

Francis Halzen

List of Publications by Year in descending order

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111
papers

4,459
citations

136950

32
h-index

102487

66
g-index

115
all docs

115
docs citations

115
times ranked

3262
citing authors

#	ARTICLE	IF	CITATIONS
1	Search for High-energy Neutrinos from Ultraluminous Infrared Galaxies with IceCube. <i>Astrophysical Journal</i> , 2022, 926, 59.	4.5	7
2	Improved Characterization of the Astrophysical Muon neutrino Flux with 9.5 Years of IceCube Data. <i>Astrophysical Journal</i> , 2022, 928, 50.	4.5	67
3	The observation of high-energy neutrinos from the cosmos: Lessons learned for multimessenger astronomy. <i>International Journal of Modern Physics D</i> , 2022, 31, .	2.1	0
4	The Forward Physics Facility: Sites, experiments, and physics potential. <i>Physics Reports</i> , 2022, 968, 1-50.	25.6	57
5	The TeV Diffuse Cosmic Neutrino Spectrum and the Nature of Astrophysical Neutrino Sources. <i>Astrophysical Journal</i> , 2022, 933, 190.	4.5	10
6	Follow-up of Astrophysical Transients in Real Time with the IceCube Neutrino Observatory. <i>Astrophysical Journal</i> , 2021, 910, 4.	4.5	18
7	A Search for Time-dependent Astrophysical Neutrino Emission with IceCube Data from 2012 to 2017. <i>Astrophysical Journal</i> , 2021, 911, 67.	4.5	9
8	Cosmic Neutrinos from Temporarily Gamma-suppressed Blazars. <i>Astrophysical Journal Letters</i> , 2021, 911, L18.	8.3	24
9	High-Energy Neutrinos from the Cosmos. <i>Annalen Der Physik</i> , 2021, 533, 2100309.	2.4	2
10	Search for Multi-flare Neutrino Emissions in 10 yr of IceCube Data from a Catalog of Sources. <i>Astrophysical Journal Letters</i> , 2021, 920, L45.	8.3	12
11	Black holes associated with cosmic neutrino flares. <i>Nature Physics</i> , 2020, 16, 498-500.	16.7	6
12	Introduction: Particle Physics with Cosmic Accelerators. , 2020, , 1-9.		0
13	On the Neutrino Flares from the Direction of TXS 0506+056. <i>Astrophysical Journal Letters</i> , 2019, 874, L9.	8.3	33
14	IceCube: Opening a new window on the universe from the South Pole. <i>International Journal of Modern Physics D</i> , 2019, 28, 1930007.	2.1	1
15	Multimessenger Search for the Sources of Cosmic Rays Using Cosmic Neutrinos. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, .	2.8	7
16	Highlights from IceCube. , 2019, , .		0
17	Opening a new window onto the universe with IceCube. <i>Progress in Particle and Nuclear Physics</i> , 2018, 102, 73-88.	14.4	93
18	Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A. <i>Science</i> , 2018, 361, .	12.6	654

