Richard Saldanha

List of Publications by Year
in descending order

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96 papers	4,605 citations	147801 31 h-index	95266 68 g-index
97 all docs	97 docs citations	97 times ranked	6426 citing authors

#	Article	IF	Citations
1	nEXO: neutrinoless double beta decay search beyond 10²⁸ year half-life sensitivity. Journal of Physics G: Nuclear and Particle Physics, 2022, 49, 015104.	3.6	51
2	Measurement of the onset of nucleate boiling in liquid xenon. Journal of Instrumentation, 2021, 16, T02004-T02004.	1.2	1
3	Decision trees for optimizing the minimum detectable concentration of radioxenon detectors. Journal of Environmental Radioactivity, 2021, 229-230, 106542.	1.7	0
4	Event reconstruction in a liquid xenon Time Projection Chamber with an optically-open field cage. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1000, 165239.	1.6	2
5	Reflectivity of VUV-sensitive silicon photomultipliers in liquid Xenon. Journal of Instrumentation, 2021, 16, P08002.	1.2	5
6	Kiloton-scale xenon detectors for neutrinoless double beta decay and other new physics searches. Physical Review D, 2021, 104, .	4.7	11
7	Measurements of electron transport in liquid and gas Xenon using a laser-driven photocathode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 972, 163965.	1.6	5
8	Reflectivity and PDE of VUV4 Hamamatsu SiPMs in liquid xenon. Journal of Instrumentation, 2020, 15, P01019-P01019.	1.2	9
9	Ultra-low radioactivity Kapton and copper-Kapton laminates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 959, 163573.	1.6	14
10	Cosmogenic activation of silicon. Physical Review D, 2020, 102, .	4.7	11
11	Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. IEEE Transactions on Nuclear Science, 2020, 67, 2501-2510.	2.0	8
12	Dark matter detection capabilities of a large multipurpose Liquid Argon Time Projection Chamber. Journal of Instrumentation, 2020, 15, P09026-P09026.	1.2	7
13	Cosmogenic production of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ar</mml:mi><mml:mprescripts /><mml:none /><mml:mn>39</mml:mn></mml:mmultiscripts></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ar</mml:mi><mml:mprescripts /><mml:none /><mml:mn>37</mml:mn></mml:mmultiscripts></mml:math> in argon. Physical Review C, 2019, 100.	2.9	21
14	Characterization of the Hamamatsu VUV4 MPPCs for nEXO. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 940, 371-379.	1.6	28
15	Simulation of charge readout with segmented tiles in nEXO. Journal of Instrumentation, 2019, 14, P09020-P09020.	1.2	8
16	Characterization of photomultiplier tubes with a realistic model through GPU-boosted simulation. Journal of Instrumentation, 2018, 13, T02011-T02011.	1.2	5
17	Characterization of an Ionization Readout Tile for nEXO. Journal of Instrumentation, 2018, 13, P01006-P01006.	1.2	14
18	VUV-Sensitive Silicon Photomultipliers for Xenon Scintillation Light Detection in nEXO. IEEE Transactions on Nuclear Science, 2018, 65, 2823-2833.	2.0	29

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19	Study of silicon photomultiplier performance in external electric fields. Journal of Instrumentation, 2018, 13, T09006-T09006.	1.2	5
20	Signal yields of keV electronic recoils and their discrimination from nuclear recoils in liquid xenon. Physical Review D, 2018, 97, .	4.7	29
21	Sensitivity and discovery potential of the proposed nEXO experiment to neutrinoless double-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> decay. Physical Review C, 2018, 97, .	2.9	115
22	Removing krypton from xenon by cryogenic distillation to the ppq level. European Physical Journal C, 2017, 77, 1.	3.9	35
23	The DarkSide Experiment: Present Status and Future. Journal of Physics: Conference Series, 2017, 798, 012109.	0.4	7
24	Model independent approach to the single photoelectron calibration of photomultiplier tubes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 863, 35-46.	1.6	28
25	First Dark Matter Search Results from the XENON1T Experiment. Physical Review Letters, 2017, 119, 181301.	7.8	757
26	Online ^{222} 222 Rn removal by cryogenic distillation in the XENON100 experiment. European Physical Journal C, 2017, 77, 1.	3.9	29
27	The DarkSide direct dark matter search with liquid argon. AIP Conference Proceedings, 2017, , .	0.4	0
28	The XENON1T dark matter experiment. European Physical Journal C, 2017, 77, 1.	3.9	157
29	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
30	CALISâ€"A CALibration Insertion System for the DarkSide-50 dark matter search experiment. Journal of Instrumentation, 2017, 12, T12004-T12004.	1.2	10
31	Material radioassay and selection for the XENON1T dark matter experiment. European Physical Journal C, 2017, 77, 1.	3.9	36
32	Results from a calibration of XENON100 using a source of dissolved radon-220. Physical Review D, 2017, 95, .	4.7	26
33	THE DARKSIDE-50 EXPERIMENT: A LIQUID ARGON TARGET FOR DARK MATTER PARTICLES. , 2017, , 355-360.		0
34	The DarkSide Program. EPJ Web of Conferences, 2016, 121, 06010.	0.3	0
35	The DarkSide-50 outer detectors. Journal of Physics: Conference Series, 2016, 718, 042062.	0.4	0
36	The electronics and data acquisition system for the DarkSide-50 veto detectors. Journal of Instrumentation, 2016, 11, P12007-P12007.	1.2	7

