

# Beatriz Fernandez

## List of Publications by Year in descending order

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124  
papers

2,348  
citations

172457

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128  
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128  
docs citations

128  
times ranked

1645  
citing authors

#	ARTICLE	IF	CITATIONS
1	The identification of $\{\varvec{\alpha}\}$ -clustered doorway states in $\{44,48,52\}$ using machine learning. European Physical Journal A, 2021, 57, 1. Neutron Capture on the $s$ -Process Branching Point Signature of a possible $\alpha$ -cluster state in $N=Z$ doubly-magic $\{56\}$ Ni. European Physical Journal A, 2020, 56, 1.	2.5	8
2	Investigation of the $^{240}\text{Pu}(n,\gamma)^{241}\text{Pu}$ reaction at the n_TOF/EAR2 facility in the 9 meV–6 MeV range. Physical Review C, 2020, 102, .	2.9	7
3	Physics opportunities with the Advanced Gamma Tracking Array: AGATA. European Physical Journal A, 2020, 56, 1.	2.5	32
4	A compact fission detector for fission-tagging neutron capture experiments with radioactive fissile isotopes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 969, 163981.	1.6	2
5	Scission configuration of $^{239}\text{U}$ from yields and kinetic information of fission fragments. Physical Review C, 2020, 101, .	2.9	14
6	Evidence for a New Compact Symmetric Fission Mode in Light Thorium Isotopes. Physical Review Letters, 2020, 124, 202502.	7.8	23
7	Commissioning of the ACTIVE TARget and Time Projection Chamber (ACTAR TPC). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 940, 498-504.	1.6	29
8	Measurement of the $^{235}\text{U}(n, f)$ cross section relative to the $^{6}\text{Li}(n, t)$ and $^{10}\text{B}(n, \alpha)$ standards from thermal to 170 keV neutron energy range at n_TOF. European Physical Journal A, 2019, 55, 1.	2.5	20
9	Measurement of the $^{70}\text{Ge}(n, \gamma)^{71}\text{Ge}$ cross section up to 300 keV at the CERN n_TOF facility. Physical Review C, 2019, 100, .	2.9	13
10	First Direct Measurement of Isotopic Fission-Fragment Yields of $^{239}\text{U}$ . Physical Review Letters, 2019, 123, 092503.	7.8	20
11	Cross section measurements of $^{155,157}\text{Gd}(n, \gamma)^{156,158}\text{Gd}$ induced by thermal and epithermal neutrons. European Physical Journal A, 2019, 55, 1.	2.5	23
12	Experimental study of nuclear fission along the thorium isotopic chain: From asymmetric to symmetric fission. Physical Review C, 2019, 99, .	2.9	32
13	Measurement of $^{73}\text{Ge}(n, \gamma)^{74}\text{Ge}$ cross sections and implications for stellar nucleosynthesis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 458-465.	4.1	11
14	Insight into excitation energy and structure effects in fission from isotopic information in fission yields. Physical Review C, 2019, 99, .	2.9	18
15	Validation of the energy-loss response of $^{18}\text{O}$ particles in iC4H10 with ACTARSim. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 927, 125-132.	1.6	3

