# James Beatty

## List of Publications by Citations



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|---|---|---|---|
| 333 papers | 41,360 citations | 77 h-index | 200 g-index |
| 346 ext. papers | 48,121 ext. citations | 5 avg, IF | 8.23 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 333 | Review of Particle Physics. *Chinese Physics C*, **2014**, 38, 090001 | 2.2 | 5549 |
| 332 | Review of Particle Physics*. *Physical Review D*, **2012**, 86, | 4.9 | 4786 |
| 331 | Review of Particle Physics*. *Physical Review D*, **2018**, 98, | 4.9 | 4401 |
| 330 | Review of Particle Physics. *Chinese Physics C*, **2016**, 40, 100001 | 2.2 | 3442 |
| 329 | Multi-messenger Observations of a Binary Neutron Star Merger. *Astrophysical Journal Letters*, **2017**, 848, L12 | 7.9 | 1935 |
| 328 | Review of Particle Physics. *Progress of Theoretical and Experimental Physics*, **2020**, 2020, | 5.4 | 1112 |
| 327 | Evidence for high-energy extraterrestrial neutrinos at the IceCube detector. *Science*, **2013**, 342, 1242856 | 33.3 | 814 |
| 326 | Observation of high-energy astrophysical neutrinos in three years of IceCube data. *Physical Review Letters*, **2014**, 113, 101101 | 7.4 | 683 |
| 325 | Correlation of the highest-energy cosmic rays with nearby extragalactic objects. *Science*, **2007**, 318, 938-43 | 33.3 | 558 |
| 324 | Properties and performance of the prototype instrument for the Pierre Auger Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2004**, 523, 50-95 | 1.2 | 516 |
| 323 | First observation of PeV-energy neutrinos with IceCube. *Physical Review Letters*, **2013**, 111, 021103 | 7.4 | 470 |
| 322 | Observation of the suppression of the flux of cosmic rays above 4 x 10 (19) eV. *Physical Review Letters*, **2008**, 101, 061101 | 7.4 | 443 |
| 321 | Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A. *Science*, **2018**, 361, | 33.3 | 407 |
| 320 | Measurement of the depth of maximum of extensive air showers above 10{18} eV. *Physical Review Letters*, **2010**, 104, 091101 | 7.4 | 387 |
| 319 | Measurements of the Cosmic-Ray Positron Fraction from 1 to 50 G[CLC]e[/CLC]V. *Astrophysical Journal*, **1997**, 482, L191-L194 | 4.7 | 385 |
| 318 | Neutrino emission from the direction of the blazar TXS 0506+056 prior to the IceCube-170922A alert. *Science*, **2018**, 361, 147-151 | 33.3 | 364 |
| 317 | Measurement of the energy spectrum of cosmic rays above 1018 eV using the Pierre Auger Observatory. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2010**, 685, 239-246 | 4.2 | 328 |

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| 316 | The Pierre Auger Cosmic Ray Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2015**, 798, 172-213 | 1.2 | 293 |
| 315 | A COMBINED MAXIMUM-LIKELIHOOD ANALYSIS OF THE HIGH-ENERGY ASTROPHYSICAL NEUTRINO FLUX MEASURED WITH ICECUBE. *Astrophysical Journal*, **2015**, 809, 98 | 4.7 | 280 |
| 314 | DISCREPANT HARDENING OBSERVED IN COSMIC-RAY ELEMENTAL SPECTRA. *Astrophysical Journal Letters*, **2010**, 714, L89-L93 | 7.9 | 271 |
| 313 | Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei. *Astroparticle Physics*, **2008**, 29, 188-204 | 2.4 | 262 |
| 312 | COSMIC-RAY PROTON AND HELIUM SPECTRA FROM THE FIRST CREAM FLIGHT. *Astrophysical Journal*, **2011**, 728, 122 | 4.7 | 256 |
| 311 | OBSERVATION AND CHARACTERIZATION OF A COSMIC MUON NEUTRINO FLUX FROM THE NORTHERN HEMISPHERE USING SIX YEARS OF ICECUBE DATA. *Astrophysical Journal*, **2016**, 833, 3 | 4.7 | 249 |
| 310 | An absence of neutrinos associated with cosmic-ray acceleration in □ray bursts. *Nature*, **2012**, 484, 351-4 | 50.4 | 230 |
