

Ryan Nichol

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

6,659
citations

57758

44
h-index

60623

81
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96
all docs

96
docs citations

96
times ranked

3233
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Commissioning of a High Pressure Time Projection Chamber with Optical Readout. <i>Instruments</i> , 2021, 5, 22. | 1.8 | 4 |
| 2 | Target neutrino mass precision for determining the neutrino hierarchy. <i>Physical Review D</i> , 2020, 101, . | 4.7 | 12 |
| 3 | First measurement of neutrino oscillation parameters using neutrinos and antineutrinos by NOvA. <i>Physical Review Letters</i> , 2019, 123, 151803. | 7.8 | 213 |
| 4 | The simulation of the sensitivity of the Antarctic Impulsive Transient Antenna (ANITA) to Askaryan radiation from cosmogenic neutrinos interacting in the Antarctic Ice. <i>Journal of Instrumentation</i> , 2019, 14, P08011-P08011. | 1.2 | 7 |
| 5 | Measurement of the real dielectric permittivity $\hat{\mu}$ of glacial ice. <i>Astroparticle Physics</i> , 2019, 108, 63-73. | 4.3 | 15 |
| 6 | Observation of an Unusual Upward-Going Cosmic-Ray-like Event in the Third Flight of ANITA. <i>Physical Review Letters</i> , 2018, 121, 161102. | 7.8 | 91 |
| 7 | Measurements and modeling of near-surface radio propagation in glacial ice and implications for neutrino experiments. <i>Physical Review D</i> , 2018, 98, . | 4.7 | 18 |
| 8 | Antarctic surface reflectivity calculations and measurements from the ANITA-4 and HiCal-2 experiments. <i>Physical Review D</i> , 2018, 98, . | 4.7 | 10 |
| 9 | Constraints on the diffuse high-energy neutrino flux from the third flight of ANITA. <i>Physical Review D</i> , 2018, 98, . | 4.7 | 53 |
| 10 | Dynamic tunable notch filters for the Antarctic Impulsive Transient Antenna (ANITA). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 894, 47-56. | 1.6 | 8 |
| 11 | $\frac{e}{\sqrt{2}}$ appearance and $\frac{1}{\sqrt{2}}$ disappearance in the NOvA experiment. <i>Physical Review D</i> , 2018, 98, . | 4.7 | 108 |
| 12 | Constraints on the ultra-high-energy neutrino flux from Gamma-Ray bursts from a prototype station of the Askaryan radio array. <i>Astroparticle Physics</i> , 2017, 88, 7-16. | 4.3 | 6 |
| 13 | Antarctic Surface Reflectivity Measurements from the ANITA-3 and HiCal-1 Experiments. <i>Journal of Astronomical Instrumentation</i> , 2017, 06, 1740002. | 1.5 | 11 |
| 14 | An evaluation of Minor Groove Binders as anti-fungal and anti-mycobacterial therapeutics. <i>European Journal of Medicinal Chemistry</i> , 2017, 136, 561-572. | 5.5 | 15 |
| 15 | Search for flavor-changing nonstandard neutrino interactions using $\hat{1}/2e$ appearance in MINOS. <i>Physical Review D</i> , 2017, 95, . | 4.7 | 6 |
| 16 | Development toward a ground-based interferometric phased array for radio detection of high energy neutrinos. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 869, 46-55. | 1.6 | 5 |
| 17 | Search for active-sterile neutrino mixing using neutral-current interactions in NOvA. <i>Physical Review D</i> , 2017, 96, . | 4.7 | 42 |
| 18 | Measurement of the Neutrino Mixing Angle $\hat{1}$ $\langle 23 \rangle$ in NOvA. <i>Physical Review Letters</i> , 2017, 118, 151802. | 7.8 | 87 |