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19	Re-examining the spectral signature of $\hat{\Gamma}_{\pm}$ clustering in $^{238}\text{U}$ and $^{235}\text{U}$ isotopes. <i>Physical Review C</i> , 2018, 97, 014603.	2.9	12
20	Fission fragment yields from heavy-ion-induced reactions measured with a fragment separator. <i>European Physical Journal A</i> , 2018, 54, 1.	2.5	2
21	Radiative neutron capture on $^{242}\text{Pu}$ in the resonance region at the CERN n_TOF-EAR1 facility. <i>Physical Review C</i> , 2018, 97, 014603.	2.9	21
22	Quasifree $(n, p)$ reactions on $^{10}\text{C}$ and $^{11}\text{C}$ at $n_{\text{TOF}}$ . <i>Physical Review C</i> , 2018, 97, .	2.9	15
23	Experimental setup and procedure for the measurement of the $^{7}\text{Be}(n, p)^{6}\text{Li}$ reaction at $n_{\text{TOF}}$ . <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 887, 27-33.	1.6	14
24	High-precision measurement of isotopic fission yields of $^{236}\text{U}^*$ . <i>EPJ Web of Conferences</i> , 2018, 193, 02001.	0.3	0
25	How sharp is the transition into the $N=20$ island of inversion for the Mg isotopes?. <i>Journal of Physics: Conference Series</i> , 2018, 966, 012020.	0.4	0
26	Measurement of the radiative capture cross section of the s-process branching points $^{204}\text{Tl}$ and $^{171}\text{Tm}$ at the $n_{\text{TOF}}$ facility (CERN). <i>EPJ Web of Conferences</i> , 2018, 178, 03004.	0.3	1
27	First Measurement of $^{72}\text{Ge}(n, \hat{\Gamma}^3)$ at $n_{\text{TOF}}$ . <i>EPJ Web of Conferences</i> , 2018, 184, 02005.	0.3	0
28	Isotopic fission-fragment distributions of $^{238}\text{U}$ and $^{235}\text{U}$ . <i>Physical Review C</i> , 2018, 97, 014603.	2.9	38
29	Search for resonant states in $^{10}\text{C}$ and $^{11}\text{C}$ and their impact on the primordial $^7\text{Li}$ abundance. <i>Journal of Physics: Conference Series</i> , 2018, 940, 012016.	0.4	0
30	Measurement of the radiative capture cross section of the s-process branching points $^{204}\text{Tl}$ and $^{171}\text{Tm}$ at the $n_{\text{TOF}}$ facility (CERN). <i>EPJ Web of Conferences</i> , 2018, 178, 03004.	0.3	1
31	Demonstrator Detection System for the Active Target and Time Projection Chamber (ACTAR TPC) project. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 895, 126-134.	1.6	26
32	Re-examining the transition into the $N = 20$ island of inversion: Structure of $^{30}\text{Mg}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 779, 124-129.	4.1	14
33	Spectroscopy of $^{36}\text{S}$ and $^{36}\text{Cl}$ . <i>Physical Review C</i> , 2018, 97, 014603.	2.9	11
34	Reaction $^{61}\text{Fe} + n \rightarrow ^{62}\text{Fe} + \gamma$ via the neutron transfer reaction. <i>Physical Review C</i> , 2018, 97, 014603.	2.9	8
35	First inverse-kinematics fission measurements in a gaseous active target. <i>Nuclear Physics A</i> , 2017, 958, 246-265.	1.5	5
36	High-accuracy determination of the neutron flux in the new experimental area $n_{\text{TOF-EAR2}}$ at CERN. <i>European Physical Journal A</i> , 2017, 53, 1.	2.5	41

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37	Monte carlo simulations of the n_TOF lead spallation target with the Geant4 toolkit: A benchmark study. EPJ Web of Conferences, 2017, 146, 03030.	0.3	0
38	Isotopic production cross sections of residual nuclei in the spallation reaction $^{136}\text{Xe} + \text{A} \rightarrow \text{X} + \text{Y} + \text{Z} + \dots$ . EPJ Web of Conferences, 2017, 146, 03031.	0.3	14
39	Accurate isotopic fission yields of electromagnetically induced fission of $^{238}\text{U}$ measured in inverse kinematics at relativistic energies. Physical Review C, 2017, 95, 054607.	2.9	49
40	The Nuclear Astrophysics program at n_TOF (CERN). EPJ Web of Conferences, 2017, 165, 01014.	0.3	1
41	$^{7}\text{Be}(n, \hat{1}\pm)$ and $^{7}\text{Be}(n, p)$ cross-section measurement for the cosmological lithium problem at the n_TOF facility at CERN. EPJ Web of Conferences, 2017, 146, 01012.	0.3	1
42	Characterization of the n_TOF EAR-2 neutron beam. EPJ Web of Conferences, 2017, 146, 03020.	0.3	1
43	The measurement programme at the neutron time-of-flight facility n_TOF at CERN. EPJ Web of Conferences, 2017, 146, 11002.	0.3	2
44	New measurement of the $^{242}\text{Pu}(n, \hat{1}^3)$ cross section at n_TOF-EAR1 for MOX fuels: Preliminary results in the RRR. EPJ Web of Conferences, 2017, 146, 11045.	0.3	1
45	The n_TOF facility: Neutron beams for challenging future measurements at CERN. EPJ Web of Conferences, 2017, 146, 03001.	0.3	1
46	Dissemination of data measured at the CERN n_TOF facility. EPJ Web of Conferences, 2017, 146, 07002.	0.3	3
47	Time-of-flight and activation experiments on $^{147}\text{Pm}$ and $^{171}\text{Tm}$ for astrophysics. EPJ Web of Conferences, 2017, 146, 01007.	0.3	0
48	The $^{33}\text{S}(n, \hat{1}\pm)^{30}\text{Si}$ cross section measurement at n_TOF-EAR2 (CERN): From 0.01 eV to the resonance region. EPJ Web of Conferences, 2017, 146, 08004.	0.3	3
49	Excitation-energy influence at the scission configuration. EPJ Web of Conferences, 2017, 146, 04019.	0.3	2
50	Measurement of the $^{240}\text{Pu}(n, f)$ cross-section at the CERN n_TOF facility: First results from experimental area II (EAR-2). EPJ Web of Conferences, 2017, 146, 04030.	0.3	6
51	Alpha clustering in Ti isotopes: $^{40,44,48}\text{Ca} + \hat{1}\pm$ resonant scattering. EPJ Web of Conferences, 2016, 113, 08002.	0.3	0
52	The CERN n_TOF facility: a unique tool for nuclear data measurement. EPJ Web of Conferences, 2016, 122, 05001.	0.3	3
53	Dependence of Fission-Fragment Properties On Excitation Energy For Neutron-Rich Actinides. EPJ Web of Conferences, 2016, 111, 10001.	0.3	5
54	Measurement of the $^{92,93,94,100}\text{Mo}(\hat{1}^3, n)$ reactions by Coulomb Dissociation. Journal of Physics: Conference Series, 2016, 665, 012034.	0.4	1

