

Giovanni Fiorentini

List of Publications by Year in descending order

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144
papers

6,231
citations

87888

38
h-index

69250

77
g-index

145
all docs

145
docs citations

145
times ranked

3350
citing authors

#	ARTICLE	IF	CITATIONS
1	A compilation of charged-particle induced thermonuclear reaction rates. Nuclear Physics A, 1999, 656, 3-183.	1.5	1,887
2	Glueball masses and string tension in lattice QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 192, 163-169.	4.1	618
3	Observation of geo-neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 687, 299-304.	4.1	187
4	Mesic molecules and muon catalysed fusion. Physics Reports, 1982, 86, 169-216.	25.6	122
5	Order of the Deconfining Phase Transition in Pure-Gauge QCD. Physical Review Letters, 1988, 61, 1545-1548.	7.8	111
6	Cross section of ${}^3\text{He}({}^3\text{He}, 2p){}^4\text{He}$ measured at solar energies. Physical Review C, 1998, 57, 2700-2710.	2.9	104
7	Enhanced electron screening in $d(d,p)t$ for deuterated metals. European Physical Journal A, 2004, 19, 283-287.	2.5	97
8	Solar neutrinos: beyond standard solar models. Physics Reports, 1997, 281, 309-398.	25.6	96
9	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
10	Laboratory for Underground Nuclear Astrophysics (LUNA). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 350, 327-337.	1.6	89
11	Coulomb de-excitation of mesic hydrogen. Il Nuovo Cimento A, 1978, 43, 9-30.	0.2	85
12	Geo-neutrinos and earth's interior. Physics Reports, 2007, 453, 117-172.	25.6	85
13	Spectroscopy of geoneutrinos from 2056 days of Borexino data. Physical Review D, 2015, 92, .	4.7	77
14	Atomic effects in the determination of nuclear cross sections of astrophysical interest. Nuclear Physics A, 1990, 513, 316-343.	1.5	73
15	Quantifying uncertainties in primordial nucleosynthesis without Monte Carlo simulations. Physical Review D, 1998, 58, .	4.7	73
16	Helioseismology and standard solar models. Astroparticle Physics, 1997, 7, 77-95.	4.3	69
17	The solar neutrino puzzle and the $\nu_L \hat{\rightarrow} \nu_R$ conversion hypothesis. Nuclear Physics B, 1988, 304, 909-920.	2.5	66
18	Stripping of $\text{H}\bar{\alpha}$ in low-energy collisions with antiprotons: Classical-trajectory Monte Carlo calculation. Physical Review A, 1986, 33, 1590-1594.	2.5	62

