Fred Sarazin

List of Publications by Year
in descending order

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119 papers	3,765 citations	136950 32 h-index	133252 59 g-index
123 all docs	123 docs citations	123 times ranked	2656 citing authors

#	Article	IF	Citations
1	Testing effects of Lorentz invariance violation in the propagation of astroparticles with the Pierre Auger Observatory. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 023.	5.4	5
2	A Review of the EUSO-Balloon Pathfinder for the JEM-EUSO Program. Space Science Reviews, 2022, 218, 3.	8.1	15
3	Development of a cosmic ray oriented trigger for the fluorescence telescope on EUSO-SPB2. Advances in Space Research, 2022, 70, 2794-2803.	2.6	5
4	The POEMMA (Probe of Extreme Multi-Messenger Astrophysics) observatory. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 007.	5.4	50
5	Extreme Universe Space Observatory on a Super Pressure Balloon 1 calibration: from the laboratory to the desert. Experimental Astronomy, 2021, 52, 125-140.	3.7	3
6	Experimental study of the nature of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo></mml:msup></mm and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>2</mml:mn><mml:mo>â^’</mml:mo></mml:msup></mm excited states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ca</mml:mi><mml:mprescripts /><mml:none /><mml:mn>47</mml:mn></mml:mmultiscripts></mml:math> from the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>Î²</mml:mi><mml:mo>â^’</mml:mo></mml:msup></m decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">K</mml:mi><mml:mprescripts /><mml:none /><mml:mn>47</mml:mn> Physical Revi	2.9	1
7		2.9	1
8	Performance and science reach of the Probe of Extreme Multimessenger Astrophysics for ultrahigh-energy particles. Physical Review D, 2020, 101, .	4.7	21
9	Isospin symmetry in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>B</mml:mi><mml:mo>(</mml:mo><mml:mi>E</mml:mi> values: Coulomb excitation study of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Mg</mml:mi><mml:mprescripts	2.9	19
10	-wave scattering lengths for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>7</mml:mn></mml:mmultiscripts><mml:mo>+</mml:mo><mml:mi>p</mml:mi></mml:mrow></mml:math> system from an <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>	2.9	8
11	Geometrical constraints of observing very high energy Earth-skimming neutrinos from space. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 021-021.	5.4	3
12	Ultra-violet imaging of the night-time earth by EUSO-Balloon towards space-based ultra-high energy cosmic ray observations. Astroparticle Physics, 2019, 111, 54-71.	4.3	18
13	The GRIFFIN facility for Decay-Spectroscopy studies at TRIUMF-ISAC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 918, 9-29.	1.6	24
14	Ultrahigh-energy cosmic ray composition from the distribution of arrival directions. Physical Review D, 2018, 98, .	4.7	6
15	EUSO-TA â€“ First results from a ground-based EUSO telescope. Astroparticle Physics, 2018, 102, 98-111.	4.3	27
16	First observations of speed of light tracks by a fluorescence detector looking down on the atmosphere. Journal of Instrumentation, 2018, 13, P05023-P05023.	1.2	15
17	Auger at the Telescope Array: Recent Progress Toward a Direct Cross-Calibration of Surface-Detector Stations. , 2018, , .		0
18	Observation of a large-scale anisotropy in the arrival directions of cosmic rays above 8 Ã— 10 ¹⁸ eV. Science, 2017, 357, 1266-1270.	12.6	261