| 309 | Update on the correlation of the highest energy cosmic rays with nearby extragalactic matter. *Astroparticle Physics*, **2010**, 34, 314-326 | 2.4 | 229 |
| 308 | Evidence for Astrophysical Muon Neutrinos from the Northern Sky with IceCube. *Physical Review Letters*, **2015**, 115, 081102 | 7.4 | 204 |
| 307 | The IceCube Neutrino Observatory: instrumentation and online systems. *Journal of Instrumentation* , **2017**, 12, P03012-P03012 | 1 | 203 |
| 306 | The fluorescence detector of the Pierre Auger Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 620, 227-251 | 1.2 | 202 |
| 305 | Search for dark matter annihilations in the sun with the 79-string IceCube detector. *Physical Review Letters*, **2013**, 110, 131302 | 7.4 | 197 |
| 304 | Cosmic-Ray Electrons and Positrons from 1 to 100 GeV: Measurements with HEAT and Their Interpretation. *Astrophysical Journal*, **2001**, 559, 296-303 | 4.7 | 196 |
| 303 | Depth of maximum of air-shower profiles at the Pierre Auger Observatory. I. Measurements at energies above 1017.8 eV. *Physical Review D*, **2014**, 90, | 4.9 | 195 |
| 302 | Atmospheric and astrophysical neutrinos above 1 TeV interacting in IceCube. *Physical Review D*, **2015**, 91, | 4.9 | 179 |
| 301 | Measurement of the proton-air cross section at □=57 TeV with the Pierre Auger Observatory. *Physical Review Letters*, **2012**, 109, 062002 | 7.4 | 179 |
| 300 | Calibration and characterization of the IceCube photomultiplier tube. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 618, 139-152 | 1.2 | 179 |
| 299 | Observation of a large-scale anisotropy in the arrival directions of cosmic rays above 8 □10 eV. *Science*, **2017**, 357, 1266-1270 | 33.3 | 172 |

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| 298 | New measurement of the cosmic-ray positron fraction from 5 to 15 GeV. *Physical Review Letters*, **2004**, 93, 241102 | 7.4 | 170 |
| 297 | The design and performance of IceCube DeepCore. *Astroparticle Physics*, **2012**, 35, 615-624 | 2.4 | 158 |
| 296 | Depth of maximum of air-shower profiles at the Pierre Auger Observatory. II. Composition implications. *Physical Review D*, **2014**, 90, | 4.9 | 157 |
| 295 | Design and initial performance of the Askaryan Radio Array prototype EeV neutrino detector at the South Pole. *Astroparticle Physics*, **2012**, 35, 457-477 | 2.4 | 154 |
| 294 | Measurement of the atmospheric neutrino energy spectrum from 100 GeV to 400 TeV with IceCube. *Physical Review D*, **2011**, 83, | 4.9 | 143 |
| 293 | Upper limit on the cosmic-ray photon flux above 1019 eV using the surface detector of the Pierre Auger Observatory. *Astroparticle Physics*, **2008**, 29, 243-256 | 2.4 | 141 |
| 292 | All-sky Search for Time-integrated Neutrino Emission from Astrophysical Sources with 7 yr of IceCube Data. *Astrophysical Journal*, **2017**, 835, 151 | 4.7 | 139 |
| 291 | ENERGY SPECTRA OF COSMIC-RAY NUCLEI AT HIGH ENERGIES. *Astrophysical Journal*, **2009**, 707, 593-603 | 4.7 | 137 |
| 290 | Observational constraints on the ultrahigh energy cosmic neutrino flux from the second flight of the ANITA experiment. *Physical Review D*, **2010**, 82, | 4.9 | 135 |
| 289 | Flavor Ratio of Astrophysical Neutrinos above 35 TeV in IceCube. *Physical Review Letters*, **2015**, 114, 171102 | 7.4 | 130 |
| 288 | SEARCHES FOR EXTENDED AND POINT-LIKE NEUTRINO SOURCES WITH FOUR YEARS OF ICECUBE DATA. *Astrophysical Journal*, **2014**, 796, 109 | 4.7 | 122 |
| 287 | Searches for Sterile Neutrinos with the IceCube Detector. *Physical Review Letters*, **2016**, 117, 071801 | 7.4 | 122 |
| 286 | Trigger and aperture of the surface detector array of the Pierre Auger Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 613, 29-39 | 1.2 | 121 |
