

Francisco Alvarez-Velarde

List of Publications by Year in descending order

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84
papers

1,745
citations

236925
25
h-index

289244
40
g-index

86
all docs

86
docs citations

86
times ranked

984
citing authors

#	ARTICLE	IF	CITATIONS
1	The joint evaluated fission and fusion nuclear data library, JEFF-3.3. European Physical Journal A, 2020, 56, 1.	2.5	318
2	The n_TOF Total Absorption Calorimeter for neutron capture measurements at CERN. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 424-433.	1.6	80
3	$\text{U}_{\text{234}} \rightarrow \text{U}_{\text{234}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	2.9	72
4	$\text{U}_{\text{197}} \rightarrow \text{U}_{\text{197}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	3.8	68
5	Neutron Capture Cross Section Measurement of Sm151 at the CERN Neutron Time of Flight Facility (n_TOF). Physical Review Letters, 2004, 93, 161103.	7.8	65
6	$\text{Sm}_{\text{197}} \rightarrow \text{Sm}_{\text{197}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	3.8	55
7	Resonance neutron-capture cross sections of stable magnesium isotopes and their astrophysical implications. Physical Review C, 2012, 85, .	2.9	55
8	New measurement of neutron capture resonances in Bi209. Physical Review C, 2006, 74, .	2.9	46
9	$\text{Bi}_{\text{209}} \rightarrow \text{Bi}_{\text{209}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	2.9	44
10	Neutron capture cross section of Th232 measured at the n_TOF facility at CERN in the unresolved resonance region up to 1 MeV. Physical Review C, 2006, 73, .	2.9	41
11	$\text{Th}_{\text{232}} \rightarrow \text{Th}_{\text{232}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	2.9	342
12	Measurement of the Sm151(n,β^+) cross section from 0.6 eV to 1 MeV via the neutron time-of-flight technique at the CERN n_TOF facility. Physical Review C, 2006, 73, .	2.9	36
13	cross sections of Os_{186} and Os_{187} . Nuclear Instruments & Methods in Physics Research B, 2007, 261, 925-929.	2.9	36
14	Status and outlook of the neutron time-of-flight facility n_TOF at CERN. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 925-929.	1.4	35
15	Time-energy relation of the n_TOF neutron beam: energy standards revisited. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 532, 622-630.	1.6	34
16	$\text{Zr}_{\text{91}} \rightarrow \text{Zr}_{\text{91}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	0.9	34
17	$\text{Zr}_{\text{92}} \rightarrow \text{Zr}_{\text{92}} + \text{m} \text{e}^- + \bar{\nu}_\text{e}$	0.9	33
18	Resonance capture cross section of Pb207. Physical Review C, 2006, 74, .	2.9	32

#	ARTICLE	IF	CITATIONS
19	Measurement of the neutron capture cross section of the only isotope Pb204 from 1 eV to 440 keV. Physical Review C, 2007, 75, .	2.9	32
20	Benchmarking and validation activities within JEFF project. EPJ Web of Conferences, 2017, 146, 06004.	0.3	31
21	Measurement of the radiative neutron capture cross section of Pb and its astrophysical implications. Physical Review C, 2007, 75,	2.9	30
22	High-accuracy $\text{U}^{233}(\text{n},\text{f})$ cross-section measurement at the white-neutron source n_TOF from near-thermal to 1 MeV neutron energy. Physical Review C, 2009, 80, .	2.9	30
23	cross sections of Os	2.9	28
24	Measurement and resonance analysis of the Np^{237} neutron capture cross section. Physical Review C, 2012, 85, .	2.9	26
25	Measurement and analysis of the Am^{243} neutron capture cross section at the n_TOF facility at CERN. Physical Review C, 2014, 90, .	2.9	26
26	The $\text{La}^{139}(\text{n},\beta)$ cross section: Key for the onset of the process. Physical Review C, 2007, 75, .	2.9	24
27	Neutron capture on Zr . High-accuracy determination of the Zr cross sections. Physical Review C, 2011, 84, .	2.9	24
28	U^{238} fission cross sections. Physical Review C, 2011, 84, .	2.9	24
29	Measurement of resolved resonances of $\text{Th}^{232}(\text{n},\beta)$ at the n_TOF facility at CERN. Physical Review C, 2012, 85, .	2.9	23
30	Nuclear data sensitivity and uncertainty analysis of effective neutron multiplication factor in various MYRRHA core configurations. Annals of Nuclear Energy, 2017, 101, 330-338.	1.8	21
31	Validation of the burn-up code EVCODE 2.0 with PWR experimental data and with a Sensitivity/Uncertainty analysis. Annals of Nuclear Energy, 2014, 73, 175-188.	2.9	17
32	Neutron-induced fission cross-section of U^{233} in the energy range $0.5 < \text{En} < 20$ MeV. European Physical Journal A, 2011, 47, 1.	2.5	15
33	Measurement of the $\text{U}^{236}(\text{n},\text{f})$ cross section from 170 meV to 2 MeV at the CERN n_TOF facility. Physical Review C, 2011, 84, .	2.9	14
34	Neutron-induced fission cross section of U^{234} measured at the CERN n_TOF facility. Physical Review C, 2014, 89, .	2.9	14
35	Neutron-induced fission cross section of Cm^{245} : New results from data taken at the time-of-flight facility n_TOF. Physical Review C, 2012, 85, .	2.9	13

