

Nathaniel Bowden

List of Publications by Year in descending order

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70
papers

3,823
citations

331642

21
h-index

138468

58
g-index

71
all docs

71
docs citations

71
times ranked

4004
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement of material isotopics and atom number ratio with \pm particle spectroscopy for a NIFFTE fission Time Projection Chamber. Nuclear Data Sheets, 2021, 178, 1-40.	1.6	3
2	Joint Determination of Reactor Antineutrino Spectra from a ^{235}U Fission Fragment Angular Anisotropy Measurement. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1021, 165864.	7.8	12
3	Joint Measurement of the $^{239}\text{Pu}(n,f)/^{235}\text{U}(n,f)$ Cross-Section Ratio with the NIFFTE Fission Time Projection Chamber. Nuclear Data Sheets, 2021, 178, 1-40.	7.8	11
4	PROSPECT-II physics opportunities. Journal of Physics G: Nuclear and Particle Physics, 2022, 49, 070501.	3.6	5
5	Measurement of the $^{239}\text{Pu}(n,f)/^{235}\text{U}(n,f)$ Cross-Section Ratio with the NIFFTE fission Time Projection Chamber. Nuclear Data Sheets, 2021, 178, 1-40.	2.2	13
6	Neutron-induced fission fragment angular distributions, anisotropy, and linear momentum transfer measured with the NIFFTE fission time projection chamber. Physical Review C, 2020, 102, .	2.9	11
7	Nonfuel antineutrino contributions in the ORNL High Flux Isotope Reactor (HFIR). Physical Review C, 2020, 101, .	2.9	4
8	Colloquium : Neutrino detectors as tools for nuclear security. Reviews of Modern Physics, 2020, 92, .	45.6	42
9	Applying a Template of Expected Uncertainties to Updating $^{239}\text{Pu}(n,f)$ Cross-section Covariances in the Neutron Data Standards Database. Nuclear Data Sheets, 2020, 163, 228-248.	2.2	21
10	PROSPECT – A precision reactor oscillation and spectrum experiment. International Journal of Modern Physics Conference Series, 2020, 50, 2060001.	0.7	0
11	Measurement of muon-induced high-energy neutrons from rock in an underground Gd-doped water detector. Physical Review C, 2020, 102, .	2.9	2
12	Fission fragment angular anisotropy in neutron-induced fission of ^{235}U measured with a time projection chamber. Physical Review C, 2019, 99, .	2.9	20
13	Measurement of the Antineutrino Spectrum from a ^{235}U Fission Fragment Angular Anisotropy Measurement. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1021, 165864.	7.8	39
14	The radioactive source calibration system of the PROSPECT reactor antineutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 944, 162465.	1.6	3
15	PROSPECT- A Precision Reactor Oscillation and Spectrum Experiment. Journal of Physics: Conference Series, 2019, 1216, 012010.	0.4	0
16	The PROSPECT reactor antineutrino experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 922, 287-309.	1.6	40
17	A low mass optical grid for the PROSPECT reactor antineutrino detector. Journal of Instrumentation, 2019, 14, P04014-P04014.	1.2	10
18	Lithium-loaded liquid scintillator production for the PROSPECT experiment. Journal of Instrumentation, 2019, 14, P03026-P03026.	1.2	16

#	ARTICLE	IF	CITATIONS
37	First test of Lorentz violation with a reactor-based antineutrino experiment. Physical Review D, 2012, 86, .	4.7	41
38	Reactor $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mover accent="true" \rangle \langle \text{mml:mi} \rangle 1/2 \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{A} \langle \text{mml:mo} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mi} \rangle e \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ disappearance in the Double Chooz experiment. Physical Review D, 2012, 86, .	4.7	275
39	A note on neutron capture correlation signals, backgrounds, and efficiencies. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 693, 209-214.	1.6	11
40	Neutron Time Projection Chamber for Nuclear Security and Verification Applications. , 2011, , .		1
41	Neutron detection and identification using ZnS:Ag/6LiF in segmented antineutrino detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 652, 412-416.	1.6	15
42	Large-scale gadolinium-doped water Cherenkov detector for nonproliferation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 654, 377-382.	1.6	14
43	Investigation of large LGB detectors for antineutrino detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 660, 77-82.	1.6	14
44	Reactor monitoring using antineutrino detectors. Nuclear Physics, Section B, Proceedings Supplements, 2011, 217, 134-136.	0.4	2
45	Advances toward a transportable antineutrino detector system for reactor monitoring and safeguards. , 2011, , .		0
46	Results from a Search for Light-Mass Dark Matter with a $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Type Point Contact Germanium Detector. Physical Review Letters, 2011, 106, 131301.	7.8	657
47	Directional fast neutron detection using a time projection chamber. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 153-161.	1.6	16
48	Integrated readout of organic scintillator and ZnS:Ag⁶LiF for segmented antineutrino detectors. , 2010, , .		2
49	Advances towards readily deployable antineutrino detectors for reactor monitoring and safeguards. , 2009, , .		2
50	Neutron detection with water Cherenkov based detectors. , 2009, , .		0
51	Observation of neutrons with a Gadolinium doped water Cherenkov detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 607, 616-619.	1.6	29
52	Improved fast neutron spectroscopy via detector segmentation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 609, 32-37.	1.6	6
53	Directional Neutron Detection Using a Time Projection Chamber. IEEE Transactions on Nuclear Science, 2009, 56, 1218-1223.	2.0	11
54	Observation of the isotopic evolution of pressurized water reactor fuel using an antineutrino detector. Journal of Applied Physics, 2009, 105, .	2.5	41

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55	Monitoring the thermal power of nuclear reactors with a prototype cubic meter antineutrino detector. Journal of Applied Physics, 2008, 103, .	2.5	46
56	Special Nuclear Material detection with a water Cherenkov based detector. , 2008, , .		1
57	Background radiation studies for future, above ground antineutrino detectors. Journal of Physics: Conference Series, 2008, 136, 042003.	0.4	0
58	The deployment of three prototype detectors for reactor monitoring and safeguards. Journal of Physics: Conference Series, 2008, 136, 042001.	0.4	0
59	Reactor monitoring and safeguards using antineutrino detectors. Journal of Physics: Conference Series, 2008, 136, 022008.	0.4	14
60	Pixellated NaI (Tl) Detector for Light Yield Nonproportionality Investigation. IEEE Transactions on Nuclear Science, 2007, 54, 1830-1835.	2.0	2
61	Experimental results from an antineutrino detector for cooperative monitoring of nuclear reactors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 985-998.	1.6	66
62	Angra dos Reis reactor neutrino oscillation experiment. Brazilian Journal of Physics, 2006, 36, 1118-1123.	1.4	11
63	Observations of cold antihydrogen. Nuclear Instruments & Methods in Physics Research B, 2004, 214, 22-30.	1.4	5
64	Aperture method to determine the density and geometry of antiparticle plasmas. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 595, 60-67.	4.1	10
65	Driven Production of Cold Antihydrogen and the First Measured Distribution of Antihydrogen States. Physical Review Letters, 2002, 89, 233401.	7.8	191
66	Background-Free Observation of Cold Antihydrogen with Field-Ionization Analysis of Its States. Physical Review Letters, 2002, 89, 213401.	7.8	515
67	Stacking of cold antiprotons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 548, 140-145.	4.1	53
68	COLD ANTIHYDROGEN AND CPT. , 2002, , .		0
69	First positron cooling of antiprotons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 507, 1-6.	4.1	126
70	Energy of the superallowed \hat{I}^2 decay of ^{38}K . Physical Review C, 1998, 58, 821-825.	2.9	16