

Kai Zuber

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1767847/publications.pdf>

Version: 2024-02-01

147
papers

6,563
citations

94433

37
h-index

64796

79
g-index

151
all docs

151
docs citations

151
times ranked

4016
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoexcitation of ^{76}Ge . Physical Review C, 2022, 105, .	2.9	2
2	First Directional Measurement of Sub-MeV Solar Neutrinos with Borexino. Physical Review Letters, 2022, 128, 091803.	7.8	17
3	Search for low-energy signals from fast radio bursts with the Borexino detector. European Physical Journal C, 2022, 82, 1.	3.9	0
4	Constraints on partial half-lives of ^{136}Ce and ^{138}Ce double electron captures. Physical Review C, 2022, 105, .	2.9	0
5	Pulse shape analysis in Gerda Phase II. European Physical Journal C, 2022, 82, 284.	3.9	7
6	The first large-scale shell-model calculation of the two-neutrino double beta decay of ^{76}Ge to the excited states in ^{76}Se . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 831, 137170.	4.1	3
7	Estimated solar-neutrino capture rates of ^{131}Xe : implications for multi-tonne Xe-based experiments. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 045102.	3.6	0
8	Measurement of the ^{13}C β -decay. Physical Review C, 2020, 101, 054307.	2.9	0
9	Characterization of inverted coaxial ^{76}Ge detectors in GERDA for future double- β decay experiments. European Physical Journal C, 2021, 81, 505.	3.9	7
10	Constraining the solar neutrino survival probability curve by using ^6Li , ^7Li , ^{12}C , ^{18}O , ^{19}F , and ^{42}Ca nuclear targets. Physical Review D, 2021, 104, .	4.7	4
11	Calibration of the Gerda experiment. European Physical Journal C, 2021, 81, 682.	3.9	9
12	Commissioning of the COBRA extended demonstrator at the LNGS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1010, 165524.	1.6	1
13	The Future of Solar Neutrinos. Annual Review of Nuclear and Particle Science, 2021, 71, 491-528.	10.2	30
14	Mass measurements of ^{99}Tc challenge ab initio nuclear theory of the nuclide ^{100}Sn . Nature Physics, 2021, 17, 1099-1103.	16.7	21
15	NeuLAND: The high-resolution neutron time-of-flight spectrometer for R3B at FAIR. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1014, 165701.	1.6	19
16	Confirmation of gA quenching using the revised spectrum-shape method for the analysis of the ^{113}Cd β^2 -decay as measured with the COBRA demonstrator. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 822, 136652.	4.1	9
17	Identification of the cosmogenic ^{11}C background in large volumes of liquid scintillators with Borexino. European Physical Journal C, 2021, 81, 1.	3.9	6
18	Prediction and detection potential of fusion neutrinos from nearby stars. Astroparticle Physics, 2020, 114, 1-9.	4.3	2

#	ARTICLE	IF	CITATIONS
19	Opportunities for measurements of astrophysical α -capture reaction rates at CRYSRING@ESR. X-Ray Spectrometry, 2020, 49, 129-132.	1.4	2
20	Quenching of gA deduced from the I^2 -spectrum shape of ^{113}Cd measured with the COBRA experiment. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 800, 135092.	4.1	21
21	Theia: an advanced optical neutrino detector. European Physical Journal C, 2020, 80, 1.	3.9	70
22	Examining the N=28 shell closure through high-precision mass measurements of ^{46}Ar . Physical Review C, 2020, 102, .	2.9	12
23	Sensitivity to neutrinos from the solar CNO cycle in Borexino. European Physical Journal C, 2020, 80, 1.	3.9	19
24	Gamow α -Teller strength distributions of ^{116}Sb and ^{122}Sb using the $^{3}\text{He}, t$ charge-exchange reaction. European Physical Journal A, 2020, 56, 1.	2.5	10
25	COMET Phase-I technical design report. Progress of Theoretical and Experimental Physics, 2020, 2020, .	6.6	66
26	Final Results of GERDA on the Search for Neutrinoless Double- β Decay. Physical Review Letters, 2020, 125, 252502.	7.8	208
27	Solar neutrino detection sensitivity in DARWIN via electron scattering. European Physical Journal C, 2020, 80, 1.	3.9	26
28	Search for Dark Matter Induced Deexcitation of ^{180}Tm . Physical Review Letters, 2020, 124, 181802.	7.8	20
29	Calculated solar-neutrino capture rate for a radiochemical $\text{Tl}205$ -based solar-neutrino detector. Physical Review C, 2020, 101, .	2.9	3
30	Spin-dipole nuclear matrix element for the double beta decay of ^{76}Ge by the $^3\text{He}, t$ charge-exchange reaction. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 05LT01.	3.6	7
31	First Search for Bosonic Superweakly Interacting Massive Particles with Masses up to 8 MeV with GERDA. Physical Review Letters, 2020, 125, 011801.	4.7	24
32	Comprehensive geoneutrino analysis with Borexino. Physical Review D, 2020, 101, .	7.8	20
33	Constraints on flavor-diagonal non-standard neutrino interactions from Borexino Phase-II. Journal of High Energy Physics, 2020, 2020, 1.	4.7	13
34	Sensitivity of the DARWIN observatory to the neutrinoless double beta decay of ^{136}Xe . European Physical Journal C, 2020, 80, 1.	3.9	38
35	Presupernova Neutrinos: Directional Sensitivity and Prospects for Progenitor Identification. Astrophysical Journal, 2020, 899, 153.	4.5	26

