

# 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	Blind Benchmark Exercise for Spent Nuclear Fuel Decay Heat. Nuclear Science and Engineering, 2022, 196, 1125-1145.	1.1	3
2	Optimization under uncertainty for robust fuel cycle analyses. International Journal of Energy Research, 2021, 45, 6139-6151.	4.5	1
3	Quantification of the differences introduced by nuclear fuel cycle simulators in advanced scenario studies. Annals of Nuclear Energy, 2020, 137, 107160.	1.8	5
4	The joint evaluated fission and fusion nuclear data library, JEFF-3.3. European Physical Journal A, 2020, 56, 1.	2.5	318
5	Sparse Polynomial Chaos expansion for advanced nuclear fuel cycle sensitivity analysis. Annals of Nuclear Energy, 2020, 142, 107430.	1.8	6
6	Impact of nuclear data evaluations on data assimilation for an LFR. EPJ Web of Conferences, 2020, 239, 13007.	0.3	0
7	Nuclear data analyses for improving the safety of advanced lead-cooled reactors. EPJ Web of Conferences, 2019, 211, 05002.	0.3	3
8	Uncertainty quantification on advanced fuel cycle scenario simulations applying local and global methods. Annals of Nuclear Energy, 2019, 124, 349-356.	1.8	6
9	Sensitivity methods for effective delayed neutron fraction and neutron generation time with summon. Annals of Nuclear Energy, 2019, 126, 410-418.	1.8	11
10	Stress-testing the ALFRED design " Part I: Impact of nuclear data uncertainties on Design Extension Conditions transients. Progress in Nuclear Energy, 2018, 106, 372-386.	2.9	6
11	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
12	Validation of the fission yield and decay data libraries with the 10 <sup>6</sup> s-delayed <sup>235</sup> U fission <sup>13</sup> 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
13	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
14	Benchmarking and validation activities within JEFF project. EPJ Web of Conferences, 2017, 146, 06004.	0.3	31
15	Dissemination of data measured at the CERN n_TOF facility. EPJ Web of Conferences, 2017, 146, 07002.	0.3	3
16	Neutron-induced nuclear data for the MYRRHA fast spectrum facility. EPJ Web of Conferences, 2017, 146, 09007.	0.3	1
17	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
18	Cross check of the new economic and mass balance features of the fuel cycle scenario code TR_EVOL. EPJ Nuclear Sciences & Technologies, 2016, 2, 33.	0.7	8

#	ARTICLE	IF	CITATIONS
19	Towards the high-accuracy determination of the $^{238}\text{U}$ fission cross section at the threshold region at CERN n_TOF. EPJ Web of Conferences, 2016, 111, 02002.	0.3	2
20	High accuracy $^{235}\text{U}(n,f)$ data in the resonance energy region. EPJ Web of Conferences, 2016, 111, 02003.	0.3	7
21	Neutron-induced fission cross section of $^{237}\text{U}$ in the keV to MeV range at CERN n_TOF. EPJ Web of Conferences, 2016, 93, .	2.9	11
22	High-accuracy determination of the $^{238}\text{U}$ fission cross section at the CERN n_TOF facility. EPJ Web of Conferences, 2016, 93, .	2.9	24
23	Neutron-induced fission cross section of $^{235}\text{U}$ measured at the CERN n_TOF facility. Physical Review C, 2014, 89, .	2.9	14
24	Measurement and analysis of the $^{243}\text{Am}$ neutron capture cross section at the n_TOF facility at CERN. Physical Review C, 2014, 90, .	2.9	26
25	Validation of the burn-up code EVOLCODE 2.0 with PWR experimental data and with a Sensitivity/Uncertainty analysis. Annals of Nuclear Energy, 2014, 73, 175-188.	1.8	16
26	Analysis of advanced European nuclear fuel cycle scenarios including transmutation and economic estimates. Annals of Nuclear Energy, 2014, 70, 240-247.	1.8	11
27	Measurement of the neutron-induced fission cross-section of $^{241}\text{Am}$ at the time-of-flight facility n_TOF. European Physical Journal A, 2013, 49, 1.	2.5	9
28	A comparative study of Monte Carlo-coupled depletion codes applied to a Sodium Fast Reactor design loaded with minor actinides. Annals of Nuclear Energy, 2013, 57, 32-40.	1.8	12
29	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
30	The $^{93}\text{Zr}$ reaction up to 8 keV neutron energy. Physical Review C, 2013, 87, .	2.9	39
31	Measurement of resolved resonances of $^{232}\text{Th}$ at the n_TOF facility at CERN. Physical Review C, 2012, 85, .	2.9	23
32	Publisher's Note: Measurement of resolved resonances of $^{232}\text{Th}$ at the n_TOF facility at CERN. Physical Review C, 2012, 85, .	2.9	3
33	Measurement and resonance analysis of the $^{237}\text{Np}$ neutron capture cross section. Physical Review C, 2012, 85, .	2.9	26
34	Neutron-induced fission cross section of $^{245}\text{Cm}$ : New results from data taken at the time-of-flight facility n_TOF. Physical Review C, 2012, 85, .	2.9	13
35	Neutron-induced fission cross section measurement of $^{233}\text{U}$ and $^{241}\text{Am}$ and $^{243}\text{Am}$ in the energy range 0.5 MeV to 20 MeV at n_TOF at CERN. Physica Scripta, 2012, T150, 014005.	2.5	2
36	Resonance neutron-capture cross sections of stable magnesium isotopes and their astrophysical implications. Physical Review C, 2012, 85, .	2.9	55

