

# Federico De Guio

## List of Publications by Year in descending order

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Version: 2024-02-01

543  
papers

27,509  
citations

6613

79  
h-index

11308

136  
g-index

547  
all docs

547  
docs citations

547  
times ranked

10506  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | <p>Continued Measurement of the Higgs Boson Mass in <math>pp</math> Collisions at <math>\sqrt{s} = 7</math> and <math>8</math> TeV. European Physical Journal C, 2015, 75, 212.</p>   | 7.8  | 1,062     |
| 2  | <p>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.</p> | 3.9  | 541       |
| 3  | <p>Determination of jet energy calibration and transverse momentum resolution in CMS. Journal of Instrumentation, 2011, 6, P11002-P11002.</p>   | 1.2  | 508       |
| 4  | <p>Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.</p>  | 3.9  | 499       |
| 5  | <p>Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC. Journal of High Energy Physics, 2010, 2010, 1.</p>   | 4.7  | 497       |
| 6  | <p>Performance of CMS muon reconstruction in pp collision events at <math>\sqrt{s} = 7</math> TeV. Journal of Instrumentation, 2012, 7, P10002-P10002.</p>  | 1.2  | 467       |
| 7  | <p>Identification of b-quark jets with the CMS experiment. Journal of Instrumentation, 2013, 8, P04013-P04013.</p>  | 1.2  | 418       |
| 8  | <p>Observation of the rare <math>B_s^0 \rightarrow \mu^+ \mu^-</math> decay from the combined analysis of CMS and LHCb data. Nature, 2015, 522, 68-72.</p>  | 27.8 | 390       |
| 9  | <p>Description and performance of track and primary-vertex reconstruction with the CMS tracker. Journal of Instrumentation, 2014, 9, P10009-P10009.</p>   | 1.2  | 380       |
| 10 | <p>Study of high-p T charged particle suppression in PbPb compared to pp collisions at <math>\sqrt{s_{NN}} = 2.76</math> TeV. European Physical Journal C, 2012, 72, 1.</p>   | 3.9  | 369       |
| 11 | <p>Combined measurements of Higgs boson couplings in proton-proton collisions at <math>\sqrt{s} = 13</math> TeV. European Physical Journal C, 2019, 79, 421.</p>  | 3.9  | 355       |
| 12 | <p>Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.</p>   | 3.9  | 342       |
| 13 | <p>Observation of a new boson with mass near 125 GeV in pp collisions at <math>\sqrt{s} = 7</math> and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.</p>  | 4.7  | 320       |
| 14 | <p>Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at <math>\sqrt{s} = 8</math> TeV. European Physical Journal C, 2015, 75, 235.</p>                                    | 3.9  | 320       |
| 15 | <p>Measurement of the <math>B \rightarrow \mu^+ \mu^-</math> branching fraction and search for <math>B \rightarrow \mu^+ \mu^-</math>. Physical Review Letters, 2012, 109, 222301.</p>  | 7.8  | 282       |
| 16 | <p>Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV. European Physical Journal C, 2014, 74, 3036.</p>                       | 3.9  | 241       |
| 17 | <p>Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at <math>\sqrt{s} = 0.9</math> and 2.36 TeV. Journal of High Energy Physics, 2010, 2010, 1.</p>                                     | 4.7  | 230       |
| 18 | <p>Observation of Sequential <math>\mu^+ \mu^-</math> Suppression in PbPb Collisions. Physical Review Letters, 2012, 109, 222301.</p>   | 7.8  | 220       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Observation of Higgs Boson Decay to Bottom Quarks. Physical Review Letters, 2018, 121, 121801.  | 7.8 | 219       |
| 20 | Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy. Physical Review Letters, 2011, 107, 221804.  | 7.8 | 208       |
| 21 | Suppression of non-prompt $J/\psi$ , prompt $J/\psi$ , and $\Upsilon(1S)$ in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.    | 4.7 | 200       |
| 22 | Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.                                     | 3.9 | 198       |
| 23 | Measurement of the differential cross section for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2015, 75, 542.               | 3.9 | 191       |
| 24 | 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       |
| 25 | 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       |

