

# R-Y Zhu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8661020/publications.pdf>

Version: 2024-02-01

244  
papers

13,221  
citations

66234

42  
h-index

23472

111  
g-index

251  
all docs

251  
docs citations

251  
times ranked

13364  
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of Particle Physics. Physical Review D, 2018, 98, .	1.6	5,390
2	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 $\sqrt{s}$ TeV. European Physical Journal C, 2015, 75, 212.	1.4	541
3	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	1.4	499
4	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	1.4	342
5	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.	1.6	320
6	Needs, Trends, and Advances in Inorganic Scintillators. IEEE Transactions on Nuclear Science, 2018, 65, 1977-1997.	1.2	305
7	Radiation damage in scintillating crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 413, 297-311.	0.7	200
8	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	1.4	198
9			

#	ARTICLE	IF	CITATIONS
19	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.	1.6	92
20	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.	1.6	86
21	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
22	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.	1.4	78
23	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.	1.4	70
24	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 $\sqrt{s}=13$ TeV. European Physical Journal C, 2019, 79, 368.	1.4	68
25	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.	1.4	64
26	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.	1.6	63
27	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.	1.4	62
28	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	62
29	Light attenuation length of barium fluoride crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 333, 422-424.	0.7	61
30	Large Size LSO and LYSO Crystals for Future High Energy Physics Experiments. IEEE Transactions on Nuclear Science, 2007, 54, 718-724.	1.2	60
31	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.	1.6	57
32	Laser monitoring system for the CMS lead tungstate crystal calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 594, 292-320.	0.7	55
33	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.	1.4	55
34	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.	1.6	54
35	Large size LYSO crystals for future high energy physics experiments. IEEE Transactions on Nuclear Science, 2005, 52, 3133-3140.	1.2	53
36	A study on radiation damage in doped BGO crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 302, 69-75.	0.7	52

#	ARTICLE	IF	CITATIONS
37	Measurements of the $\sigma(\text{pp} \rightarrow \text{Z}\gamma\text{Z})$ 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.	1.4	52
38	Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1.	1.6	51
39	On quality requirements to the barium fluoride crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 340, 442-457.	0.7	50
40	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.	1.4	49
41	Crystal Calorimeters in Particle Physics. Annual Review of Nuclear and Particle Science, 1994, 44, 453-500.	3.5	46
42	Large size LSO and LYSO crystal scintillators for future high-energy physics and nuclear physics experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 218-224.	0.7	43
43	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	1.6	43
44	Gamma-Ray Induced Radiation Damage in Large Size LSO and LYSO Crystal Samples. IEEE Transactions on Nuclear Science, 2007, 54, 1319-1326.	1.2	42
45	Measurement of the $\sigma(\text{pp} \rightarrow \text{t}\bar{\text{t}}\gamma)$ production cross section in the $\text{e}\bar{\text{e}}\gamma$ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	41
46	Radiation resistance and fluorescence of europium doped BGO crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 297, 163-168.	0.7	40
47	LSO/LYSO Crystals for Calorimeters in Future HEP Experiments. IEEE Transactions on Nuclear Science, 2014, 61, 483-488.	1.2	40
48	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.	1.4	40
49	Measurement of the ZZ production cross section and search for anomalous couplings in $2\ell\gamma$ final states in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
50	Measurement of differential cross sections for $\text{Z} + \text{jet}$ production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	1.4	39
51	Results of the first performance tests * of the CMS electromagnetic calorimeter. European Physical Journal C, 2006, 44, 1-10.	1.4	38
52	Emission Spectra of LSO and LYSO Crystals Excited by UV Light, X-Ray and $\gamma$ -ray. IEEE Transactions on Nuclear Science, 2008, 55, 1759-1766.	1.2	38
53	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.	1.4	38
54	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\ell$ , leptons at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38