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19	The worldwide NORM production and a fully automated gamma-ray spectrometer for their characterization. Journal of Radioanalytical and Nuclear Chemistry, 2013, 295, 445-457.	1.5	62
20	Some aspects of the muon catalysis of d-t fusion. Nuclear Physics A, 1981, 364, 383-407.	1.5	61
21	The cosmological ${}^7\text{Li}$ problem from a nuclear physics perspective. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 030-030.	5.4	60
22	Axion to magnon conversion. A scheme for the detection of galactic axions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 226, 357-360.	4.1	58
23	The hadronic mass spectrum in quenched lattice QCD: Results at $\hat{\tau}^2 = 5.7$ and $\hat{\tau}^2 = 6.0$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 214, 115-119.	4.1	57
24	Atmospheric neutrino flux supported by recent muon experiments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 510, 173-188.	4.1	57
25	The hadronic mass spectrum in quenched lattice QCD: $\hat{\tau}^2=5.7$. Nuclear Physics B, 1989, 317, 509-525.	2.5	55
26	The probability of muon sticking to helium in the muon-catalyzed fusion $d\bar{t}^{1/4} \hat{a}t^{1/4} \text{-} 4\text{He} + n$. Nuclear Physics A, 1986, 454, 653-668.	1.5	48
27	Glueball masses and the loop-loop correlation functions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 197, 400-402.	4.1	48
28	Prospects for underground accelerator research. Zeitschrift für Physik A, 1995, 350, 289-301.	0.9	47
29	A new FSA approach for in situ $\hat{\tau}^3$ ray spectroscopy. Science of the Total Environment, 2012, 414, 639-645.	8.0	47
30	The APE computer: An array processor optimized for lattice gauge theory simulations. Computer Physics Communications, 1987, 45, 345-353.	7.5	43
31	Neutrinos from the Sun: Experimental results confronted with solar models. Physical Review D, 1994, 50, 4749-4761.	4.7	42
32	Future solar neutrino spectroscopy and neutrino properties. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 324, 425-432.	4.1	42
33	Comprehensive geoneutrino analysis with Borexino. Physical Review D, 2020, 101, .	4.7	42
34	Fast neutrino decay and solar neutrino detectors. Zeitschrift für Physik C-Particles and Fields, 1992, 54, 581-586.	1.5	41
35	Solar neutrino interactions: Using charged currents at SNO to tell neutral currents at Super-Kamiokande. Physical Review D, 1998, 59, .	4.7	41
36	Does solar physics provide constraints to weakly interacting massive particles?. Physical Review D, 2002, 66, .	4.7	41

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37	Electron screening in the $d+3\text{He}$ fusion reaction. <i>Zeitschrift für Physik A</i> , 1994, 350, 171-176.	0.9	39
38	U and Th content in the Central Apennines continental crust: A contribution to the determination of the geo-neutrinos flux at LNGS. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 2271-2294.	3.9	39
39	Measurements on radioactivity of ancient roman lead to be used as shield in searches for rare events. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1991, 61, 106-117.	1.4	38
40	Measurement of the $3\text{He}(3\text{He},2p)4\text{He}$ cross section within the solar Gamow peak. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 389, 452-456.	4.1	38
41	Enhanced electron screening in $d(d, p)t$ for deuterated metals: a possible classical explanation. <i>Nuclear Physics A</i> , 2003, 719, C37-C42.	1.5	36
42	Protonium formation in flight. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1979, 85, 280-284.	4.1	35
43	LAST HOPE for an astrophysical solution to the solar neutrino problem. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 365, 185-192.	4.1	35
44	Collision-induced spin flip in isotopes of muonic hydrogen. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 134, 435-439.	2.1	34
45	Do e come out from the sun?. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 259, 119-124.	4.1	33
46	Accuracy of Flight Altitude Measured with Low-Cost GNSS, Radar and Barometer Sensors: Implications for Airborne Radiometric Surveys. <i>Sensors</i> , 2017, 17, 1889.	3.8	33
47	Geo-neutrinos: A new probe of Earth's interior. <i>Earth and Planetary Science Letters</i> , 2005, 238, 235-247.	4.4	32
48	Reference worldwide model for antineutrinos from reactors. <i>Physical Review D</i> , 2015, 91, .	4.7	32
49	LARAMED: A Laboratory for Radioisotopes of Medical Interest. <i>Molecules</i> , 2019, 24, 20.	3.8	32
50	Mantle geoneutrinos in KamLAND and Borexino. <i>Physical Review D</i> , 2012, 86, .	4.7	31
51	Binding of magnetic monopoles and atomic nuclei. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1983, 124, 493-496.	4.1	30
52	Muon transfer to heavy atoms: A probe for the study of the $(\hat{1}/4p)2S$ system. <i>Il Nuovo Cimento A</i> , 1976, 36, 317-330.	0.2	29
53	Just so? Vacuum oscillations and MSW: an update. <i>Astroparticle Physics</i> , 1995, 4, 159-175.	4.3	29
54	The $^{14}\text{N}(p, \hat{1}^3)^{15}\text{O}$ reaction, solar neutrinos and the age of the globular clusters. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 590, 13-20.	4.1	28

