# Cristiano Galbiati

List of Publications by Year
in descending order



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|---|---|---|---|
| 94 papers | 6,957 citations | 57758 44 h-index | 56724 83 g-index |
| 94 all docs | 94 docs citations | 94 times ranked | 4593 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Precision Measurement of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>7</mml:mn></mml:mmultiscripts></mml:math>Solar Neutrino Interaction Rate in Borexino. Physical Review Letters, 2011, 107, 141302. | 7.8 | 441 |
| 2 | Direct Measurement of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>7</mml:mn></mml:mmultiscripts></mml:math>Solar Neutrino Flux with 192 Days of Borexino Data. Physical Review Letters, 2008, 101, 091302. | 7.8 | 344 |
| 3 | The Borexino detector at the Laboratori Nazionali del Gran Sasso. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 600, 568-593. | 1.6 | 292 |
| 4 | Science and technology of Borexino: a real-time detector for low energy solar neutrinos. Astroparticle Physics, 2002, 16, 205-234. | 4.3 | 261 |
| 5 | Low-Mass Dark Matter Search with the DarkSide-50 Experiment. Physical Review Letters, 2018, 121, 081307. | 7.8 | 259 |
| 6 | Neutrinos from the primary protonâ€“proton fusion process in the Sun. Nature, 2014, 512, 383-386. | 27.8 | 250 |
| 7 | DarkSide-20k: A 20 tonne two-phase LAr TPC for direct dark matter detection at LNGS. European Physical Journal Plus, 2018, 133, 1. | 2.6 | 247 |
| 8 | Measurement of the solar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">B</mml:mi><mml:mprescripts /><mml:none /><mml:mn>8</mml:mn></mml:mmultiscripts></mml:math>neutrino rate with a liquid scintillator target and 3ÂMeV energy threshold in the Borexino detector. Physical Review D, 2010, 82, . | 4.7 | 214 |
| 9 | First Evidence of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mi>e</mml:mi><mml:mi>p</mml:mi></mml:math>Solar Neutrinos by Direct Detection in Borexino. Physical Review Letters, 2012, 108, 051302. | 7.8 | 213 |
| 10 | Final results of Borexino Phase-I on low-energy solar neutrino spectroscopy. Physical Review D, 2014, 89, . | 4.7 | 204 |
| 11 | First real time detection of 7Be solar neutrinos by Borexino. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 658, 101-108. | 4.1 | 192 |
| 12 | Observation of geo-neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 687, 299-304. | 4.1 | 187 |
| 13 | First results from the DarkSide-50 dark matter experiment at Laboratori Nazionali del Gran Sasso. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 743, 456-466. | 4.1 | 186 |
| 14 | Constraints on Sub-GeV Dark-Matterâ€“Electron Scattering from the DarkSide-50 Experiment. Physical Review Letters, 2018, 121, 111303. | 7.8 | 179 |
| 15 | Comprehensive measurement of pp-chain solar neutrinos. Nature, 2018, 562, 505-510. | 27.8 | 169 |
| 16 | First results from a dark matter search with liquid argon at 87K in the Gran Sasso underground laboratory. Astroparticle Physics, 2008, 28, 495-507. | 4.3 | 153 |
| 17 | DarkSide-50 532-day dark matter search with low-radioactivity argon. Physical Review D, 2018, 98, . | 4.7 | 147 |
| 18 | Measurements of extremely low radioactivity levels in BOREXINO. Astroparticle Physics, 2002, 18, 1-25. | 4.3 | 138 |

