

Paul Lecoq

List of Publications by Year in descending order

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Version: 2024-02-01

208
papers

10,604
citations

31976

53
h-index

38395

95
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211
all docs

211
docs citations

211
times ranked

9240
citing authors

#	ARTICLE	IF	CITATIONS
1	Metascintillators for Ultrafast Gamma Detectors: A Review of Current State and Future Perspectives. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 5-15.	3.7	32
2	Metascintillators: New Results for TOF-PET Applications. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 510-516.	3.7	22
3	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
4	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
5	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 153.	3.9	14
6	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
7	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
8	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
9	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
10	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
11	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
12	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
13	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
14	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
15	Measurement of the inclusive $\overline{t}t$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
16	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
17	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
18	Observation of $B^0 \rightarrow \mu^+ \mu^- \psi(2S) K^0_{\text{S}}$ and $B^0_{\text{S}} \rightarrow \mu^+ \mu^- \psi(2S) K^0_{\text{S}}$ decays. European Physical Journal C, 2022, 82, .	3.9	1

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19	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
20	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
21	Design considerations for a new generation of SiPMs with unprecedented timing resolution. Journal of Instrumentation, 2021, 16, P02019-P02019.	1.2	14
22	Measurements of $pp \rightarrow ZZ$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	3.9	24
23	SiPM applications in positron emission tomography: toward ultimate PET time-of-flight resolution. European Physical Journal Plus, 2021, 136, 1.	2.6	21
24	DOI estimation through signal arrival time distribution: a theoretical description including proof of concept measurements. Physics in Medicine and Biology, 2021, 66, 095015.	3.0	16
25	Development and validation of HERWIG tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
26	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
27	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 488.	3.9	35
28	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
29	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
30	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, 2021, 81, 688.	3.9	9
31	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
32	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
33	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
34	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
35	Radiation-Based Medical Imaging Techniques: An Overview. , 2021, , 1145-1171.		0
36	Experimental time resolution limits of modern SiPMs and TOF-PET detectors exploring different scintillators and Cherenkov emission. Physics in Medicine and Biology, 2020, 65, 025001.	3.0	153

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37	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
38	CMOS-compatible all-dielectric metalens for improving pixel photodetector arrays. APL Photonics, 2020, 5, .	5.7	21
39	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P02027-P02027.	1.2	27
40	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
41	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
42	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
43	Roadmap toward the 10 ps time-of-flight PET challenge. Physics in Medicine and Biology, 2020, 65, 21RM01.	3.0	136
44	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV collisions. European Physical Journal C, 2020, 80, 534.	3.9	14
45	Time-of-flight computed tomography - proof of principle. Physics in Medicine and Biology, 2020, 65, 085013.	3.0	18
46	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
47	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. European Physical Journal C, 2020, 80, 3.	3.9	70
48	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
49	Pushing Cherenkov PET with BGO via coincidence time resolution classification and correction. Physics in Medicine and Biology, 2020, 65, 115004.	3.0	56
50	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
51	Detectors in Medicine and Biology. , 2020, , 913-964.		1
52	Scintillation Detectors for Charged Particles and Photons. , 2020, , 45-89.		7
53	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s} = 8$ TeV with the CMS and TOTEM experiments. European Physical Journal C, 2020, 80, 1164.	3.9	5
54	Radiation-Based Medical Imaging Techniques: An Overview. , 2020, , 1-27.		0