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55	Nuclear astrophysics with radioactive ions at FAIR. Journal of Physics: Conference Series, 2016, 665, 012044.	0.4	9
56	The SOFIA experiment: Measurement of $^{236}\text{U}$ fission fragment yields in inverse kinematics. EPJ Web of Conferences, 2016, 122, 01006.	0.3	3
57	Accurate measurements of fission-fragment yields in $^{234,235,236,238}\text{U}(\hat{1}^3, f)$ with the SOFIA set-up. EPJ Web of Conferences, 2016, 111, 08001.	0.3	5
58	Nuclear data activities at the $n_{\text{TOF}}$ facility at CERN. European Physical Journal Plus, 2016, 131, 1.	2.6	26
59	$\langle \sigma \rangle_{\text{is}} = \frac{1}{2} \left( \langle \sigma \rangle_{\text{p}} + \langle \sigma \rangle_{\text{n}} \right)$	7.8	94
60	Experimental study of high-lying states in $\text{Mg}^{28}$ using the resonant elastic scattering of $\hat{1}^{\pm}$ particles. Physical Review C, 2016, 94, .	2.9	2
61	Experimental setup and procedure for the measurement of the $^7\text{Be}(n, \hat{1}^{\pm})\hat{1}^{\pm}$ reaction at $n_{\text{TOF}}$ . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 830, 197-205.	1.6	21
62	Isoscalar response of $^{68}\text{Ni}$ to $\hat{1}^{\pm}$ -particle and deuteron probes. Physical Review C, 2015, 92, .	2.9	23
63	Characterization of the scission point from fission-fragment velocities. Physical Review C, 2015, 92, .	2.9	55
64	Observation of isoscalar multipole strengths in exotic doubly-magic $^{56}\text{Ni}$ in inelastic $\hat{1}^{\pm}$ scattering in inverse kinematics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 371-375.	4.1	16
65	A Sample of the Results of the First SOFIA Experiment. Physics Procedia, 2015, 64, 101-106.	1.2	7
66	Transfer-induced fission in inverse kinematics: Impact on experimental and evaluated nuclear data bases. European Physical Journal A, 2015, 51, 1.	2.5	6
67	Single-particle strength in neutron-rich $^{71}\text{Cu}$ from the $(d, ^3\text{He})$ proton pick-up reaction. Journal of Physics: Conference Series, 2015, 580, 012012.	0.4	0
68	Studies on fission with ALADIN. European Physical Journal A, 2015, 51, 1.	2.5	26
69	Evolution of single-particle strength in neutron-rich $^{71}\text{Cu}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 306-310.	4.1	17
70	Fission Yields of Minor Actinides at Low Energy Through Multi-nucleon Transfer Reactions of $^{238}\text{U}$ on $^{12}\text{C}$ . Acta Physica Polonica B, 2015, 46, 443.	0.8	3
71	Spectroscopic study of the exotic nucleus $^{25}\text{P}$ . Physical Review C, 2015, 91, .	2.9	3
72	$^{12}\text{C}+p$ resonant elastic scattering in the Maya active target. European Physical Journal A, 2015, 51, 1.	2.5	5