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19	Matching of the Halo Nucleus <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Be</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>11</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Au</mml:mi></mml:mrow><mml:mprescripts	7.8	53
20	Scattering of halo nuclei on heavy targets at energies around the Coulomb barrier: The case of 11Be on 197Au. EPJ Web of Conferences, 2017, 163, 00045.	0.3	1
21	Performance of the Versatile Array of Neutron Detectors at Low Energy (VANDLE). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 836, 122-133.	1.6	34
22	Shell evolution approaching the N= 20 island of inversion: Structure of 26Na. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 759, 417-423.	4.1	16
23	New Opportunities in Decay Spectroscopy with the GRIFFIN and DESCANT Arrays. Physics Procedia, 2015, 66, 465-470.	1.2	0
24	Performances of JEMâ€“EUSO: energy and X max reconstruction. Experimental Astronomy, 2015, 40, 183-214.	3.7	7
25	Calibration aspects of the JEM-EUSO mission. Experimental Astronomy, 2015, 40, 91-116.	3.7	5
26	Space experiment TUS on board the Lomonosov satellite as pathfinder of JEM-EUSO. Experimental Astronomy, 2015, 40, 315-326.	3.7	11
27	Far From â€˜Easyâ€™ Spectroscopy with the 8Ï€ and GRIFFIN Spectrometers at TRIUMF-ISAC. Journal of Physics: Conference Series, 2015, 639, 012006.	0.4	14
28	DESCANT andÎ²-delayed neutron measurements at TRIUMF. EPJ Web of Conferences, 2015, 93, 07005.	0.3	6
29	The infrared camera onboard JEM-EUSO. Experimental Astronomy, 2015, 40, 61-89.	3.7	7
30	Ground-based tests of JEM-EUSO components at the Telescope Array site, â€œEUSO-TAâ€• Experimental Astronomy, 2015, 40, 301-314.	3.7	16
31	The JEM-EUSO mission: An introduction. Experimental Astronomy, 2015, 40, 3-17.	3.7	38
32	The JEM-EUSO observation in cloudy conditions. Experimental Astronomy, 2015, 40, 135-152.	3.7	10
33	The atmospheric monitoring system of the JEM-EUSO instrument. Experimental Astronomy, 2015, 40, 45-60.	3.7	10
34	JEM-EUSO: Meteor and nuclearite observations. Experimental Astronomy, 2015, 40, 253-279.	3.7	27
35	Structure of ^{26}Na via a Novel Technique Using ($d,pgamma $) with a Radioactive ^{25}Na Beam. Acta Physica Polonica B, 2015, 46, 527.	0.8	5
36	The JEM-EUSO instrument. Experimental Astronomy, 2015, 40, 19-44.	3.7	45

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37	Search for patterns by combining cosmic-ray energy and arrival directions at the Pierre Auger Observatory. European Physical Journal C, 2015, 75, 269.	3.9	12
38	Science of atmospheric phenomena with JEM-EUSO. Experimental Astronomy, 2015, 40, 239-251.	3.7	8
39	The EUSO-Balloon pathfinder. Experimental Astronomy, 2015, 40, 281-299.	3.7	31
40	Scattering of Halo Nuclei at Energies below and around the Coulomb Barrier. , 2015, , .		1
41	Investigating Single-Particle Structure in 26Na Using the New SHARC Array. , 2015, , .		0
42	Performances of JEM-EUSO: angular reconstruction. Experimental Astronomy, 2015, 40, 153-177.	3.7	8
43	Ultra high energy photons and neutrinos with JEM-EUSO. Experimental Astronomy, 2015, 40, 215-233.	3.7	3
44	JEM-EUSO observational technique and exposure. Experimental Astronomy, 2015, 40, 117-134.	3.7	16
45	Reaction of the Halo Nucleus ^{11}Be on Heavy Targets at Energies Around the Coulomb Barrier. Acta Physica Polonica B, 2014, 45, 375.	0.8	5
46	Calibration for extensive air showers observed during the JEM-EUSO mission. Advances in Space Research, 2014, 53, 1506-1514.	2.6	6
47	Two-neutron transfer reaction mechanisms in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow		