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37	A comparative study of Monte Carlo-coupled depletion codes applied to a Sodium Fast Reactor design loaded with minor actinides. <i>Annals of Nuclear Energy</i> , 2013, 57, 32-40.	1.8	12
38	The measurement of the $^{206}\text{Pb}(n, \bar{\nu})$ cross section and stellar implications. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2008, 35, 014020.	3.6	11
39	Measurement of the neutron-induced fission cross-section of ^{243}Am relative to ^{235}U from 0.5 to 20 MeV. <i>European Physical Journal A</i> , 2011, 47, 1.	2.5	11
40	Analysis of advanced European nuclear fuel cycle scenarios including transmutation and economic estimates. <i>Annals of Nuclear Energy</i> , 2014, 70, 240-247.	1.8	11
41	Neutron-induced fission cross section of Np in the keV to MeV range at the CERN n_TOF facility. <i>Physical Review C</i> , 2016, 93, ..	2.9	11
42	Sensitivity methods for effective delayed neutron fraction and neutron generation time with summon. <i>Annals of Nuclear Energy</i> , 2019, 126, 410-418.	1.8	11
43	Nuclear data requirements for the ADS conceptual design EFIT: Uncertainty and sensitivity study. <i>Annals of Nuclear Energy</i> , 2010, 37, 1570-1579.	1.8	9
44	Measurement of the neutron-induced fission cross-section of ^{241}Am at the time-of-flight facility n_TOF. <i>European Physical Journal A</i> , 2013, 49, 1.	2.5	9
45	Study of Photon Strength Function of Actinides: the Case of ^{235}U , ^{238}Np and ^{241}Pu . <i>Journal of the Korean Physical Society</i> , 2011, 59, 1510-1513.	0.7	9
46	Nuclear physics for the Re/Os clock. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2008, 35, 014015.	3.6	8
47	Cross check of the new economic and mass balance features of the fuel cycle scenario code TR_EVOL. <i>EPJ Nuclear Sciences & Technologies</i> , 2016, 2, 33.	0.7	8
48	Measurement of the $^{151}\text{Sm}(n, \bar{\nu})^{152}\text{Sm}$ cross section at n_TOF. <i>Nuclear Physics A</i> , 2005, 758, 533-536.	1.5	7
49	Neutron capture cross section measurements for nuclear astrophysics at CERN n_TOF. <i>Nuclear Physics A</i> , 2005, 758, 501-504.	1.5	7
50	Neutron reactions and nuclear cosmo-chronology. <i>Progress in Particle and Nuclear Physics</i> , 2007, 59, 165-173.	14.4	7
51	Neutron cross-sections for next generation reactors: New data from n_TOF. <i>Applied Radiation and Isotopes</i> , 2010, 68, 643-646.	1.5	7
52	High accuracy $^{235}\text{U}(n,f)$ data in the resonance energy region. <i>EPJ Web of Conferences</i> , 2016, 111, 02003.	0.3	7
53	Stress-testing the ALFRED design – Part I: Impact of nuclear data uncertainties on Design Extension Conditions transients. <i>Progress in Nuclear Energy</i> , 2018, 106, 372-386.	2.9	6
54	Uncertainty quantification on advanced fuel cycle scenario simulations applying local and global methods. <i>Annals of Nuclear Energy</i> , 2019, 124, 349-356.	1.8	6

