Christian Buck

List of Publications by Year
in descending order

55 papers	2,973 citations	236925 25 h-index	161849 54 g-index
56 all docs	56 docs citations	56 times ranked	2054 citing authors

#	Article	IF	Citations
1	Indication of Reactor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mover accent="true"><mml:mi>Î½</mml:mi><mml:mo>Â¯</mml:mo></mml:mover><mml:mi>e</mml:mi></mml:msub></mml:math>Disapp in the Double Chooz Experiment. Physical Review Letters, 2012, 108, 131801.	7.8	979
2	Reactor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mover accent="true"><mml:mi>Î½</mml:mi><mml:mo>Â¯</mml:mo></mml:mover><mml:mi>e</mml:mi></mml:msub></mml:math>disappea in the Double Chooz experiment. Physical Review D, 2012, 86, .	4.7	275
3	Improved measurements of the neutrino mixing angle Î¸13 with the Double Chooz detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	181
4	Measurements of extremely low radioactivity levels in BOREXINO. Astroparticle Physics, 2002, 18, 1-25.	4.3	138
5	Status of light sterile neutrino searches. Progress in Particle and Nuclear Physics, 2020, 111, 103736.	14.4	123
6	First measurement of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>Î¸</mml:mi></mml:mrow><mml:mrow><mml:mn>13</mml:mn></mml:mrow></m from delayed neutron capture on hydrogen in the Double Chooz experiment. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 66-70.	4.1	84
7	Sterile Neutrino Constraints from the STEREO Experiment with 66ÂDays of Reactor-On Data. Physical Review Letters, 2018, 121, 161801.	7.8	80
8	Improved sterile neutrino constraints from the STEREO experiment with 179Âdays of reactor-on data. Physical Review D, 2020, 102, .	4.7	60
9	Constraints on Elastic Neutrino Nucleus Scattering in the Fully Coherent Regime from the CONUS Experiment. Physical Review Letters, 2021, 126, 041804.	7.8	60
10	Online monitoring of the Osiris reactor with the Nucifer neutrino detector. Physical Review D, 2016, 93, .	4.7	58
11	Large scale Gd-beta-diketonate based organic liquid scintillator production for antineutrino detection. Journal of Instrumentation, 2012, 7, P06008-P06008.	1.2	48
12	Neutron-induced background in the CONUS experiment. European Physical Journal C, 2019, 79, 1.	3.9	47
13	Measurement of Î¸13 in Double Chooz using neutron captures on hydrogen with novel background rejection techniques. Journal of High Energy Physics, 2016, 2016, 1.	4.7	46
14	New limits on nucleon decays into invisible channels with the BOREXINO counting test facility. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 563, 23-34.	4.1	42
15	New experimental limits on violations of the Pauli exclusion principle obtained with the Borexino Counting Test Facility. European Physical Journal C, 2004, 37, 421-431.	3.9	41
16	First test of Lorentz violation with a reactor-based antineutrino experiment. Physical Review D, 2012, 86, .	4.7	41
17	The STEREO experiment. Journal of Instrumentation, 2018, 13, P07009-P07009.	1.2	41
18	Search for electron decay mode eâ†’Î³+Î½ with prototype of Borexino detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 525, 29-40.	4.1	38

