Jacob D Daughhetee

List of Publications by Year
in descending order

91 papers	8,558 citations	50276 46 h-index	42399 92 g-index
93 all docs	93 docs citations	93 times ranked	6804 citing authors

#	Article	IF	Citations
1	The EXO-200 detector, partÂII: auxiliary systems. Journal of Instrumentation, 2022, 17, P02015.	1.2	4
2	Monitoring the SNS basement neutron background with the MARS detector. Journal of Instrumentation, 2022, 17, P03021.	1.2	2
3	First Measurement of Coherent Elastic Neutrino-Nucleus Scattering on Argon. Physical Review Letters, 2021, 126, 012002.	7.8	117
4	Development of a ⁸³mKr source for the calibration of the CENNS-10 liquid argon detector. Journal of Instrumentation, 2021, 16, P04002.	1.2	2
5	A D₂O detector for flux normalization of a pion decay-at-rest neutrino source. Journal of Instrumentation, 2021, 16, P08048.	1.2	8
6	Sensitivity of the COHERENT experiment to accelerator-produced dark matter. Physical Review D, 2020, 102, .	4.7	28
7	First constraint on coherent elastic neutrino-nucleus scattering in argon. Physical Review D, 2019, 100, .	4.7	20
8	Search for Neutrinoless Double-Beta Decay with the Upgraded EXO-200 Detector. Physical Review Letters, 2018, 120, 072701.	7.8	152
9	Search for nucleon decays with EXO-200. Physical Review D, 2018, 97, .	4.7	14
10	Characterization of an Ionization Readout Tile for nEXO. Journal of Instrumentation, 2018, 13, P01006-P01006.	1.2	14
11	VUV-Sensitive Silicon Photomultipliers for Xenon Scintillation Light Detection in nEXO. IEEE Transactions on Nuclear Science, 2018, 65, 2823-2833.	2.0	29
12	Study of silicon photomultiplier performance in external electric fields. Journal of Instrumentation, 2018, 13, T09006-T09006.	1.2	5
13	Deep neural networks for energy and position reconstruction in EXO-200. Journal of Instrumentation, 2018, 13, P08023-P08023.	1.2	34
14	Sensitivity and discovery potential of the proposed nEXO experiment to neutrinoless double-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> decay. Physical Review C, 2018, 97, .	2.9	115
15	THE CONTRIBUTION OF FERMI-2LAC BLAZARS TO DIFFUSE TEVâ€“PEV NEUTRINO FLUX. Astrophysical Journal, 2017, 835, 45.	4.5	186
16	Measurement of the drift velocity and transverse diffusion of electrons in liquid xenon with the EXO-200 detector. Physical Review C, 2017, 95, .	2.9	28
17	Trace radioactive impurities in final construction materials for EXO-200. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 871, 169-179.	1.6	25
18	Searches for 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>Xe</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>134</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> with EXO-200. Physical Review D, 2017, 96, .	4.7	9

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19	Improved limits on dark matter annihilation in the Sun with the 79-string IceCube detector and implications for supersymmetry. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 022-022.	5.4	56
20	THE FIRST COMBINED SEARCH FOR NEUTRINO POINT-SOURCES IN THE SOUTHERN HEMISPHERE WITH THE ANTARES AND ICECUBE NEUTRINO TELESCOPES. Astrophysical Journal, 2016, 823, 65.	4.5	49
21	Neutrino oscillation studies with IceCube-DeepCore. Nuclear Physics B, 2016, 908, 161-177.	2.5	11
22	ANISOTROPY IN COSMIC-RAY ARRIVAL DIRECTIONS IN THE SOUTHERN HEMISPHERE BASED ON SIX YEARS OF DATA FROM THE ICECUBE DETECTOR. Astrophysical Journal, 2016, 826, 220.	4.5	72
23	Searches for Sterile Neutrinos with the IceCube Detector. Physical Review Letters, 2016, 117, 071801.	7.8	140
24	All-flavour search for neutrinos from dark matter annihilations in the Milky Way with IceCube/DeepCore. European Physical Journal C, 2016, 76, 1.	3.9	37
25	Search for astrophysical tau neutrinos in three years of IceCube data. Physical Review D, 2016, 93, .	4.7	44
26	High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. Physical Review D, 2016, 93, .	4.7	92
27	AN ALL-SKY SEARCH FOR THREE FLAVORS OF NEUTRINOS FROM GAMMA-RAY BURSTS WITH THE ICECUBE NEUTRINO OBSERVATORY. Astrophysical Journal, 2016, 824, 115.	4.5	109
28	LOWERING ICECUBE'S ENERGY THRESHOLD FOR POINT SOURCE SEARCHES IN THE SOUTHERN SKY. Astrophysical Journal Letters, 2016, 824, L28.	8.3	27
29	Characterization of the atmospheric muon flux in IceCube. Astroparticle Physics, 2016, 78, 1-27.	4.3	51
30	Searches for relativistic magnetic monopoles in IceCube. European Physical Journal C, 2016, 76, 1.	3.9	29
31	THE SEARCH FOR TRANSIENT ASTROPHYSICAL NEUTRINO EMISSION WITH ICECUBE-DEEPCORE. Astrophysical Journal, 2016, 816, 75.	4.5	5
32	Determining neutrino oscillation parameters from atmospheric muon neutrino disappearance with three years of IceCube DeepCore data. Physical Review D, 2015, 91, .	4.7	86
33	Measurement of the Atmospheric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î½</mml:mi><mml:mi>e</mml:mi></mml:msub></mml:math>Spectrum with IceCube. Physical Review D, 2015, 91, .	4.7	48
34	Evidence for Astrophysical Muon Neutrinos from the Northern Sky with IceCube. Physical Review Letters, 2015, 115, 081102.	7.8	247
35	SEARCH FOR PROMPT NEUTRINO EMISSION FROM GAMMA-RAY BURSTS WITH ICECUBE. Astrophysical Journal Letters, 2015, 805, L5.	8.3	124
36	THE DETECTION OF A SN IIn IN OPTICAL FOLLOW-UP OBSERVATIONS OF ICECUBE NEUTRINO EVENTS. Astrophysical Journal, 2015, 811, 52.	4.5	39

