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	Correlation of the Highest-Energy Cosmic Rays with Nearby Extragalactic Objects. Science, 2007, 318, 938-943.	12.6	647
2	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
3	Shape Coexistence and theN=28Shell Closure Far from Stability. Physical Review Letters, 2000, 84, 5062-5065.	7.8	189
4	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
5	Detection of neutron clusters. Physical Review C, 2002, 65, .	2.9	114
6	An evaluation of the exposure in nadir observation of the JEM-EUSO mission. Astroparticle Physics, 2013, 44, 76-90.	4.3	102
7	Halo Structure ofB14e. Physical Review Letters, 2001, 86, 600-603.	7.8	91
8	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
9	Shape evolution in heavy sulfur isotopes and erosion of theN=28shell closure. Physical Review C, 2002, 66, .	2.9	90
10	Three-body correlations in Borromean halo nuclei. Physical Review C, 2001, 64, .	2.9	77
11	Structure of states in 12Be via the 11Be(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") reaction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 682,	4.1	61
12	TIGRESS: TRIUMF-ISAC gamma-ray escape-suppressed spectrometer. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1663-S1668.	3.6	55
13	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
14	Scattering 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
15	The POEMMA (Probe of Extreme Multi-Messenger Astrophysics) observatory. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 007.	5.4	50
16	Radioactive beam experiments with large gamma-ray detector arrays. Nuclear Instruments & Methods in Physics Research B, 2003, 204, 660-665.	1.4	48
17	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
18	Probing shell structure in neutron-rich nuclei with in-beam Î³-spectroscopy. European Physical Journal A, 2002, 15, 93-97.	2.5	46

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19	High precision measurements ofNa26Î²âº decay. Physical Review C, 2005, 71, .	2.9	45
20	The JEM-EUSO instrument. Experimental Astronomy, 2015, 40, 19-44.	3.7	45
21	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
22	Structure of the neutron-rich 37, 39P and 43, 45Cl nuclei. European Physical Journal A, 2004, 22, 173-178.	2.5	41
23	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
24	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
25	Halo neutrons and theÎ²decay ofLi11. Physical Review C, 2004, 70, .	2.9	38
26	<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
27	The JEM-EUSO mission: An introduction. Experimental Astronomy, 2015, 40, 3-17.	3.7	38
28	Strong resonances in elastic scattering of radioactive21Naon protons. Physical Review C, 2002, 65, .	2.9	35
29	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
30	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
31	Î² decay ofNa32. Physical Review C, 2007, 75, .	2.9	33
32	Î³rays emitted in the decay of 31-yr178Hfm2. Physical Review C, 2003, 68, .	2.9	32
33	The EUSO-Balloon pathfinder. Experimental Astronomy, 2015, 40, 281-299.	3.7	31
34	MultichannelR-matrix analysis of elastic and inelastic resonances in theNa21+pcompound system. Physical Review C, 2005, 71, .	2.9	30
35	Study of 19Na at SPIRAL. European Physical Journal A, 2005, 24, 237-247.	2.5	28
36	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

#	ARTICLE	IF	CITATIONS
37	High-precision branching ratio measurement for the superallowedÎ²+emitterGa62. Physical Review C, 2008, 78, .	2.9	27
38	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
39	JEM-EUSO: Meteor and nuclearite observations. Experimental Astronomy, 2015, 40, 253-279.	3.7	27
40	EUSO-TA â€“ First results from a ground-based EUSO telescope. Astroparticle Physics, 2018, 102, 98-111.	4.3	27
41	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
42	Reorientation-effect measurement of theâŒ©21+âˆ¥E2Ì‚âˆ¥21+âŒªmatrix element in10Be. Physical Review C, 2012, 86, .	2.9	26
43	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	The TRIUMF nuclear structure program and TIGRESS. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 1084-1088.	1.4	20
56	A determination of the interaction potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 505, 15-20.	4.1	19
57	Coulomb excitation of radioactiveNa21and its stable mirrorNe21. Physical Review C, 2008, 78, .	2.9	19
58	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 /><mml:none /><mml:mn>21</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2019, 99, .	2.9	19
59	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
60	Ground-based tests of JEM-EUSO components at the Telescope Array site, â€œEUSO-TAâ€• Experimental Astronomy, 2015, 40, 301-314.	3.7	16
61	JEM-EUSO observational technique and exposure. Experimental Astronomy, 2015, 40, 117-134.	3.7	16
62	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
63	Precision half-life measurement of62Ga. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1885-S1889.	3.6	15
64	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
65	A Review of the EUSO-Balloon Pathfinder for the JEM-EUSO Program. Space Science Reviews, 2022, 218, 3.	8.1	15
66	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
67	Level structure ofMg21: Nuclear and astrophysical implications. Physical Review C, 2006, 73, .	2.9	13
68	Coulomb excitation of the proton-dripline nucleusNa20. Physical Review C, 2009, 80, .	2.9	13
69	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
70	Space experiment TUS on board the Lomonosov satellite as pathfinder of JEM-EUSO. Experimental Astronomy, 2015, 40, 315-326.	3.7	11
71	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
72	The JEM-EUSO observation in cloudy conditions. Experimental Astronomy, 2015, 40, 135-152.	3.7	10