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37	The veto system of the DarkSide-50 experiment. Journal of Instrumentation, 2016, 11, P03016-P03016.	1.2	33
38	A first walk on the DarkSide. Nuclear and Particle Physics Proceedings, 2016, 273-275, 452-458.	0.5	0
39	SOX: Short Distance Neutrino Oscillations with Borexino. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1760-1764.	0.5	2
40	Results from the first use of low radioactivity argon in a dark matter search. Physical Review D, 2016, 93, .	4.7	108
41	First realâ€“time detection of solar pp neutrinos by Borexino. EPJ Web of Conferences, 2016, 121, 01001.	0.3	0
42	The DarkSide awakens. Journal of Physics: Conference Series, 2016, 718, 042016.	0.4	4
43	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
44	Neutrino measurements from the Sun and Earth: Results from Borexino. AIP Conference Proceedings, 2015, , .	0.4	1
45	Geo-neutrinos from 1353 Days with the Borexino Detector. Physics Procedia, 2015, 61, 340-344.	1.2	1
46	The DarkSide Multiton Detector for the Direct Dark Matter Search. Advances in High Energy Physics, 2015, 2015, 1-8.	1.1	21
47	Measurement of scintillation and ionization yield and scintillation pulse shape from nuclear recoils in liquid argon. Physical Review D, 2015, 91, .	4.7	80
48	DarkSide-50: A WIMP Search with a Two-phase Argon TPC. Physics Procedia, 2015, 61, 124-129.	1.2	10
49	Direct Search for Dark Matter with DarkSide. Journal of Physics: Conference Series, 2015, 650, 012006.	0.4	9
50	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
51	Short Distance Neutrino Oscillations with BoreXino: SOX. Physics Procedia, 2015, 61, 511-517.	1.2	3
52	Geo-neutrinos and Borexino. Physics of Particles and Nuclei, 2015, 46, 174-181.	0.7	1
53	Solar neutrino with Borexino: Results and perspectives. Physics of Particles and Nuclei, 2015, 46, 166-173.	0.7	4
54	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

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55	Final results of Borexino Phase-I on low-energy solar neutrino spectroscopy. Physical Review D, 2014, 89, .	4.7	204
56	Lifetimes of 214Po and 212Po measured with Counting Test Facility at Gran Sasso National Laboratory. Journal of Environmental Radioactivity, 2014, 138, 444-446.	1.7	1
57	Low energy neutrinos. International Journal of Modern Physics Conference Series, 2014, 31, 1460285.	0.7	0
58	Lifetime measurements of 214Po and 212Po with the CTF liquid scintillator detector at LNGS. European Physical Journal A, 2013, 49, 1.	2.5	17
59	SOX: Short distance neutrino Oscillations with BoreXino. Journal of High Energy Physics, 2013, 2013, 1.	4.7	98
60	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
61	Neutrinos from the sun and from radioactive sources. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 77-81.	0.4	0
62	Light yield in DarkSide-10: A prototype two-phase argon TPC for dark matter searches. Astroparticle Physics, 2013, 49, 44-51.	4.3	36
63	Solar neutrino results from Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 104-106.	0.4	1
64	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
65	Recent results and future development of Borexino. Nuclear Physics, Section B, Proceedings Supplements, 2013, 235-236, 55-60.	0.4	3
66	Cosmogenic Backgrounds in Borexino at 3800 m water-equivalent depth. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 049-049.	5.4	63
67	DarkSide search for dark matter. Journal of Instrumentation, 2013, 8, C11021-C11021.	1.2	36
68	Observation of the dependence on drift field of scintillation from nuclear recoils in liquid argon. Physical Review D, 2013, 88, .	4.7	30
69	STUDY OF THE RARE PROCESSES WITH THE BOREXINO DETECTOR. , 2013, , 177-180.		0
70	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
71	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
72	First evidence ofpepsolar neutrinos by direct detection in Borexino. Journal of Physics: Conference Series, 2012, 375, 042030.	0.4	1

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73	Borexino calibrations: hardware, methods, and results. Journal of Instrumentation, 2012, 7, P10018-P10018.	1.2	60
74	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
75	Search for [sup 11]C produced in the solar 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:mprescr Borexino detector. Physical Review D, 2012, 85, .	4.7	54
76	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
77	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
78	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
79	The WArP Experiment. Journal of Physics: Conference Series, 2011, 308, 012005.	0.4	9
80	Muon and cosmogenic neutron detection in Borexino. Journal of Instrumentation, 2011, 6, P05005-P05005.	1.2	68
81	Production and suppression of [sup 11]C in the solar neutrino experiment Borexino. , 2011, , .		0
82	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
83	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
84	Borexino: recent results, detector calibration and future perspectives. Nuclear Physics, Section B, Proceedings Supplements, 2011, 217, 101-106.	0.4	2
85	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
86	The WArP experiment. Journal of Physics: Conference Series, 2010, 203, 012006.	0.4	20
87	Observation of geo-neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 687, 299-304.	4.1	187
88	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
89	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
90	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

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91	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
92	200 days of Borexino data. Nuclear Physics, Section B, Proceedings Supplements, 2009, 188, 90-95.	0.4	0
93	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
94	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
95	Discovery of underground argon with a low level of radioactive³⁹Ar and possible applications to WIMP dark matter detectors. Journal of Physics: Conference Series, 2008, 120, 042015.	0.4	9
96	Hard Xâ€Ray Spectral Evolution and Production of Solar Energetic Particle Events during the January 2005 Xâ€Class Flares. Astrophysical Journal, 2008, 673, 1169-1173.	4.5	30