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55	Neutrinos and energetics of the Earth. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 557, 139-146.	4.1	27
56	On the collision quenching of the 2S-state of muonic hydrogen. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1977, 39, 281-291.	0.2	25
57	Scaling in lattice QCD: Glueball masses and string tension. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 205, 535-539.	4.1	25
58	The MSW solution to the solar neutrino problem for non-standard solar models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 341, 38-45.	4.1	25
59	KamLAND, terrestrial heat sources and neutrino oscillations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 558, 15-21.	4.1	24
60	The pp reaction in the sun and solar neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 303, 68-74.	4.1	23
61	Fusion rate enhancement due to energy spread of colliding nuclei. Physical Review C, 2003, 67, .	2.9	23
62	A multivariate spatial interpolation of airborne $\hat{1}^3$ -ray data using the geological constraints. Remote Sensing of Environment, 2013, 137, 1-11.	11.0	23
63	Interactions of magnetic monopoles with nuclei and atoms: Formation of bound states and phenomenological consequences. Nuclear Physics B, 1984, 232, 236-262.	2.5	21
64	Stellar evolution and large extra dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 481, 323-332.	4.1	19
65	First characterisation of natural radioactivity in building materials manufactured in Albania. Radiation Protection Dosimetry, 2013, 155, 217-223.	0.8	19
66	Meson transfer to atoms and molecules. Il Nuovo Cimento A, 1979, 50, 373-392.	0.2	17
67	Enhancement of the number of muon catalysed fusions. Nature, 1982, 297, 134-136.	27.8	17
68	Corrections to the $g - 2$ Frequency in weak focusing storage devices due to betatron oscillations. Il Nuovo Cimento A, 1974, 21, 297-328.	0.2	16
69	Screening of nuclear reactions in the Sun and solar neutrinos. Physical Review C, 1995, 52, 1095-1101.	2.9	16
70	The ^{51}Cr neutrino source and Borexino: a desirable marriage. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 387, 427-431.	4.1	16
71	Helioseismic constraints to the central solar temperature and neutrino fluxes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 407, 155-160.	4.1	16
72	Helioseismology and $p+p \rightarrow d + e^+ + \hat{1}/2e$ in the sun. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 416, 365-368.	4.1	16

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73	Total natural radioactivity, Veneto (Italy). Journal of Maps, 2015, 11, 545-551.	2.0	16
74	Uranium distribution in the Variscan Basement of Northeastern Sardinia. Journal of Maps, 2016, 12, 1029-1036.	2.0	16
75	GIGJ: A Crustal Gravity Model of the Guangdong Province for Predicting the Geoneutrino Signal at the JUNO Experiment. Journal of Geophysical Research: Solid Earth, 2019, 124, 4231-4249.	3.4	16
76	The deconfining phase transition and the glueball channels in pure gauge QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 220, 607-610.	4.1	14
77	A new computation of the correlation length near the deconfining transition in SU(3). Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 224, 333-338.	4.1	14
78	Formation of monopole-proton bound states in the hot universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 143, 357-362.	4.1	13
79	Superkamiokande and solar antineutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 413, 378-381.	4.1	13
80	What have we learnt about the Sun from the measurement of the 8B neutrino flux?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 526, 186-190.	4.1	13
81	Bounds on a hypothetical fundamental length. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 133, 231-233.	4.1	12
82	From APE to APE-100: From 1 to 100 gflops in lattice gauge theory simulations. Computer Physics Communications, 1989, 57, 285-289.	7.5	12
83	A dynamical calculation of the electron shielding for d-d fusion. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 146, 128-133.	2.1	12
84	Helioseismology, solar models and neutrino fluxes. Nuclear Physics, Section B, Proceedings Supplements, 1999, 70, 301-314.	0.4	11
85	Total natural radioactivity, Tuscany, Italy. Journal of Maps, 2013, 9, 438-443.	2.0	11
86	$H\bar{a}$ -stripping in collisions with low-energy $p\bar{A}$ and $H\bar{a}$. Physical Review A, 1983, 27, 737-739.	2.5	10
87	About the boundary conditions for the three-body scattering problem in the adiabatic representation. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1990, 105, 459-468.	0.2	10
88	Bounds on long-range hadronic interactions. Nuclear Physics B, 1983, 217, 215-247.	2.5	9
89	Quantum mechanical calculation of the electron screening in d-D fusion. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 153, 456-460.	2.1	9
90	Solar neutrinos, sunspot number and the magnetic field in the convective zone. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 253, 181-184.	4.1	9