| 285 | Energy reconstruction methods in the IceCube neutrino telescope. *Journal of Instrumentation*, **2014**, 9, P03009-P03009 | 1 | 118 |
| 284 | Upper limit on the diffuse flux of ultrahigh energy tau neutrinos from the Pierre Auger Observatory. *Physical Review Letters*, **2008**, 100, 211101 | 7.4 | 117 |
| 283 | Measurements of cosmic-ray secondary nuclei at high energies with the first flight of the CREAM balloon-borne experiment. *Astroparticle Physics*, **2008**, 30, 133-141 | 2.4 | 116 |
| 282 | SEARCHES FOR ANISOTROPIES IN THE ARRIVAL DIRECTIONS OF THE HIGHEST ENERGY COSMIC RAYS DETECTED BY THE PIERRE AUGER OBSERVATORY. *Astrophysical Journal*, **2015**, 804, 15 | 4.7 | 113 |
| 281 | The Antarctic Impulsive Transient Antenna ultra-high energy neutrino detector: Design, performance, and sensitivity for the 2006–2007 balloon flight. *Astroparticle Physics*, **2009**, 32, 10-41 | 2.4 | 110 |

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| 280 | Improved limit to the diffuse flux of ultrahigh energy neutrinos from the Pierre Auger Observatory. *Physical Review D*, **2015**, 91, | 4.9 | 108 |
| 279 | Testing Hadronic Interactions at Ultrahigh Energies with Air Showers Measured by the Pierre Auger Observatory. *Physical Review Letters*, **2016**, 117, 192001 | 7.4 | 107 |
| 278 | TIME-INTEGRATED SEARCHES FOR POINT-LIKE SOURCES OF NEUTRINOS WITH THE 40-STRING IceCube DETECTOR. *Astrophysical Journal*, **2011**, 732, 18 | 4.7 | 106 |
| 277 | Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. *Astrophysical Journal Letters*, **2017**, 850, L35 | 7.9 | 104 |
| 276 | MEASUREMENT OF THE ANISOTROPY OF COSMIC-RAY ARRIVAL DIRECTIONS WITH ICECUBE. *Astrophysical Journal Letters*, **2010**, 718, L194-L198 | 7.9 | 104 |
| 275 | 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 | 1.2 | 103 |
| 274 | An Indication of Anisotropy in Arrival Directions of Ultra-high-energy Cosmic Rays through Comparison to the Flux Pattern of Extragalactic Gamma-Ray Sources. *Astrophysical Journal Letters*, **2018**, 853, L29 | 7.9 | 102 |
| 273 | 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 | 1.2 | 101 |
| 272 | OBSERVATION OF ANISOTROPY IN THE GALACTIC COSMIC-RAY ARRIVAL DIRECTIONS AT 400 TeV WITH ICECUBE. *Astrophysical Journal*, **2012**, 746, 33 | 4.7 | 101 |
| 271 | Muons in air showers at the Pierre Auger Observatory: Mean number in highly inclined events. *Physical Review D*, **2015**, 91, | 4.9 | 100 |
| 270 | Measurement of the cosmic ray energy spectrum with IceTop-73. *Physical Review D*, **2013**, 88, | 4.9 | 100 |
| 269 | The Energy Spectra and Relative Abundances of Electrons and Positrons in the Galactic Cosmic Radiation. *Astrophysical Journal*, **1998**, 498, 779-789 | 4.7 | 100 |
| 268 | Upper limit on the cosmic-ray photon fraction at EeV energies from the Pierre Auger Observatory. *Astroparticle Physics*, **2009**, 31, 399-406 | 2.4 | 99 |
| 267 | Combined fit of spectrum and composition data as measured by the Pierre Auger Observatory. *Journal of Cosmology and Astroparticle Physics*, **2017**, 2017, 038-038 | 6.4 | 95 |
| 266 | SEARCH FOR PROMPT NEUTRINO EMISSION FROM GAMMA-RAY BURSTS WITH ICECUBE. *Astrophysical Journal Letters*, **2015**, 805, L5 | 7.9 | 92 |
| 265 | Observation of ultrahigh-energy cosmic rays with the ANITA balloon-borne radio interferometer. *Physical Review Letters*, **2010**, 105, 151101 | 7.4 | 90 |
| 264 | Constraints on Ultrahigh-Energy Cosmic-Ray Sources from a Search for Neutrinos above 10 PeV with IceCube. *Physical Review Letters*, **2016**, 117, 241101 | 7.4 | 87 |