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37	Search for dark matter annihilation in the Galactic Center with IceCube-79. European Physical Journal C, 2015, 75, 1.	3.9	52
38	Development of a general analysis and unfolding scheme and its application to measure the energy spectrum of atmospheric neutrinos with IceCube. European Physical Journal C, 2015, 75, 116.	3.9	38
39	Searches for small-scale anisotropies from neutrino point sources with three years of IceCube data. Astroparticle Physics, 2015, 66, 39-52.	4.3	34
40	Multipole analysis of IceCube data to search for dark matter accumulated in the Galactic halo. European Physical Journal C, 2015, 75, 1.	3.9	28
41	Flavor Ratio of Astrophysical Neutrinos above 35ÂTeV in IceCube. Physical Review Letters, 2015, 114, 171102.	7.8	156
42	Atmospheric and astrophysical neutrinos above 1ÂTeV interacting in IceCube. Physical Review D, 2015, 91, .	4.7	209
43	SEARCHES FOR TIME-DEPENDENT NEUTRINO SOURCES WITH ICECUBE DATA FROM 2008 TO 2012. Astrophysical Journal, 2015, 807, 46.	4.5	56
44	A COMBINED MAXIMUM-LIKELIHOOD ANALYSIS OF THE HIGH-ENERGY ASTROPHYSICAL NEUTRINO FLUX MEASURED WITH ICECUBE. Astrophysical Journal, 2015, 809, 98.	4.5	337
45	The IceProd framework: Distributed data processing for the IceCube neutrino observatory. Journal of Parallel and Distributed Computing, 2015, 75, 198-211.	4.1	9
46	IceCube sensitivity for low-energy neutrinos from nearby supernovae (Corrigendum). Astronomy and Astrophysics, 2014, 563, C1.	5.1	94
47	Observation of the cosmic-ray shadow of the Moon with IceCube. Physical Review D, 2014, 89, .	4.7	34
48	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration. Physical Review D, 2014, 89, .	4.7	74
49	Search for neutrino-induced particle showers with IceCube-40. Physical Review D, 2014, 89, .	4.7	23
50	Energy reconstruction methods in the IceCube neutrino telescope. Journal of Instrumentation, 2014, 9, P03009-P03009.	1.2	171
51	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. Physical Review D, 2014, 90, .	4.7	29
52	Improvement in fast particle track reconstruction with robust statistics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 736, 143-149.	1.6	25
53	SEARCHES FOR EXTENDED AND POINT-LIKE NEUTRINO SOURCES WITH FOUR YEARS OF ICECUBE DATA. Astrophysical Journal, 2014, 796, 109.	4.5	149
54	Observation of High-Energy Astrophysical Neutrinos in Three Years of IceCube Data. Physical Review Letters, 2014, 113, 101101.	7.8	873

