

Joshua Spitz

List of Publications by Year in descending order

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Version: 2024-02-01

110
papers

6,652
citations

76322

40
h-index

62593

80
g-index

111
all docs

111
docs citations

111
times ranked

2725
citing authors

#	ARTICLE	IF	CITATIONS
19	Measurement of the flux-averaged inclusive charged-current electron neutrino and antineutrino cross section on argon using the NuMI beam and the MicroBooNE detector. Physical Review D, 2021, 104, .	4.7	21
20	The JSNS $\langle \text{si25.svg} \rangle$ detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1014, 165742.	1.6	16
21	Calorimetric classification of track-like signatures in liquid argon TPCs using MicroBooNE data. Journal of High Energy Physics, 2021, 2021, 1.	4.7	10
22	Measuring Changes in the Atmospheric Neutrino Rate over Gigayear Timescales. Physical Review Letters, 2020, 125, 231802.	7.8	11
23	Calibration of the charge and energy loss per unit length of the MicroBooNE liquid argon time projection chamber using muons and protons. Journal of Instrumentation, 2020, 15, P03022-P03022.	1.2	34
24	Search for heavy neutral leptons decaying into muon-pion pairs in the MicroBooNE detector. Physical Review D, 2020, 101, .	4.7	28
25	Long-baseline neutrino oscillation physics potential of the DUNE experiment. European Physical Journal C, 2020, 80, 1.	3.9	93
26	First Measurement of Differential Charged Current Quasielasticlike $\langle \text{math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{msub} \langle \text{mi} \hat{1}^{\frac{1}{2}} \rangle \langle \text{mi} \hat{1}^{\frac{1}{4}} \rangle \langle \text{msub} \rangle \langle \text{math} \rangle$ -Argon Scattering Cross Sections with the MicroBooNE Detector. Physical Review Letters, 2020, 125, 201803.	7.8	34
27	Reconstruction and measurement of $\langle \text{math} \rangle$ (100) MeV energy electromagnetic activity from $\langle \text{math} \rangle$ decays in the MicroBooNE LArTPC. Journal of Instrumentation, 2020, 15, P02007-P02007.	1.2	21
28	First measurement of electron neutrino scattering cross section on argon. Physical Review D, 2020, 102, .	4.7	16
29	Improved Limits on Millicharged Particles Using the ArgoNeUT Experiment at Fermilab. Physical Review Letters, 2020, 124, 131801.	7.8	46
30	Measurement of space charge effects in the MicroBooNE LArTPC using cosmic muons. Journal of Instrumentation, 2020, 15, P12037-P12037.	1.2	33
31	Measurement of differential cross sections for $\langle \text{math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{msub} \langle \text{mi} \hat{1}^{\frac{1}{2}} \rangle \langle \text{mi} \hat{1}^{\frac{1}{4}} \rangle \langle \text{msub} \rangle \langle \text{math} \rangle$ -Ar charged-current interactions with protons and no pions in the final state with the MicroBooNE detector. Physical Review D, 2020, 102, .	4.7	30
32	First measurement of $\langle \text{math} \rangle$ charged-current $\langle \text{math} \rangle$ production on argon with the MicroBooNE detector. Physical Review D, 2019, 99, .	4.7	24
33	Rejecting cosmic background for exclusive charged current quasi elastic neutrino interaction studies with Liquid Argon TPCs; a case study with the MicroBooNE detector. European Physical Journal C, 2019, 79, 1.	3.9	7
34	First Measurement of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon at $\langle \text{math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{msub} \langle \text{mi} \hat{E} \rangle \langle \text{mi} \hat{1}^{\frac{1}{2}} \rangle \langle \text{msub} \rangle \langle \text{mo} \hat{1}^{\frac{1}{4}} \rangle \langle \text{mo} \rangle \langle \text{mn} \hat{0.8} \rangle \langle \text{mm} \rangle$ with the MicroBooNE Detector. Physical Review Letters, 2019, 123, 131801.	7.8	58
35	Optimizing the ^8Li yield for the IsoDAR Neutrino Experiment. Journal of Instrumentation, 2019, 14, P03001-P03001.	1.2	10
36	Design and construction of the MicroBooNE Cosmic Ray Tagger system. Journal of Instrumentation, 2019, 14, P04004-P04004.	1.2	20