| 263 | Differential limit on the extremely-high-energy cosmic neutrino flux in the presence of astrophysical background from nine years of IceCube data. *Physical Review D*, **2018**, 98, | 4.9 | 85 |

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| 262 | IceCube sensitivity for low-energy neutrinos from nearby supernovae (Corrigendum). *Astronomy and Astrophysics*, **2014**, 563, C1 | 5.1 | 84 |
| 261 | Cosmic-ray positrons: are there primary sources?. *Astroparticle Physics*, **1999**, 11, 429-435 | 2.4 | 81 |
| 260 | High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. *Physical Review D*, **2016**, 93, | 4.9 | 80 |
| 259 | Time-Integrated Neutrino Source Searches with 10 Years of IceCube Data. *Physical Review Letters*, **2020**, 124, 051103 | 7.4 | 78 |
| 258 | Extending the Search for Muon Neutrinos Coincident with Gamma-Ray Bursts in IceCube Data. *Astrophysical Journal*, **2017**, 843, 112 | 4.7 | 77 |
| 257 | An upper limit to the photon fraction in cosmic rays above 1019eV from the Pierre Auger Observatory. *Astroparticle Physics*, **2007**, 27, 155-168 | 2.4 | 77 |
| 256 | The IceCube realtime alert system. *Astroparticle Physics*, **2017**, 92, 30-41 | 2.4 | 76 |
| 255 | Search for annihilating dark matter in the Sun with 3 years of IceCube data. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 76 |
| 254 | Measurements at 0 degrees of negatively charged particles and antinuclei produced in collisions of 14.6A GeV/c Si on Al, Cu, and Au targets. *Physical Review Letters*, **1992**, 69, 2345-2348 | 7.4 | 76 |
| 253 | AN ALL-SKY SEARCH FOR THREE FLAVORS OF NEUTRINOS FROM GAMMA-RAY BURSTS WITH THE ICECUBE NEUTRINO OBSERVATORY. *Astrophysical Journal*, **2016**, 824, 115 | 4.7 | 75 |
| 252 | Characteristics of Four Upward-Pointing Cosmic-Ray-like Events Observed with ANITA. *Physical Review Letters*, **2016**, 117, 071101 | 7.4 | 74 |
| 251 | OBSERVATION OF COSMIC-RAY ANISOTROPY WITH THE ICETOP AIR SHOWER ARRAY. *Astrophysical Journal*, **2013**, 765, 55 | 4.7 | 74 |
| 250 | A study of the effect of molecular and aerosol conditions in the atmosphere on air fluorescence measurements at the Pierre Auger Observatory. *Astroparticle Physics*, **2010**, 33, 108-129 | 2.4 | 73 |
| 249 | Limits on neutrino emission from gamma-ray bursts with the 40 string IceCube detector. *Physical Review Letters*, **2011**, 106, 141101 | 7.4 | 72 |
| 248 | Antennas for the detection of radio emission pulses from cosmic-ray induced air showers at the Pierre Auger Observatory. *Journal of Instrumentation*, **2012**, 7, P10011-P10011 | 1 | 72 |
| 247 | SEARCH FOR MUON NEUTRINOS FROM GAMMA-RAY BURSTS WITH THE IceCube NEUTRINO TELESCOPE. *Astrophysical Journal*, **2010**, 710, 346-359 | 4.7 | 69 |
| 246 | SEARCH FOR TIME-INDEPENDENT NEUTRINO EMISSION FROM ASTROPHYSICAL SOURCES WITH 3 yr OF IceCube DATA. *Astrophysical Journal*, **2013**, 779, 132 | 4.7 | 66 |
| 245 | New limit on the low-energy antiproton/proton ratio in the Galactic cosmic radiation. *Physical Review Letters*, **1988**, 61, 145-148 | 7.4 | 66 |

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| 244 | Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Universal Estimator of Cosmic-Ray Energy. *Physical Review Letters*, **2016**, 116, 241101 | 7.4 | 65 |
| 243 | Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration. *Physical Review D*, **2014**, 89, | 4.9 | 65 |
| 242 | Search for a Lorentz-violating sidereal signal with atmospheric neutrinos in IceCube. *Physical Review D*, **2010**, 82, | 4.9 | 65 |
| 241 | Performance of two Askaryan Radio Array stations and first results in the search for ultrahigh energy neutrinos. *Physical Review D*, **2016**, 93, | 4.9 | 64 |
