight system. IEEE Transactions on Nuclear Science, 2003, 50, 1053-1058. | 2.0 | 20 |
| 499 | Performance of CMS hadron calorimeter timing and synchronization using test beam, cosmic ray, and LHC beam data. Journal of Instrumentation, 2010, 5, T03013-T03013. | 1.2 | 20 |
| 500 | Performance of the CMS cathode strip chambers with cosmic rays. Journal of Instrumentation, 2010, 5, T03018-T03018. | 1.2 | 20 |
| 501 | Measurement of the inclusive Z cross section via decays to tau pairs in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 20 |
| 502 | Search for exotic resonances decaying into WZ/ZZ in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 20 |
| 503 | Search for supersymmetry in pp collisions at $\sqrt{s}=7$ TeV in events with a single lepton, jets, and missing transverse momentum. European Physical Journal C, 2013, 73, 2404. | 3.9 | 20 |
| 504 | Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 1252-1272. | 4.1 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 505 | Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}} + \text{Z})$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.1 | 20 |
| 506 | Measurements of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}} + \text{Z})$ charge asymmetry using the dilepton decay channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 20 |
| 507 | Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 20 |
| 508 | Study of $\text{B} \rightarrow \text{D}^* \ell \bar{\nu}_\ell$ Meson Production in $\text{p}\bar{\text{p}} \rightarrow \text{B}^0 \text{D}^* \ell \bar{\nu}_\ell$ Collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 7.8 | 20 |
| 509 | Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 20 |
| 510 | Search for $\text{t}\bar{\text{t}} \rightarrow \text{t}\bar{\text{t}} + \text{H}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 20 |
| 511 | Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 20 |
| 512 | Search for rare decays of $\text{Z} \rightarrow \text{Z} + \text{H}$ and Higgs bosons to $\text{Z} \rightarrow \text{Z} + \text{H} + \text{Z}$ and a photon in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 94. | 3.9 | 20 |
| 513 | Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1. | 4.7 | 20 |
| 514 | Aligning the CMS muon chambers with the muon alignment system during an extended cosmic ray run. Journal of Instrumentation, 2010, 5, T03019-T03019. | 1.2 | 19 |
| 515 | Performance of the CMS drift-tube chamber local trigger with cosmic rays. Journal of Instrumentation, 2010, 5, T03003-T03003. | 1.2 | 19 |
| 516 | CMS data processing workflows during an extended cosmic ray run. Journal of Instrumentation, 2010, 5, T03006-T03006. | 1.2 | 19 |
| 517 | Radiation hardness qualification of PbWO_4 scintillation crystals for the CMS Electromagnetic Calorimeter. Journal of Instrumentation, 2010, 5, P03010-P03010. | 1.2 | 19 |
| 518 | Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 19 |
| 519 | Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into l, ν leptons in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 19 |
| 520 | Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 723. | 3.9 | 19 |
| 521 | Fine synchronization of the CMS muon drift-tube local trigger using cosmic rays. Journal of Instrumentation, 2010, 5, T03004-T03004. | 1.2 | 18 |
| 522 | Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2012, 86, . | 4.7 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 523 | Search for quark compositeness in dijet angular distributions from pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 18 |
| 524 | Searches for Higgs bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.1 | 18 |
| 525 | Measurement of the azimuthal anisotropy of neutral pions in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2013, 110, 042301. | 4.1 | 18 |
| 526 | Search for stealth supersymmetry in events with jets, either photons or leptons, and low missing transverse momentum in pp collisions at 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 743, 503-525. | 4.1 | 18 |
| 527 | Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 18 |
| 528 | Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 460. | 3.9 | 18 |
| 529 | Search for $W\tilde{\chi}^0_1$ decaying to tau lepton and neutrino in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 755, 196-216. | 4.1 | 18 |
| 530 | Measurement of normalized differential cross sections in the dilepton channel from pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 18 |
| 531 | Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 20. | 3.9 | 18 |
| 532 | Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 18 |