#	ARTICLE	IF	CITATIONS
55	Gamma-Ray Induced Radiation Damage Up to 340 Mrad in Various Scintillation Crystals. IEEE Transactions on Nuclear Science, 2016, 63, 612-619.	1.2	36
56	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13, \text{ TeV}$ . European Physical Journal C, 2021, 81, 488.	1.4	35
57	The next generation of crystal detectors. , 2015, , .		34
58	Search for dark matter produced in association with a leptonically decaying $Z$ boson in proton-proton collisions at $\sqrt{s} = 13, \text{ TeV}$ . European Physical Journal C, 2021, 81, 13.	1.4	33
59	Search for top squark pair production using dilepton final states in $pp$ collision data collected at $\sqrt{s} = 13, \text{ TeV}$ . European Physical Journal C, 2021, 81, 3.	1.4	33
60	Measurements of the $Z Z$ production cross sections in the $2\mu 2l 2\bar{l} 1/2$ channel in proton-proton collisions at $\sqrt{s} = 7, 8, 13, \text{ TeV}$ . European Physical Journal C, 2015, 75, 511.	1.4	32
61	Searches for pair production of third-generation squarks in $\sqrt{s} = 13, 8, 7, \text{ TeV}$ $pp$ collisions. European Physical Journal C, 2017, 77, 327.	1.4	32
62	A study on the radiation hardness of lead tungstate crystals. IEEE Transactions on Nuclear Science, 1998, 45, 686-691.	1.2	31
63	Radiation-induced color centers in La-doped PbWO <sub>4</sub> crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 438, 415-420.	0.7	31
64	Shape, transverse size, and charged-hadron multiplicity of jets in $pp$ collisions at $\sqrt{s} = 7, \text{ TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	31
65	Search for top squark pair production in $pp$ collisions at $\sqrt{s} = 13, \text{ TeV}$ using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
66	Precision crystal calorimetry in future high energy colliders. IEEE Transactions on Nuclear Science, 1997, 44, 468-476.	1.2	29
67	Performance of the monitoring light source for the CMS lead tungstate crystal calorimeter. IEEE Transactions on Nuclear Science, 2005, 52, 1123-1130.	1.2	29
68	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s} = 8, 13, \text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.	1.6	29
69	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13, \text{ TeV}$ . European Physical Journal C, 2019, 79, 280.	1.4	29
70	Search for $\overline{t}t\overline{b}b$ production in the $\overline{t}t\overline{b}b$ decay channel with leptonic $\overline{t}t$ decays in proton-proton collisions at $\sqrt{s} = 13, \text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
71	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13, \text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
72	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13, 8, 7, \text{ TeV}$ . European Physical Journal C, 2018, 78, 291.	1.4	27

#	ARTICLE	IF	CITATIONS
73	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.	0.5	27
74	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.	1.6	27
75	Radiation induced color centers and light monitoring for lead tungstate crystals. IEEE Transactions on Nuclear Science, 2000, 47, 1741-1747.	1.2	26
76	On optical bleaching of barium fluoride crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 332, 113-120.	0.7	25
77	A study on yttrium doping in lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 480, 470-487.	0.7	25
78	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.	1.6	25
79	Ultrafast Inorganic Scintillators for Gigahertz Hard X-Ray Imaging. IEEE Transactions on Nuclear Science, 2018, 65, 2097-2104.	1.2	25
80	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.	1.6	25
81	Ultrafast inorganic scintillator-based front imager for Gigahertz Hard X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 940, 223-229.	0.7	25
82	Measurements of $\sigma(\text{pp} \rightarrow \text{ZZ})$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 200.	1.4	24
83	Beam tests of lead tungstate crystal matrices and a silicon strip preshower detector for the CMS electromagnetic calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 412, 223-237.	0.7	23
84	A study on undoped CsI crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 326, 508-512.	0.7	22
85	A LYSO calorimeter for the SuperB factory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 107-109.	0.7	22
86	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.	1.6	22
87	Design and Status of the Mu2e Crystal Calorimeter. IEEE Transactions on Nuclear Science, 2018, 65, 2073-2080.	1.2	21
88	Proton-Induced Radiation Damage in BaF <sub>2</sub> , LYSO, and PWO Crystal Scintillators. IEEE Transactions on Nuclear Science, 2018, 65, 1018-1024.	1.2	21
89	Ultrafast and Radiation Hard Inorganic Scintillators for Future HEP Experiments. Journal of Physics: Conference Series, 2019, 1162, 012022.	0.3	21
90	LuAG ceramic scintillators for future HEP experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161723.	0.7	21