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37	Astrophysics at n_TOF Facility at CERN. Journal of Physics: Conference Series, 2011, 312, 042024.	0.4	0
38	Neutron-induced fission cross-section of $^{233}\text{U}$ in the energy range 0.5 &lt; En &lt; 20 MeV. European Physical Journal A, 2011, 47, 1.	2.5	15
39	Measurement of the neutron-induced fission cross-section of $^{243}\text{Am}$ relative to $^{235}\text{U}$ from 0.5 to 20 MeV. European Physical Journal A, 2011, 47, 1.	2.5	11
40	The [ <sup>237</sup> Np(n,f) cross section at the CERN n-TOF facility. , 2011, , .		1
41	$\frac{\sigma_{\text{Zr}}}{\sigma_{\text{Tj}}} = \frac{0.784314 \text{ rgBT}}{10 \text{ Tf } 50 \text{ 587 Td}}$	2.9	17
42	Neutron capture on $^{94}\text{Zr}$ resonance parameters and Maxwellian-averaged cross sections. Physical Review C, 2011, 84, .	2.9	24
43	Measurement of the $^{236}\text{U}(n,f)$ cross section from 170 meV to 2 MeV at the CERN n_TOF facility. Physical Review C, 2011, 84, .	2.9	14
44	$\frac{\sigma_{\text{Au}}}{\sigma_{\text{Tj}}} = \frac{0.784314 \text{ rgBT}}{10 \text{ Tf } 50 \text{ 587 Td}}$	2.9	14
45	Study of Photon Strength Function of Actinides: the Case of $^{235}\text{U}$ , $^{238}\text{Np}$ and $^{241}\text{Pu}$ . Journal of the Korean Physical Society, 2011, 59, 1510-1513.	0.7	9
46	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
47	$^{237}\text{Np}(n,f)$ Cross Section: New Data and Present Status. Journal of the Korean Physical Society, 2011, 59, 1908-1911.	0.7	2
48	Fission Cross-section Measurements of $^{233}\text{U}$ , $^{245}\text{Cm}$ and $^{241}\text{Pu}$ ; $^{243}\text{Am}$ at CERN n_TOF Facility. Journal of the Korean Physical Society, 2011, 59, 1912-1915.	0.7	3
49	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
50	Nuclear data requirements for the ADS conceptual design EFIT: Uncertainty and sensitivity study. Annals of Nuclear Energy, 2010, 37, 1570-1579.	1.8	9
51	Neutron cross-sections for next generation reactors: New data from n_TOF. Applied Radiation and Isotopes, 2010, 68, 643-646.	1.5	7
52	Measurements of high-energy neutron-induced fission of $^{208}\text{Pb}$ and $^{209}\text{Bi}$ . EPJ Web of Conferences, 2010, 8, 07009.	0.3	2
53	cross sections of $^{208}\text{Pb}$ and $^{209}\text{Bi}$ resonance analyses and stellar $\langle \sigma v \rangle$ for $^{208}\text{Pb}$ and $^{209}\text{Bi}$ .	2.9	36
54	$\frac{\sigma_{\text{Au}}}{\sigma_{\text{Tj}}} = \frac{0.784314 \text{ rgBT}}{10 \text{ Tf } 50 \text{ 587 Td}}$	2.9	55