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37	Severe Constraints on New Physics Explanations of the MiniBooNE Excess. Physical Review Letters, 2019, 122, 081801.	7.8	22
38	Demonstration of MeV-scale physics in liquid argon time projection chambers using ArgoNeUT. Physical Review D, 2019, 99, .	4.7	45
39	First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions. Physical Review Letters, 2018, 120, 141802.	7.8	25
40	The Pandora multi-algorithm approach to automated pattern recognition of cosmic-ray muon and neutrino events in the MicroBooNE detector. European Physical Journal C, 2018, 78, 82.	3.9	71
41	Significant Excess of Electronlike Events in the MiniBooNE Short-Baseline Neutrino Experiment. Physical Review Letters, 2018, 121, 221801.	7.8	335
42	First measurement of the cross section for $\sigma_{\nu e}^{\text{CC}}$ and $\sigma_{\nu e}^{\text{NC}}$ and $\sigma_{\nu e}^{\text{CC}}/\sigma_{\nu e}^{\text{NC}}$ ionization electron signal processing in single phase LArTPCs. Part I. Algorithm Description and quantitative evaluation with MicroBooNE simulation. Journal of Instrumentation, 2018, 13, P07006-P07006.	4.7	19
43	Signatures of pseudo-Dirac dark matter at high-intensity neutrino experiments. Physical Review D, 2018, 98, .	1.2	59
44	Signatures of pseudo-Dirac dark matter at high-intensity neutrino experiments. Physical Review D, 2018, 98, .	4.7	33
45	Design and construction of the MicroBooNE detector. Journal of Instrumentation, 2017, 12, P02017-P02017.	1.2	215
46	First observation of low energy electron neutrinos in a liquid argon time projection chamber. Physical Review D, 2017, 95, .	4.7	33
47	Measurement of $\sigma_{\nu e}^{\text{CC}}$ and $\sigma_{\nu e}^{\text{NC}}$ ionization electron signal processing in single phase LArTPCs. Part I. Algorithm Description and quantitative evaluation with MicroBooNE simulation. Journal of Instrumentation, 2017, 12, P12030-P12030.	4.7	14
48	Measurement of cosmic-ray reconstruction efficiencies in the MicroBooNE LArTPC using a small external cosmic-ray counter. Journal of Instrumentation, 2017, 12, P12030-P12030.	1.2	11
49	Noise Characterization and Filtering in the MicroBooNE Liquid Argon TPC. Journal of Instrumentation, 2017, 12, P08003-P08003.	1.2	61
50	Michel electron reconstruction using cosmic-ray data from the MicroBooNE LArTPC. Journal of Instrumentation, 2017, 12, P09014-P09014.	1.2	33
51	Determination of muon momentum in the MicroBooNE LArTPC using an improved model of multiple Coulomb scattering. Journal of Instrumentation, 2017, 12, P10010-P10010.	1.2	26
52	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
53	Muon capture on light isotopes measured with the Double Chooz detector. Physical Review C, 2016, 93, .	2.9	8
54	Measurement of $\hat{\nu}_e$ in Double Chooz using neutron captures on hydrogen with novel background rejection techniques. Journal of High Energy Physics, 2016, 2016, 1.	4.7	46

