Davide Chiesa

List of Publications by Year
in descending order

119 papers	3,036 citations	236925 25 h-index	161849 54 g-index
121 all docs	121 docs citations	121 times ranked	1988 citing authors

#	Article	IF	Citations
1	Neutrino physics with JUNO. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 030401.	3.6	750
2	First Results from CUORE: A Search for Lepton Number Violation via <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>0</mml:mn><mml:mi>Î½</mml:mi><mml:mi>Î²</mml:mi><mml:mi>Î²</mml:mi></mml:mrow Decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Te</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>130</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow><	7.8	246
3	Search for Neutrinoless Double-Beta Decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Te</mml:mi></mml:mrow><mml:mprescripts /><mml:none [illegible] multiscripts></mml:mrow></mml:math>with [illegible]	7.8	189
4	Improved Limit on Neutrinoless Double-Beta Decay in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mo>â€‰</mml:mo><mml:mi>Te</mml:mi></mml:mrow><mml: /><mml:none /><mml:mrow><mml:mn>130</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> with CUORE. Physical Review Letters, 2020, 124, 122501.	7.8	133
5	Searching for Neutrinoless Double-Beta Decay of¹³⁰Te with CUORE. Advances in High Energy Physics, 2015, 2015, 1-13.	1.1	109
6	The projected background for the CUORE experiment. European Physical Journal C, 2017, 77, 1.	3.9	90
7	Exploring the neutrinoless double beta decay in the inverted neutrino hierarchy with bolometric detectors. European Physical Journal C, 2014, 74, 1.	3.9	85
8	Search for Majorana neutrinos exploiting millikelvin cryogenics with CUORE. Nature, 2022, 604, 53-58.	27.8	74
9	Measurement of the two-neutrino double-beta decay half-life of ^{130}Te with the CUORE-0 experiment. European Physical Journal C, 2017, 77, 1.	3.9	73
10	Final Result of CUPID-0 Phase-I in the Search for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Se</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>82</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> Neutrinoless Double- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">	7.8	68
11	Analysis techniques for the evaluation of the neutrinoless double- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math>decay lifetime in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Te</mml:mi><mml:mprescripts /><mml:none /><mml:mn>130</mml:mn></mml:mmultiscripts></mml:math>with the CUORE-0 detector. Physical Review C, 2016, 93, .	2.9	64
12	CUORE-0 detector: design, construction and operation. Journal of Instrumentation, 2016, 11, P07009-P07009.	1.2	64
13	New Limit for Neutrinoless Double-Beta Decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Mo</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>100</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> from the CUPID-Mo Experiment. Physical Review Letters, 2021, 126, 181802.	7.8	61
14	Current Status and Future Perspectives of the LUCIFER Experiment. Advances in High Energy Physics, 2013, 2013, 1-15.	1.1	52
15	Initial performance of the CUORE-0 experiment. European Physical Journal C, 2014, 74, 1.	3.9	52
16	Background model of the CUPID-0 experiment. European Physical Journal C, 2019, 79, 1.	3.9	45
17	Evidence of Single State Dominance in the Two-Neutrino Double- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math> Decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Se</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>82</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> wi	7.8	44
18	Double-beta decay investigation with highly pure enriched ^{82} 82 Se for the LUCIFER experiment. European Physical Journal C, 2015, 75, 591.	3.9	41