#	ARTICLE	IF	CITATIONS
91	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	1.3	21
92	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.	1.6	21
93	Quality of mass-produced lead tungstate crystals. IEEE Transactions on Nuclear Science, 2004, 51, 1777-1783.	1.2	20
94	LSO/LYSO Crystals for Future HEP Experiments. Journal of Physics: Conference Series, 2011, 293, 012004.	0.3	20
95	Design and status of the Mu2e electromagnetic calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 695-698.	0.7	20
96	Slow Scintillation Suppression in Yttrium Doped BaF <sub>2</sub> Crystals. IEEE Transactions on Nuclear Science, 2018, 65, 2147-2151.	1.2	20
97	Search for $\overline{\text{t}}\text{t}\text{H}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	20
98	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.	1.6	20
99	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.	1.6	20
100	Light yield and surface treatment of barium fluoride crystals. Nuclear Instruments & Methods in Physics Research B, 1991, 61, 61-66.	0.6	19
101	A Search for Scintillation in Doped Cubic Lead Fluoride Crystals. IEEE Transactions on Nuclear Science, 2010, 57, 3841-3845.	1.2	19
102	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $s=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
103	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tilde{l}, \text{leptons}$ in pp collisions at $s=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
104	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s}=13, \text{TeV}$ . European Physical Journal C, 2021, 81, 723.	1.4	19
105	Monitoring light source for CMS lead tungstate crystal calorimeter at LHC. IEEE Transactions on Nuclear Science, 2001, 48, 372-378.	1.2	18
106	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.	1.6	18
107	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s}=13, \text{TeV}$ . European Physical Journal C, 2021, 81, 629.	1.4	18
108	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s}=13, \text{TeV}$ . European Physical Journal C, 2021, 81, 970.	1.4	18

#	ARTICLE	IF	CITATIONS
109	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.	1.4	18
110	Probing color coherence effects in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2014, 74, 2901.	1.4	17
111	Search for $Z^0$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
112	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.	1.4	17
113	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.	1.6	17
114	Crystals for the HHCAL Detector Concept. IEEE Transactions on Nuclear Science, 2012, 59, 2229-2236.	1.2	16
115	Quality of a 28 cm Long LYSO Crystal and Progress on Optical and Scintillation Properties. IEEE Transactions on Nuclear Science, 2012, 59, 2224-2228.	1.2	16
116	Measurement of the $t\bar{t}\bar{\nu}_\tau$ production cross section using events with one lepton and at least one jet in pp collisions at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	15
117	BaF <sub>2</sub> :Y and ZnO:Ga crystal scintillators for GHz hard X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 950, 162767.	0.7	15
118	The Next Generation of Crystal Detectors. Journal of Physics: Conference Series, 2015, 587, 012055.	0.3	14
119	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.	1.6	14
120	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.	1.6	14
121	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV $PbPb$ collisions. European Physical Journal C, 2020, 80, 534.	1.4	14
122	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.	1.6	14
123	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2022, 82, 153.	1.4	14
124	Optical bleaching in situ for barium fluoride crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 356, 309-318.	0.7	13
125	Precision lead tungstate Crystal calorimeter for CMS at LHC. IEEE Transactions on Nuclear Science, 2004, 51, 1560-1567.	1.2	13
126	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $s = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	13