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|----|---|-----|-----------|
| 19 | Constraints on Oscillation Parameters from ν_e Appearance and ν_μ Disappearance in NOVA. <i>Physical Review Letters</i> , 2017, 118, 231801. | 7.8 | 138 |
| 20 | Phased arrays: A strategy to lower the energy threshold for neutrinos. <i>EPJ Web of Conferences</i> , 2017, 135, 05007. | 0.3 | 0 |
| 21 | Constraints on large extra dimensions from the MINOS experiment. <i>Physical Review D</i> , 2016, 94, . | 4.7 | 15 |
| 22 | The NuMI neutrino beam. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 806, 279-306. | 1.6 | 202 |
| 23 | Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments. <i>Physical Review Letters</i> , 2016, 117, 151801. | 7.8 | 71 |
| 24 | Search for Sterile Neutrinos Mixing with Muon Neutrinos in MINOS. <i>Physical Review Letters</i> , 2016, 117, 151803. | 7.8 | 60 |
| 25 | Measurement of the multiple-muon charge ratio in the MINOS Far Detector. <i>Physical Review D</i> , 2016, 93, . | 4.7 | 1 |
| 26 | Performance of two Askaryan Radio Array stations and first results in the search for ultrahigh energy neutrinos. <i>Physical Review D</i> , 2016, 93, . | 4.7 | 87 |
| 27 | Accelerator Measurements of Magnetically Induced Radio Emission from Particle Cascades with Applications to Cosmic-Ray Air Showers. <i>Physical Review Letters</i> , 2016, 116, 141103. | 7.8 | 33 |
| 28 | Characteristics of Four Upward-Pointing Cosmic-Ray-like Events Observed with ANITA. <i>Physical Review Letters</i> , 2016, 117, 071101. | 7.8 | 94 |
| 29 | Measurement of single $\bar{\nu}_e$ production by coherent neutral-current ν_μ interactions in the MINOS Near Detector. <i>Physical Review D</i> , 2016, 94, . | 4.7 | 12 |
| 30 | Energy and flux measurements of ultra-high energy cosmic rays observed during the first ANITA flight. <i>Astroparticle Physics</i> , 2016, 77, 32-43. | 4.3 | 55 |
| 31 | Observation of seasonal variation of atmospheric multiple-muon events in the MINOS Near and Far Detectors. <i>Physical Review D</i> , 2015, 91, . | 4.7 | 8 |
| 32 | Precision measurement of the speed of propagation of neutrinos using the MINOS detectors. <i>Physical Review D</i> , 2015, 92, . | 4.7 | 11 |
| 33 | Antarctic radio frequency albedo and implications for cosmic ray reconstruction. <i>Radio Science</i> , 2015, 50, 1-17. | 1.6 | 11 |
| 34 | An interferometric analysis method for radio impulses from ultra-high energy particle showers. <i>Astroparticle Physics</i> , 2015, 60, 72-85. | 4.3 | 25 |
| 35 | First constraints on the ultra-high energy neutrino flux from a prototype station of the Askaryan Radio Array. <i>Astroparticle Physics</i> , 2015, 70, 62-80. | 4.3 | 44 |
| 36 | Study of quasielastic scattering using charged-current ν_μ interactions in the MINOS near detector. <i>Physical Review D</i> , 2015, 91, . | 4.7 | 53 |