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19	Calibration strategy of the JUNO experiment. Journal of High Energy Physics, 2021, 2021, 1.	4.7	39
20	Measurement of the neutron flux at spallation sources using multi-foil activation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 902, 14-24.	1.6	36
21	TRIGA reactor absolute neutron flux measurement using activated isotopes. Progress in Nuclear Energy, 2014, 70, 249-255.	2.9	35
22	Comparison of a Modal Method and a Proper Orthogonal Decomposition approach for multi-group time-dependent reactor spatial kinetics. Annals of Nuclear Energy, 2014, 71, 217-229.	1.8	34
23	Optimization of the JUNO liquid scintillator composition using a Daya Bay antineutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 988, 164823.	1.6	34
24	CUORE sensitivity to $$0u eta eta $$ decay. European Physical Journal C, 2017, 77, 1.	3.9	31
25	Measurement of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>2</mml:mn><mml:mi>Î½</mml:mi><mml:mi>Î²</mml:mi><mml:mi>Î²</mml:mi></mml:math> Decay Half-Life of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Te</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>130</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>	7.8	29
26	Feasibility and physics potential of detecting ⁸B solar neutrinos at JUNO *. Chinese Physics C, 2021, 45, 023004.	3.7	26
27	First search for Lorentz violation in double beta decay with scintillating calorimeters. Physical Review D, 2019, 100, .	4.7	24
28	A zero dimensional model for simulation of TRIGA Mark II dynamic response. Progress in Nuclear Energy, 2013, 68, 43-54.	2.9	21
29	Embedded readout electronics R&D for the large PMTs in the JUNO experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 985, 164600.	1.6	21
30	Characterization of cubic Li$$_{2}$$^{100}MoO$$_4$$ crystals for the CUPID experiment. European Physical Journal C, 2021, 81, 1.	3.9	21
31	Bayesian statistics applied to neutron activation data for reactor flux spectrum analysis. Annals of Nuclear Energy, 2014, 70, 157-168.	1.8	19
32	Measurement and simulation of the neutron flux distribution in the TRIGA Mark II reactor core. Annals of Nuclear Energy, 2015, 85, 925-936.	1.8	19
33	Final characterization of the first critical configuration for the TRIGA Mark II reactor of the University of Pavia using the Monte Carlo code MCNP. Progress in Nuclear Energy, 2014, 74, 129-135.	2.9	18
34	Fuel burnup analysis of the TRIGA Mark II reactor at the University of Pavia. Annals of Nuclear Energy, 2016, 96, 270-276.	1.8	18
35	Characterization of the TRIGA Mark II reactor full-power steady state. Nuclear Engineering and Design, 2016, 300, 308-321.	1.7	18
36	Low energy analysis techniques for CUORE. European Physical Journal C, 2017, 77, 1.	3.9	17

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37	Distillation and stripping pilot plants for the JUNO neutrino detector: Design, operations and reliability. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 925, 6-17.	1.6	17
38	GIGJ: A Crustal Gravity Model of the Guangdong Province for Predicting the Geoneutrino Signal at the JUNO Experiment. Journal of Geophysical Research: Solid Earth, 2019, 124, 4231-4249.	3.4	16
39	A CUPID Li₂¹⁰⁰MoO₄ scintillating bolometer tested in the CROSS underground facility. Journal of Instrumentation, 2021, 16, P02037-P02037.	1.2	16
40	Novel technique for the study of pileup events in cryogenic bolometers. Physical Review C, 2021, 104, .	2.9	16
41	CUORE opens the door to tonne-scale cryogenics experiments. Progress in Particle and Nuclear Physics, 2022, 122, 103902.	14.4	16
42	Search for neutrinoless Î²+EC decay of Te120 with CUORE-0. Physical Review C, 2018, 97, .	2.9	15
43	Nanoseconds Timing System Based on IEEE 1588 FPGA Implementation. IEEE Transactions on Nuclear Science, 2019, 66, 1151-1158.	2.0	15
44	The design and sensitivity of JUNOâ€™s scintillator radiopurity pre-detector OSIRIS. European Physical Journal C, 2021, 81, 1.	3.9	15
45	The CUORE Detector and Results. Journal of Low Temperature Physics, 2020, 199, 519-528.	1.4	14
46	Radioactivity control strategy for the JUNO detector. Journal of High Energy Physics, 2021, 2021, 1.	4.7	13
47	Search for neutrinoless double beta decay of ^{64}Zn and ^{70}Zn with CUPID-0. European Physical Journal C, 2020, 80, 1.	3.9	12
48	Study of rare nuclear processes with CUORE. International Journal of Modern Physics A, 2018, 33, 1843002.	1.5	11
49	JUNO sensitivity to low energy atmospheric neutrino spectra. European Physical Journal C, 2021, 81, 1.	3.9	11
50	Double-beta decay of $$^{130}hbox {Te}$$ to the first $$0^+$$ excited state of $$^{130}hbox {Xe}$$ with CUORE-0. European Physical Journal C, 2019, 79, 1.	3.9	10
51	A new model with Serpent for the first criticality benchmarks of the TRIGA Mark II reactor. Annals of Nuclear Energy, 2018, 113, 171-176.	1.8	10
52	Coherent elastic nuclear scattering of ^{51}Cr neutrinos. European Physical Journal C, 2019, 79, 1.	3.9	9
53	A new technique for direct investigation of dark matter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 744, 61-68.	1.6	7
54	Resolution enhancement with light/heat decorrelation in CUPID-0 bolometric detector. Journal of Instrumentation, 2019, 14, P08017-P08017.	1.2	7