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19	Background-independent measurement of <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevie. Physics	4.1	34
20	Metal-loaded organic scintillators for neutrino physics. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 093001.	3.6	33
21	Light output of Double Chooz scintillators for low energy electrons. Journal of Instrumentation, 2011, 6, P11006-P11006.	1.2	32
22	Study of phenylxylylethane (PXE) as scintillator for low energy neutrino experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 585, 48-60.	1.6	30
23	Investigating the spectral anomaly with different reactor antineutrino experiments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 765, 159-162.	4.1	28
24	Light yield and energy transfer in a new Gd-loaded liquid scintillator. Chemical Physics Letters, 2011, 516, 257-262.	2.6	27
25	Light propagation and fluorescence quantum yields in liquid scintillators. Journal of Instrumentation, 2015, 10, P09007-P09007.	1.2	24
26	Prototype scintillator cell for an In-based solar neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 547, 368-388.	1.6	23
27	Study of neutrino electromagnetic properties with the prototype of the Borexino detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 563, 35-47.	4.1	22
28	Direct measurement of backgrounds using reactor-off data in Double Chooz. Physical Review D, 2013, 87, .	4.7	21
29	Accurate Measurement of the Electron Antineutrino Yield of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">U</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>235</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> Fissions from the STEREO Experiment with 119 Days of Reactor-On Data. Physical Review Letters, 2020, 1	7.8	20
30	Production and properties of the liquid scintillators used in the STEREO reactor neutrino experiment. Journal of Instrumentation, 2019, 14, P01027-P01027.	1.2	19
31	Novel constraints on neutrino physics beyond the standard model from the CONUS experiment. Journal of High Energy Physics, 2022, 2022, .	4.7	19
32	Improved STEREO simulation with a new gamma ray spectrum of excited gadolinium isotopes using FIFRELIN. European Physical Journal A, 2019, 55, 1.	2.5	18
33	Luminescent properties of a new In-based organic liquid scintillation system. Journal of Luminescence, 2004, 106, 57-67.	3.1	17
34	First antineutrino energy spectrum from ²³⁵U fissions with the STEREO detector at ILL [*]. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 075107.	3.6	15
35	Title is missing!. Journal of Radioanalytical and Nuclear Chemistry, 2003, 258, 255-263.	1.5	14
36	Cosmic-muon characterization and annual modulation measurement with Double Chooz detectors. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 017-017.	5.4	14

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37	Energy transfer and light yield properties of a new highly loaded indium(III) Î2-diketonate organic scintillator system. Chemical Physics Letters, 2007, 435, 252-256.	2.6	11
38	Joint Measurement of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">U</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>235</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> Antineutrino Spectrum by PROSPECT and STEREO. Physical Review Letters, 2022, 128, 081802.	7.8	11
39	Large-size sub-keV sensitive germanium detectors for the CONUS experiment. European Physical Journal C, 2021, 81, 1.	3.9	10
40	Measuring the 14C isotope concentration in a liquid organic scintillator at a small-volume setup. Instruments and Experimental Techniques, 2012, 55, 34-37.	0.5	9
41	Precision muon reconstruction in Double Chooz. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 330-339.	1.6	9
42	Yields and production rates of cosmogenic 9Li and 8He measured with the Double Chooz near and far detectors. Journal of High Energy Physics, 2018, 2018, 1.	4.7	9
43	The Lens project. Nuclear Physics, Section B, Proceedings Supplements, 2003, 118, 450.	0.4	8
44	Ortho-positronium observation in the Double Chooz experiment. Journal of High Energy Physics, 2014, 2014, 1.	4.7	8
45	Muon capture on light isotopes measured with the Double Chooz detector. Physical Review C, 2016, 93, .	2.9	8
46	Novel opaque scintillator for neutrino detection. Journal of Instrumentation, 2019, 14, P11007-P11007.	1.2	8
47	Neutrino physics with an opaque detector. Communications Physics, 2021, 4, .	5.3	8
48	Characterization of the spontaneous light emission of the PMTs used in the Double Chooz experiment. Journal of Instrumentation, 2016, 11, P08001-P08001.	1.2	6
49	Searching for Hidden Neutrons with a Reactor Neutrino Experiment: Constraints from the STEREO Experiment. Physical Review Letters, 2022, 128, 061801.	7.8	6
50	Search for signatures of sterile neutrinos with Double Chooz. European Physical Journal C, 2021, 81, 1.	3.9	5
51	Novel event classification based on spectral analysis of scintillation waveforms in Double Chooz. Journal of Instrumentation, 2018, 13, P01031-P01031.	1.2	4
52	Search for light sterile neutrinos with the STEREO experiment. EPJ Web of Conferences, 2019, 219, 08001.	0.3	2
53	Scintillation light production, propagation and detection in the Stereo reactor antineutrino experiment. Journal of Physics: Conference Series, 2017, 888, 012101.	0.4	1
54	The Double Chooz experiment. , 2017, , .		1

#	Article	IF	Citations
55	Scintillation light production, propagation and detection in the Stereo reactor antineutrino experiment. Journal of Physics: Conference Series, 2017, 888, 012187.	0.4	0