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|----|--|-----|-----------|
| 37 | Continued Analysis of $\mu \rightarrow e \gamma$ and $\mu \rightarrow e \gamma$ Appearance in MINOS Using Accelerator. Physical Review Letters, 2014, 112, 191801. | 7.8 | 187 |
| 38 | Light sterile neutrino sensitivity at the nuSTORM facility. Physical Review D, 2014, 89, . | 4.7 | 28 |
| 39 | Observation of muon intensity variations by season with the MINOS near detector. Physical Review D, 2014, 90, . | 4.7 | 16 |
| 40 | New Results from MINOS. Nuclear Physics, Section B, Proceedings Supplements, 2013, 235-236, 105-111. | 0.4 | 9 |
| 41 | Electron Neutrino and Antineutrino Appearance in the Full MINOS Data Sample. Physical Review Letters, 2013, 110, 171801. | 7.8 | 174 |
| 42 | Measurement of Neutrino and Antineutrino Oscillations Using Beam and Atmospheric Data in MINOS. Physical Review Letters, 2013, 110, 251801. | 7.8 | 196 |
| 43 | Search for flavor-changing non-standard neutrino interactions by MINOS. Physical Review D, 2013, 88, . | 4.7 | 28 |
| 44 | Comparisons of annual modulations in MINOS with the event rate modulation in CoGeNT. Physical Review D, 2013, 87, . | 4.7 | 6 |
| 45 | Improved Measurement of Muon Antineutrino Disappearance in MINOS. Physical Review Letters, 2012, 108, 191801. | 7.8 | 70 |
| 46 | Search for Lorentz invariance and CPT violation with muon antineutrinos in the MINOS Near Detector. Physical Review D, 2012, 85, . | 4.7 | 71 |
| 47 | Measurements of atmospheric neutrinos and antineutrinos in the MINOS far detector. Physical Review D, 2012, 86, . | 4.7 | 34 |
| 48 | Design and initial performance of the Askaryan Radio Array prototype EeV neutrino detector at the South Pole. Astroparticle Physics, 2012, 35, 457-477. | 4.3 | 191 |
| 49 | Measurement of the underground atmospheric muon charge ratio using the MINOS Near Detector. Physical Review D, 2011, 83, . | 4.7 | 13 |
| 50 | Improved Search for Muon-Neutrino to Electron-Neutrino Oscillations in MINOS. Physical Review Letters, 2011, 107, 181802. | 7.8 | 574 |
| 51 | THE FIRST LIMITS ON THE ULTRA-HIGH ENERGY NEUTRINO FLUENCE FROM GAMMA-RAY BURSTS. Astrophysical Journal, 2011, 736, 50. | 4.5 | 15 |
| 52 | Observation in the MINOS far detector of the shadowing of cosmic rays by the sun and moon. Astroparticle Physics, 2011, 34, 457-466. | 4.3 | 12 |
| 53 | Radio detection of high-energy particles with the ANITA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 626-627, S30-S35. | 1.6 | 8 |
| 54 | Search for the disappearance of muon antineutrinos in the NuMI neutrino beam. Physical Review D, 2011, 84, . | 4.7 | 16 |

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|----|---|-----|-----------|
| 55 | Ultrarelativistic magnetic monopole search with the ANITA-II balloon-borne radio interferometer. Physical Review D, 2011, 83, . | 4.7 | 37 |
| 56 | Active to Sterile Neutrino Mixing Limits from Neutral-Current Interactions in MINOS. Physical Review Letters, 2011, 107, 011802. | 7.8 | 108 |
| 57 | First Direct Observation of Muon Antineutrino Disappearance. Physical Review Letters, 2011, 107, 021801. | 7.8 | 56 |
| 58 | Measurement of the Neutrino Mass Splitting and Flavor Mixing by MINOS. Physical Review Letters, 2011, 106, 181801. | 7.8 | 188 |
| 59 | A prototype station for ARIANNA: A detector for cosmic neutrinos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 85-91. | 1.6 | 38 |
| 60 | Observation of Ultrahigh-Energy Cosmic Rays with the ANITA Balloon-Borne Radio Interferometer. Physical Review Letters, 2010, 105, 151101. | 7.8 | 107 |
| 61 | Search for Lorentz Invariance and CPT Violation with the MINOS Far Detector. Physical Review Letters, 2010, 105, 151601. | 7.8 | 83 |
| 62 | Search for sterile neutrino mixing in the MINOS long-baseline experiment. Physical Review D, 2010, 81, . | 4.7 | 59 |
| 63 | Observational constraints on the ultrahigh energy cosmic neutrino flux from the second flight of the ANITA experiment. Physical Review D, 2010, 82, . | 4.7 | 150 |
| 64 | New constraints on muon-neutrino to electron-neutrino transitions in MINOS. Physical Review D, 2010, 82, . | 4.7 | 45 |
| 65 | Neutrino and antineutrino inclusive charged-current cross section measurements with the MINOS near detector. Physical Review D, 2010, 81, . | 4.7 | 91 |
| 66 | Observation of muon intensity variations by season with the MINOS far detector. Physical Review D, 2010, 81, . | 4.7 | 56 |
| 67 | New Limits on the Ultrahigh Energy Cosmic Neutrino Flux from the ANITA Experiment. Physical Review Letters, 2009, 103, 051103. | 7.8 | 95 |
| 68 | Measurements of radio propagation in rock salt for the detection of high-energy neutrinos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 599, 184-191. | 1.6 | 17 |
| 69 | IceRay: An IceCube-centered radio-Cherenkov GZK neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, S64-S69. | 1.6 | 20 |
| 70 | Comparisons of the MINOS near and far detector readout systems at a test beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 609, 106-113. | 1.6 | 13 |
| 71 | 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. | 4.3 | 138 |
| 72 | Search for Muon-Neutrino to Electron-Neutrino Transitions in MINOS. Physical Review Letters, 2009, 103, 261802. | 7.8 | 46 |