| 240 | Search for first harmonic modulation in the right ascension distribution of cosmic rays detected at the Pierre Auger Observatory. *Astroparticle Physics*, **2011**, 34, 627-639 | 2.4 | 64 |
| 239 | Constraints on the extremely-high energy cosmic neutrino flux with the IceCube 2008-2009 data. *Physical Review D*, **2011**, 83, | 4.9 | 64 |
| 238 | Observation of an Unusual Upward-Going Cosmic-Ray-like Event in the Third Flight of ANITA. *Physical Review Letters*, **2018**, 121, 161102 | 7.4 | 64 |
| 237 | Measurement of the multi-TeV neutrino interaction cross-section with IceCube using Earth absorption. *Nature*, **2017**, 551, 596-600 | 50.4 | 63 |
| 236 | Constraints on Galactic Neutrino Emission with Seven Years of IceCube Data. *Astrophysical Journal*, **2017**, 849, 67 | 4.7 | 63 |
| 235 | Determining neutrino oscillation parameters from atmospheric muon neutrino disappearance with three years of IceCube DeepCore data. *Physical Review D*, **2015**, 91, | 4.9 | 63 |
| 234 | Probing the radio emission from air showers with polarization measurements. *Physical Review D*, **2014**, 89, | 4.9 | 63 |
| 233 | Energy estimation of cosmic rays with the Engineering Radio Array of the Pierre Auger Observatory. *Physical Review D*, **2016**, 93, | 4.9 | 62 |
| 232 | Cosmic ray positrons at high energies: A new measurement. *Physical Review Letters*, **1995**, 75, 390-393 | 7.4 | 60 |
| 231 | Evidence for a mixed mass composition at the □ankle□ in the cosmic-ray spectrum. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2016**, 762, 288-295 | 4.2 | 59 |
| 230 | Measurement of the atmospheric □ flux in IceCube. *Physical Review Letters*, **2013**, 110, 151105 | 7.4 | 58 |
| 229 | Measurement of the cosmic-ray antiproton-to-proton abundance ratio between 4 and 50 GeV. *Physical Review Letters*, **2001**, 87, 271101 | 7.4 | 58 |
| 228 | SEARCHES FOR LARGE-SCALE ANISOTROPY IN THE ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE ENERGY OF 1019eV AT THE PIERRE AUGER OBSERVATORY AND THE TELESCOPE ARRAY. *Astrophysical Journal*, **2014**, 794, 172 | 4.7 | 56 |
| 227 | Search for sterile neutrino mixing using three years of IceCube DeepCore data. *Physical Review D*, **2017**, 95, | 4.9 | 55 |

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| 226 | Description of atmospheric conditions at the Pierre Auger Observatory using the Global Data Assimilation System (GDAS). *Astroparticle Physics*, **2012**, 35, 591-607 | 2.4 | 55 |
| 225 | IceCube-Gen2: the window to the extreme Universe. *Journal of Physics G: Nuclear and Particle Physics*, **2021**, 48, 060501 | 2.9 | 55 |
| 224 | Measurement of Atmospheric Neutrino Oscillations at 6-56 GeV with IceCube DeepCore. *Physical Review Letters*, **2018**, 120, 071801 | 7.4 | 54 |
| 223 | Inferences on mass composition and tests of hadronic interactions from 0.3 to 100 EeV using the water-Cherenkov detectors of the Pierre Auger Observatory. *Physical Review D*, **2017**, 96, | 4.9 | 53 |
| 222 | CONSTRAINTS ON THE ORIGIN OF COSMIC RAYS ABOVE 10 18 eV FROM LARGE-SCALE ANISOTROPY SEARCHES IN DATA OF THE PIERRE AUGER OBSERVATORY. *Astrophysical Journal Letters*, **2013**, 762, L13 | 7.9 | 53 |
| 221 | The energy spectrum of atmospheric neutrinos between 2 and 200TeV with the AMANDA-II detector. *Astroparticle Physics*, **2010**, 34, 48-58 | 2.4 | 53 |
| 220 | Search for steady point-like sources in the astrophysical muon neutrino flux with 8 years of IceCube data. *European Physical Journal C*, **2019**, 79, 1 | 4.2 | 52 |
| 219 | 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 | 4.7 | 51 |
| 218 | Characteristics of the Diffuse Astrophysical Electron and Tau Neutrino Flux with Six Years of IceCube High Energy Cascade Data. *Physical Review Letters*, **2020**, 125, 121104 | 7.4 | 49 |
