

Anatoly Barzakh

List of Publications by Year in descending order

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115
papers

2,177
citations

236925

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42
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117
all docs

117
docs citations

117
times ranked

1106
citing authors

#	ARTICLE	IF	CITATIONS
1	Producing gold at ISOLDE-CERN. Nuclear Instruments & Methods in Physics Research B, 2022, 513, 26-32.	1.4	0
2	Decay modes of the $^{99\text{Tl}}$ isomeric state in $^{183\text{Au}}$. Physical Review C, 2022, 105, .	2.9	1
3	Atomic calculations of the hyperfine-structure anomaly in gold. Physical Review A, 2021, 103, .	2.5	5
4	Laser-assisted nuclear decay spectroscopy of $^{176\text{Au}}$ and $^{177\text{Au}}$. Physical Review C, 2021, 104, .	2.9	7
5	Relativistic Fock space coupled-cluster study of bismuth electronic structure to extract the Bi nuclear quadrupole moment. Physical Review C, 2021, 104, .	2.9	11
6	Laser Spectroscopy of Neutron-Rich $^{207\text{Hg}}$ and $^{208\text{Hg}}$ Isotopes: Illuminating the Kink and Odd-Even Staggering in Charge Radii across the $^{135\text{N}}$ decay spectroscopy of $^{135\text{N}}$ and new $^{135\text{N}}$ -decay branches of $^{135\text{N}}$.	2.9	5
7	Large Shape Staggering in Neutron-Deficient Bi Isotopes. Physical Review Letters, 2021, 127, 192501.	7.8	27
9	Charge radii, moments, and masses of mercury isotopes across the $^{116\text{Hg}}$ shell closure. Physical Review C, 2021, 104, .	2.9	10
10	In-source laser spectroscopy of dysprosium isotopes at the ISOLDE-RILIS. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 472-475.	1.4	2
11	Highly efficient ion source for surface and laser ionization. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 364-366.	1.4	0
12	Laser-assisted decay spectroscopy for the ground states of $^{180\text{Au}}$ and $^{182\text{Au}}$. Physical Review C, 2020, 102, .	2.9	10
13	Detailed spectroscopy of doubly magic $^{132\text{Sn}}$. Physical Review C, 2020, 102, .	2.9	10
14	Laser-assisted decay spectroscopy and mass spectrometry of $^{178\text{Au}}$. Physical Review C, 2020, 102, .	2.9	8
15	Hyperfine anomaly in gold and magnetic moments of $^{197\text{Au}}$ gold isomers. Physical Review C, 2020, 101, .	2.9	2
16	$^{197\text{Au}}$ -decay branching ratio of $^{180\text{Pt}}$. Physical Review C, 2020, 101, .	2.9	2
17	In-source laser photoionization spectroscopy of Bi isotopes: accuracy of the technique and methods of data analysis. Hyperfine Interactions, 2020, 241, 1.	0.5	3
18	Search for octupole-deformed actinium isotopes using resonance ionization spectroscopy. Physical Review C, 2019, 100, .	2.9	22