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55	Towards²⁶Na via (d,p) with SHARC and TIGRESS and a novel zero-degree detector. Journal of Physics: Conference Series, 2012, 381, 012097.	0.4	8
56	SHARC: Silicon Highly-segmented Array for Reactions and Coulex used in conjunction with the TIGRESS Î³-ray spectrometer. Journal of Instrumentation, 2011, 6, P02005-P02005.	1.2	39
57	Structure of states in 12Be via the 11Be(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT / reaction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 682, 391-395.	4.1	61
58	Development of a Versatile Array of Neutron Detectors at Low Energy. , 2009, , .		4
59	First Results with TIGRESS and Accelerated Radioactive Ion Beams from ISAC: Coulomb Excitation of [sup 20,21,29]Na. , 2009, , .		0
60	Line-shape analysis of Doppler-broadened<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î³</mml:mi></mml:mrow></mml:math>lines following the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow></mml:math>decay of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mat	2.9	22
61	Coulomb excitation of the proton-dripline nucleusNa20. Physical Review C, 2009, 80, .	2.9	13
62	Narrowing of the neutron <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>s</mml:mi><mml:mi>d</mml:mi><mml:mtext>â€“</mml:mtext><mml:mi>p</mml:mi><mml:mi>f</mml:mi> shell gap in 29Na. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 168-171.	4.1	27
63	Coulomb excitation of radioactive 20, 21Na. European Physical Journal A, 2009, 42, 477.	2.5	3
64	Gamma-Ray Spectroscopy at TRIUMF-ISAC: the New Frontier of Radioactive Ion Beam Research. , 2009, , .		0
65	First Penning-Trap Mass Measurement of the Exotic Halo Nucleus<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Li</mml:mi><mml:mprescripts /><mml:none /><mml:mn>11</mml:mn></mml:mmultiscripts></mml:math>. Physical Review Letters, 2008, 101, 202501.	7.8	174
66	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>-Delayed Deuteron Emission from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Li</mml:mi><mml:mprescripts /><mml:none /><mml:mn>11</mml:mn></mml:mmultiscripts></mml:math>: Decay of the Halo. Physical Review Letters, 2008, 101, 212501.	7.8	38
67	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mi>Î²</mml:mi><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:mrow></mml:math>-Delayed Deuteron Emission from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Ga</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>62</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>. Physical Review	2.9	22
68	High-precision branching ratio measurement for the superallowedÎ²+emitterGa62. Physical Review C, 2008, 78, .	2.9	27
69	Coulomb excitation of radioactiveNa21and its stable mirrorNe21. Physical Review C, 2008, 78, .	2.9	19
70	Correlation of the Highest-Energy Cosmic Rays with Nearby Extragalactic Objects. Science, 2007, 318, 938-943.	12.6	647
71	Charged-particle channels in the Î²-decay of [sup 11]Li. AIP Conference Proceedings, 2007, , .	0.4	1
72	Î² decay ofNa32. Physical Review C, 2007, 75, .	2.9	33

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73	Measured and simulated performance of Compton-suppressed TIGRESS HPGe clover detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 570, 437-445.	1.6	42
74	Pile-up corrections for high-precision superallowed decay half-life measurements via -ray photopeak counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 1005-1033.	1.6	27
75	Excited states in 22Mg via the 12C(12C,2n)22Mg reaction. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 945-947.	1.4	3
76	The TRIUMF nuclear structure program and TIGRESS. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 1084-1088.	1.4	20
77	Optimization of Compton-suppression and summing schemes for the TIGRESS HPGe detector array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 573, 157-160.	1.6	10
78	TRIUMF-ISAC Gamma-Ray Escape-Suppressed Spectrometer (TIGRESS): a versatile tool for radioactive beam physics. Nuclear Physics A, 2007, 787, 118-125.	1.5	4
79	Recent results of experiments with radioactive 21Na and 7Be ion beams. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 1089-1093.	1.4	7
80	Gamma-Ray Spectroscopy at TRIUMF-ISAC. AIP Conference Proceedings, 2006, , .	0.4	1
81	Level structure ofMg21: Nuclear and astrophysical implications. Physical Review C, 2006, 73, .	2.9	13
82	Multichannel R-matrix analysis of elastic and inelastic resonances in the 20,21Na+p compound systems. Nuclear Physics A, 2005, 758, 166-169.	1.5	8
83	TIGRESS highly-segmented high-purity germanium clover detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 543, 431-440.	1.6	53
84	Study of 19Na at SPIRAL. European Physical Journal A, 2005, 24, 237-247.	2.5	28
85	Position sensitivity of the TIGRESS 32-fold segmented HPGe clover detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 540, 348-360.	1.6	40
86	High-resolution Î³-ray spectroscopy: a versatile tool for nuclear Î²-decay studies at TRIUMF-ISAC. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1491-S1498.	3.6	35
87	High precision measurements ofNa26Î²â^'decay. Physical Review C, 2005, 71, .	2.9	45
88	Precision half-life measurement of62Ga. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1885-S1889.	3.6	15
89	MultichannelR-matrix analysis of elastic and inelastic resonances in theNa21+pcompound system. Physical Review C, 2005, 71, .	2.9	30
90	TIGRESS: TRIUMF-ISAC gamma-ray escape-suppressed spectrometer. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1663-S1668.	3.6	55