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91	The muon attachment probability after prompt fission. Nuclear Physics A, 1984, 423, 429-444.	1.5	8
92	Where are the beryllium neutrinos?. Nuclear Physics, Section B, Proceedings Supplements, 1995, 43, 66-70.	0.4	8
93	Helioseismology and screening of nuclear reactions in the Sun. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 503, 121-125.	4.1	8
94	Cosmic and Galactic neutrino backgrounds from thermonuclear sources. Astroparticle Physics, 2004, 20, 683-701.	4.3	8
95	Monopole atoms and monopole catalysis of proton decay. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 124, 29-33.	4.1	7
96	Neutrinos from SN1987A and long-range forces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 221, 353-356.	4.1	7
97	On the energy loss of very-slowly-moving magnetic monopoles. Nuclear Physics B, 1984, 238, 167-180.	2.5	6
98	On the capture of protons by magnetic monopoles. Nuclear Physics B, 1985, 249, 519-532.	2.5	6
99	Calculation of the elastic scattering cross sections for $p^{1/4}+p$ and $t^{1/4}+t$ collisions in adiabatic representation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 149, 463-468.	2.1	6
100	Physics potentials of pp and pep solar neutrino fluxes. Astroparticle Physics, 1996, 5, 205-214.	4.3	6
101	Helioseismology and solar neutrinos: an update. Nuclear Physics, Section B, Proceedings Supplements, 2001, 95, 116-122.	0.4	6
102	Geoneutrinos and reactor antineutrinos at SNO+. Journal of Physics: Conference Series, 2016, 718, 062003.	0.4	6
103	On the formation of muonic hydrogen at low pressure. Il Nuovo Cimento A, 1978, 43, 396-412.	0.2	5
104	Monopole trapping inside stars and phenomenological consequences. Nuclear Physics B, 1985, 258, 726-746.	2.5	5
105	Helioseismology, solar models and solar neutrinos. Nuclear Physics, Section B, Proceedings Supplements, 2000, 81, 95-101.	0.4	5
106	Negative muons in matter: Atomic and molecular aspects. Nuclear Physics A, 1982, 374, 607-617.	1.5	4
107	On the significance of muon distribution between the fission fragments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 132, 39-43.	4.1	4
108	Nuclear effects on proton decay. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 167, 356-359.	4.1	4