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55	Background identification in cryogenic calorimeters through $$alpha -alpha $$ delayed coincidences. European Physical Journal C, 2021, 81, 722.	3.9	7
56	Search for double-beta decay of $$mathrm {^{130}Te}$$ to the $$0^+$$ states of $$mathrm {^{130}Xe}$$ with CUORE. European Physical Journal C, 2021, 81, 1.	3.9	6
57	Results from the Cuore Experiment â€. Universe, 2019, 5, 10.	2.5	5
58	Search for double $$eta $$-decay modes of ^{64}Zn using purified zinc. European Physical Journal C, 2021, 81, 1.	3.9	5
59	Measurement of 216Po half-life with the CUPID-0 experiment. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 822, 136642.	4.1	5
60	Status of the CUORE and results from the CUORE-0 neutrinoless double beta decay experiments. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1719-1725.	0.5	4
61	The LUCIFER Project: Achievements and Near Future Prospects. Journal of Low Temperature Physics, 2016, 184, 852-858.	1.4	4
62	Lowering the Energy Threshold of the CUORE Experiment: Benefits in the Surface Alpha Events Reconstruction. Journal of Low Temperature Physics, 2020, 200, 321-330.	1.4	4
63	Status and prospects for CUORE. Journal of Physics: Conference Series, 2017, 888, 012034.	0.4	3
64	Charge reconstruction in large-area photomultipliers. Journal of Instrumentation, 2018, 13, P02008-P02008.	1.2	3
65	NIEL Dose Analysis on triple and single junction InGaP/GaAs/Ge solar cells irradiated with electrons, protons and neutrons. , 2019, , .		3
66	Characterization of TRIGA RC-1 neutron irradiation facilities for radiation damage testing. European Physical Journal Plus, 2020, 135, 1.	2.6	3
67	A Serpent/OpenFOAM coupling for 3D burnup analysis. European Physical Journal Plus, 2020, 135, 1.	2.6	3
68	Damping signatures at JUNO, a medium-baseline reactor neutrino oscillation experiment. Journal of High Energy Physics, 2022, 2022, .	4.7	3
69	Study of an intrinsically safe infrastructure for training and research on nuclear technologies. EPJ Web of Conferences, 2014, 79, 02004.	0.3	2
70	Dark Matter Search with CUORE-0 and CUORE. Physics Procedia, 2015, 61, 13-20.	1.2	2
71	CUORE and Beyond: Bolometric Techniques to Explore Inverted Neutrino Mass Hierarchy. Physics Procedia, 2015, 61, 241-250.	1.2	2
72	Results of CUORE-0 and prospects for the CUORE experiment. Nuclear and Particle Physics Proceedings, 2015, 265-266, 73-76.	0.5	2

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73	Object-Oriented Modeling and simulation of a TRIGA reactor plant with Dymola. Energy Procedia, 2016, 101, 42-49.	1.8	2
74	The CUORE cryostat and its bolometric detector. Journal of Instrumentation, 2017, 12, C02055-C02055.	1.2	2
75	CUORE: The first bolometric experiment at the ton scale for the search for neutrino-less double beta decay. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162440.	1.6	2
76	Development of a low background alphaâ€“beta/gamma coincidence detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1003, 165290.	1.6	2
77	Improving radioactive contaminant identification through the analysis of delayed coincidences with an $$alpha $$-spectrometer. European Physical Journal C, 2021, 81, 1.	3.9	2
78	Machine Learning Techniques for Pile-Up Rejection in Cryogenic Calorimeters. Journal of Low Temperature Physics, 2022, 209, 1024-1031.	1.4	2
79	A novel method for direct investigation of dark matter. International Journal of Modern Physics A, 2014, 29, 1443005.	1.5	1
80	First CUORE-0 Performance Results and Status of CUORE Experiment. Journal of Low Temperature Physics, 2014, 176, 986-994.	1.4	1
81	First data from CUORE-0. Physics Procedia, 2015, 61, 289-294.	1.2	1
82	First neutrinoless double beta decay results from CUORE-0. AIP Conference Proceedings, 2015, , .	0.4	1
83	Neutrinoless double-beta decay search with CUORE and CUORE-0 experiments. EPJ Web of Conferences, 2015, 90, 03004.	0.3	1
84	The CUORE and CUORE-0 experiments at Gran Sasso. EPJ Web of Conferences, 2015, 95, 04024.	0.3	1
85	Results from the CUORE-0 experiment. Journal of Physics: Conference Series, 2016, 718, 062007.	0.4	1
86	Results on double beta decay of 82Se with CUPID-0 Phase I. AIP Conference Proceedings, 2019, , .	0.4	1
87	CUPID-0: A double-readout cryogenic detector for Double Beta Decay search. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162441.	1.6	1
88	Final results of the CUPID-0 Phase I experiment. Journal of Physics: Conference Series, 2020, 1468, 012205.	0.4	1
89	First results from the CUORE experiment. Journal of Physics: Conference Series, 2020, 1342, 012002.	0.4	1
90	Assessment of the integrated mass conservative Kalman filter algorithm for Computational Thermo-Fluid Dynamics on the TRIGA Mark II reactor. Nuclear Engineering and Design, 2021, 384, 111431.	1.7	1