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91	Proton decay of the highly deformed nucleusTb135. Physical Review C, 2004, 69, .	2.9	22
92	Halo neutrons and theÎ²decay ofLi11. Physical Review C, 2004, 70, .	2.9	38
93	Structure of the neutron-rich 37, 39P and 43, 45Cl nuclei. European Physical Journal A, 2004, 22, 173-178.	2.5	41
94	Studies of high-K isomers at TRIUMF-ISAC. Nuclear Physics A, 2004, 746, 617-620.	1.5	8
95	Complete structure determination of the astrophysically important nucleus 20Na below the proton threshold. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 590, 170-175.	4.1	21
96	Î³rays emitted in the decay of 31-yr178Hfm2. Physical Review C, 2003, 68, .	2.9	32
97	Radioactive beam experiments with large gamma-ray detector arrays. Nuclear Instruments & Methods in Physics Research B, 2003, 204, 660-665.	1.4	48
98	Search for particleâ€“hole excitations across the N=28 shell gap in 45,46Ar nuclei. Nuclear Physics A, 2003, 727, 195-206.	1.5	48
99	Results of 21Na+p experiments at ISAC. Nuclear Physics A, 2003, 718, 119-126.	1.5	3
100	(3He,p) as an alternative to resonant elastic scattering. Nuclear Physics A, 2003, 718, 556-557.	1.5	1
101	Half-life of176Lu. Physical Review C, 2003, 67, .	2.9	24
102	Strong resonances in elastic scattering of radioactive21Naon protons. Physical Review C, 2002, 65, .	2.9	35
103	Shape evolution in heavy sulfur isotopes and erosion of theN=28shell closure. Physical Review C, 2002, 66, .	2.9	90
104	Publisherâ€™s Note: Strong resonances in elastic scattering of radioactive21Naon protons [Phys. Rev. C65, 042801 (2002)]. Physical Review C, 2002, 65, .	2.9	1
105	Detection of neutron clusters. Physical Review C, 2002, 65, .	2.9	114
106	Proton reaction cross-section measurements on stable and neutron-rich nuclei as a probe of the nucleonâ€“nucleus interaction. Nuclear Physics A, 2002, 706, 295-312.	1.5	21
107	Probing shell structure in neutron-rich nuclei with in-beam Î³-spectroscopy. European Physical Journal A, 2002, 15, 93-97.	2.5	46
108	Shape coexistence and the N = 20 shell closure far from stability by inelastic scattering. European Physical Journal A, 2002, 15, 157-160.	2.5	24

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109	Changes in neutron shell closures of light very neutron-rich nuclei. European Physical Journal D, 2001, 51, A245-A253.	0.4	1
110	A determination of the interaction potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 505, 15-20.	4.1	19
111	Shape Coexistence and the N=28 Shell Closure Far from Stability. Hyperfine Interactions, 2001, 132, 147-152.	0.5	22
112	Mass Measurements of Exotic Nuclei around N=Z=40 with CSS2. Hyperfine Interactions, 2001, 132, 313-320.	0.5	21
113	The Mass Programme at GANIL Using the CSS2 and CIME Cyclotrons. Hyperfine Interactions, 2001, 132, 273-279.	0.5	4
114	Halo Structure ofB14e. Physical Review Letters, 2001, 86, 600-603.	7.8	91
115	Three-body correlations in Borromean halo nuclei. Physical Review C, 2001, 64, .	2.9	77
116	Shape Coexistence and the N = 28 Shell Closure Far from Stability. , 2001, , 147-152.		0
117	Neutron cross-talk rejection in a modular array and the detection of halo neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 450, 109-118.	1.6	26
118	Two-neutron interferometry as a probe of the nuclear halo. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 476, 219-225.	4.1	90
119	Shape Coexistence and theN=28Shell Closure Far from Stability. Physical Review Letters, 2000, 84, 5062-5065.	7.8	189