

Christoph Garbers

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/45150/publications.pdf>

Version: 2024-02-01

39
papers

875
citations

430874

18
h-index

477307

29
g-index

40
all docs

40
docs citations

40
times ranked

4668
citing authors

#	ARTICLE	IF	CITATIONS
1	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13$ TeV in 2015 and 2016 at CMS. <i>European Physical Journal C</i> , 2021, 81, 800.	3.9	123
2	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of Instrumentation</i> , 2020, 15, P10017-P10017.	1.2	84
3	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. <i>European Physical Journal C</i> , 2020, 80, 75.	3.9	78
4	Searches for physics beyond the standard model with the M_{T2} variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2020, 80, 3.	3.9	70
5	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. <i>European Physical Journal C</i> , 2021, 81, 378.	3.9	40
6	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 488.	3.9	35
7	Search for dark matter produced in association with a leptonically decaying Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 13.	3.9	33
8	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 3.	3.9	33
9	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	4.7	28
10	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
11	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
12	Measurements of $p\bar{p} \rightarrow Z\bar{Z}$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 200.	3.9	24
13	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. <i>Computing and Software for Big Science</i> , 2020, 4, 10.	2.9	21
14	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	21
15	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	20
16	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. <i>European Physical Journal C</i> , 2021, 81, 723.	3.9	19
17	MUSiC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 629.	3.9	18
18	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13$ TeV. <i>European Physical Journal C</i> , 2021, 81, 970.	3.9	18

#	ARTICLE	IF	CITATIONS
19	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$. European Physical Journal C, 2022, 82, 290.	3.9	18
20	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and $5.02, \text{ext } \{\text{TeV}\}$ collisions. European Physical Journal C, 2020, 80, 534.	3.9	14
21	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
22	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$. European Physical Journal C, 2022, 82, 153.	3.9	14
23	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
24	Development and validation of HERWIG7 tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
25	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
26	Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13, \text{ext } \{\text{TeV}\}$. European Physical Journal C, 2021, 81, 688.	3.9	9
27	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
28	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
29	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
30	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, .	4.7	5
31	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
32	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
33	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
34	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
35	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
36	Measurement of the inclusive $t\bar{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	Observation of $B^0 \rightarrow \psi(2S)K^0_{\text{S}} \mu^+ \mu^-$ and $B^0_{\text{S}} \rightarrow \psi(2S)K^0_{\text{S}}$ decays. European Physical Journal C, 2022, 82, .	3.9	1