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55	Decisive disappearance search at high $\hat{\theta}$ with monoenergetic muon neutrinos. Physical Review D, 2015, 92, .	4.7	7
56	Future short-baseline sterile neutrino searches with accelerators. AIP Conference Proceedings, 2015, , .	0.4	5
57	Measurement of the antineutrino neutral-current elastic differential cross section. Physical Review D, 2015, 91, .	4.7	31
58	Publisher's Note: First Measurement of Neutrino and Antineutrino Coherent Charged Pion Production on Argon [Phys. Rev. Lett. 113 (2014) 261801]. Physical Review Letters, 2015, 114, .	7.8	5
59	Development and operational experience of magnetic horn system for T2K experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 789, 57-80.	1.6	12
60	First Measurement of Neutrino and Antineutrino Coherent Charged Pion Production on Argon. Physical Review Letters, 2014, 113, 261801.	7.8	25
61	Cyclotrons as Drivers for Precision Neutrino Measurements. Advances in High Energy Physics, 2014, 2014, 1-22.	1.1	7
62	Detection of back-to-back proton pairs in charged-current neutrino interactions with the ArgoNeUT detector in the NuMI low energy beam line. Physical Review D, 2014, 90, .	4.7	57
63	Cross section measurements with monoenergetic muon neutrinos. Physical Review D, 2014, 89, .	4.7	14
64	Annual modulation of cosmic relic neutrinos. Physical Review D, 2014, 90, .	4.7	14
65	Ortho-positronium observation in the Double Chooz experiment. Journal of High Energy Physics, 2014, 2014, 1.	4.7	8
66	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
67	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
68	Measurements of inclusive muon neutrino and antineutrino charged current differential cross sections on argon in the NuMI antineutrino beam. Physical Review D, 2014, 89, .	4.7	46
69	Precision $\hat{\theta}_{13}$ measurement of $e^- \nu_\mu$ scattering. Physical Review Letters, 2014, 113, 261801.	4.7	24
70	Background-independent measurement of $\hat{\theta}_{13}$ with the Double Chooz experiment. Physical Review Letters, 2014, 113, 261801.	4.1	34
71	TESTING LORENTZ SYMMETRY WITH THE DOUBLE CHOOZ EXPERIMENT. , 2014, , 9-12.		2
72	First measurement of the muon antineutrino double-differential charged-current quasielastic cross section. Physical Review D, 2013, 88, .	4.7	137

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73	Search for neutrino-antineutrino oscillations with a reactor experiment. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 727, 412-416.	4.1	30
74	First measurement of $\langle \nu_{\mu} \nu_{\tau} \rangle$ 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
75	Test of Lorentz and CPT violation with short baseline neutrino oscillation excesses. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 1303-1308.	4.1	52
76	Improved Search for $\langle \nu_{\mu} \nu_{\tau} \rangle$ in the MiniBooNE Experiment. Physical Review Letters, 2013, 110, 161801.	7.8	48
77	Coherent neutrino scattering as a probe of oscillations. , 2013, , .		0
78	Sterile Neutrino Fits to Short-Baseline Neutrino Oscillation Measurements. Advances in High Energy Physics, 2013, 2013, 1-26.	1.1	122
79	Direct measurement of backgrounds using reactor-off data in Double Chooz. Physical Review D, 2013, 87, .	4.7	21
80	A study of electron recombination using highly ionizing particles in the ArgoNeuT Liquid Argon TPC. Journal of Instrumentation, 2013, 8, P08005-P08005.	1.2	63
81	Proposal for an Electron Antineutrino Disappearance Search Using High-Rate $\langle \nu_{\mu} \nu_{\tau} \rangle$ Production and Decay. Physical Review Letters, 2012, 109, 141802.	7.8	81
82	Dual baseline search for muon antineutrino disappearance at $0.1 \text{ eV}^2 < m^2 < 100 \text{ eV}^2$. Physical Review D, 2012, 86, .	4.7	64
83	Indication of Reactor $\langle \nu_{\mu} \nu_{\tau} \rangle$ Disappearance in the Double Chooz Experiment. Physical Review Letters, 2012, 108, 131801.	7.8	979
84	Dual baseline search for muon neutrino disappearance at $\langle \nu_{\mu} \nu_{\tau} \rangle$. Physical Review D, 2012, 85, .	4.7	71
85	Measuring active-to-sterile neutrino oscillations with neutral current coherent neutrino-nucleus scattering. Physical Review D, 2012, 86, .	4.7	52
86	Sterile neutrino search with kaon decay at rest. Physical Review D, 2012, 85, .	4.7	18
87	Analysis of a large sample of neutrino-induced muons with the ArgoNeuT detector. Journal of Instrumentation, 2012, 7, P10020-P10020.	1.2	18
88	First test of Lorentz violation with a reactor-based antineutrino experiment. Physical Review D, 2012, 86, .	4.7	41
89	Reactor $\langle \nu_{\mu} \nu_{\tau} \rangle$ disappearance in the Double Chooz experiment. Physical Review D, 2012, 86, .	4.7	275
90	First Measurements of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon. Physical Review Letters, 2012, 108, 161802.	7.8	75