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|---|---|---|---|
| 19 | A large-scale low-background liquid scintillation detector: the counting test facility at Gran Sasso. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 406, 411-426. | 1.6 | 137 |
| 20 | Ultra-low background measurements in a large volume underground detector. Astroparticle Physics, 1998, 8, 141-157. | 4.3 | 130 |
| 21 | Results from the first use of low radioactivity argon in a dark matter search. Physical Review D, 2016, 93, . | 4.7 | 108 |
| 22 | SOX: Short distance neutrino Oscillations with BoreXino. Journal of High Energy Physics, 2013, 2013, 1. | 4.7 | 98 |
| 23 | Limiting neutrino magnetic moments with Borexino Phase-II solar neutrino data. Physical Review D, 2017, 96, . | 4.7 | 94 |
| 24 | Measurement of geo-neutrinos from 1353 days of Borexino. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 722, 295-300. | 4.1 | 92 |
| 25 | Measurement of the specific activity of 39Ar in natural argon. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 574, 83-88. | 1.6 | 91 |
| 26 | Absence of a dayâ€“night asymmetry in the 7Be solar neutrino rate in Borexino. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 707, 22-26. | 4.1 | 83 |
| 27 | Measurement of the 14C abundance in a low-background liquid scintillator. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 422, 349-358. | 4.1 | 82 |
| 28 | Measurement of scintillation and ionization yield and scintillation pulse shape from nuclear recoils in liquid argon. Physical Review D, 2015, 91, . | 4.7 | 80 |
| 29 | The liquid handling systems for the Borexino solar neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 609, 58-78. | 1.6 | 71 |
| 30 | Muon and cosmogenic neutron detection in Borexino. Journal of Instrumentation, 2011, 6, P05005-P05005. | 1.2 | 68 |
| 31 | Cosmogenic Backgrounds in Borexino at 3800 m water-equivalent depth. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 049-049. | 5.4 | 63 |
| 32 | Light propagation in a large volume liquid scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 440, 360-371. | 1.6 | 61 |
| 33 | Study of solar and other unknown anti-neutrino fluxes with Borexino at LNGS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 696, 191-196. | 4.1 | 60 |
| 34 | Borexino calibrations: hardware, methods, and results. Journal of Instrumentation, 2012, 7, P10018-P10018. | 1.2 | 60 |
| 35 | CosmogenicC11production and sensitivity of organic scintillator detectors topepand CNO neutrinos. Physical Review C, 2005, 71, . | 2.9 | 57 |
| 36 | New experimental limits on the Pauli-forbidden transitions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>12</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>nuclei obtained with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>485</mml:mn></mml:mrow></mml:math>days Borexino data. Ph | 2.9 | 56 |

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|---|---|---|---|
| 37 | Search for solar axions produced in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>d</mml:mi><mml:mo>,</mml:mo><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mpresc | 4.7 | 54 |
| 38 | Borexino detector. Physical Review D, 2012, 85, . Effects of Nitrogen contamination in liquid Argon. Journal of Instrumentation, 2010, 5, P06003-P06003. | 1.2 | 53 |
| 39 | Cryogenic Characterization of FBK HD Near-UV Sensitive SiPMs. IEEE Transactions on Electron Devices, 2017, 64, 521-526. | 3.0 | 50 |
| 40 | A scintillator purification system for the Borexino solar neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 587, 277-291. | 1.6 | 49 |
| 41 | Pulse-shape discrimination with the Counting Test Facility. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 584, 98-113. | 1.6 | 48 |
| 42 | Cosmic-muon flux and annual modulation in Borexino at 3800 m water-equivalent depth. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 015-015. | 5.4 | 47 |
| 43 | The nylon scintillator containment vessels for the Borexino solar neutrino experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 582, 509-534. | 1.6 | 46 |
| 44 | Discovery of underground argon with low level of radioactive 39Ar and possible applications to WIMP dark matter detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 587, 46-51. | 1.6 | 44 |
| 45 | Oxygen contamination in liquid Argon: combined effects on ionization electron charge and scintillation light. Journal of Instrumentation, 2010, 5, P05003-P05003. | 1.2 | 44 |
| 46 | New limits on nucleon decays into invisible channels with the BOREXINO counting test facility. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 563, 23-34. | 4.1 | 42 |
| 47 | Test of Electric Charge Conservation with Borexino. Physical Review Letters, 2015, 115, 231802. | 7.8 | 42 |
| 48 | New experimental limits on violations of the Pauli exclusion principle obtained with the Borexino Counting Test Facility. European Physical Journal C, 2004, 37, 421-431. | 3.9 | 41 |
| 49 | Search for electron decay mode eâ†'Î³+Î½ with prototype of Borexino detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 525, 29-40. | 4.1 | 38 |
| 50 | Measurement of the liquid argon energy response to nuclear and electronic recoils. Physical Review D, 2018, 97, . | 4.7 | 38 |
| 51 | CNO andpepneutrino spectroscopy in Borexino: Measurement of the deep-underground production of cosmogenicC11in an organic liquid scintillator. Physical Review C, 2006, 74, . | 2.9 | 37 |
| 52 | Light yield in DarkSide-10: A prototype two-phase argon TPC for dark matter searches. Astroparticle Physics, 2013, 49, 44-51. | 4.3 | 36 |
| 53 | Measurement of CNGS muon neutrino speed with Borexino. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 716, 401-405. | 4.1 | 33 |
| 54 | The veto system of the DarkSide-50 experiment. Journal of Instrumentation, 2016, 11, P03016-P03016. | 1.2 | 33 |