#	ARTICLE	IF	CITATIONS
55	Spectral shapes of forbidden argon \hat{I}^2 decays as background component for rare-event searches. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 025202.	3.6	3
56	Upgrade for Phase II of the Gerda experiment. European Physical Journal C, 2018, 78, 1.	3.9	46
57	An improved half-life limit of the double beta decay of ^{94}Zr into the excited state of ^{94}Mo . Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 075104.	3.6	4
58	Precision Mass Measurements of ^{58}Cr . Nuclear Collectivity Towards the ^{63}Cr . EPJ Web of Conferences, 2018, 182, 02099.	7.8	40
59	Recent Borexino results and perspectives of the SOX measurement. EPJ Web of Conferences, 2018, 182, 02099.	0.3	0
60	\hat{I}^4 \hat{a}^e e + conversion in upcoming LFV experiments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 764, 157-162.	4.1	21
61	A White Paper on keV sterile neutrino Dark Matter. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 025-025.	5.4	256
62	Physics prospects of the Jinping neutrino experiment. Chinese Physics C, 2017, 41, 023002.	3.7	74
63	High precision half-life measurement of ^{147}Sm decay from thin-film sources. Physical Review C, 2017, 95, .	2.9	13
64	A new precision measurement of the \hat{I}^{\pm} -decay half-life of ^{190}Pt . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 768, 317-320.	4.1	12
65	Half-life expectations for neutrinoless double beta decay in standard and nonstandard scenarios. Physical Review D, 2017, 96, .	4.7	10
66	Limiting neutrino magnetic moments with Borexino Phase-II solar neutrino data. Physical Review D, 2017, 96, .	4.7	94
67	Borexino: Recent results and future plans. Physics of Particles and Nuclei, 2017, 48, 1026-1029.	0.7	1
68	Search for the decay of nature's rarest isotope ^{180}Ta . Physical Review C, 2017, 95, .	2.9	26
69	The electron capture in ^{163}Ho experiment \hat{a}^e ECHO. European Physical Journal: Special Topics, 2017, 226, 1623-1694.	2.6	97
70	Future experimental improvement for the search of lepton-number-violating processes in the $e\hat{I}^4$ sector. Physical Review D, 2017, 96, .	4.7	8
71	The large enriched germanium experiment for neutrinoless double beta decay (LEGEND). AIP Conference Proceedings, 2017, .	0.4	126
72	Current Status and Future Prospects of the SNO+ Experiment. Advances in High Energy Physics, 2016, 2016, 1-21.	1.1	185

#	ARTICLE	IF	CITATIONS
73	Solar neutrino interactions with liquid scintillators used for double beta-decay experiments. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 045201.	3.6	12
74	The discovery of neutrino oscillations. Annalen Der Physik, 2016, 528, 452-457.	2.4	0
75	Measurement of neutrino flux from the primary proton-proton fusion process in the Sun with Borexino detector. Physics of Particles and Nuclei, 2016, 47, 995-1002.	0.7	7
76	The search for sterile neutrinos with SOX-Borexino. Physics of Atomic Nuclei, 2016, 79, 1481-1484.	0.4	2
77	A search for the radiative neutrinoless double-electron capture of ^{58}Ni . Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 065201.	3.6	8
78	Long-term stability of underground operated CZT detectors based on the analysis of intrinsic ^{113}Cd $\beta\beta$ -decay. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 821, 109-115.	1.6	10
79	Probing flavor models with ^{76}Ge -based experiments on neutrinoless double- β decay. European Physical Journal C, 2016, 76, 1.	3.9	17
80	Combining data from high-energy pp-reactions and neutrinoless double-beta decay: Limits on the mass of the right-handed boson. International Journal of Modern Physics E, 2016, 25, 1650081.	1.0	1
81	Results of a search for neutrinoless double- β decay using the COBRA demonstrator. Physical Review C, 2016, 94, .	2.9	26
82	Search of Neutrinoless Double Beta Decay with the GERDA Experiment. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1876-1882.	0.5	23
83	DARWIN: towards the ultimate dark matter detector. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 017-017.	5.4	288
84	Limit on the radiative neutrinoless double electron capture of ^{36}Ar from GERDA Phase I. European Physical Journal C, 2016, 76, 1.	3.9	15
85	Recent Results for the ECHo Experiment. Journal of Low Temperature Physics, 2016, 184, 910-921.	1.4	17
86	Design and performance of an ionisation chamber for the measurement of low alpha-activities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 814, 12-18.	1.6	17
87	Characterization of a large CdZnTe coplanar quad-grid semiconductor detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 806, 159-168.	1.6	8
88	The COBRA demonstrator at the LNGS underground laboratory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 807, 114-120.	1.6	22
89	Test of Electric Charge Conservation with Borexino. Physical Review Letters, 2015, 115, 231802.	7.8	42
90	Neutrino measurements from the Sun and Earth: Results from Borexino. AIP Conference Proceedings, 2015, . . .	0.4	1