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19	Neutrino emission from the direction of the blazar TXS 0506+056 prior to the IceCube-170922A alert. <i>Science</i> , 2018, 361, 147-151.	12.6	601
20	High-energy neutrino astrophysics. <i>Nature Physics</i> , 2017, 13, 232-238.	16.7	44
21	IceCube in the era of multimessenger astrophysics. <i>Modern Physics Letters A</i> , 2017, 32, 1730010.	1.2	1
22	Gamma-ray puzzle in Cygnus X: Implications for high-energy neutrinos. <i>Physical Review D</i> , 2017, 96, .	4.7	14
23	New angle on cosmic rays. <i>Science</i> , 2017, 357, 1240-1241.	12.6	2
24	Anomalies in (semi)-leptonic B decays $B \rightarrow \bar{\nu}_\mu \ell^+ \nu_\ell$, $B \rightarrow \bar{\nu}_\mu \ell^+ \nu_\ell$, $B \rightarrow \bar{\nu}_\mu \ell^+ \nu_\ell$, and possible resolution with sterile neutrino. <i>Chinese Physics C</i> , 2017, 41, 113102.	3.7	31
25	Prospects for detecting galactic sources of cosmic neutrinos with IceCube: An update. <i>Astroparticle Physics</i> , 2017, 86, 46-56.	4.3	28
26	IceCube and the discovery of high-energy cosmic neutrinos. , 2017, , .		0
27	HIGH-ENERGY NEUTRINOS FROM RECENT BLAZAR FLARES. <i>Astrophysical Journal</i> , 2016, 831, 12.	4.5	17
28	IceCube and the discovery of high-energy cosmic neutrinos. <i>International Journal of Modern Physics D</i> , 2016, 25, 1630028.	2.1	2
29	High-energy behavior of photon, neutrino, and proton cross sections. <i>Physical Review D</i> , 2015, 92, .	4.7	44
30	High-energy cosmic neutrino puzzle: a review. <i>Reports on Progress in Physics</i> , 2015, 78, 126901.	20.1	51
31	Neutrinos at the Ends of the Earth. <i>Scientific American</i> , 2015, 313, 58-63.	1.0	0
32	Pinpointing extragalactic neutrino sources in light of recent IceCube observations. <i>Physical Review D</i> , 2014, 90, .	4.7	85
33	The highest energy neutrinos: First evidence for cosmic origin. <i>Astronomische Nachrichten</i> , 2014, 335, 507-516.	1.2	13
34	Neutrino astronomy: An update. <i>Astroparticle Physics</i> , 2014, 53, 166-174.	4.3	1
35	IceCube. <i>Annual Review of Nuclear and Particle Science</i> , 2014, 64, 101-123.	10.2	28
36	IceCube Neutrinos: from Oscillations to PeV-Energy Events. <i>Brazilian Journal of Physics</i> , 2013, 43, 308-313.	1.4	0

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37	Limits on the source properties of FR-I galaxies from high-energy neutrino and gamma observations. <i>Astroparticle Physics</i> , 2013, 48, 30-36.	4.3	9
38	Neutrino astronomy: An update. <i>Frontiers of Physics</i> , 2013, 8, 759-770.	5.0	1
39	<i>Colloquium</i>: Multimessenger astronomy with gravitational waves and high-energy neutrinos. <i>Reviews of Modern Physics</i> , 2013, 85, 1401-1420.	45.6	76
40	Pionic photons and neutrinos from cosmic ray accelerators. <i>Astroparticle Physics</i> , 2013, 43, 155-162.	4.3	13
41	Exploring $\hat{\nu}_{1/2}, \hat{\nu}_{1/2}$ mixing with cascade events in DeepCore. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 048-048.	5.4	30
42	Minimal cosmogenic neutrinos. <i>Physical Review D</i> , 2012, 86, .	4.7	60
43	Total hadronic cross sections and $\sigma_{\text{had}}^{\text{tot}}(s)$. <i>Physical Review D</i> , 2012, 85, .		
44	Commentary on "Total Hadronic Cross-Section Data and the Froissart-Martin Bound" by Fagundes, Menon, and Silva. <i>Brazilian Journal of Physics</i> , 2012, 42, 465-470.	1.4	3
45	Constraining sterile neutrinos with AMANDA and IceCube atmospheric neutrino data. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 041-041.	5.4	46
46	New experimental evidence that the proton develops asymptotically into a black disk. <i>Physical Review D</i> , 2012, 86, .	4.7	35
47	Experimental Confirmation that the Proton is Asymptotically a Black Disk. <i>Physical Review Letters</i> , 2011, 107, 212002.	7.8	49
48	NEUTRINO EMISSION FROM HIGH-ENERGY COMPONENT GAMMA-RAY BURSTS. <i>Astrophysical Journal</i> , 2010, 721, 1891-1899.	4.5	12
49	GZK neutrinos after the Fermi-LAT diffuse photon flux measurement. <i>Astroparticle Physics</i> , 2010, 34, 106-115.	4.3	184
50	IceCube. , 2010, , .		0
51	Invited Review Article: IceCube: An instrument for neutrino astronomy. <i>Review of Scientific Instruments</i> , 2010, 81, 081101.	1.3	157
52	The indirect search for dark matter with IceCube. <i>New Journal of Physics</i> , 2009, 11, 105019.	2.9	32
53	Identifying Galactic PeVatrons with neutrinos. <i>Astroparticle Physics</i> , 2009, 31, 437-444.	4.3	57
54	Reconstructing the supernova bounce time with neutrinos in IceCube. <i>Physical Review D</i> , 2009, 80, .	4.7	54