| 533 | MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 629. | 3.9 | 18 |
| 534 | Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 970. | 3.9 | 18 |
| 535 | Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 290. | 3.9 | 18 |
| 536 | Calibration of the CMS drift tube chambers and measurement of the drift velocity with cosmic rays. Journal of Instrumentation, 2010, 5, T03016-T03016. | 1.2 | 17 |
| 537 | Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 106, 201803. | 7.8 | 17 |
| 538 | Search for stopped long-lived particles produced in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 17 |
| 539 | Search for large-scale dimensions in dimuon and dielectron events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.1 | 17 |
| 540 | Measurement of the Λ_{cb}^0 lifetime in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 559 | Search for lepton flavour violating decays of heavy resonances and quantum black holes to an $\mu e \gamma$ pair in proton-proton collisions at $\sqrt{s}=8$ -ext $\sqrt{s}=8$ TeV. Measurement of the production cross section of a W boson in association with two b jets in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 536. | 3.9 | 16 |
| 560 | Measurement of the production cross section of a W boson in association with two b jets in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 92. | 3.9 | 16 |
| 561 | Measurement of dijet azimuthal decorrelation in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 536. | 3.9 | 16 |
| 562 | Search for excited leptons in proton-proton collisions at $s = 8 \sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 16 |
| 563 | Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at $s = 8 \sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 16 |
| 564 | Measurement of the production cross section of a W boson in association with two b jets in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 92. | 3.9 | 16 |
| 565 | Measurement of associated Z + charm production in proton-proton collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2018, 78, 287. | 3.9 | 16 |
| 566 | Search for new physics in top quark production in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 886. | 3.9 | 16 |
| 567 | Study of the Dijet Mass Spectrum in $pp \rightarrow W + \text{jets}$ Events at $\sqrt{s}=7$ TeV. Physical Review Letters, 2012, 109, 251801. | 4.1 | 15 |
| 568 | Search for a fermiophobic Higgs boson in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 15 |
| 569 | Search for a Higgs boson decaying into $\gamma \gamma$ with low dilepton mass in pp collisions at $\sqrt{s}=8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 341-362. | 4.1 | 15 |
| 570 | Measurement of the mass difference between top and antitop quarks. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 15 |
| 571 | Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 15 |
| 572 | Search for heavy resonances in the W/Z -tagged dijet mass spectrum in pp collisions at 7 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 280-301. | 4.1 | 15 |
| 573 | Search for supersymmetry with zero variables in $pp \rightarrow W + \text{jets}$ Events at $\sqrt{s}=7$ TeV. Physical Review Letters, 2012, 109, 251801. | 4.7 | 15 |
| 574 | Measurement of the cross section ratio $\sigma(\text{pp} \rightarrow W + \text{jets})/\sigma(\text{pp} \rightarrow W)$ in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 92. | 4.1 | 15 |
| 575 | Search for a Higgs boson decaying into $\gamma \gamma$ at $\sqrt{s}=8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 341-362. | 4.1 | 15 |
| 576 | Measurement of top quark polarisation in t-channel single top quark production. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 577 | Search for electroweak production of charginos and neutralinos in WH events in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 15 |
| 578 | Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at $s = 8 \sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 15 |
| 579 | Measurement of the $t \bar{t} \rightarrow \ell \bar{\nu}_\ell$ production cross section using events with one lepton and at least one jet in pp collisions at $s = 13 \sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 15 |
| 580 | Search for new physics with dijet angular distributions in proton-proton collisions at $s = 13 \sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 15 |
| 581 | Measurement of the ratio of the dijet to jet-jet cross sections in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.1 | 14 |
| 582 | Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 14 |