| 217 | Cosmic-ray energetics and mass (CREAM) balloon project. *Advances in Space Research*, **2004**, 33, 1777-1785 | 2.4 | 49 |
| 216 | SEARCHES FOR TIME-DEPENDENT NEUTRINO SOURCES WITH ICECUBE DATA FROM 2008 TO 2012. *Astrophysical Journal*, **2015**, 807, 46 | 4.7 | 47 |
| 215 | Energy and flux measurements of ultra-high energy cosmic rays observed during the first ANITA flight. *Astroparticle Physics*, **2016**, 77, 32-43 | 2.4 | 47 |
| 214 | Search for neutrinos from dark matter self-annihilations in the center of the Milky Way with 3 years of IceCube/DeepCore. *European Physical Journal C*, **2017**, 77, 1 | 4.2 | 46 |
| 213 | SEARCH FOR POINT-LIKE SOURCES OF ULTRA-HIGH ENERGY NEUTRINOS AT THE PIERRE AUGER OBSERVATORY AND IMPROVED LIMIT ON THE DIFFUSE FLUX OF TAU NEUTRINOS. *Astrophysical Journal Letters*, **2012**, 755, L4 | 7.9 | 46 |
| 212 | 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 | 6.4 | 46 |
| 211 | Muons in air showers at the Pierre Auger Observatory: Measurement of atmospheric production depth. *Physical Review D*, **2014**, 90, | 4.9 | 44 |
| 210 | Advanced functionality for radio analysis in the Offline software framework of the Pierre Auger Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 635, 92-102 | 1.2 | 44 |
| 209 | Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory. *Astroparticle Physics*, **2007**, 27, 244-253 | 2.4 | 44 |

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| 208 | LARGE SCALE DISTRIBUTION OF ULTRA HIGH ENERGY COSMIC RAYS DETECTED AT THE PIERRE AUGER OBSERVATORY WITH ZENITH ANGLES UP TO 80□. *Astrophysical Journal*, **2015**, 802, 111 | 4.7 | 43 |
| 207 | IceCube search for dark matter annihilation in nearby galaxies and galaxy clusters. *Physical Review D*, **2013**, 88, | 4.9 | 42 |
| 206 | The cosmic-ray He-3/He-4 ratio from 100 to 1600 MeV/amu. *Astrophysical Journal*, **1993**, 413, 268 | 4.7 | 42 |
| 205 | Constraints on the diffuse high-energy neutrino flux from the third flight of ANITA. *Physical Review D*, **2018**, 98, | 4.9 | 42 |
| 204 | Measurement of atmospheric neutrino oscillations with IceCube. *Physical Review Letters*, **2013**, 111, 081801 | 7.4 | 41 |
| 203 | FIRST NEUTRINO POINT-SOURCE RESULTS FROM THE 22 STRING ICECUBE DETECTOR. *Astrophysical Journal*, **2009**, 701, L47-L51 | 4.7 | 41 |
| 202 | Characterization of the atmospheric muon flux in IceCube. *Astroparticle Physics*, **2016**, 78, 1-27 | 2.4 | 40 |
| 201 | Probing the origin of cosmic rays with extremely high energy neutrinos using the IceCube Observatory. *Physical Review D*, **2013**, 88, | 4.9 | 40 |
| 200 | Calibration of the surface array of the Pierre Auger Observatory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2006**, 568, 839-846 | 1.2 | 40 |
| 199 | Limits on the antiproton/proton ratio in the cosmic radiation from 100 MeV to 1580 MeV. *Astrophysical Journal*, **1990**, 349, 78 | 4.7 | 40 |
| 198 | THE FIRST COMBINED SEARCH FOR NEUTRINO POINT-SOURCES IN THE SOUTHERN HEMISPHERE WITH THE ANTARES AND ICECUBE NEUTRINO TELESCOPES. *Astrophysical Journal*, **2016**, 823, 65 | 4.7 | 40 |
| 197 | Measurement of the Atmospheric □ Spectrum with IceCube. *Physical Review D*, **2015**, 91, | 4.9 | 39 |
| 196 | The exposure of the hybrid detector of the Pierre Auger Observatory. *Astroparticle Physics*, **2011**, 34, 368-381 | 2.4 | 39 |
| 195 | LARGE-SCALE DISTRIBUTION OF ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE 10 18 eV AT THE PIERRE AUGER OBSERVATORY. *Astrophysical Journal, Supplement Series*, **2012**, 203, 34 | 8 | 39 |
