

Christian Buck

List of Publications by Year in descending order

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55
papers

2,973
citations

236925

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161849

54
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56
all docs

56
docs citations

56
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Searching for Hidden Neutrons with a Reactor Neutrino Experiment: Constraints from the STEREO Experiment. Physical Review Letters, 2022, 128, 061801.	7.8	6
2	Joint Measurement of the $\langle \text{mml:mrow} \langle \text{mml:mmultiscripts} \langle \text{mml:mrow} \langle \text{mml:mi mathvariant="normal"} \rangle \text{U} \langle \text{mml:mrow} \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \rangle \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 235 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \rangle \rangle$ Antineutrino Spectrum by PROSPECT and STEREO. Physical Review Letters, 2022, 128, 081802.	7.8	11
3	Novel constraints on neutrino physics beyond the standard model from the CONUS experiment. Journal of High Energy Physics, 2022, 2022, .	4.7	19
4	Constraints on Elastic Neutrino Nucleus Scattering in the Fully Coherent Regime from the CONUS Experiment. Physical Review Letters, 2021, 126, 041804.	7.8	60
5	Large-size sub-keV sensitive germanium detectors for the CONUS experiment. European Physical Journal C, 2021, 81, 1.	3.9	10
6	First antineutrino energy spectrum from $\langle \text{sup} \rangle 235 \langle \text{sup} \rangle \text{U}$ fissions with the STEREO detector at ILL $\langle \text{sup} \rangle * \langle \text{sup} \rangle$. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 075107.	3.6	15
7	Search for signatures of sterile neutrinos with Double Chooz. European Physical Journal C, 2021, 81, 1.	3.9	5
8	Neutrino physics with an opaque detector. Communications Physics, 2021, 4, .	5.3	8
9	Status of light sterile neutrino searches. Progress in Particle and Nuclear Physics, 2020, 111, 103736. Accurate Measurement of the Electron Antineutrino Yield of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mmultiscripts} \langle \text{mml:mrow} \langle \text{mml:mi mathvariant="normal"} \rangle \text{U} \langle \text{mml:mrow} \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \rangle \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 235 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \rangle \rangle$	14.4	123
10	Fissions from the STEREO Experiment with 119 Days of Reactor-On Data. Physical Review Letters, 2020, 1	7.8	20
11	Improved sterile neutrino constraints from the STEREO experiment with 179Ådays of reactor-on data. Physical Review D, 2020, 102, .	4.7	60
12	Neutron-induced background in the CONUS experiment. European Physical Journal C, 2019, 79, 1.	3.9	47
13	Production and properties of the liquid scintillators used in the STEREO reactor neutrino experiment. Journal of Instrumentation, 2019, 14, P01027-P01027.	1.2	19
14	Search for light sterile neutrinos with the STEREO experiment. EPJ Web of Conferences, 2019, 219, 08001.	0.3	2
15	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
16	Novel opaque scintillator for neutrino detection. Journal of Instrumentation, 2019, 14, P11007-P11007.	1.2	8
17	The STEREO experiment. Journal of Instrumentation, 2018, 13, P07009-P07009.	1.2	41
18	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

#	ARTICLE	IF	CITATIONS
19	Sterile Neutrino Constraints from the STEREO Experiment with 66 Days of Reactor-On Data. Physical Review Letters, 2018, 121, 161801.	7.8	80
20	Novel event classification based on spectral analysis of scintillation waveforms in Double Chooz. Journal of Instrumentation, 2018, 13, P01031-P01031.	1.2	4
21	Cosmic-muon characterization and annual modulation measurement with Double Chooz detectors. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 017-017.	5.4	14
22	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
23	Scintillation light production, propagation and detection in the Stereo reactor antineutrino experiment. Journal of Physics: Conference Series, 2017, 888, 012187.	0.4	0
24	Scintillation light production, propagation and detection in the Stereo reactor antineutrino experiment. Journal of Physics: Conference Series, 2017, 888, 012101.	0.4	1
25	The Double Chooz experiment. , 2017, , .		1
26	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
27	Metal-loaded organic scintillators for neutrino physics. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 093001.	3.6	33
28	Muon capture on light isotopes measured with the Double Chooz detector. Physical Review C, 2016, 93, .	2.9	8
29	Online monitoring of the Osiris reactor with the Nucifer neutrino detector. Physical Review D, 2016, 93, .	4.7	58
30	Measurement of $\hat{\theta}_{13}$ in Double Chooz using neutron captures on hydrogen with novel background rejection techniques. Journal of High Energy Physics, 2016, 2016, 1.	4.7	46
31	Light propagation and fluorescence quantum yields in liquid scintillators. Journal of Instrumentation, 2015, 10, P09007-P09007.	1.2	24
32	Ortho-positronium observation in the Double Chooz experiment. Journal of High Energy Physics, 2014, 2014, 1.	4.7	8
33	Improved measurements of the neutrino mixing angle $\hat{\theta}_{13}$ with the Double Chooz detector. Journal of High Energy Physics, 2014, 2014, 1.	4.7	181
34	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
35	Independent measurement of $\hat{\theta}_{13}$ 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	34
36	First measurement of $\hat{\theta}_{13}$ 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

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37	Direct measurement of backgrounds using reactor-off data in Double Chooz. Physical Review D, 2013, 87, .	4.7	21
38	Indication of Reactor $\bar{\nu}_e$ disappearance in the Double Chooz Experiment. Physical Review Letters, 2012, 108, 131801.	7.8	979
39	Large scale Gd-beta-diketonate based organic liquid scintillator production for antineutrino detection. Journal of Instrumentation, 2012, 7, P06008-P06008.	1.2	48
40	First test of Lorentz violation with a reactor-based antineutrino experiment. Physical Review D, 2012, 86, .	4.7	41
41	Reactor $\bar{\nu}_e$ disappearance in the Double Chooz experiment. Physical Review D, 2012, 86, .	4.7	275
42	Measuring the ^{14}C isotope concentration in a liquid organic scintillator at a small-volume setup. Instruments and Experimental Techniques, 2012, 55, 34-37.	0.5	9
43	Light output of Double Chooz scintillators for low energy electrons. Journal of Instrumentation, 2011, 6, P11006-P11006.	1.2	32
44	Light yield and energy transfer in a new Gd-loaded liquid scintillator. Chemical Physics Letters, 2011, 516, 257-262.	2.6	27
45	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
46	Energy transfer and light yield properties of a new highly loaded indium(III) β^2 -diketonate organic scintillator system. Chemical Physics Letters, 2007, 435, 252-256.	2.6	11
47	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
48	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
49	Luminescent properties of a new In-based organic liquid scintillation system. Journal of Luminescence, 2004, 106, 57-67.	3.1	17
50	Title is missing!. Journal of Radioanalytical and Nuclear Chemistry, 2003, 258, 255-263.	1.5	14
51	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
52	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
53	The Lens project. Nuclear Physics, Section B, Proceedings Supplements, 2003, 118, 450.	0.4	8
54	Measurements of extremely low radioactivity levels in BOREXINO. Astroparticle Physics, 2002, 18, 1-25.	4.3	138

#	ARTICLE	IF	CITATIONS
55	Search for electron decay mode $e\hat{\nu}^3+\hat{\nu}^{1/2}$ with prototype of Borexino detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 525, 29-40.	4.1	38