| 583 | Measurement of the production cross section for $Z \gamma \rightarrow u \bar{u} \gamma$ in pp collisions at $\sqrt{s} = 7$ TeV and limits on $ZZ\gamma^3$ and $Z\gamma^3$ triple gauge boson couplings. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 14 |
| 584 | Search for s channel single top quark production in pp collisions at $s = 7 \sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 14 |
| 585 | Search for supersymmetry in pp collisions at $s = 13 \sqrt{s}=13$ TeV in the single-lepton final state using the sum of masses of large-radius jets. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 14 |
| 586 | Measurement of spin correlations in $t \bar{t} \rightarrow \ell \bar{\nu}_\ell$ production using the matrix element method in the $\mu\text{on}+\text{jets}$ final state in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.1 | 14 |
| 587 | Search for associated production of dark matter with a Higgs boson decaying to $b \bar{b} \gamma$ or $\gamma \gamma$ at $s = 13 \sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 14 |
| 588 | Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $s = 8 \sqrt{s}=8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 14 |
| 589 | Search for electroweak production of a vector-like quark decaying to a top quark and a Higgs boson using boosted topologies in fully hadronic final states. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 14 |
| 590 | Search for supersymmetry in events with at least one photon, missing transverse momentum, and large transverse event activity in proton-proton collisions at $s = 13 \sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 14 |
| 591 | Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 14 |
| 592 | Studies of $B \rightarrow \ell \ell \gamma$ and $B \rightarrow \ell \ell \gamma \gamma$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | | |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 613 | Search for baryon number violation in top-quark decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 731, 173-196. | 4.1 | 12 |
| 614 | Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 12 |
| 615 | Phenomenological MSSM interpretation of CMS searches in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 12 |
| 616 | Search for neutral MSSM Higgs bosons decaying to $\tilde{\chi}_1^0 \tilde{\chi}_1^0$ in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 752, 221-246. | 4.1 | 12 |
| 617 | Comparing transverse momentum balance of b jet pairs in pp and PbPb collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 12 |
| 618 | Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 12 |
| 619 | Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}_1^0 \tilde{\chi}_1^0$ or $\tilde{\chi}_1^0 \tilde{\chi}_1^{\pm}$ at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 12 |
| 620 | Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1. | 3.9 | 12 |
| 621 | Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 12 |
| 622 | Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 893. | 3.9 | 12 |
| 623 | Development and validation of HERWIG++ tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312. | 3.9 | 12 |
| 624 | Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 12 |
| 625 | Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 11 |
| 626 | Forward energy flow, central charged-particle multiplicities, and pseudorapidity gaps in W and Z boson events from pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2012, 72, 1. | 3.9 | 11 |
| 627 | Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow \tilde{\chi}_1^0 \tilde{\chi}_1^0$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 11 |
| 628 | Search for new physics in final states with a lepton and missing transverse energy in pp collisions at the LHC. Physical Review D, 2013, 87, . | 4.7 | 11 |
| 629 | Measurement of the $Z\tilde{\chi}_1^0$ production cross section in pp collisions at 8 TeV and search for anomalous triple gauge boson couplings. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 11 |
| 630 | Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2016, 93, . | 4.7 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 631 | Search for electroweak production of charginos in final states with two \tilde{l} , leptons in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 11 |
| 632 | Measurement of the semileptonic $t \bar{t} \hat{A}^- \mathbf{t} + \hat{I}^3$ production cross section in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 11 |
| 633 | Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ using $H \hat{A}^+ WW$ decays. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 11 |
| 634 | Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 11 |