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55	Neutron physics of the Re/Os clock. I. Measurement of the $T_{j\text{ETQq00}}^{\text{rgBT/Overlock}}$ ( $n_{\pm\text{TOF}}$ ) $\langle \text{Zr} \rangle$ $\langle \text{Os} \rangle$ ASTROPHYSICS AT $n_{\pm\text{TOF}}$ FACILITY. , 2010, , .	2.9	33
56	cross sections of $\langle \text{Os} \rangle$ $\langle \text{Os} \rangle$ ASTROPHYSICS AT $n_{\pm\text{TOF}}$ FACILITY. , 2010, , .	2.9	28
57	ASTROPHYSICS AT $n_{\pm\text{TOF}}$ FACILITY. , 2010, , .		0
58	Study of Neutron-Induced Fission Cross Sections of U, Am, and Cm at $n_{\pm\text{TOF}}$ . , 2010, , . Neutron-induced fission cross section of $\langle \text{U} \rangle$ $\langle \text{U} \rangle$ and $\langle \text{Np} \rangle$ $\langle \text{Np} \rangle$		0
59	Neutron capture cross section of $\langle \text{U} \rangle$ and $\langle \text{Np} \rangle$ $\langle \text{U} \rangle$ and $\langle \text{Np} \rangle$ $\langle \text{Np} \rangle$	2.9	72
60	High-accuracy $\text{U}233(n,f)$ cross-section measurement at the white-neutron source $n_{\text{TOF}}$ from near-thermal to 1 MeV neutron energy. Physical Review C, 2009, 80, .	2.9	30
61	The $n_{\text{TOF}}$ 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
62	Nuclear physics for the Re/Os clock. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014015.	3.6	8
63	The measurement of the $^{206}\text{Pb}(n, \hat{1}^3)$ cross section and stellar implications. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014020. Experimental study of the $\langle \text{Zr} \rangle$ $\langle \text{Zr} \rangle$ $\langle \text{Zr} \rangle$	3.6	11
64	Neutron capture cross section of $\langle \text{Zr} \rangle$ $\langle \text{Zr} \rangle$ $\langle \text{Zr} \rangle$	2.9	34
65	Bottleneck in the $\langle \text{Zr} \rangle$ -process reaction flow. Physical Review C, 2008, 77, .	2.9	44
66	Measurements of neutron capture cross-sections at $n_{\text{TOF}}$ . AIP Conference Proceedings, 2007, , .	0.4	0
67	Measurement of the Neutron Induced Fission Cross Section on Transuranic (TRU) Elements at the $n_{\pm\text{TOF}}$ Facility at CERN. AIP Conference Proceedings, 2007, , .	0.4	0
68	Measurement of the radiative neutron capture cross section of $\langle \text{Pb} \rangle$ and its astrophysical implications. Physical Review C, 2007, 76, .	2.9	30
69	Measurement of the neutron capture cross section of the only isotope $\text{Pb}204$ from 1 eV to 440 keV. Physical Review C, 2007, 75, .	2.9	32
70	The $^{139}\text{La}(n, \hat{1}^3)$ cross section: Key for the onset of the s-process. Physical Review C, 2007, 75, .	2.9	24
71	Neutron reactions and nuclear cosmo-chronology. Progress in Particle and Nuclear Physics, 2007, 59, 165-173.	14.4	7
72	Status and outlook of the neutron time-of-flight facility $n_{\text{TOF}}$ at CERN. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 925-929.	1.4	35

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73	Measurement of the $^{151}\text{Sm}(n, \hat{1}^3)$ cross section from 0.6 eV to 1 MeV via the neutron time-of-flight technique at the CERN n_TOF facility. <i>Physical Review C</i> , 2006, 73, .	2.9	36
74	New measurement of neutron capture resonances in $^{209}\text{Bi}$ . <i>Physical Review C</i> , 2006, 74, .	2.9	46
75	Neutron capture cross section of $^{232}\text{Th}$ measured at the n_TOF facility at CERN in the unresolved resonance region up to 1 MeV. <i>Physical Review C</i> , 2006, 73, .	2.9	41
76	Resonance capture cross section of $^{207}\text{Pb}$ . <i>Physical Review C</i> , 2006, 74, .	2.9	32
77	Measurement of the $^{151}\text{Sm}(n, \hat{1}^3)^{152}\text{Sm}$ cross section at n_TOF. <i>Nuclear Physics A</i> , 2005, 758, 533-536.	1.5	7
78	Neutron capture cross section measurements for nuclear astrophysics at CERN n_TOF. <i>Nuclear Physics A</i> , 2005, 758, 501-504.	1.5	7
79	Measurements of the $^{90,91,92,94,96}\text{Zr}(n, \hat{1}^3)$ cross-sections at n_TOF. <i>Nuclear Physics A</i> , 2005, 758, 573-576.	1.5	2
80	Neutron Capture Cross Sections for the Re/Os Clock. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	1
81	New Measurement of the Capture Cross Section of Bismuth and Lead Isotopes. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	0
82	Measurements at n_TOF of the Neutron Capture Cross Section of Minor Actinides Relevant to the Nuclear Waste Transmutation. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	3
83	Neutron Capture Cross Section Measurement of $^{151}\text{Sm}$ at the CERN Neutron Time of Flight Facility (n_TOF). <i>Physical Review Letters</i> , 2004, 93, 161103.	7.8	65
84	Time-energy relation of the n_TOF neutron beam: energy standards revisited. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 532, 622-630.	1.6	34