| 194 | Neutrino interferometry for high-precision tests of Lorentz symmetry with IceCube. *Nature Physics*, **2018**, 14, 961-966 | 16.2 | 37 |
| 193 | Search for dark matter annihilation in the Galactic Center with IceCube-79. *European Physical Journal C*, **2015**, 75, 1 | 4.2 | 37 |
| 192 | MEASUREMENTS OF THE RELATIVE ABUNDANCES OF HIGH-ENERGY COSMIC-RAY NUCLEI IN THE TeV/NUCLEON REGION. *Astrophysical Journal*, **2010**, 715, 1400-1407 | 4.7 | 37 |
| 191 | Reconstruction of inclined air showers detected with the Pierre Auger Observatory. *Journal of Cosmology and Astroparticle Physics*, **2014**, 2014, 019-019 | 6.4 | 36 |

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| 190 | The Cosmic Ray Energetics And Mass (CREAM) instrument. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 579, 1034-1053 | 1.2 | 36 |
| 189 | Joint Constraints on Galactic Diffuse Neutrino Emission from the ANTARES and IceCube Neutrino Telescopes. *Astrophysical Journal Letters*, **2018**, 868, L20 | 7.9 | 35 |
| 188 | Search for astrophysical tau neutrinos in three years of IceCube data. *Physical Review D*, **2016**, 93, | 4.9 | 34 |
| 187 | First constraints on the ultra-high energy neutrino flux from a prototype station of the Askaryan Radio Array. *Astroparticle Physics*, **2015**, 70, 62-80 | 2.4 | 33 |
| 186 | Atmospheric effects on extensive air showers observed with the surface detector of the Pierre Auger observatory. *Astroparticle Physics*, **2009**, 32, 89-99 | 2.4 | 33 |
| 185 | Search for photons with energies above 1018eV using the hybrid detector of the Pierre Auger Observatory. *Journal of Cosmology and Astroparticle Physics*, **2017**, 2017, 009-009 | 6.4 | 32 |
| 184 | Comprehensive analysis of anomalous ANITA events disfavors a diffuse tau-neutrino flux origin. *Physical Review D*, **2019**, 99, | 4.9 | 32 |
| 183 | Prototype muon detectors for the AMIGA component of the Pierre Auger Observatory. *Journal of Instrumentation*, **2016**, 11, P02012-P02012 | 1 | 32 |
| 182 | Investigation of Two Fermi-LAT Gamma-Ray Blazars Coincident with High-energy Neutrinos Detected by IceCube. *Astrophysical Journal*, **2019**, 880, 103 | 4.7 | 32 |
| 181 | Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube. *Physical Review D*, **2017**, 96, | 4.9 | 32 |
| 180 | Searches for small-scale anisotropies from neutrino point sources with three years of IceCube data. *Astroparticle Physics*, **2015**, 66, 39-52 | 2.4 | 32 |
| 179 | PINGU: a vision for neutrino and particle physics at the South Pole. *Journal of Physics G: Nuclear and Particle Physics*, **2017**, 44, 054006 | 2.9 | 31 |
| 178 | Constraints on the ultrahigh-energy cosmic neutrino flux from the fourth flight of ANITA. *Physical Review D*, **2019**, 99, | 4.9 | 31 |
| 177 | Bounds on the density of sources of ultra-high energy cosmic rays from the Pierre Auger Observatory. *Journal of Cosmology and Astroparticle Physics*, **2013**, 2013, 009-009 | 6.4 | 31 |
| 176 | Measurement of the Isotopic Composition of Cosmic-Ray Helium, Lithium, Beryllium, and Boron up to 1700 MeV per Atomic Mass Unit. *Astrophysical Journal*, **2000**, 534, 757-769 | 4.7 | 31 |
| 175 | Search for non-relativistic magnetic monopoles with IceCube. *European Physical Journal C*, **2014**, 74, 1 | 4.2 | 30 |
| 174 | THE DETECTION OF A SN IIn IN OPTICAL FOLLOW-UP OBSERVATIONS OF ICECUBE NEUTRINO EVENTS. *Astrophysical Journal*, **2015**, 811, 52 | 4.7 | 30 |
| 173 | The High-Energy Antimatter Telescope (HEAT): An instrument for the study of cosmic-ray positrons. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **1997**, 400, 34-52 | 1.2 | 30 |

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