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| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Prompt and non-prompt $J/\psi$ production in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2011, 71, 1.  | 3.9  | 135       |
| 38 | 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       |
| 39 | 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       |
| 40 | 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       |
| 41 | Evidence for the 125 GeV Higgs boson decaying to a pair of $\tau$ , leptons. Journal of High Energy Physics, 2014, 2014, 1.  | 4.7  | 123       |
| 42 | Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 8$ TeV in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.                            | 3.9  | 123       |
| 43 | 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       |
| 44 | CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192.   | 3.9  | 120       |
| 45 | 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       |
| 46 | 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       |
| 47 | 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       |
| 48 | Evidence for the direct decay of the 125 GeV Higgs boson to fermions. Nature Physics, 2014, 10, 557-560.   | 16.7 | 114       |
| 49 | Observation of the Associated Production of a Single Top Quark and a W Boson in pp Collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.                    | 7.8  | 108       |
| 50 | Observation of Charge-Dependent Azimuthal Correlations in pp Collisions and Its Implication for the Search for the Chiral Magnetic Effect. Physical Review Letters, 2017, 118, 122301. | 7.8  | 107       |
| 51 | 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       |
| 52 | 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       |
| 53 | Missing transverse energy performance of the CMS detector. Journal of Instrumentation, 2011, 6, P09001-P09001.   | 1.2  | 102       |
| 54 | 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       |

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|----|---|------|-----------|
| 55 | 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       |
| 56 | Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{\text{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1.                 | 4.7  | 99        |
| 57 | Search for new phenomena with the $M_{\text{T}2}$ variable in the all-hadronic final state produced in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 710. | 3.9  | 98        |
| 58 | Measurement of the underlying event activity at the LHC with $\sqrt{s} = 7$ TeV and comparison with $\sqrt{s} = 0.9$ TeV. Journal of High Energy Physics, 2011, 2011, 1.                            | 4.7  | 97        |
| 59 | Search for supersymmetry in hadronic final states using $M_{\text{T}2}$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.                                      | 4.7  | 95        |
| 60 | Searches for invisible decays of the Higgs boson in pp collisions at $\sqrt{s} = 7, 8,$ and 13 TeV. Journal of High Energy Physics, 2017, 2017, 1.  | 4.7  | 95        |
| 61 | Performance of the CMS missing transverse momentum reconstruction in pp data at $\sqrt{s} = 8$ TeV. Journal of Instrumentation, 2015, 10, P02006-P02006.  | 1.2  | 93        |
| 62 | Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. Journal of High Energy Physics, 2015, 2015, 1.   | 4.7  | 92        |
| 63 | Performance of $\tau, \mu$ -lepton reconstruction and identification in CMS. Journal of Instrumentation, 2012, 7, P01001-P01001.  | 1.2  | 91        |
| 64 | 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        |
| 65 | 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        |
| 66 | Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{\text{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.                              | 4.7  | 85        |
| 67 | 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        |
| 68 | 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        |
| 69 | 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        |
| 70 | Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV. European Physical Journal C, 2014, 74, 2847.                                   | 3.9  | 85        |
| 71 | 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        |
| 72 | 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        |