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55	Sparse Polynomial Chaos expansion for advanced nuclear fuel cycle sensitivity analysis. Annals of Nuclear Energy, 2020, 142, 107430.	1.8	6
56	Quantification of the differences introduced by nuclear fuel cycle simulators in advanced scenario studies. Annals of Nuclear Energy, 2020, 137, 107160.	1.8	5
57	Measurements at n_TOF of the Neutron Capture Cross Section of Minor Actinides Relevant to the Nuclear Waste Transmutation. AIP Conference Proceedings, 2005, , . Publisher's Note: Measurement of resolved resonances of $\text{Th}(\text{n},\text{f})$ ($T_{\text{d}} = 10 \text{ MeV}$)	0.4	3
58	$\text{Th}(\text{n},\text{f})$ ($T_{\text{d}} = 10 \text{ MeV}$)	2.9	2
59	Dissemination of data measured at the CERN n_TOF facility. EPJ Web of Conferences, 2017, 146, 07002.	0.3	3
60	Stress-testing the ALFRED design - Part II: Quantification of uncertainties on the fuel assembly temperature field. Progress in Nuclear Energy, 2018, 105, 301-308.	2.9	3
61	Nuclear data analyses for improving the safety of advanced lead-cooled reactors. EPJ Web of Conferences, 2019, 211, 05002.	0.3	3
62	Fission Cross-section Measurements of ^{233}U , ^{245}Cm and $^{241,243}\text{Am}$ at CERN n_TOF Facility. Journal of the Korean Physical Society, 2011, 59, 1912-1915.	0.7	3
63	Blind Benchmark Exercise for Spent Nuclear Fuel Decay Heat. Nuclear Science and Engineering, 2022, 196, 1125-1145.	1.1	3
64	Measurements of the $^{90,91,92,94,96}\text{Zr}(n,\bar{\nu})$ cross-sections at n_TOF. Nuclear Physics A, 2005, 758, 573-576.	1.5	2
65	Measurements of high-energy neutron-induced fission of ^{208}Pb and ^{209}Bi . EPJ Web of Conferences, 2010, 8, 07009.	0.3	2
66	Neutron-induced fission cross section measurement of ^{233}U , ^{241}Am and ^{243}Am in the energy range $0.5 \text{ MeV} \rightarrow 20 \text{ MeV}$ at n_TOF. Physica Scripta, 2012, T150, 014005.	2.5	2
67	Towards the high-accuracy determination of the ^{238}U fission cross section at the threshold region at CERN n_TOF. EPJ Web of Conferences, 2016, 111, 02002.	0.3	2
68	Neutron Capture Measurements on Minor Actinides at the n_TOF Facility at CERN: Past, Present and Future. Journal of the Korean Physical Society, 2011, 59, 1809-1812.	0.7	2
69	$^{237}\text{Np}(n,f)$ Cross Section: New Data and Present Status. Journal of the Korean Physical Society, 2011, 59, 1908-1911.	0.7	2
70	Neutron Capture Cross Sections for the Re/Os Clock. AIP Conference Proceedings, 2005, , .	0.4	1
71	The $^{237}\text{Np}(n,f)$ cross section at the CERN n_TOF facility. , 2011, , .	1	
72	Monte Carlo analysis of the long-lived fission product neutron capture rates at the Transmutation by Adiabatic Resonance Crossing (TARC) experiment. Nuclear Engineering and Design, 2013, 254, 148-153.	1.7	1

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73	Validation of the fission yield and decay data libraries with the 10Ås-delayed ^{235}U fission γ -ray energy spectrum. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 870, 60-63.	1.6	1
74	Neutron-induced nuclear data for the MYRRHA fast spectrum facility. EPJ Web of Conferences, 2017, 146, 09007.	0.3	1
75	Optimization under uncertainty for robust fuel cycle analyses. International Journal of Energy Research, 2021, 45, 6139-6151.	4.5	1
76	New Measurement of the Capture Cross Section of Bismuth and Lead Isotopes. AIP Conference Proceedings, 2005, , .	0.4	0
77	Measurements of neutron capture cross-sections at n_TOF. AIP Conference Proceedings, 2007, , .	0.4	0
78	Measurement of the Neutron Induced Fission Cross Section on Transuranic (TRU) Elements at the n_TOF Facility at CERN. AIP Conference Proceedings, 2007, , .	0.4	0
79	ASTROPHYSICS AT n_TOF FACILITY. , 2010, , .	0	
80	Study of Neutron-Induced Fission Cross Sections of U, Am, and Cm at n_TOF. , 2010, , .	0	
81	Astrophysics at n_TOF Facility at CERN. Journal of Physics: Conference Series, 2011, 312, 042024.	0.4	0
82	Economics and Resources Analysis of the Potential Use of Reprocessing Options by a Medium Sized Nuclear Reactor Fleet. Energies, 2017, 10, 690.	3.1	0
83	High-energy Neutron-induced Fission Cross Sections of Natural Lead and Bismuth-209. Journal of the Korean Physical Society, 2011, 59, 1904-1907.	0.7	0
84	Impact of nuclear data evaluations on data assimilation for an LFR. EPJ Web of Conferences, 2020, 239, 13007.	0.3	0