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|----|--|-----|-----------|
| 73 | Sudden stratospheric warmings seen in MINOS deep underground muon data. Geophysical Research Letters, 2009, 36, . | 4.0 | 26 |
| 74 | The magnetized steel and scintillator calorimeters of the MINOS experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 596, 190-228. | 1.6 | 230 |
| 75 | In situ radioglaciological measurements near Taylor Dome, Antarctica and implications for ultra-high energy (UHE) neutrino astronomy. Astroparticle Physics, 2008, 29, 130-157. | 4.3 | 27 |
| 76 | Study of muon neutrino disappearance using the Fermilab Main Injector neutrino beam. Physical Review D, 2008, 77, . | 4.7 | 126 |
| 77 | PRELIMINARY RESULT FROM ANITA EXPERIMENT. Modern Physics Letters A, 2008, 23, 1419-1430. | 1.2 | 0 |
| 78 | Measurement of Neutrino Oscillations with the MINOS Detectors in the NuMI Beam. Physical Review Letters, 2008, 101, 131802. | 7.8 | 262 |
| 79 | Search for Active Neutrino Disappearance Using Neutral-Current Interactions in the MINOS Long-Baseline Experiment. Physical Review Letters, 2008, 101, 221804. | 7.8 | 51 |
| 80 | Testing Lorentz Invariance and CPT Conservation with NuMI Neutrinos in the MINOS Near Detector. Physical Review Letters, 2008, 101, 151601. | 7.8 | 86 |
| 81 | RESULTS FROM THE ANITA EXPERIMENT. Modern Physics Letters A, 2007, 22, 2237-2246. | 1.2 | 2 |
| 82 | Observations of the Askaryan Effect in Ice. Physical Review Letters, 2007, 99, 171101. | 7.8 | 117 |
| 83 | Charge-separated atmospheric neutrino-induced muons in the MINOS far detector. Physical Review D, 2007, 75, . | 4.7 | 20 |
| 84 | Measurement of neutrino velocity with the MINOS detectors and NuMI neutrino beam. Physical Review D, 2007, 76, . | 4.7 | 111 |
| 85 | Measurement of the atmospheric muon charge ratio at TeV energies with the MINOS detector. Physical Review D, 2007, 76, . | 4.7 | 46 |
| 86 | An upper limit to the photon fraction in cosmic rays above 1019eV from the Pierre Auger Observatory. Astroparticle Physics, 2007, 27, 155-168. | 4.3 | 90 |
| 87 | The large analog bandwidth recorder and digitizer with ordered readout (LABRADOR) ASIC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 583, 447-460. | 1.6 | 64 |
| 88 | Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory. Astroparticle Physics, 2007, 27, 244-253. | 4.3 | 51 |
| 89 | Constraints on Cosmic Neutrino Fluxes from the Antarctic Impulsive Transient Antenna Experiment. Physical Review Letters, 2006, 96, 171101. | 7.8 | 153 |
| 90 | The MINOS calibration detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 556, 119-133. | 1.6 | 38 |

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|----|--|-----|-----------|
| 91 | Observation of Muon Neutrino Disappearance with the MINOS Detectors in the NuMI Neutrino Beam. Physical Review Letters, 2006, 97, 191801. | 7.8 | 430 |
| 92 | First observations of separated atmospheric ν_{μ} and ν_{τ} events in the MINOS detector. Physical Review D, 2006, 73, . | 4.7 | 59 |
| 93 | 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 |
| 94 | Spontaneous light emission from fibers in MINOS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 545, 145-155. | 1.6 | 4 |
| 95 | On the linearity of the MINOS light-injection calibration system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 521, 361-366. | 1.6 | 10 |
| 96 | The MINOS light-injection calibration system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 492, 325-343. | 1.6 | 30 |