Albert Sotnikov

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1615262/publications.pdf

Version: 2024-02-01

113 papers	4,499 citations	109321 35 h-index	98798 67 g-index
114 all docs	114 docs citations	114 times ranked	2396 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	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
5	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
6	Final results of Borexino Phase-I on low-energy solar neutrino spectroscopy. Physical Review D, 2014, 89, .	4.7	204
7	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
8	Observation of geo-neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 687, 299-304.	4.1	187
9	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
10	Measurements of extremely low radioactivity levels in BOREXINO. Astroparticle Physics, 2002, 18, 1-25.	4.3	138
11	Discovery of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Ï„</mml:mi></mml:math>Neutrino Appearance in the CNGS Neutrino Beam with the OPERA Experiment. Physical Review Letters, 2015, 115, 121802.	7.8	132
12	Results from the first use of low radioactivity argon in a dark matter search. Physical Review D, 2016, 93, .	4.7	108
13	SOX: Short distance neutrino Oscillations with BoreXino. Journal of High Energy Physics, 2013, 2013, 1.	4.7	98
14	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
15	Final Results of the OPERA Experiment on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î½</mml:mi><mml:mi>Ï„</mml:mi></mml:msub></mml:math> Appearance in the CNGS Neutrino Beam. Physical Review Letters, 2018, 120, 211801.	7.8	91
16	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
17	Simultaneous precision spectroscopy of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mi>p</mml:mi></mml:math> , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Be</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></m	4.7	80
18	Spectroscopy of geoneutrinos from 2056 days of Borexino data. Physical Review D, 2015, 92, .	4.7	77

#	Article	IF	Citations
19	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
20	First measurement of muon-neutrino disappearance in NOvA. Physical Review D, 2016, 93, .	4.7	71
21	Muon and cosmogenic neutron detection in Borexino. Journal of Instrumentation, 2011, 6, P05005-P05005.	1.2	68
22	Cosmogenic Backgrounds in Borexino at 3800 m water-equivalent depth. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 049-049.	5.4	63
23	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
24	Borexino calibrations: hardware, methods, and results. Journal of Instrumentation, 2012, 7, P10018-P10018.	1.2	60
25	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"	2.9	56
26	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:mprescript	4.7	54
27	Borexino detector. Physical Review D, 2012, 85. 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
28	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
29	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
30	Comprehensive geoneutrino analysis with Borexino. Physical Review D, 2020, 101, .	4.7	42
31	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
32	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
33	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
34	Light yield in DarkSide-10: A prototype two-phase argon TPC for dark matter searches. Astroparticle Physics, 2013, 49, 44-51.	4.3	36
35	DarkSide search for dark matter. Journal of Instrumentation, 2013, 8, C11021-C11021.	1.2	36
36	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

#	Article	IF	Citations
37	The veto system of the DarkSide-50 experiment. Journal of Instrumentation, 2016, 11, P03016-P03016.	1.2	33
38	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
39	The Monte Carlo simulation of the Borexino detector. Astroparticle Physics, 2018, 97, 136-159.	4.3	30
40	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
41	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
42	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
43	Seasonal modulation of the 7 Be solar neutrino rate in Borexino. Astroparticle Physics, 2017, 92, 21-29.	4.3	22
44	The DarkSide Multiton Detector for the Direct Dark Matter Search. Advances in High Energy Physics, 2015, 2015, 1-8.	1.1	21
45	Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2001, 91, 58-65.	0.4	20
46	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
47	Lifetime measurements of 214Po and 212Po with the CTF liquid scintillator detector at LNGS. European Physical Journal A, 2013, 49, 1.	2.5	17
48	Borexinoâ€™s search for low-energy neutrino and antineutrino signals correlated with gamma-ray bursts. Astroparticle Physics, 2017, 86, 11-17.	4.3	13
49	DarkSide-50: A WIMP Search with a Two-phase Argon TPC. Physics Procedia, 2015, 61, 124-129.	1.2	10
50	Study of silicon photomultiplier performance at different temperatures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 997, 165162.	1.6	10
51	Direct Search for Dark Matter with DarkSide. Journal of Physics: Conference Series, 2015, 650, 012006.	0.4	9
52	Current Status of the BOREXINO experiment. Nuclear Physics, Section B, Proceedings Supplements, 2005, 143, 21-24.	0.4	7
53	Measurement of neutrino flux from the primary protonâ€“proton fusion process in the Sun with Borexino detector. Physics of Particles and Nuclei, 2016, 47, 995-1002.	0.7	7
54	The electronics and data acquisition system for the DarkSide-50 veto detectors. Journal of Instrumentation, 2016, 11, P12007-P12007.	1.2	7