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73	The atmospheric monitoring system of the JEM-EUSO instrument. Experimental Astronomy, 2015, 40, 45-60.	3.7	10
74	Studies of high-K isomers at TRIUMF-ISAC. Nuclear Physics A, 2004, 746, 617-620.	1.5	8
75	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
76	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
77	Science of atmospheric phenomena with JEM-EUSO. Experimental Astronomy, 2015, 40, 239-251.	3.7	8
78	Performances of JEM-EUSO: angular reconstruction. Experimental Astronomy, 2015, 40, 153-177.	3.7	8
79	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>s</mml:mi></mml:math> -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
80	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
81	Performances of JEMâ€“EUSO: energy and X max reconstruction. Experimental Astronomy, 2015, 40, 183-214.	3.7	7
82	The infrared camera onboard JEM-EUSO. Experimental Astronomy, 2015, 40, 61-89.	3.7	7
83	Calibration for extensive air showers observed during the JEM-EUSO mission. Advances in Space Research, 2014, 53, 1506-1514.	2.6	6
84	DESCANT andÎ²-delayed neutron measurements at TRIUMF. EPJ Web of Conferences, 2015, 93, 07005.	0.3	6
85	Ultrahigh-energy cosmic ray composition from the distribution of arrival directions. Physical Review D, 2018, 98, .	4.7	6
86	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
87	Calibration aspects of the JEM-EUSO mission. Experimental Astronomy, 2015, 40, 91-116.	3.7	5
88	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
89	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
90	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

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91	The Mass Programme at GANIL Using the CSS2 and CIME Cyclotrons. Hyperfine Interactions, 2001, 132, 273-279.	0.5	4
92	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
93	Development of a Versatile Array of Neutron Detectors at Low Energy. , 2009, , .		4
94	A gas jet target for radioactive ion beam experiments. , 2013, , .		4
95	Results of 21Na+p experiments at ISAC. Nuclear Physics A, 2003, 718, 119-126.	1.5	3
96	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
97	Coulomb excitation of radioactive 20, 21Na. European Physical Journal A, 2009, 42, 477.	2.5	3
98	Ultra high energy photons and neutrinos with JEM-EUSO. Experimental Astronomy, 2015, 40, 215-233.	3.7	3
99	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
100	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
101	Changes in neutron shell closures of light very neutron-rich nuclei. European Physical Journal D, 2001, 51, A245-A253.	0.4	1
102	Publisherâ€™s Note: Strong resonances in elastic scattering of radioactive21Naon protons [Phys. Rev. C65, 042801 (2002)]. Physical Review C, 2002, 65, .	2.9	1
103	(3He,p) as an alternative to resonant elastic scattering. Nuclear Physics A, 2003, 718, 556-557.	1.5	1
104	Gamma-Ray Spectroscopy at TRIUMF-ISAC. AIP Conference Proceedings, 2006, , .	0.4	1
105	Charged-particle channels in the Î²-decay of [sup 11]Li. AIP Conference Proceedings, 2007, , .	0.4	1
106	Scattering of Halo Nuclei at Energies below and around the Coulomb Barrier. , 2015, , .		1
107	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
108	Spectroscopic study of <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:mn>1</mml:mn></mml:msup></mml: 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:m. Physical Revi	2.9	1

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109	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></mml:math> 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></mml:math> excited states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="bold	2.9	1
110	First Results with TIGRESS and Accelerated Radioactive Ion Beams from ISAC: Coulomb Excitation of [sup 20,21,29]Na. , 2009, , .		0
111	Gamma-Ray Spectroscopy at TRIUMF-ISAC: the New Frontier of Radioactive Ion Beam Research. , 2009, , .		0
112	The Pierre Auger Research and Development Array (RDA) in southeastern Colorado â€“ R&D for a giant ground array. EPJ Web of Conferences, 2013, 53, 08017.	0.3	0
113	New Opportunities in Decay Spectroscopy with the GRIFFIN and DESCANT Arrays. Physics Procedia, 2015, 66, 465-470.	1.2	0
114	Investigating Single-Particle Structure in 26Na Using the New SHARC Array. , 2015, , .		0
115	Shape Coexistence and the N = 28 Shell Closure Far from Stability. , 2001, , 147-152.		0
116	MEASUREMENT OF THE SPECTROSCOPIC QUADRUPOLE MOMENT FOR THE 2^{+}_{1} STATE IN 10Be: TESTING AB INITIO CALCULATIONS. , 2013, , .		0
117	A GAS JET TARGET FOR RADIOACTIVE ION BEAM EXPERIMENTS. , 2013, , .		0
118	PERFORMANCE OF VANDLE MEASURING BETA-DELAYED NEUTRON SPECTRA OF FISSION FRAGMENTS. , 2013, , .		0
119	Auger at the Telescope Array: Recent Progress Toward a Direct Cross-Calibration of Surface-Detector Stations. , 2018, , .		0