| 635 | Search for a heavy resonance decaying to a pair of vector bosons in the lepton plus merged jet final state at $\sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 11 |
| 636 | Search for supersymmetry in events with a photon, jets, \mathbf{b} -jets, and missing transverse momentum in proton-proton collisions at $13 \sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2019, 79, 444. | 3.9 | 11 |
| 637 | Study of the underlying event in top quark pair production in pp collisions at $13 \sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2019, 79, 123. | 3.9 | 11 |
| 638 | Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 43. | 3.9 | 11 |
| 639 | Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 10 |
| 640 | Search for excited leptons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 720, 309-329. | 4.7 | 10 |
| 641 | Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at $s = 2.76 \sqrt{s} = 2.76 \text{ TeV}$. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 10 |
| 642 | Measurements of the $pp \hat{A}^+ W \hat{I}^3$ and $pp \hat{A}^+ Z \hat{I}^3$ cross sections and limits on anomalous quartic gauge couplings at $s = 8 \sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 10 |
| 643 | Measurement of the inclusive energy spectrum in the very forward direction in proton-proton collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 10 |
| 644 | Search for a light pseudoscalar Higgs boson produced in association with bottom quarks in pp collisions at $\sqrt{s} = 8 \text{ TeV}$. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 10 |
| 645 | Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. European Physical Journal C, 2018, 78, 242. | 3.9 | 10 |
| 646 | Measurement of the $\mathbf{Z}/\gamma \rightarrow \text{au au}$ cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ and validation of $\mathbf{Z}/\gamma \rightarrow \text{t}\bar{t}, \text{b}\bar{b}$, cross section in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ and validation of $\mathbf{Z}/\gamma \rightarrow \text{t}\bar{t}, \text{b}\bar{b}$. European Physical Journal C, 2018, 78, 708. | 3.9 | 10 |
| 647 | Search for a heavy resonance decaying into a Z boson and a vector boson in the $\text{u}\bar{\text{u}} \rightarrow \text{q}\bar{\text{q}}$ final state. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 10 |
| 648 | Evidence for $\text{W} \rightarrow \text{W}$ production from double-parton interactions in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$. European Physical Journal C, 2020, 80, 1. | 3.9 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 649 | Publisher's Note: Search for Dijet Resonances in 7 TeV pp Collisions at CMS [Phys. Rev. Lett. 105, 211801 (2010)]. Physical Review Letters, 2011, 106, . | 7.8 | 9 |
| 650 | Search for a narrow, spin-2 resonance decaying to a pair of Z bosons in the $q\bar{q}$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2013, 718, 1208-1228. | 4.1 | 9 |
| 651 | Search for supersymmetry in final states with a single lepton, b-quark jets, and missing transverse energy in proton-proton collisions at $\sqrt{s} = 7$ TeV. Physical Review D, 2013, 87, . | 4.7 | 9 |
| 652 | Search for lepton-flavor violating decays of heavy resonances and quantum black holes to $e\bar{\nu}_\mu$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 9 |
| 653 | Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 1. | 3.9 | 9 |
| 654 | Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton + jets final state in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1. | 3.9 | 9 |
| 655 | Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 1. | 3.9 | 9 |
| 656 | Search for excited leptons in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 1208-1228. | 4.1 | 8 |
| 657 | Beam test evaluation of electromagnetic calorimeter modules made from proton-damaged PbWO ₄ crystals. Journal of Instrumentation, 2016, 11, P04012-P04012. | 1.2 | 8 |
| 658 | Searches for W bosons decaying to a top quark and a bottom quark in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 8 |
| 659 | Pseudorapidity distributions of charged hadrons in proton-lead collisions at $\sqrt{s_{NN}} = 5.02$ and 8.16 TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 8 |
| 660 | Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2q$ final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 8 |
| 661 | Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 773. | 3.9 | 8 |
| 662 | Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 8 |
| 663 | Vector boson scattering processes: Status and prospects. Reviews in Physics, 2022, 8, 100071. | 8.9 | 8 |
| 664 | Search for the standard model Higgs boson produced in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 7 |