#	ARTICLE	IF	CITATIONS
91	Results on $\beta\beta$ \hat{I}^2 \hat{I}^2 decay with emission of two neutrinos or Majorons in ^{76}Ge from GERDA Phase I. European Physical Journal C, 2015, 75, 1.	3.9	62
92	Status and perspectives of double beta decay searches. Journal of Physics: Conference Series, 2015, 578, 012007.	0.4	0
93	Neutrinos – die Akte X der Teilchenphysik. Physik in Unserer Zeit, 2015, 46, 18-26.	0.0	1
94	Improvement of the energy resolution via an optimized digital signal processing in GERDA Phase I. European Physical Journal C, 2015, 75, 1.	3.9	30
95	Neutrinos sind gewichtig. Physik in Unserer Zeit, 2015, 46, 272-273.	0.0	0
96	HALO, a supernova neutrino observatory. Nuclear and Particle Physics Proceedings, 2015, 265-266, 233-235.	0.5	13
97	Probing the $N=32$ Shell Closure below the Magic Proton Number $Z=20$: Mass Measurements of the Exotic Isotopes $^{52,53}\text{K}$. Physical Review Letters, 2015, 114, 202501.	7.8	92
98	Constraint on the magnetic dipole moment of neutrinos by the tip-RGB luminosity in α -Centauri. Astroparticle Physics, 2015, 70, 1-11.	4.3	54
99	Cosmic-ray-induced background intercomparison with actively shielded HPGe detectors at underground locations. European Physical Journal A, 2015, 51, 1.	2.5	4
100	Production, characterization and operation of ^{76}Ge enriched BEGe detectors in GERDA. European Physical Journal C, 2015, 75, 1.	3.9	55
101	First search for the \hat{I}^{\pm} -decay of ^{146}Nd into the first excited state of ^{142}Ce . International Journal of Modern Physics E, 2015, 24, 1550043.	1.0	3
102	Status and Perspectives of Double Beta Decay Searches. , 2015, , . New determination of double- β -decay properties		0
103	Strength of the \hat{I}^{\pm} -decay properties in ^{48}Ca : High-precision $Q_{\beta\beta}$ measurement and \hat{I}^{\pm} -decay properties in ^{48}Ca . Physical Review C, 2014, 89, 014307.	2.9	40
104	resonance in the \hat{I}^{\pm} -decay of ^{146}Nd . Physical Review C, 2014, 89, 014307.		