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109	Solar neutrino fluxes with arbitrary ^3He mixing. <i>Physical Review D</i> , 1999, 60, .	4.7	4
110	The cross section of $^3\text{He}(^3\text{He},2p)^4\text{He}$ measured at solar energies. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1999, 70, 382-385.	0.4	4
111	Solar neutrino with Borexino: Results and perspectives. <i>Physics of Particles and Nuclei</i> , 2015, 46, 166-173.	0.7	4
112	Effects of surface structure in meson transfer reactions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1980, 78, 437-442.	2.1	3
113	Research on Muon Catalyzed Fusion in the USSR. <i>Fusion Science and Technology</i> , 1985, 8, 2646-2654.	0.6	3
114	Nuclear fusion in molecular systems. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 1990, 16, 83-98.	3.6	3
115	Neutrino oscillations and magnetic moment transitions in a model with a conserved lepton number. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 264, 381-388.	4.1	3
116	Is G a conversion factor or a fundamental unit?. <i>JETP Letters</i> , 2002, 76, 485-485.	1.4	3
117	Magnetic monopoles in stellar interiors. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica</i> , 1985, 42, 123-128.	0.4	2
118	The missing-mass problem and the precession of perihelia. <i>Il Nuovo Cimento Della Società Italiana Di Fisica C</i> , 1989, 12, 121-127.	0.2	2
119	Status of the LUNA experiment. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1996, 48, 375-377.	0.4	2
120	Geo-Neutrinos: from Theory to the KamLAND Results. <i>Earth, Moon and Planets</i> , 2007, 99, 91-110.	0.6	2
121	Geo-Neutrinos And Radiogenic Contribution To Earth's Heat Flow. , 2010, , .		2
122	Molecular systems with muons or monopoles. <i>Nuclear Physics A</i> , 1984, 416, 519-533.	1.5	1
123	A fast mechanism for the acceleration of solar cosmic rays and solar energetic particles in solar flares. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1993, 307, 128-131.	4.1	1
124	Intermediate energy solar neutrinos. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1996, 48, 343-349.	0.4	1
125	The fate of Li and Be in stars and in the laboratory. <i>Zeitschrift Für Physik A</i> , 1996, 354, 237-248.	0.9	1
126	A signature of solar antineutrinos in Superkamiokande. <i>Progress in Particle and Nuclear Physics</i> , 1998, 40, 149-150.	14.4	1

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127	Geo-neutrinos from 1353 Days with the Borexino Detector. <i>Physics Procedia</i> , 2015, 61, 340-344.	1.2	1
128	Geo-neutrinos and Borexino. <i>Physics of Particles and Nuclei</i> , 2015, 46, 174-181.	0.7	1
129	Nuclear Reactions in the Sun after SNO and KamLAND. <i>Springer Proceedings in Physics</i> , 2004, , 739-752.	0.2	1
130	Muon-Catalyzed Fusion: A Short Introduction and a Few Comments. , 1987, , 9-17.		1
131	K-leptonic decays and spontaneous breakdown of chiral symmetry. <i>Il Nuovo Cimento A</i> , 1972, 7, 397-406.	0.2	0
132	Oscillations of the e.m. form factor and p-p elastic cross-section. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1973, 8, 675-680.	0.4	0
133	Analyticity in a symmetry-breaking parameter. <i>Il Nuovo Cimento A</i> , 1974, 24, 241-248.	0.2	0
134	Auger-like formation of monopolium. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1985, 165, 425-428.	4.1	0
135	Magnetic monopoles in ferromagnetic materials. <i>Nuclear Physics B</i> , 1985, 262, 49-66.	2.5	0
136	Phenomenology of strange quark matter. <i>Progress in Particle and Nuclear Physics</i> , 1988, 20, 343-351.	14.4	0
137	On the order of the deconfining phase transition in SU(3) LGT. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1989, 9, 315-319.	0.4	0
138	Molecular trapping of nuclei produced in neutrino capture reactions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1992, 297, 197-200.	4.1	0
139	Further direct approaches to the nuclear reactions in the Sun. <i>Nuclear Physics A</i> , 1997, 621, 603-606.	1.5	0
140	Perspectives for geo-neutrinos after KamLAND1. <i>Journal of Physics: Conference Series</i> , 2006, 39, 257-262.	0.4	0
141	Nuclear physics inputs needed for geo-neutrino studies. <i>Journal of Physics: Conference Series</i> , 2008, 120, 052007.	0.4	0
142	Neutrino interactions at few MeV: results from Borexino at Gran Sasso. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2011, 212-213, 121-127.	0.4	0
143	The Earth's mantle and geoneutrinos. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2013, 237-238, 82-84.	0.4	0
144	Geo-Neutrinos: from Theory to the KamLAND Results. , 2006, , 91-110.		0