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91	The ArgoNeuT detector in the NuMI low-energy beam line at Fermilab. Journal of Instrumentation, 2012, 7, P10019-P10019.	1.2	96
92	Measurement of $\langle \sigma_{\nu N}^{\text{CC}} \rangle$ induced charged-current neutral pion production cross sections on mineral oil at $\langle E_{\nu} \rangle = 0.5$ GeV. Physical Review D, 2011, 83, .	4.7	81
93	Measurement of the neutrino component of an antineutrino beam observed by a nonmagnetized detector. Physical Review D, 2011, 84, .	4.7	27
94	ArgoNeuT and the Neutrino-Argon Charged Current Quasi-Elastic Cross Section. Journal of Physics: Conference Series, 2011, 312, 072017.	0.4	4
95	Measurement of neutrino-induced charged-current charged pion production cross sections on mineral oil at $\langle E_{\nu} \rangle = 0.5$ GeV. Physical Review D, 2011, 83, .	4.7	122
96	Coherent neutrino scattering in dark matter detectors. Physical Review D, 2011, 84, .	4.7	33
97	Status of the ArgoNeuT Reconstruction and Analysis. , 2011, , .		0
98	ArgoNeuT, a liquid argon time projection chamber in a low energy neutrino beam. Journal of Physics: Conference Series, 2010, 203, 012108.	0.4	4
99	Publisher's Note: Measurement of the Ratio of the Charged-Current Single-Pion Production to Quasielastic Scattering with a 0.8 GeV Neutrino Beam on Mineral Oil [Phys. Rev. Lett.103, 081801 (2009)]. Physical Review Letters, 2010, 104, .	7.8	0
100	Event Excess in the MiniBooNE Search for $\nu_{\mu} \rightarrow \nu_{\tau}$ Oscillation. Physical Review Letters, 2010, 105, 181801.	7.8	38
101	RENAISSANCE OF THE ~1 TeV FIXED-TARGET PROGRAM. International Journal of Modern Physics A, 2010, 25, 777-813.	1.5	4
102	Measurement of the neutrino neutral-current elastic differential cross section on mineral oil at $\langle E_{\nu} \rangle = 0.5$ GeV. Physical Review D, 2010, 82, .	4.7	122
103	Search for core-collapse supernovae using the MiniBooNE neutrino detector. Physical Review D, 2010, 81, .	4.7	11
104	Atmospheric tau neutrinos in a multikiloton liquid argon detector. Physical Review D, 2010, 82, .	4.7	33
105	First measurement of the muon neutrino charged current quasielastic double differential cross section. Physical Review D, 2010, 81, .	4.7	341
106	Measurement of $\langle \sigma_{\nu N}^{\text{CC}} \rangle$ induced neutral current single $\nu_{\mu} \rightarrow \nu_{\tau}$ oscillation. Physical Review D, 2010, 81, .	4.7	81
107	Search for Electron Antineutrino Appearance at the $\nu_{\mu} \rightarrow \nu_{\tau}$ Oscillation. Physical Review Letters, 2009, 103, 111801.	7.8	82
108	Search for Muon Neutrino and Antineutrino Disappearance in MiniBooNE. Physical Review Letters, 2009, 103, 061802.	7.8	49

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109	Measurement of the Ratio of the $\frac{\sigma(\nu_e + p \rightarrow n + \pi^0)}{\sigma(\nu_e + p \rightarrow n + \pi^+ + \pi^-)}$ Charged-Current Single-Pion Production to Quasielastic Scattering with a 0.8 GeV Neutrino Beam on Mineral Oil. Physical Review Letters, 2009, 103, 081801.	7.8	44
110	A regenerable filter for liquid argon purification. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 605, 306-311.	1.6	20