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|----|---|-----|-----------|
| 73 | Measurement of the differential cross section and charge asymmetry for inclusive $\{p\}\mathrm{p}\rightarrow\mathrm{W}^{\pm}\mathrm{X}$ production at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 469. | 3.9 | 83        |
| 74 | Measurement of prompt and nonprompt charmonium suppression in $\mathrm{PbPb}$ collisions at $5.02$ TeV. European Physical Journal C, 2018, 78, 509.   | 3.9 | 83        |
| 75 | Suppression and azimuthal anisotropy of prompt and nonprompt $J/\psi/\psi'$ production in PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. European Physical Journal C, 2017, 77, 252.                                  | 3.9 | 82        |
| 76 | Search for narrow and broad dijet resonances in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter mediators and other new particles. Journal of High Energy Physics, 2018, 2018, 1.      | 4.7 | 82        |
| 77 | $J/\psi'$ and $\psi(2S)$ production in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.  | 4.7 | 81        |
| 78 | Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions. Journal of High Energy Physics, 2014, 2014, 1.   | 4.7 | 81        |
| 79 | 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        |
| 80 | Study of $Z$ Boson Production in PbPb Collisions at $\sqrt{s_{NN}}=2.76$ TeV. Physical Review Letters, 2011, 106, 212301.   | 7.8 | 80        |
| 81 | 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        |
| 82 | 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        |
| 83 | Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV. Journal of High Energy Physics, 2014, 2014, 1.   | 4.7 | 77        |
| 84 | Search for Top-Quark Partners with Charge $5/3$ in the Same-Sign Dilepton Final State. Physical Review Letters, 2014, 112, 171801.  | 7.8 | 76        |
| 85 | Study of exclusive two-photon production of $W+W^*$ 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        |
| 86 | 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        |
| 87 | 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        |
| 88 | Measurement of the $X(3872)$ production cross section via decays to $J/\psi\psi'$ in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.  | 4.7 | 73        |
| 89 | 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        |
| 90 | Search for additional neutral MSSM Higgs bosons in the $\tilde{\chi}_0^0, \tilde{\chi}_1^0$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.            | 4.7 | 73        |

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|-----|---|-----|-----------|
| 91  | Measurement of the t-channel single-top-quark production cross section and of the $ V_{tb} $ CKM matrix element in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.  | 4.7 | 70        |
| 92  | Measurement of the Splitting Function in $p\bar{p}$ and Pb-Pb Collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.  | 7.8 | 70        |
| 93  | Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.   | 7.8 | 70        |
| 94  | Searches for physics beyond the standard model with the $M_{\text{T}}$ variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 3.                           | 3.9 | 70        |
| 95  | 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        |
| 96  | 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        |
| 97  | 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        |
| 98  | 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        |
| 99  | 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        |
| 100 | Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}})$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1. | 3.9 | 68        |
| 101 | Long-range and short-range dihadron angular correlations in central PbPb collisions at $\sqrt{s_{\text{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1.  | 4.7 | 65        |
| 102 | Search for a New Baryon. Physical Review Letters, 2012, 108, 252002.  | 7.8 | 65        |
| 103 | Observation of a New Baryon. Physical Review Letters, 2012, 108, 252002.  | 7.8 | 65        |
| 104 | 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        |
| 105 | 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        |
| 106 | Search for a New Baryon. Physical Review Letters, 2012, 108, 252002.  | 7.8 | 64        |
| 107 | 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        |
| 108 | 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        |