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91	Perspectives of lowering CUORE thresholds with Optimum Trigger. Journal of Physics: Conference Series, 2020, 1643, 012020.	0.4	1
92	Results on ⁸²Se 2Î½Î²Î² with CUPID-0 Phase I. Journal of Physics: Conference Series, 2020, 1643, 012025.	0.4	1
93	Measurements of Neutron Fields in a Wide Energy Range Using Multi-Foil Activation Analysis. IEEE Transactions on Nuclear Science, 2022, 69, 1659-1666.	2.0	1
94	Searching for New Physics in two-neutrino double beta decay with CUPID. Journal of Physics: Conference Series, 2021, 2156, 012233.	0.4	1
95	Search for neutrinoless <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>Î²</mml:mi><mml:mo>+</mml:mo></mml:msup></mm EC decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Te</mml:mi><mml:mprescripts /><mml:none /><mml:mn>120</mml:mn></mml:mmultiscripts></mml:math> with CUORE. Physical Review C, 2022, 105, .	2.9	1
96	Expected sensitivity to 128Te neutrinoless double beta decay with the CUORE TeO2 cryogenic bolometers. Journal of Low Temperature Physics, 2022, 209, 788-795.	1.4	1
97	Study of a Low-power, Fast-neutron-based ADS. Physics Procedia, 2014, 60, 54-60.	1.2	0
98	An intrinsically safe facility for forefront research and training on nuclear technologies â€" A zero-power experiment. European Physical Journal Plus, 2014, 129, 1.	2.6	0
99	CUORE-0 results and prospects for the CUORE experiment. AIP Conference Proceedings, 2015, , .	0.4	0
100	Lowering the CUORE energy threshold. Journal of Physics: Conference Series, 2017, 888, 012047.	0.4	0
101	Results from CUORE and CUORE-0. AIP Conference Proceedings, 2017, , .	0.4	0
102	The CUORE and CUORE-0 experiments at LNGS. EPJ Web of Conferences, 2017, 164, 07047.	0.3	0
103	Setting-up a control-oriented model for simulation of TRIGA Mark II dynamic response. Nuclear Engineering and Design, 2018, 331, 103-115.	1.7	0
104	The CUORE and CUORE-0 experiments at LNGS. Journal of Physics: Conference Series, 2018, 1056, 012009.	0.4	0
105	Results from the CUORE experiment. Journal of Physics: Conference Series, 2019, 1137, 012052.	0.4	0
106	CUORE: The first bolometric experiment at the ton scale for rare decay searches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 158-161.	1.6	0
107	Measuring the coherent elastic neutrino-nucleus scattering with an high intensity ⁵¹Cr radioactive source. Journal of Physics: Conference Series, 2020, 1468, 012209.	0.4	0
108	Initial performance of the CUORE detector. Journal of Physics: Conference Series, 2020, 1342, 012114.	0.4	0

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109	Double beta decay results from the CUPID-0 experiment. , 2021, , .		0
110	FPGA Implementation of an NCO Based CDR for the JUNO Front-End Electronics. IEEE Transactions on Nuclear Science, 2021, 68, 1952-1960.	2.0	0
111	Neutrinoless double beta decay results from CUORE-0 and status of the CUORE experiment. , 2016, , .		0
112	The Cryogenic Underground Observatory for Rare Events: Status and Prospects. , 2017, , .		0
113	The CUORE Bolometric Detector for Neutrinoless Double Beta Decay Searches. Springer Proceedings in Physics, 2018, , 202-207.	0.2	0
114	CUORE: first results and prospects. , 2018, , .		0
115	The commissioning of the CUORE experiment: the mini-tower run. , 2018, , .		0
116	Status and results from the CUORE experiment. International Journal of Modern Physics A, 2020, 35, 2044016.	1.5	0
117	High precision measurement of the half-life of the 391.6 keV metastable level in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Pu</mml:mi><mml:mprescripts /><mml:none /><mml:mn>239</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2022, 105, .	2.9	0
118	New results from the CUORE experiment. International Journal of Modern Physics A, 0, , .	1.5	0
119	Optimization of a single module of CUPID. Journal of Physics: Conference Series, 2021, 2156, 012228.	0.4	0