| 665 | Measurement of neutral strange particle production in the underlying event in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2013, 88, . | 4.7 | 7 |
| 666 | Production of leading charged particles and leading charged-particle jets at small transverse momenta in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2015, 92, . | 4.7 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 667 | Search for supersymmetry with photons in pp collisions at $\sqrt{s} = 8$ TeV. Physical Review D, 2015, 92, . | 4.7 | 7 |
| 668 | Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 7 |
| 669 | Search for high-mass $Z\gamma$ resonances in $e^+e^- \rightarrow \gamma^* \rightarrow \gamma^* \gamma^* \rightarrow \gamma^* \gamma^* \gamma^*$ final states in proton-proton collisions at $\sqrt{s} = 8$ TeV and 13 TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 7 |
| 670 | Response of microchannel plates in ionization mode to single particles and electromagnetic showers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 879, 6-12. | 1.6 | 7 |
| 671 | Study of central exclusive "Equation missing" production in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV. European Physical Journal C, 2020, 80, 718. | 3.9 | 7 |
| 672 | Measurement of the cross section for production of $b\bar{b}$ decaying to muons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1. | 4.7 | 6 |
| 673 | Search for anomalous production of highly boosted Z bosons decaying to $\mu\mu$. $\sqrt{s} = 8 \text{ TeV}$ | 4.1 | 6 |
| 674 | Search for jet extinction in the inclusive jet cross section. $\sqrt{s} = 8 \text{ TeV}$ | 4.7 | 6 |
| 675 | Comparison of the $Z/\gamma^* \rightarrow \mu\mu + \text{jets}$ cross sections in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 6 |
| 676 | Distributions of topological observables in inclusive three- and four-jet events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2015, 75, 302. | 3.9 | 6 |
| 677 | Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 757, 6-31. | 4.1 | 6 |
| 678 | Search for R-parity violating decays of a top squark in proton-proton collisions at $\sqrt{s} = 8$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 178-201. | 4.1 | 6 |
| 679 | Measurement of the mass of the top quark in decays with a J/ψ meson in pp collisions at 8 TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 6 |
| 680 | Search for supersymmetry in events with at least three electrons or muons, jets, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 6 |
| 681 | Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2019, 79, 969. | 3.9 | 6 |
| 682 | Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1. | | 6 |
| 683 | Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 6 |
| 684 | Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 685 | Inter-calibration of the CMS electromagnetic calorimeter with isolated electrons. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, N67-N83. | 3.6 | 5 |
| 686 | Commissioning of the CMS High-Level Trigger with cosmic rays. Journal of Instrumentation, 2010, 5, T03005-T03005. | 1.2 | 5 |
| 687 | Same sign WW scattering process as a probe of Higgs boson in $\sqrt{s}=10$ TeV. European Physical Journal C, 2011, 71, 1. | 3.9 | 5 |
| 688 | Search for contact interactions in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 5 |
| 689 | Study of final-state radiation in decays of Z bosons produced in pp collisions at $\sqrt{s}=7$ TeV. Physical Review D, 2015, 91, . | 4.7 | 5 |
| 690 | Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 5 |
| 691 | Search for the production of an excited bottom quark decaying to tW in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 5 |
| 692 | Measurement of the ratio $R_{B\tau}$ in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | | |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 703 | Search for pair production of excited top quarks in the lepton + jets final state. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 4 |
| 704 | Measurement of the differential cross sections for top quark pair production as a function of kinematic event variables in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Physical Review D, 2016, 94, . | 4.7 | 4 |
| 705 | Search for dark matter particles in proton-proton collisions at $\sqrt{s} = 8$ TeV using the razor variables. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 4 |
| 706 | Search for CP violation in $t\bar{t}$ production and decay in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 4 |
| 707 | Measurement of differential cross sections in the kinematic angular variable $\tilde{\chi}^*$ for inclusive Z boson production in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 4 |