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73	The new vertical neutron beam line at the CERN n_TOF facility design and outlook on the performance. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 799, 90-98.	1.6	82
74	Experimental Study of the Two-Body Spin-Orbit Force in Nuclei. Physical Review Letters, 2014, 112, 042502.	7.8	46
75	Measurement of the Isoscalar Monopole Response in the Neutron-Rich Nucleus $^{68}\text{Ni}$ . Physical Review Letters, 2014, 113, 032504.	7.8	38
76	Publisher's Note: Measurement of the Isoscalar Monopole Response in the Neutron-Rich Nucleus $^{68}\text{Ni}$ [Phys. Rev. Lett. 113, 032504 (2014)]. Physical Review Letters, 2014, 113, .	7.8	0
77	Transfer reactions in inverse kinematics: An experimental approach for fission investigations. Physical Review C, 2014, 89, .	2.9	48
78	The thick target inverse kinematics technique with a large acceptance silicon detector array. Journal of Physics: Conference Series, 2014, 569, 012052.	0.4	6
79	Isotopic yield distributions of transfer- and fusion-induced fission from $^{238}\text{U}$ reactions in inverse kinematics. Physical Review C, 2013, 88, .	2.9	66
80	Structure of unbound neutron-rich $^9\text{He}$ studied using single-neutron transfer. Physical Review C, 2013, 88, .	2.9	34
81	Measurement of the Dipole Polarizability of the Unstable Neutron-Rich Nucleus $^{68}\text{Ni}$ . Physical Review Letters, 2013, 111, 242503.	7.8	155
82	Isotopic Distributions of Fission Fragments from Transfer-induced Fission. Physics Procedia, 2013, 47, 125-130.	1.2	0
83	Isotopic production cross sections of the residual nuclei in spallation reactions induced by $^{136}\text{Xe}$ projectiles on proton at 500 A MeV. Nuclear Physics A, 2013, 899, 116-132.	1.5	31
84	Search for new resonant states in $^{10}\text{C}$ and $^{11}\text{C}$ and their impact on the cosmological lithium problem. Physical Review C, 2013, 88, .	2.9	40
85	Isotopic fission fragment distributions as a deep probe to fusion-fission dynamics. Journal of Physics: Conference Series, 2013, 420, 012119.	0.4	5
86	Complete isotopic distributions of fragments produced in transfer- and fusion-induced reactions. EPJ Web of Conferences, 2013, 62, 06006.	0.3	0
87	Alpha cluster structure in $^{56}\text{Ni}$ . Journal of Physics: Conference Series, 2013, 436, 012010.	0.4	12
88	Coulomb excitation of exotic nuclei at the R3B-LAND setup. Journal of Physics: Conference Series, 2013, 420, 012072.	0.4	4
89	SOFIA: An innovative setup to measure complete isotopic yield of fission fragments. EPJ Web of Conferences, 2013, 62, 06005.	0.3	11
90	One-proton breakup of $^{24}\text{Si}$ and the $^{24}\text{Si}$ .		