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55	A novel metascintillator approach for ultra-fast timing in Positron Emission Tomography. , 2020, , .		3
56	Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	17
57	Improving light output and coincidence time resolution of scintillating crystals using nanoimprinted photonic crystal slabs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 940, 254-261.	1.6	11
58	Light yield of scintillating nanocrystals under X-ray and electron excitation. Journal of Luminescence, 2019, 215, 116613.	3.1	29
59	On the use of CdSe scintillating nanoplatelets as time taggers for high-energy gamma detection. Npj 2D Materials and Applications, 2019, 3, .	7.9	53
60	On the structure, synthesis, and characterization of ultrafast blue-emitting CsPbBr ₃ nanoplatelets. APL Materials, 2019, 7, .	5.1	38
61	On light sharing TOF-PET modules with depth of interaction and 157 ps FWHM coincidence time resolution. Physics in Medicine and Biology, 2019, 64, 155008.	3.0	64
62	Search for the pair production of light top squarks in the $e^+e^- \rightarrow t\bar{t}$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
63	Measurements of the $pp \rightarrow t\bar{t}WZ$ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
64	Measurement of the $\sigma(\text{pp} \rightarrow t\bar{t}\gamma)$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at. European Physical Journal C, 2019, 79, 368.	3.9	68
65	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
66	Search for $\text{pp} \rightarrow t\bar{t}\text{H} \rightarrow t\bar{t}\text{bb}$ production in the $\text{H} \rightarrow \text{bb}$ decay channel with leptonic $t\bar{t}$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
67	Towards a metamaterial approach for fast timing in PET: experimental proof-of-concept. Physics in Medicine and Biology, 2019, 64, 185018.	3.0	54
68	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
69	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
70	Core-shell ZnO:Ga-SiO ₂ nanocrystals: limiting particle agglomeration and increasing luminescence via surface defect passivation. RSC Advances, 2019, 9, 28946-28952.	3.6	15
71	High-frequency SiPM readout advances measured coincidence time resolution limits in TOF-PET. Physics in Medicine and Biology, 2019, 64, 055012.	3.0	124
72	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

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73	Metamaterials: opportunities in medical imaging. , 2019, , .		0
74	Precise rise and decay time measurements of inorganic scintillators by means of X-ray and 511 keV excitation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 891, 42-52.	1.6	65
75	Scintillation yield of hot intraband luminescence. Journal of Luminescence, 2018, 198, 260-271.	3.1	31
76	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. European Physical Journal C, 2018, 78, 291.	3.9	27
77	Measurements of the $\sigma(\text{pp} \rightarrow \text{Z}\nu\bar{\nu})$ production cross section and the $\text{BR}(\text{Z} \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	3.9	52
78	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
79	Enhanced Scintillation Light Extraction Using Nanoimprinted Photonic Crystals. IEEE Transactions on Nuclear Science, 2018, 65, 1059-1065.	2.0	10
80	Photonic Crystal Slabs Applied to Inorganic Scintillators. IEEE Transactions on Nuclear Science, 2018, 65, 2191-2195.	2.0	6
81	Search for $\text{t}\bar{\text{t}}\text{H}$ 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
82	Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
83	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
84	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
85	Search for $Z\bar{Z}$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
86	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
87	Measurement of differential cross sections for $\text{Z} + \text{jets}$ production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
88	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\ell + 2q$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
89	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 697.	3.9	17
90	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

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91	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
92	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}_1^0$ or $\tilde{\chi}_1^\pm, \tilde{\chi}_2^0$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
93	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
94	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying \tilde{t} , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
95	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
96	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
97	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
98	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
99	Needs, Trends, and Advances in Inorganic Scintillators. IEEE Transactions on Nuclear Science, 2018, 65, 1977-1997.	2.0	305
100	Energy discrimination for positron emission tomography using the time information of the first detected photons. Journal of Instrumentation, 2018, 13, P01012-P01012.	1.2	5
101	Enhancing Light Extraction of Inorganic Scintillators Using Photonic Crystals. Crystals, 2018, 8, 78.	2.2	43
102	Improved single photon time resolution for analog SiPMs with front end readout that reduces influence of electronic noise. Physics in Medicine and Biology, 2018, 63, 185022.	3.0	75
103	Measurements of the $(p\bar{p}) \rightarrow Z\gamma$ production cross section and the $(Z \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{ext } \{\text{TeV}\})$. , 2018, 78, 1.		3
104	Timing capabilities of garnet crystals for detection of high energy charged particles. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 852, 1-9.	1.6	32
105	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $\sqrt{s}=8$ TeV and cross section ratios at 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	54
106	Inorganic Scintillators for Detector Systems. Particle Acceleration and Detection, 2017, , .	0.5	126
107	Scintillation and Inorganic Scintillators. Particle Acceleration and Detection, 2017, , 1-41.	0.5	4
108	Influence of Crystal Structure Defects on Scintillation Properties. Particle Acceleration and Detection, 2017, , 197-252.	0.5	1