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55	Gamma-ray astronomy with muons: Sensitivity of IceCube to PeVatrons in the Southern sky. Physical Review D, 2009, 80, .	4.7	5
56	Prospects for identifying the sources of the Galactic cosmic rays with IceCube. Physical Review D, 2008, 78, .	4.7	46
57	Call for Papers: Special Issue of Earth, Planets and Space (EPS) "High Energy Earth Science: Muon and Neutrino Radiography" Earth, Planets and Space, 2008, 60, 791-791.	2.5	0
58	Astronomy and astrophysics with neutrinos. Physics Today, 2008, 61, 29-35.	0.3	25
59	NEUTRINO ASTRONOMY 2006. , 2008, , .		0
60	Neutrino Astrophysics Experiments Beneath the Sea and Ice. Science, 2007, 315, 66-68.	12.6	13
61	Neutrino flux from cosmic ray accelerators in the Cygnus spiral arm of the Galaxy. Physical Review D, 2007, 76, .	4.7	17
62	LS I +61 303 as a potential neutrino source on the light of magic results. Astroparticle Physics, 2007, 27, 500-508.	4.3	22
63	Cosmic neutrinos from the sources of galactic and extragalactic cosmic rays. Astrophysics and Space Science, 2007, 309, 407-414.	1.4	14
64	Cosmic Neutrinos and the Energy Budget of Galactic and Extragalactic Cosmic Rays. , 2007, , .		0
65	Probing leptoquark production at IceCube. Physical Review D, 2006, 74, .	4.7	29
66	Coincident GRB neutrino flux predictions: Implications for experimental UHE neutrino physics. Astroparticle Physics, 2006, 25, 118-128.	4.3	32
67	IceHEP high energy physics at the South Pole. Annals of Physics, 2006, 321, 2660-2716.	2.8	32
68	Prospects for detecting dark matter with neutrino telescopes in light of recent results from direct detection experiments. Physical Review D, 2006, 73, .	4.7	41
69	AMANDA Observations Constrain the Ultrahigh Energy Neutrino Flux. Physical Review Letters, 2006, 97, 071101.	7.8	2
70	LEPTON PHOTON SYMPOSIUM 2005: SUMMARY AND OUTLOOK. International Journal of Modern Physics A, 2006, 21, 2000-2010.	1.5	0
71	INTRODUCTION TO THE SALSA, A SALTDOME SHOWER ARRAY AS A GZK NEUTRINO OBSERVATORY. International Journal of Modern Physics A, 2006, 21, 252-253.	1.5	0
72	LEPTON PHOTON SYMPOSIUM 2005: SUMMARY AND OUTLOOK. , 2006, , .		0