#	ARTICLE	IF	CITATIONS
127	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.	1.6	13
128	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.	1.6	13
129	Development of Yttrium-Doped BaF <sub>2</sub> Crystals for Future HEP Experiments. IEEE Transactions on Nuclear Science, 2019, 66, 1854-1860.	1.2	13
130	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.	1.6	13
131	A study of the optical and radiation damage properties of lead tungstate crystals. IEEE Transactions on Nuclear Science, 1996, 43, 1585-1589.	1.2	12
132	Crystal Calorimeters in the Next Decade. Physics Procedia, 2012, 37, 372-383.	1.2	12
133	Proton-Induced Radiation Damage in Fast Crystal Scintillators. IEEE Transactions on Nuclear Science, 2017, 64, 665-672.	1.2	12
134	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.	1.6	12
135	Search for dark matter produced in association with a Higgs boson decaying to $\hat{\chi}^0_3$ or $\tilde{l}, +\tilde{l}, \tilde{\nu}$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	12
136	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.	1.6	12
137	Neutron-Induced Radiation Damage in LYSO, BaF <sub>2</sub> , and PWO Crystals. IEEE Transactions on Nuclear Science, 2020, 67, 1086-1092.	1.2	12
138	Development and validation of HERWIG <sup>7</sup> tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	1.4	12
139	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.	1.6	12
140	Quality of mass produced lead tungstate crystals. , 2003, , .		11
141	Quality Assurance on Undoped CsI Crystals for the Mu2e Experiment. IEEE Transactions on Nuclear Science, 2018, 65, 752-757.	1.2	11
142	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.	1.6	11
143	Scintillating crystals in a radiation environment. Nuclear Physics, Section B, Proceedings Supplements, 1995, 44, 547-556.	0.5	10
144	Precision crystal calorimetry in high energy physics. Nuclear Physics, Section B, Proceedings Supplements, 1999, 78, 203-219.	0.5	10

#	ARTICLE	IF	CITATIONS
145	New types of lead tungstate crystals with high light yield. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 196-200.	0.7	10
146	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}q\bar{q}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
147	Proton induced radiation damage in fast crystal scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 726-728.	0.7	9
148	Search for a heavy vector resonance decaying to a $Z\gamma$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	1.4	9
149	Emission spectra of LSO and LYSO crystals excited by UV light, x-ray and $\gamma$ -ray. , 2007, , .		8
150	Gamma ray induced radiation damage in PWO and LSO/LYSO crystals. , 2009, , .		8
151	Crystals for the HHCAL Detector Concept. Journal of Physics: Conference Series, 2012, 404, 012029.	0.3	8
152	A Very Compact Crystal Shashlik Electromagnetic Calorimeter for Future HEP Experiments. Journal of Physics: Conference Series, 2017, 928, 012015.	0.3	8
153	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2q\bar{q}$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	8
154	Proton radiation effects on carrier transport in diamond radiation detectors. AIP Advances, 2020, 10, 025004.	0.6	8
155	Hadron-Induced Radiation Damage in LuAG:Ce Scintillating Ceramics. IEEE Transactions on Nuclear Science, 2022, 69, 181-186.	1.2	8
156	A Study on Correlations Between the Initial Optical and Scintillation Properties and Their Radiation Damage for Lead Tungstate Crystals. IEEE Transactions on Nuclear Science, 2007, 54, 375-382.	1.2	7
157	Precision crystal calorimeters in high-energy physics: past, present, and future. Proceedings of SPIE, 2008, , .	0.8	7
158	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.	1.6	7
159	Calibration and monitoring for crystal calorimetry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 537, 344-348.	0.7	6
160	Gigahertz (GHz) hard x-ray imaging using fast scintillators. Proceedings of SPIE, 2013, , .	0.8	6
161	Characterization of three LYSO crystal batches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 784, 105-110.	0.7	6
162	The calorimeter of the Mu2e experiment at Fermilab. Journal of Instrumentation, 2017, 12, C01061-C01061.	0.5	6

#	ARTICLE	IF	CITATIONS
163	Neutron-Induced Radiation Damage in BaF <sub>2</sub> , LYSO/LFS and PWO Crystals. Journal of Physics: Conference Series, 2019, 1162, 012020.	0.3	6
164	From optical to X-ray ghost imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 935, 173-177.	0.7	6
165	Design and test of the Mu2e undoped CsI + SiPM crystal calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 94-97.	0.7	6
166	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
167	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.	1.6	6
168	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.	1.6	6
169	Effects of neutron irradiations in various crystal samples of large size for future crystal calorimeter. , 2009, , .		5
170	Crystal calorimeters in the next decade. Journal of Physics: Conference Series, 2009, 160, 012017.	0.3	5
171	The next generation of crystal detectors. Radiation Detection Technology and Methods, 2018, 2, 1.	0.4	5
172	La- and La-/Ce-Doped BaF <sub>2</sub> Crystals for Future HEP Experiments at the Energy and Intensity Frontiers Part II. IEEE Transactions on Nuclear Science, 2019, 66, 512-518.	1.2	5
173	Search for the pair production of light top squarks in the $e^{\pm}\gamma$ final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	5
174	Alkali-free Ce-doped and co-doped fluorophosphate glasses for future HEP experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161665.	0.7	5
175	Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager. IEEE Transactions on Nuclear Science, 2020, 67, 1014-1019.	1.2	5
176	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV. , 2011, 2011, 1.		5
177	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.	1.4	5
178	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.	1.6	5
179	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, .	1.6	5
180	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.	1.6	5