#	ARTICLE	IF	CITATIONS
109	Pulse-shape discrimination of surface events in CdZnTe detectors for the COBRA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 749, 27-34.	1.6	12
110	ISOLTRAP's multi-reflection time-of-flight mass separator/spectrometer. International Journal of Mass Spectrometry, 2013, 349-350, 123-133.	1.5	140
111	Recent exploits of the ISOLTRAP mass spectrometer. Nuclear Instruments & Methods in Physics Research B, 2013, 317, 492-500.	1.4	41
112	Status and perspectives of COBRA. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 37-39.	0.4	1
113	Pulse shape discrimination for Gerda Phase I data. European Physical Journal C, 2013, 73, 1.	3.9	73
114	Resonance triplet at $E_{\pm}=4.5\text{ÅMeV}$ in the $^{40}\text{Ca}(\hat{1}\pm, \hat{1}^3)44\text{Ti}$ reaction. Physical Review C, 2013, 88, .	2.9	16
115	Measurement of the half-life of the two-neutrino double beta decay of ^{76}Ge with the GERDA experiment. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 035110.	3.6	49
116	Combined analysis of all three phases of solar neutrino data from the Sudbury Neutrino Observatory. Physical Review C, 2013, 88, .	2.9	267
117	Analytical model for event reconstruction in coplanar grid CdZnTe detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 708, 1-6.	1.6	16
118	Masses of exotic calcium isotopes pin down nuclear forces. Nature, 2013, 498, 346-349.	27.8	375
119	The Gerda experiment for the search of $0\nu\hat{1}/2\hat{1}^2$ decay in ^{76}Ge . European Physical Journal C, 2013, 73, 1.	3.9	181
120	Results on Neutrinoless Double- $\hat{1}^2$ Decay of ^{76}Ge from Phase I of the GERDA Experiment. Physical Review Letters, 2013, 111, 122503.	7.8	470
121	Current Status and Future Perspectives of the COBRA Experiment. Advances in High Energy Physics, 2013, 2013, 1-6.	1.1	16
122	Neutrino masses. Annalen Der Physik, 2013, 525, 565-575.	2.4	14
123	$\hat{1}^3$ production and neutron inelastic scattering cross sections for ^{76}Ge . Physical Review C, 2013, 88, .	2.9	11
124	Excitation functions of proton-induced reactions on natural Nd in the $10\hat{e}30$ MeV energy range, and production of radionuclides relevant for double- $\hat{1}^2$ decay. Physical Review C, 2012, 85, .	2.9	21
125	QValue and Half-Lives for the Double- $\hat{1}^2$ -Decay Nuclide $\text{Pd}110$. Physical Review Letters, 2012, 108, 062502.	7.8	31
126	Double beta decay experiments. Journal of Physics G: Nuclear and Particle Physics, 2012, 39, 124009.	3.6	11

#	ARTICLE	IF	CITATIONS
127	Double- β transformations in isobaric triplets with mass numbers A . <i>Physical Review C</i> , 2012, 86, .	2.9	33
128	On-line separation of short-lived nuclei by a multi-reflection time-of-flight device. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 686, 82-90.	1.6	114
129	Neutrinoless double beta decay. <i>Pramana - Journal of Physics</i> , 2012, 79, 781-791.	1.8	7
130	Real-time spectroscopy of solar pp-neutrinos using ^{150}Nd . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2012, 709, 6-8.	4.1	8
131	Neutrinoless double beta decay, the inverted hierarchy, and precision determination of $\langle m_{\nu}^2 \rangle$. <i>Physical Review D</i> , 2011, 83, .	4.7	30
132	Resonant Enhancement of Neutrinoless Double-Electron Capture in ^{152}Gd . <i>Physical Review Letters</i> , 2011, 106, 052504.	7.8	85
133	Consistency test of neutrinoless double beta decay with one isotope. <i>Physical Review D</i> , 2011, 84, .	4.7	13
134	Precision half-life measurement of the 4-fold forbidden β decay of ^{150}Nd . <i>Physical Review</i>	2.9	16
135	A prototype Compton camera for in-vivo dosimetry of ion beam cancer irradiation. , 2011, , .		4
136	Solar neutrino "electron scattering as background limitation for double-beta decay. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2011, 38, 105201.	3.6	16
137	A prototype compton camera for in-vivo dosimetry of ion beam cancer irradiation. , 2011, , .		1
138	The status of the COBRA double-beta-decay experiment. <i>Progress in Particle and Nuclear Physics</i> , 2010, 64, 267-269.	14.4	10
139	Status of the SNO+ experiment. , 2009, , .		0
140	Status of the COBRA experiment. , 2009, , .		1
141	An investigation into the ^{113}Cd beta decay spectrum using a CdZnTe array. <i>Nuclear Physics A</i> , 2009, 818, 264-278.	1.5	17
142	Measurement of the Total Active ^{8}B Solar Neutrino Flux at the Sudbury Neutrino Observatory with Enhanced Neutral Current Sensitivity. <i>Physical Review Letters</i> , 2004, 92, 181301.	7.8	654
143	Spectroscopy of low energy solar neutrinos using CdTe detectors. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2003, 571, 148-154.	4.1	29
144	Effective Majorana neutrino masses and $\bar{\nu}\nu$ $L = 2$ processes. <i>Progress in Particle and Nuclear Physics</i> , 2002, 48, 223-229.	14.4	4

#	ARTICLE	IF	CITATIONS
145	COBRA's double beta decay searches using CdTe detectors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 519, 1-7.	4.1	146
146	New limits on effective Majorana neutrino masses from rare kaon decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 479, 33-36.	4.1	33
147	On the physics of massive neutrinos. Physics Reports, 1998, 305, 295-364.	25.6	101