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73	High-Energy Neutrino Astronomy. , 2006, , .		0
74	IceCube: A Kilometer-Scale Neutrino Observatory at the South Pole. Highlights of Astronomy, 2005, 13, 949-950.	0.0	0
75	High-energy Neutrino Astronomy: From AMANDA to IceCube. Highlights of Astronomy, 2005, 13, 13-17.	0.0	1
76	High energy neutrinos from the TeV Blazar 1ES 1959+650. Astroparticle Physics, 2005, 23, 537-542.	4.3	44
77	Neutrinos as a diagnostic of cosmic ray galactic-extragalactic transition. Physical Review D, 2005, 72, .	4.7	67
78	Physics reach of high-energy and high-statistics IceCube atmospheric neutrino data. Physical Review D, 2005, 71, .	4.7	104
79	GRB 941017: A Case Study of Neutrino Production in Gamma-Ray Bursts. Astrophysical Journal, 2004, 604, L85-L88.	4.5	9
80	HIGH-ENERGY NEUTRINO ASTRONOMY. , 2004, , .		0
81	MULTI-MESSENGER ASTRONOMY: COSMIC RAYS, GAMMA-RAYS AND NEUTRINOS. , 2003, , .		1
82	Detecting microscopic black holes with neutrino telescopes. Physical Review D, 2002, 65, .	4.7	89
83	High-energy neutrino astronomy: the cosmic ray connection. Reports on Progress in Physics, 2002, 65, 1025-1078.	20.1	304
84	THE HIGHEST ENERGY COSMIC RAYS, GAMMA-RAYS AND NEUTRINOS: FACTS, FANCY AND RESOLUTION. International Journal of Modern Physics A, 2002, 17, 3432-3445.	1.5	6
85	THE HIGHEST ENERGY COSMIC RAYS, GAMMA-RAYS AND NEUTRINOS: FACTS, FANCY AND RESOLUTION. , 2002, , .		0
86	THE HIGHEST ENERGY COSMIC RAYS, GAMMA-RAYS AND NEUTRINOS: FACTS, FANCY AND RESOLUTION. , 2002, , .		0
87	LECTURES ON NEUTRINO ASTRONOMY: THEORY AND EXPERIMENT. , 2000, , .		4
88	HIGH ENERGY NEUTRINO ASTRONOMY: PASCOS 99. , 2000, , .		0
89	NEUTRINO ASTRONOMY AND THE AMANDA SOUTH POLE TELESCOPE. , 2000, , .		0
90	Predicting Proton-Air Cross Sections at $\sim 1/4$ 30 TeV Using Accelerator and Cosmic Ray Data. Physical Review Letters, 1999, 83, 4926-4928.	7.8	22

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91	Observing the Birth of Supermassive Black Holes with the Planned ICECUBE Neutrino Detector. <i>Physical Review Letters</i> , 1998, 81, 5722-5725.	7.8	12
92	Large natural Cherenkov detectors: Water and ice. , 1998, , .		0
93	The AMANDA neutrino telescope: Science prospects and performance at first light. , 1998, , .		0
94	The AMANDA Neutrino Telescope. , 1998, , .		1
95	Î-ray astronomy with muons. <i>Physical Review D</i> , 1997, 55, 4475-4479.	4.7	16
96	Particle astrophysics with high energy neutrinos. <i>Physics Reports</i> , 1995, 258, 173-236.	25.6	445
97	Neutrinos from primordial black holes. <i>Physical Review D</i> , 1995, 52, 3239-3247.	4.7	28
98	Two-loop electroweak parameters. <i>Zeitschrift für Physik C-Particles and Fields</i> , 1993, 58, 119-131.	1.5	29
99	A full acceptance SSC detector: The cosmic-ray connection. <i>AIP Conference Proceedings</i> , 1993, , .	0.4	0
100	Signatures of dark matter in underground detectors. <i>Physical Review D</i> , 1992, 45, 4439-4442.	4.7	50
101	Catching photons from hell. <i>Nature</i> , 1992, 358, 452-453.	27.8	1
102	Coplanar jets. <i>Physical Review D</i> , 1990, 42, 1435-1439.	4.7	28
103	Cosmic Accelerators. <i>Annals of the New York Academy of Sciences</i> , 1987, 490, 237-256.	3.8	1
104	Non-accelerator quark matter physics. <i>Nuclear Physics A</i> , 1987, 461, 181-196.	1.5	0
105	Constraints on cosmic-ray observation of Cygnus X-3. <i>Nature</i> , 1985, 317, 409-411.	27.8	19
106	Heavy quarks and prompt leptons in p-p collider jets. <i>Physical Review D</i> , 1984, 30, 2326-2332.	4.7	15
107	The search for matter in its quark-gluon phase. <i>Contemporary Physics</i> , 1983, 24, 591-622.	1.8	6
108	Very-high-energy antiproton physics: Colliding 1-TeV "antiquarks" on heavy nuclei. <i>Physical Review D</i> , 1980, 21, 726-732.	4.7	1

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109	Hadroproduction of quark flavors. Physical Review D, 1978, 17, 1344-1355.	4.7	36
110	Energy dependence and scaling of the spin-correlation and polarization parameters in elastic proton-proton scattering. Physical Review D, 1977, 15, 352-354.	4.7	2
111	Exchange mechanism of proton-proton scattering and the trend of polarized-beam cross sections at intermediate energies. Physical Review D, 1974, 10, 344-347.	4.7	41