#	Article	IF	Citations
55	The DarkSide Experiment: Present Status and Future. Journal of Physics: Conference Series, 2017, 798, 012109.	0.4	7
56	Optimization of the light intensity for Photodetector calibration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 939, 61-65.	1.6	7
57	Effect of low electric fields on alpha scintillation light yield in liquid argon. Journal of Instrumentation, 2017, 12, P01021-P01021.	1.2	5
58	New results on solar neutrino fluxes from 192 days of Borexino data. Journal of Physics: Conference Series, 2008, 136, 022001.	0.4	4
59	Solar neutrino with Borexino: Results and perspectives. Physics of Particles and Nuclei, 2015, 46, 166-173.	0.7	4
60	The DarkSide awakens. Journal of Physics: Conference Series, 2016, 718, 042016.	0.4	4
61	Development of the Light Collection Module for the Liquid Argon Time Projection Chamber (LArTPC). Journal of Instrumentation, 2020, 15, C07022-C07022.	1.2	4
62	Performances of the CTF experiment in prospect of Borexino. Nuclear Physics, Section B, Proceedings Supplements, 1999, 70, 377-381.	0.4	3
63	Recent results and future development of Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2013, 235-236, 55-60.	0.4	3
64	Short Distance Neutrino Oscillations with BoreXino: SOX. Physics Procedia, 2015, 61, 511-517.	1.2	3
65	SOX: search for short baseline neutrino oscillations with Borexino. Journal of Physics: Conference Series, 2016, 718, 062066.	0.4	3
66	Geo-neutrino results with Borexino. Journal of Physics: Conference Series, 2016, 675, 012029.	0.4	3
67	Measurement of Solar pp-neutrino flux with Borexino: results and implications. Journal of Physics: Conference Series, 2016, 675, 012027.	0.4	3
68	First observation of a tau neutrino charged current interaction with charm production in the OPERA experiment. European Physical Journal C, 2020, 80, 1.	3.9	3
69	OPERA tau neutrino charged current interactions. Scientific Data, 2021, 8, 218.	5.3	3
70	Scintillator purification, detector performance and first results from Borexino. Journal of Physics: Conference Series, 2008, 120, 052017.	0.4	2
71	Measurement of the solar 8B neutrino flux down to 2.8 MeV with Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2009, 188, 127-129.	0.4	2
72	Solar neutrino results from Borexino and main future perspectives. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 630, 210-213.	1.6	2

#	Article	IF	Citations
73	Borexino: recent results, detector calibration and future perspectives. Nuclear Physics, Section B, Proceedings Supplements, 2011, 217, 101-106.	0.4	2
74	Low-energy (anti)neutrino physics with Borexino: Neutrinos from the primary proton-proton fusion process in the Sun. Nuclear and Particle Physics Proceedings, 2015, 265-266, 87-92.	0.5	2
75	Recent Borexino results and prospects for the near future. EPJ Web of Conferences, 2016, 126, 02008.	0.3	2
76	CNO andpepsolar neutrino measurements and perspectives in Borexino. Journal of Physics: Conference Series, 2016, 675, 012040.	0.4	2
77	The search for sterile neutrinos with SOX-Borexino. Physics of Atomic Nuclei, 2016, 79, 1481-1484.	0.4	2
78	SOX: Short Distance Neutrino Oscillations with Borexino. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1760-1764.	0.5	2
79	The144Ce source for SOX. Journal of Physics: Conference Series, 2016, 675, 012032.	0.4	2
80	JINR stand measurements for improvements in the NOvA detector simulation chain. Journal of Instrumentation, 2020, 15, C06066-C06066.	1.2	2
81	First direct evidence of the CNO fusion cycle in the Sun with Borexino. , 2021, , .		2
82	First evidence ofpepsolar neutrinos by direct detection in Borexino. Journal of Physics: Conference Series, 2012, 375, 042030.	0.4	1
83	Solar neutrino results from Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 104-106.	0.4	1
84	Neutrino measurements from the Sun and Earth: Results from Borexino. AIP Conference Proceedings, 2015, , .	0.4	1
85	Geo-neutrinos from 1353 Days with the Borexino Detector. Physics Procedia, 2015, 61, 340-344.	1.2	1
86	Geo-neutrinos and Borexino. Physics of Particles and Nuclei, 2015, 46, 174-181.	0.7	1
87	Overview and accomplishments of the Borexino experiment. Journal of Physics: Conference Series, 2016, 675, 012036.	0.4	1
88	High significance measurement of the terrestrial neutrino flux with the Borexino detector. Journal of Physics: Conference Series, 2016, 718, 062025.	0.4	1
89	Borexino: Recent results and future plans. Physics of Particles and Nuclei, 2017, 48, 1026-1029.	0.7	1
90	CeSOX: An experimental test of the sterile neutrino hypothesis with Borexino. Journal of Physics: Conference Series, 2017, 934, 012003.	0.4	1