#	ARTICLE	IF	CITATIONS
181	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.	1.6	5
182	A study on Sb doping in lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 469, 193-204.	0.7	4
183	Yttrium-doped lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 102-105.	0.7	4
184	Optical and scintillation properties of inorganic scintillators in high energy physics. , 2007, , .		4
185	A study on radiation hardness of BGO crystals. , 2012, , .		4
186	Doped Lead Fluoride Chloride Crystals for the HHCAL Detector Concept. IEEE Transactions on Nuclear Science, 2014, 61, 489-494.	1.2	4
187	Slow scintillation component and radiation induced readout noise in pure CsI crystals. , 2016, , .		4
188	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, .	1.6	4
189	Implementation of a Software Feedback Control for the CMS Monitoring Lasers. IEEE Transactions on Nuclear Science, 2008, 55, 637-643.	1.2	3
190	A Study on Radiation Damage in BGO and PWO-II Crystals. Journal of Physics: Conference Series, 2012, 404, 012025.	0.3	3
191	BSO Crystals for the HHCAL Detector Concept. Journal of Physics: Conference Series, 2015, 587, 012064.	0.3	3
192	Thin scintillators for ultrafast hard X-ray imaging. Proceedings of SPIE, 2015, , .	0.8	3
193	Electron beam test of the large area Mu2e calorimeter prototype. Journal of Physics: Conference Series, 2019, 1162, 012027.	0.3	3
194	La- and La-/Ce-Doped BaF <sub>2</sub> Crystals for Future HEP Experiments at the Energy and Intensity Frontiers Part I. IEEE Transactions on Nuclear Science, 2019, 66, 506-511.	1.2	3
195	The Mu2e calorimeter: Quality assurance of production crystals and SiPMs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 154-155.	0.7	3
196	Applications of Very Fast Inorganic Crystal Scintillators in Future HEP Experiments. Springer Proceedings in Physics, 2018, , 70-75.	0.1	3
197	Measurements of the $(\chi_{1,2}^0 \rightarrow \chi_{1,2}^0 \gamma)$ production cross section and the $(\chi_{1,2}^0 \rightarrow 4e)$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{ext } \{TeV\})$ . , 2018, 78, 1.		3
198	Very fast inorganic crystal scintillators. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
199	Spectral Response of UV Photodetectors for Barium Fluoride Crystal Readout. IEEE Transactions on Nuclear Science, 2022, 69, 958-964.	1.2	3
200	A study on SB doping in lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 89-92.	0.7	2
201	Large size LYSO crystals for future high energy physics experiments. , 0, , .		2
202	Quality of Long LSO/LYSO Crystals. Journal of Physics: Conference Series, 2012, 404, 012026.	0.3	2
203	Monitoring LSO/LYSO Crystal Calorimeters. IEEE Transactions on Nuclear Science, 2016, 63, 605-611.	1.2	2
204	Slow Scintillation Component and Radiation-Induced Readout Noise in Undoped CsI Crystals. IEEE Transactions on Nuclear Science, 2018, 65, 2716-2723.	1.2	2
205	Gamma-Ray- and Neutron-Induced Photocurrent and Readout Noise in LYSO+SiPM Packages. IEEE Transactions on Nuclear Science, 2021, 68, 1244-1250.	1.2	2
206	Measurements of angular distance and momentum ratio distributions in three-jet and $\{Z\}$ + two-jet final states in $\{p\}\{p\}$ collisions. European Physical Journal C, 2021, 81, 852.	1.4	2
207	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.	1.6	2
208	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
209	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, .	1.6	2
210	A study on yttrium doped lead tungstate crystals. , 0, , .		1
211	Evaluation of mass-produced lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 537, 406-410.	0.7	1
212	Search for scintillation in doped lead fluoride crystals. , 2009, , .		1