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|---|---|---|---|
| 55 | Simulation of argon response and light detection in the DarkSide-50 dual phase TPC. Journal of Instrumentation, 2017, 12, P10015-P10015. | 1.2 | 31 |
| 56 | Study of phenylxylylethane (PXE) as scintillator for low energy neutrino experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 585, 48-60. | 1.6 | 30 |
| 57 | Observation of the dependence on drift field of scintillation from nuclear recoils in liquid argon. Physical Review D, 2013, 88, . | 4.7 | 30 |
| 58 | The Monte Carlo simulation of the Borexino detector. Astroparticle Physics, 2018, 97, 136-159. | 4.3 | 30 |
| 59 | New limits on heavy sterile neutrino mixing in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">B</mml:mi><mml:mprescripts /><mml:none /><mml:mn>8</mml:mn></mml:mmultiscripts></mml:math>decay obtained with the Borexino detector. Physical Review D, 2013, 88, . | 4.7 | 29 |
| 60 | Search for solar axions emitted in the M1-transition of 7Li* with Borexino CTF. European Physical Journal C, 2008, 54, 61-72. | 3.9 | 26 |
| 61 | A Search for Low-energy Neutrinos Correlated with Gravitational Wave Events GW 150914, GW 151226, and GW 170104 with the Borexino Detector. Astrophysical Journal, 2017, 850, 21. | 4.5 | 26 |
| 62 | Development of a Very Low-Noise Cryogenic Preamplifier for Large-Area SiPM Devices. IEEE Transactions on Nuclear Science, 2018, 65, 1005-1011. | 2.0 | 24 |
| 63 | Solar neutrino detection in a large volume double-phase liquid argon experiment. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 017-017. | 5.4 | 23 |
| 64 | Study of neutrino electromagnetic properties with the prototype of the Borexino detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 563, 35-47. | 4.1 | 22 |
| 65 | A study of the trace 39Ar content in argon from deep underground sources. Astroparticle Physics, 2015, 66, 53-60. | 4.3 | 22 |
| 66 | Seasonal modulation of the 7 Be solar neutrino rate in Borexino. Astroparticle Physics, 2017, 92, 21-29. | 4.3 | 22 |
| 67 | Development of a Novel Single-Channel, 24 cm<sup>2</sup>, SiPM-Based, Cryogenic Photodetector. IEEE Transactions on Nuclear Science, 2018, 65, 591-596. | 2.0 | 22 |
| 68 | Modulations of the cosmic muon signal in ten years of Borexino data. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 046-046. | 5.4 | 22 |
| 69 | The DarkSide Multiton Detector for the Direct Dark Matter Search. Advances in High Energy Physics, 2015, 2015, 1-8. | 1.1 | 21 |
| 70 | New experimental limits on heavy neutrino mixing in 8B-decay obtained with the Borexino counting test facility. JETP Letters, 2003, 78, 261-266. | 1.4 | 18 |
| 71 | Search for electron antineutrino interactions with the Borexino Counting Test Facility at Gran Sasso. European Physical Journal C, 2006, 47, 21-30. | 3.9 | 18 |
| 72 | Lifetime measurements of 214Po and 212Po with the CTF liquid scintillator detector at LNGS. European Physical Journal A, 2013, 49, 1. | 2.5 | 17 |