#	Article	IF	Citations
91	Solar neutrino detectors as sterile neutrino hunters. Journal of Physics: Conference Series, 2017, 888, 012018.	0.4	1
92	First results on7Be solar neutrinos from the Borexino real time detector. Journal of Physics: Conference Series, 2008, 120, 052006.	0.4	0
93	200 days of Borexino data. Nuclear Physics, Section B, Proceedings Supplements, 2009, 188, 90-95.	0.4	0
94	Production and suppression of [sup 11]C in the solar neutrino experiment Borexino. , 2011, , .		0
95	Neutrino interactions at few MeV: results from Borexino at Gran Sasso. Nuclear Physics, Section B, Proceedings Supplements, 2011, 212-213, 121-127.	0.4	0
96	High precision 7Be solar neutrinos measurement and day night effect obtained with Borexino. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 692, 258-261.	1.6	0
97	Neutrinos from the sun and from radioactive sources. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 77-81.	0.4	0
98	STUDY OF THE RARE PROCESSES WITH THE BOREXINO DETECTOR. , 2013, , 177-180.		0
99	Low energy neutrinos. International Journal of Modern Physics Conference Series, 2014, 31, 1460285.	0.7	0
100	Recent results from Borexino. Journal of Physics: Conference Series, 2016, 718, 062059.	0.4	0
101	Short distance neutrino oscillations with Borexino. EPJ Web of Conferences, 2016, 121, 01002.	0.3	0
102	The DarkSide Program. EPJ Web of Conferences, 2016, 121, 06010.	0.3	0
103	The DarkSide-50 outer detectors. Journal of Physics: Conference Series, 2016, 718, 042062.	0.4	0
104	A first walk on the DarkSide. Nuclear and Particle Physics Proceedings, 2016, 273-275, 452-458.	0.5	0
105	Test of the electric charge conservation law with Borexino detector. Journal of Physics: Conference Series, 2016, 675, 012025.	0.4	0
106	The high precision measurement of the¹⁴⁴Ce activity in the SOX experiment. Journal of Physics: Conference Series, 2016, 675, 012035.	0.4	0
107	First realâ€“time detection of solar pp neutrinos by Borexino. EPJ Web of Conferences, 2016, 121, 01001.	0.3	0
108	Recent results from Borexino and the first real time measure of solar pp neutrinos. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1753-1759.	0.5	0

#	Article	IF	Citations
109	Understanding the detector behavior through Montecarlo and calibration studies in view of the SOX measurement. Journal of Physics: Conference Series, 2016, 675, 012012.	0.4	0
110	RESULTS FROM BOREXINO AT LNGS. , 2017, , 81-86.		0
111	Recent Results from Borexino. Journal of Physics: Conference Series, 2017, 798, 012114.	0.4	0
112	The Monte Carlo simulation of the Borexino detector. Journal of Physics: Conference Series, 2020, 1342, 012035.	0.4	0
113	THE DARKSIDE-50 EXPERIMENT: A LIQUID ARGON TARGET FOR DARK MATTER PARTICLES. , 2017, , 355-360.		0