| 708 | Search for ZZ resonances in the $2\gamma, 2\ell$ final state in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 4 |
| 709 | Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 305. | 3.9 | 4 |
| 710 | Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, . | 4.7 | 4 |
| 711 | Design and performance of the cooling system for the electromagnetic calorimeter of CMS. , 0, , . | | 3 |
| 712 | PERFORMANCE OF THE COOLING SYSTEM OF ECAL CMS. , 2004, , . | | 3 |
| 713 | Study of hadronic event-shape variables in multijet final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1. | 4.7 | 3 |
| 714 | Performance of a tungsten-cerium fluoride sampling calorimeter in high-energy electron beam tests. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 804, 79-83. | 1.6 | 3 |
| 715 | Search for $W\bar{t}t$ in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 3 |
| 716 | Search for top quark partners with charge $5/3$ in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 3 |
| 717 | Calibration of the CMS hadron calorimeters using proton-proton collision data at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P05002-P05002. | 1.2 | 3 |
| 718 | Measurement of the $(\overline{t}t)$ production cross section in the dilepton channel in pp collisions at $(\sqrt{s}) = 8$ TeV. , 2014, 2014, 1. | | 3 |
| 719 | Measurements of the $(pp \rightarrow ZZ)$ production cross section and the $(Z \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{ext } \{TeV\})$. , 2018, 78, 1. | | 3 |
| 720 | Beam test results on the detection of single particles and electromagnetic showers with microchannel plates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 471-474. | 1.6 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 721 | Search for new phenomena with multiple charged leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 1. | 3.9 | 2 |
| 722 | Measurements of angular distance and momentum ratio distributions in three-jet and Z + two-jet final states in pp collisions. European Physical Journal C, 2021, 81, 852. | 3.9 | 2 |
| 723 | Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8$ TeV. , 2013, 2013, 1. | | 2 |
| 724 | Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 2 |
| 725 | Measurement of the inclusive t production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 2 |
| 726 | Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, . | 4.7 | 2 |
| 727 | The laser calibration system of the HARP TOF. Nuclear Physics, Section B, Proceedings Supplements, 2003, 125, 32-36. | 0.4 | 1 |
| 728 | The CMS Simulation Software. , 2006, , . | | 1 |
| 729 | High-Level Trigger for Electrons and Photons in CMS. Nuclear Physics, Section B, Proceedings Supplements, 2006, 150, 295-298. | 0.4 | 1 |
| 730 | Probing new physics via $p\bar{p} \rightarrow W^+W^+ + \dots$ at the CERN LHC. Physical Review D, 2012, 86, . | 4.7 | 1 |
| 731 | Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2015, 2015, 1. | 4.7 | 1 |
| 732 | Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1. | 4.7 | 1 |
| 733 | Observation of $B^0 \rightarrow \psi(2S)K^0_{\text{short}}$ and $B^0_{\text{short}} \rightarrow \psi(2S)K^0_{\text{short}}$ decays. European Physical Journal C, 2022, 82, . | 3.9 | 1 |
| 734 | The CMS Object-Oriented Simulation. , 0, , . | | 0 |
| 735 | The CMS electromagnetic calorimeter pre-calibration with cosmic rays and test beam electrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 581, 377-379. | 1.6 | 0 |
| 736 | The CMS ECAL in situ intercalibration. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 240-242. | 0.4 | 0 |
| 737 | The intercalibration of the CMS electromagnetic calorimeter at the test beam. Nuclear Physics, Section B, Proceedings Supplements, 2008, 177-178, 291-292. | 0.4 | 0 |
| 738 | Study of VV -scattering processes as a probe of electroweak symmetry breaking. , 2008, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 739 | Search for the VBF Production of SM Higgs Boson at the LHC. , 2008, , . | | 0 |
| 740 | The Computing Grids. Nuclear Physics, Section B, Proceedings Supplements, 2009, 197, 346-348. | 0.4 | 0 |
| 741 | Measurements of Higgs boson production and properties in the WW decay channel with both W's decaying into electrons or muons plus neutrino using the CMS detector. Nuclear and Particle Physics Proceedings, 2016, 273-275, 727-732. | 0.5 | 0 |
| 742 | Search for natural supersymmetry in events with top quark pairs and photons in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2018, 2018, 1. | 4.7 | 0 |
| 743 | The CMS High-Level Trigger. , 2007, , 361-364. | | 0 |