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55	Search for non-relativistic magnetic monopoles with IceCube. European Physical Journal C, 2014, 74, 1.	3.9	39
56	First Observation of PeV-Energy Neutrinos with IceCube. Physical Review Letters, 2013, 111, 021103.	7.8	578
57	An improved method for measuring muon energy using the truncated mean of dE/dx. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 703, 190-198.	1.6	36
58	Measurement of Atmospheric Neutrino Oscillations with IceCube. Physical Review Letters, 2013, 111, 081801.	7.8	49
59	Evidence for High-Energy Extraterrestrial Neutrinos at the IceCube Detector. Science, 2013, 342, 1242856.	12.6	1,048
60	Measurement of South Pole ice transparency with the IceCube LED calibration system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 711, 73-89.	1.6	122
61	Search for Dark Matter Annihilations in the Sun with the 79-String IceCube Detector. Physical Review Letters, 2013, 110, 131302.	7.8	235
62	Cosmic ray composition and energy spectrum from 1â€“30 PeV using the 40-string configuration of IceTop and IceCube. Astroparticle Physics, 2013, 42, 15-32.	4.3	34
63	All-particle cosmic ray energy spectrum measured with 26 IceTop stations. Astroparticle Physics, 2013, 44, 40-58.	4.3	15
64	Search for Galactic PeV gamma rays with the IceCube Neutrino Observatory. Physical Review D, 2013, 87, .	4.7	29
65	Measurement of the Atmospheric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î½</mml:mi><mml:mi>e</mml:mi></mml:msub></mml:math>Flux in IceCube. Physical Review Letters, 2013, 110, 151105.	7.8	64
66	IceTop: The surface component of IceCube. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 700, 188-220.	1.6	166
67	Lateral distribution of muons in IceCube cosmic ray events. Physical Review D, 2013, 87, .	4.7	25
68	Measurement of the cosmic ray energy spectrum with IceTop-73. Physical Review D, 2013, 88, .	4.7	114
69	IceCube search for dark matter annihilation in nearby galaxies and galaxy clusters. Physical Review D, 2013, 88, .	4.7	53
70	Probing the origin of cosmic rays with extremely high energy neutrinos using the IceCube Observatory. Physical Review D, 2013, 88, .	4.7	47
71	Search for relativistic magnetic monopoles with IceCube. Physical Review D, 2013, 87, .	4.7	20
72	SEARCH FOR TIME-INDEPENDENT NEUTRINO EMISSION FROM ASTROPHYSICAL SOURCES WITH 3 yr OF IceCube DATA. Astrophysical Journal, 2013, 779, 132.	4.5	81

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73	OBSERVATION OF COSMIC-RAY ANISOTROPY WITH THE ICETOP AIR SHOWER ARRAY. Astrophysical Journal, 2013, 765, 55.	4.5	85
74	SEARCHES FOR HIGH-ENERGY NEUTRINO EMISSION IN THE GALAXY WITH THE COMBINED ICECUBE-AMANDA DETECTOR. Astrophysical Journal, 2013, 763, 33.	4.5	10
75	Search for ultrahigh-energy tau neutrinos with IceCube. Physical Review D, 2012, 86, .	4.7	19
76	Searching for soft relativistic jets in core-collapse supernovae with the IceCube optical follow-up program. Astronomy and Astrophysics, 2012, 539, A60.	5.1	40
77	NEUTRINO ANALYSIS OF THE 2010 SEPTEMBER CRAB NEBULA FLARE AND TIME-INTEGRATED CONSTRAINTS ON NEUTRINO EMISSION FROM THE CRAB USING ICECUBE. Astrophysical Journal, 2012, 745, 45.	4.5	13
78	SEARCHES FOR PERIODIC NEUTRINO EMISSION FROM BINARY SYSTEMS WITH 22 AND 40 STRINGS OF ICECUBE. Astrophysical Journal, 2012, 748, 118.	4.5	11
79	TIME-DEPENDENT SEARCHES FOR POINT SOURCES OF NEUTRINOS WITH THE 40-STRING AND 22-STRING CONFIGURATIONS OF ICECUBE. Astrophysical Journal, 2012, 744, 1.	4.5	37
80	Multiyear search for dark matter annihilations in the Sun with the AMANDA-II and IceCube detectors. Physical Review D, 2012, 85, .	4.7	66
81	OBSERVATION OF ANISOTROPY IN THE GALACTIC COSMIC-RAY ARRIVAL DIRECTIONS AT 400 TeV WITH ICECUBE. Astrophysical Journal, 2012, 746, 33.	4.5	115
82	Background studies for acoustic neutrino detection at the South Pole. Astroparticle Physics, 2012, 35, 312-324.	4.3	12
83	The design and performance of IceCube DeepCore. Astroparticle Physics, 2012, 35, 615-624.	4.3	222
84	Constraints on the extremely-high energy cosmic neutrino flux with the IceCube 2008-2009 data. Physical Review D, 2011, 83, .	4.7	68
85	Search for dark matter from the Galactic halo with the IceCube Neutrino Telescope. Physical Review D, 2011, 84, .	4.7	79
86	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 40-string detector. Physical Review D, 2011, 84, .	4.7	87
87	OBSERVATION OF ANISOTROPY IN THE ARRIVAL DIRECTIONS OF GALACTIC COSMIC RAYS AT MULTIPLE ANGULAR SCALES WITH IceCube. Astrophysical Journal, 2011, 740, 16.	4.5	103
88	TIME-INTEGRATED SEARCHES FOR POINT-LIKE SOURCES OF NEUTRINOS WITH THE 40-STRING IceCube DETECTOR. Astrophysical Journal, 2011, 732, 18.	4.5	126
89	IceCube sensitivity for low-energy neutrinos from nearby supernovae. Astronomy and Astrophysics, 2011, 535, A109.	5.1	121
90	First search for atmospheric and extraterrestrial neutrino-induced cascades with the IceCube detector. Physical Review D, 2011, 84, .	4.7	34

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91	Limits on Neutrino Emission from Gamma-Ray Bursts with the 40 String IceCube Detector. Physical Review Letters, 2011, 106, 141101.	7.8	85