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91	Core excitations and narrow states beyond the proton dripline: The exotic nucleus $^{21}\text{Al}$ . Physical Review C, 2012, 86, .	2.9	6
92	Low-lying neutron intruder states in $^{27}\text{Ne}$ . Physical Review C, 2012, 85, .	2.9	45
93	Direct radiative proton capture $^{23}\text{Al}(p,\gamma)^{24}\text{Si}$ studied via one-proton nuclear breakup of $^{24}\text{Si}$ . Journal of Physics: Conference Series, 2012, 337, 012059.	0.4	0
94	Direct Mass Measurements of $^{19}\text{B}$ and $^{19}\text{C}$ . Physical Review Letters, 2011, 106, 082501.	7.8	121
95	Evolution of isotopic fission-fragment yields with excitation energy. EPJ Web of Conferences, 2012, 31, 00025.	0.3	3
96	Structure of $^{23}\text{Al}$ from the one-proton breakup reaction and astrophysical implications. Physical Review C, 2011, 84, .	2.9	23
97	Publisher's Note: Emergence of the $N=16$ shell gap in $^{21}\text{O}$ [Phys. Rev. C 84, 011301(R) (2011)]. Physical Review C, 2011, 84, .	2.9	1
98	Emergence of the $N=16$ shell gap in $^{21}\text{O}$ . Physical Review C, 2011, 84, .	2.9	35
99	Title is missing!. Acta Physica Polonica B, 2011, 42, 541.	0.8	3
100	Target dependence in the study of collective modes in stable and exotic Ni nuclei. Journal of Physics: Conference Series, 2010, 202, 012035.	0.4	0
101	Astrophysically Important Reaction Rates For Novae And X-ray Bursts From Proton Breakup At Intermediate Energies. , 2010, , .		0
102	TIARA: A large solid angle silicon array for direct reaction studies with radioactive beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 614, 439-448.	1.6	48
103	Minor actinide fission induced by multi-nucleon transfer reaction in inverse kinematics. EPJ Web of Conferences, 2010, 2, 07001.	0.3	4
104	Investigating the intra-nuclear cascade process using the reaction $^{136}\text{Xe}$ on deuterium at 500 MeV. EPJ Web of Conferences, 2010, 8, 07012.	0.3	2
105	Production of new neutron-rich isotopes of heavy elements in fragmentation reactions of $^{238}\text{U}$ projectiles at 1 GeV. Physical Review C, 2010, 81, 054607.	7.8	40
106	Production of new neutron-rich isotopes of heavy elements in fragmentation reactions of $^{238}\text{U}$ projectiles at 1 GeV. Physical Review C, 2010, 81, 054607.	2.9	76
107	Study of $^{60}\text{Fe}(n,\gamma)^{61}\text{Fe}$ reaction of astrophysical interest via $d(^{60}\text{Fe},p)^{61}\text{Fe}$ indirect reaction. , 2010, , .		2
108	STUDY OF THE $^{20}\text{O}(d,t)$ REACTION WITH THE TIARA-MUST2-VAMOS-EXO GAM SETUP. International Journal of Modern Physics E, 2009, 18, 2056-2060.	1.0	6

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109	Production cross-sections of neutron-rich Pb and Bi isotopes in the fragmentation of $^{238}\text{U}$ . European Physical Journal A, 2009, 42, 485.	2.5	15
110	Prompt $\gamma$ -ray spectroscopy of isotopically identified fission fragments. Physical Review C, 2009, 80, .	2.9	24
111	Study of dipole excitations and the single particle structure of neutron rich Ni isotopes. AIP Conference Proceedings, 2008.	0.4	0
112	Experimental study of resonance states in $^{7}\text{H}$ and $^{7}\text{He}$ .	2.9	22
113	Spallation residues in the reaction $^{56}\text{Fe} + p$ at 0.3A, 0.5A, 0.75A, 1.0A, and 1.5A GeV. Physical Review C, 2007, 75, .	2.9	85
114	Measurement of the complete nuclide production and kinetic energies of the system $^{136}\text{Xe} + \text{H}$ + hydrogen at 1 GeV per nucleon. Physical Review C, 2007, 76, .	2.9	79
115	Resonance State in $^{7}\text{H}$ . Physical Review Letters, 2007, 99, 062502.	7.8	48
116	Single particle structure of exotic nuclei with transfer reactions. Progress in Particle and Nuclear Physics, 2007, 59, 389-391.	14.4	4
117	The search for $^{7}\text{H}$ . European Physical Journal: Special Topics, 2007, 150, 9-12.	2.6	1
118	Evaporation residues produced in spallation of $^{208}\text{Pb}$ by protons at. Nuclear Physics A, 2006, 768, 1-21.	1.5	45
119	Studies of Single-Particle Structure in the N=16 Region Using Transfer Reactions. AIP Conference Proceedings, 2006, , .	0.4	0
120	Studies of the Single Particle Structure of Exotic Nuclei using Transfer Reactions. AIP Conference Proceedings, 2006, , .	0.4	0
121	Nuclide cross-sections of fission fragments in the reaction $^{208}\text{Pb} + p$ at 500 MeV. Nuclear Physics A, 2005, 747, 227-267.	1.5	41
122	Production cross-sections from neutron-deficient $^{92}\text{Mo}$ at 500A MeV. European Physical Journal A, 2005, 25, 193-198.	2.5	7
123	Production cross sections of N sime Z nuclei in the region around A sime 80. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1843-S1846.	3.6	1
124	Momentum distributions of projectile spectators: a new tool to investigate the equation of state of nuclear matter. Nuclear Physics A, 2004, 734, 609-612.	1.5	1