213	Quality of a 28 cm long LYSO crystal and progress on optical and scintillation properties. , 2010, , .		1
214	Fast Neutron Induced Nuclear Counter Effect in Hamamatsu Silicon PIN Diodes and APDs. Journal of Physics: Conference Series, 2011, 293, 012012.	0.3	1
215	The SuperBFactory Electromagnetic Calorimeter. Journal of Physics: Conference Series, 2012, 404, 012065.	0.3	1
216	Lead based halide crystals for the HHCAL detector concept. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
217	A Study on Radiation Damage in PWO-II Crystals. IEEE Transactions on Nuclear Science, 2013, 60, 2336-2342.	1.2	1
218	Proton-induced radiation damage in BGO, LFS, PWO and a LFS/W/Quartz capillary shashlik cell. , 2016, , .		1
219	Performances of Crystal Scintillators in a Severe Radiation Environment Caused by Gamma Rays. Journal of Physics: Conference Series, 2017, 928, 012032.	0.3	1
220	UVâ€“Visible reflectance of common light reflectors and their degradation after an ionization dose up to 100 Mrad. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 992, 165043.	0.7	1
221	Radiation Damage Effects. , 2020, , 1-25.		1
222	Development, construction and tests of the Mu2e electromagnetic calorimeter mechanical structures. Journal of Instrumentation, 2022, 17, C01007.	0.5	1
223	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.	1.6	1
224	Observation of $B^0 \rightarrow \psi(2S) K^0_{\text{short}} \psi(2S) K^0_{\text{short}}$ and $B^0_{\text{short}} \rightarrow \psi(2S) K^0_{\text{short}} \psi(2S) K^0_{\text{short}}$ decays. European Physical Journal C, 2022, 82, .	1.4	1
225	Monitoring light source for CMS lead tungstate crystal calorimeter at LHC. , 0, , .		0
226	Radiation induced color centers and light monitoring for lead tungstate crystals. , 0, , .		0
227	Lead tungstate crystals of high light yield for medical imaging. , 0, , .		0
228	Precision lead tungstate crystal calorimeter for CMS at LHC. , 2003, , .		0
229	Performance of the monitoring light source for the CMS lead tungstate crystal calorimeter. , 0, , .		0
230	Crystal calorimeters in the next decade. , 2009, , .		0
231	Neutron induced nuclear counter effect in Hamamatsu silicon PIN diodes and APDs. , 2010, , .		0
232	A study on radiation hardness of PWO-II crystals. , 2012, , .		0
233	LSO/LYSO crystals for calorimeters in future HEP experiments. , 2013, , .		0
234	Doped lead fluoride chloride crystals for the HHICAL detector concept. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
235	Characterization of Three LYSO Crystal Batches. Journal of Physics: Conference Series, 2015, 587, 012065.	0.3	0
236	Monitoring LSO/LYSO Crystal Based Calorimeters. Journal of Physics: Conference Series, 2015, 587, 012066.	0.3	0
237	Performance of Crystal Scintillators in a Severe Radiation Environment Caused by Protons. Journal of Physics: Conference Series, 2017, 928, 012029.	0.3	0
238	Temporal Response of Fast and Ultrafast Inorganic Scintillators. , 2018, , .		0
239	Improvement of Scintillation Performance in Large Size Yttrium Doped BaF <sub>2</sub> Crystals. , 2018, , .		0
240	Feasibility of hard X-ray imaging using monolithic active pixel sensors (MAPS). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161243.	0.7	0
241	Design and status of the Mu2e crystal calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162140.	0.7	0
242	Construction status of the Mu2e crystal calorimeter. Journal of Instrumentation, 2020, 15, C09035-C09035.	0.5	0
243	Recent progress on inorganic scintillators for future HEP experiments. , 2021, , .		0
244	Radiation Damage Effects. , 2021, , 687-711.		0