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|-----|---|-----|-----------|
| 109 | Search for Signatures of Extra Dimensions in the Diphoton Mass Spectrum at the Large Hadron Collider. <i>Physical Review Letters</i> , 2012, 108, 111801.   | 7.8 | 63        |
| 110 | Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.   | 4.7 | 63        |
| 111 | Measurement of the Pseudorapidity and Centrality Dependence of the Transverse Energy Density in Pb-Pb Collisions at $\sqrt{s_{NN}}=2.76$ TeV. <i>Physical Review Letters</i> , 2012, 109, 152303.   | 7.8 | 62        |
| 112 | Measurement of the $W+W\tilde{a}$ cross section in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous $WW\tilde{f}^3$ and $WWZ$ couplings. <i>European Physical Journal C</i> , 2013, 73, 1.   | 3.9 | 62        |
| 113 | Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s}=8$ TeV. <i>European Physical Journal C</i> , 2016, 76, 13.  | 3.9 | 62        |
| 114 | Search for dark matter produced with an energetic jet or a hadronically decaying W or Z boson at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.  | 4.7 | 62        |
| 115 | Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.   | 4.7 | 62        |
| 116 | Measurement of the $B\rightarrow 0$ Production Cross Section in pp Collisions at $\sqrt{s}=7$ TeV. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.   | 7.8 | 61        |
| 117 | Measurement of prompt $J/\psi$ pair production in pp collisions at $\sqrt{s}=7$ TeV. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.   | 4.7 | 61        |
| 118 | Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s}=13$ TeV. <i>Physical Review Letters</i> , 2020, 124, 131802.  | 7.8 | 61        |
| 119 | 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, 1. | 3.9 | 60        |
| 120 | Performance and operation of the CMS electromagnetic calorimeter. <i>Journal of Instrumentation</i> , 2010, 5, T03010-T03010.   | 1.2 | 59        |
| 121 | Alignment of the CMS silicon tracker during commissioning with cosmic rays. <i>Journal of Instrumentation</i> , 2010, 5, T03009-T03009.   | 1.2 | 59        |
| 122 | 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        |
| 123 | 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        |
| 124 | Studies of jet mass in dijet and W/Z + jet events. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.   | 4.7 | 58        |
| 125 | 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        |
| 126 | Measurement of the weak mixing angle using the forward-backward asymmetry of Drell-Yan events in pp collisions at $\sqrt{s} = 8$ TeV. <i>European Physical Journal C</i> , 2018, 78, 701.   | 3.9 | 58        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Identification and filtering of uncharacteristic noise in the CMS hadron calorimeter. Journal of Instrumentation, 2010, 5, T03014-T03014. | 1.2 | 57        |

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| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Measurement of the $\overline{t}t$ 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        |
| 146 | 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        |
| 147 | Measurements of the $\sigma(\text{pp} \rightarrow Z\gamma) / \sigma(\text{pp} \rightarrow Z)$ production cross section and the $\text{BR}(Z \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165. | 3.9 | 52        |
| 148 | Search for exclusive or semi-exclusive $\hat{t}\hat{t}^*$ 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        |
| 149 | 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        |
| 150 | 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        |
| 151 | Search for $B_s^0 \rightarrow \tau^+ \tau^-$ and $B^0 \rightarrow \tau^+ \tau^-$ Decays in pp Collisions at $\sqrt{s} = 7$ TeV. Physical Review Letters, 2011, 107, 1501802.  | 7.8 | 50        |
| 152 | Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s} = 0.9, 2.76, 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.   | 4.7 | 50        |
| 153 | Search for Leptoquarks Coupled to Third-Generation Quarks in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2018, 121, 241802.   | 7.8 | 50        |
| 154 | Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 564.   | 3.9 | 50        |
| 155 | Search for new physics with jets and missing transverse momentum in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.   | 4.7 | 49        |
| 156 | Search for leptonic decays of $W \rightarrow \tau\tau$ bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.  | 4.7 | 49        |
| 157 | Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV by the CMS and TOTEM experiments. European Physical Journal C, 2014, 74, 1.  | 3.9 | 49        |
| 158 | Search for new physics in events with same-sign dileptons and jets in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2014, 2014, 1.   | 4.7 | 48        |
| 159 | Observation of $Y(1S)$ pair production in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.  | 4.7 | 48        |
| 160 | Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 364.  | 3.9 | 48        |
| 161 | Search for Supersymmetry in pp Collisions at $\sqrt{s} = 7$ TeV in Events with Two Photons and Missing Transverse Energy. Physical Review Letters, 2011, 106, 211802.   | 7.8 | 47        |
| 162 | Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.  | 4.7 | 47        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | 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.  | 7.8 | 47        |
| 164 | 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.                 | 4.7 | 46        |
| 165 | Search for disappearing tracks in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2015, 2015, 1.   | 4.7 | 46        |
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