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109	Examples of Recent Crystal Development. Particle Acceleration and Detection, 2017, , 345-399.	0.5	1
110	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	103
111	Pushing the Limits in Time-of-Flight PET Imaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2017, 1, 473-485.	3.7	217
112	Searches for pair production of third-generation squarks in $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 327.	3.9	32
113	Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
114	Search for top squark pair production in pp collisions at $\sqrt{s}=13$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
115	Measurement of the $t\bar{t}$ production cross section using events with one lepton and at least one jet in pp collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15
116	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
117	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
118	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
119	Charged Hadron Radiation Damage of Scintillators. Particle Acceleration and Detection, 2017, , 253-280.	0.5	1
120	Single photon time resolution of state of the art SiPMs. Journal of Instrumentation, 2016, 11, P10016-P10016.	1.2	67
121	Test beam results of a high granularity LuAG fibre calorimeter prototype. Journal of Instrumentation, 2016, 11, P05004-P05004.	1.2	14
122	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
123	Ultrafast emission from colloidal nanocrystals under pulsed X-ray excitation. Journal of Instrumentation, 2016, 11, P10015-P10015.	1.2	41
124	Large Scale Production of Photonic Crystals Scintillators. IEEE Transactions on Nuclear Science, 2016, 63, 639-643.	2.0	7
125	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
126	Preparation and luminescence properties of ZnO:Ga polystyrene composite scintillator. Optics Express, 2016, 24, 15289.	3.4	56

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127	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
128	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
129	State of the art timing in TOF-PET detectors with LuAG, GAGG and L(Y)SO scintillators of various sizes coupled to FBK-SiPMs. Journal of Instrumentation, 2016, 11, P08008-P08008.	1.2	129
130	Timing performance of ZnO:Ga nanopowder composite scintillators. Physica Status Solidi - Rapid Research Letters, 2016, 10, 843-847.	2.4	21
131	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
132	Measurement of the $t\bar{t}\hat{A}$ production cross section in the $e\bar{e}\gamma$ channel in proton-proton collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41
133	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
134	Measurement of intrinsic rise times for various L(Y)SO and LuAG scintillators with a general study of prompt photons to achieve 10 ps in TOF-PET. Physics in Medicine and Biology, 2016, 61, 2802-2837.	3.0	138
135	Light Extraction From Scintillating Crystals Enhanced by Photonic Crystal Structures Patterned by Focused Ion Beam. IEEE Transactions on Nuclear Science, 2016, 63, 644-648.	2.0	6
136	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\bar{l}l$, leptons in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
137	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.	3.9	62
138	Development of new scintillators for medical applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 809, 130-139.	1.6	353
139	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
140	Potential of non-linear optical phenomena for fast timing in detectors of ionizing radiation. , 2015, , .		0
141	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
142	Measurements of the $Z\bar{Z}$ 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
143	On the comparison of analog and digital SiPM readout in terms of expected timing performance. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 787, 6-11.	1.6	47
144	Conical photonic crystals for enhancing light extraction efficiency from high refractive index materials. Optics Express, 2015, 23, 22730.	3.4	20

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145	Development of ClearPEM-Sonic, a multimodal mammography system for PET and Ultrasound. Journal of Instrumentation, 2014, 9, C03008-C03008.	1.2	5
146	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
147	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	3.9	342
148	Review on photonic crystal coatings for scintillators. International Journal of Modern Physics A, 2014, 29, 1430070.	1.5	38
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	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	43
151	Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states. Journal of High Energy Physics, 2014, 2014, 1.	4.7	169
152	Ce-doped LuAG single-crystal fibers grown from the melt for high-energy physics. Acta Materialia, 2014, 67, 232-238.	7.9	44
153	Can Transient Phenomena Help Improving Time Resolution in Scintillators?. IEEE Transactions on Nuclear Science, 2014, 61, 229-234.	2.0	87
154	Probing color coherence effects in pp collisions at $\sqrt{s} = 7, 8$ TeV. European Physical Journal C, 2014, 74, 2901.	3.9	17
155	Time resolution deterioration with increasing crystal length in a TOF-PET system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 737, 92-100.	1.6	80
156	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
157	Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	4.7	320
158	Time of flight positron emission tomography towards 100ps resolution with L(Y)SO: an experimental and theoretical analysis. Journal of Instrumentation, 2013, 8, P07014-P07014.	1.2	106
159			

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