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|---|---|---|---|
| 73 | Cryogenic Characterization of FBK RGB-HD SiPMs. Journal of Instrumentation, 2017, 12, P09030-P09030. | 1.2 | 16 |
| 74 | Demonstration and comparison of photomultiplier tubes at liquid Argon temperature. Journal of Instrumentation, 2012, 7, P01016-P01016. | 1.2 | 15 |
| 75 | Measuring the cosmic ray muon-induced fast neutron spectrum by (n,p) isotope production reactions in underground detectors. Physical Review C, 2005, 72, . | 2.9 | 14 |
| 76 | Time and space reconstruction in optical, non-imaging, scintillator-based particle detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 700-709. | 1.6 | 13 |
| 77 | Borexinoâ€™s search for low-energy neutrino and antineutrino signals correlated with gamma-ray bursts. Astroparticle Physics, 2017, 86, 11-17. | 4.3 | 13 |
| 78 | Electroluminescence pulse shape and electron diffusion in liquid argon measured in a dual-phase TPC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 904, 23-34. | 1.6 | 13 |
| 79 | Reducing potassium contamination for AMS detection of 39Ar with an electron-cyclotron-resonance ion source. Nuclear Instruments & Methods in Physics Research B, 2012, 283, 77-83. | 1.4 | 10 |
| 80 | The electronics, trigger and data acquisition system for the liquid argon time projection chamber of the DarkSide-50 search for dark matter. Journal of Instrumentation, 2017, 12, P12011-P12011. | 1.2 | 10 |
| 81 | CALISâ€”A CALibration Insertion System for the DarkSide-50 dark matter search experiment. Journal of Instrumentation, 2017, 12, T12004-T12004. | 1.2 | 10 |
| 82 | When nothing is certain, anything is possible: open innovation and lean approach at MVM. R and D Management, 0, , . | 5.3 | 10 |
| 83 | Directional modulation of electron-ion pairs recombination in liquid argon. Journal of Instrumentation, 2017, 12, P12002-P12002. | 1.2 | 9 |
| 84 | A high-resolution CMOS imaging detector for the search of neutrinoless double Î² decay in<sup>82</sup>Se. Journal of Instrumentation, 2017, 12, P03022-P03022. | 1.2 | 8 |
| 85 | Directional dark matter detection sensitivity of a two-phase liquid argon detector. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 014-014. | 5.4 | 8 |
| 86 | The electronics and data acquisition system for the DarkSide-50 veto detectors. Journal of Instrumentation, 2016, 11, P12007-P12007. | 1.2 | 7 |
| 87 | Depleted Argon from Underground Sources. Physics Procedia, 2012, 37, 1105-1112. | 1.2 | 5 |
| 88 | Effect of low electric fields on alpha scintillation light yield in liquid argon. Journal of Instrumentation, 2017, 12, P01021-P01021. | 1.2 | 5 |
| 89 | The fluid-filling system for the Borexino solar neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 464-474. | 1.6 | 4 |
| 90 | Results from the Borexino Solar Neutrino Experiment. Annual Review of Nuclear and Particle Science, 2012, 62, 315-336. | 10.2 | 4 |

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| 91 | $alpha$ / $eta$ discrimination in Borexino. European Physical Journal A, 2016, 52, 1. | 2.5 | 3 |
| 92 | Lessons Learned from the Development of a Mechanical Ventilator for COVID-19. , 2021, , . | | 3 |
| 93 | The nylon scintillator containment vessels for the Borexino solar neutrino experiment. International Journal of Modern Physics A, 2014, 29, 1442004. | 1.5 | 2 |
| 94 | Feasibility study of SiGHT: a novel ultra low background photosensor for low temperature operation. Journal of Instrumentation, 2017, 12, P02019-P02019. | 1.2 | 0 |