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19	Decay properties of ^{200}Fr . Physical Review C, 2019, 100, .	2.9	10
20	Fine structure in the $\hat{I}\pm$ decay of At218. Physical Review C, 2019, 99, .	2.9	5
21	Inverse odd-even staggering in nuclear charge radii and possible octupole collectivity in At217,218,219 revealed by in-source laser spectroscopy. Physical Review C, 2019, 99, .	2.9	13
22	Shape staggering of midshell mercury isotopes from in-source laser spectroscopy compared with density-functional-theory and Monte Carlo shell-model calculations. Physical Review C, 2019, 99, .	2.9	43
23	\hat{I}^2 decay of In133 : \hat{I}^3 emission from neutron-unbound states in Sn133. Physical Review C, 2019, 99, .	2.9	9
24	Shell effect in the mean square charge radii and magnetic moments of bismuth isotopes near N=126. Physical Review C, 2018, 97, .	2.9	15
25	Target development for $^{67}\text{D}_{\text{u}}$, ^{82}Sr radionuclide production at the RIC-80 facility. Physics of Particles and Nuclei, 2018, 49, 75-77.	0.7	0
26	A New Method for Production of the Sr-82 Generator Radionuclide and Other Medical Radionuclides. Technical Physics, 2018, 63, 1254-1261.	0.7	0
27	Change in structure between the $\hat{I}\epsilon^- = \hat{I}\epsilon^-/2$ states in ^{181}Tl and $^{177,179}\text{Au}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 786, 355-363.	4.1	22
28	Characterization of the shape-staggering effect in mercury nuclei. Nature Physics, 2018, 14, 1163-1167.	16.7	106
29	Charge radii and electromagnetic moments of ^{195}At and ^{211}At . Physical Review C, 2018, 97, .	2.9	35
30	Calculation of Francium Hyperfine Anomaly. Atoms, 2018, 6, 39.	1.6	10
31	Investigation of Low-lying States in ^{133}Sn Populated in the β Decay of ^{133}In Using Isomer-selective Laser Ionization. Acta Physica Polonica B, 2018, 49, 523.	0.8	4
32	Towards high-resolution laser ionization spectroscopy of the heaviest elements in supersonic gas jet expansion. Nature Communications, 2017, 8, 14520.	12.8	90
33	Changes in mean-squared charge radii and magnetic moments of ^{179}Tl and ^{184}Tl measured by in-source laser spectroscopy. Physical Review C, 2017, 95, .	2.9	23
34	Shape coexistence studied in $^{182,184}\text{Hg}$ via the \hat{I}^2 decay of $^{182,184}\text{Tl}$. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 074001.	3.6	13
35	Penning-trap mass spectrometry and mean-field study of nuclear shape coexistence in the neutron-deficient lead region. Physical Review C, 2017, 95, .	2.9	12
36	In-gas laser ionization and spectroscopy of actinium isotopes near the N=126 closed shell. Physical Review C, 2017, 96, .	2.9	27

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37	Detailed \hat{I}_{\pm} -decay study of ^{180}Tl . Physical Review C, 2017, 96, .	2.9	4
38	Shape evolution for neutron-deficient bismuth isotopes studied by resonance laser ionization spectroscopy. Physics of Particles and Nuclei, 2017, 48, 914-916.	0.7	2
39	Onset of deformation in neutron-deficient Bi isotopes studied by laser spectroscopy. Physical Review C, 2017, 95, .	2.9	13
40	CALCULATION OF THALLIUM HYPERFINE ANOMALY. RAD Association Journal, 2017, 2, .	0.0	8
41	\hat{I}_{\pm} -decay study of $^{182,184}\text{Tl}$. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 025102.	3.6	10
42	First results on Ge resonant laser photoionization in hollow cathode lamp. Review of Scientific Instruments, 2016, 87, 02B708.	1.3	7
43	\hat{I}_{\pm} -delayed fission and \hat{I}_{\pm} decay of ^{193}Po . Laser spectroscopy studies of intruder states in ^{193}Po .	2.9	10
44	Internal decay of ^{193}Po .	2.9	17
45	state in ^{193}Po .	2.9	7
46	Ground-State Properties of ^{193}Po .	8.9	18
47	Changes in the mean square charge radii and electromagnetic moments of neutron-deficient Bi isotopes. AIP Conference Proceedings, 2015, .	0.4	0
48	The radioisotope complex project RIC-80 at the Petersburg Nuclear Physics Institute. Review of Scientific Instruments, 2015, 86, 123510.	1.3	6
49	Electromagnetic moments of odd- A ^{193}Po .	2.9	51
50	Evolution of fission-fragment mass distributions in the neutron-deficient lead region. Physical Review C, 2014, 90, .	2.9	39
51	Charge radii of odd- A ^{191}Po isotopes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 719, 362-366.	4.1	64
52	New developments of the in-source spectroscopy method at RILIS/ISOLDE. Nuclear Instruments & Methods in Physics Research B, 2013, 317, 550-556.	1.4	47
53	\hat{I}_{\pm} -decay spectroscopy of the chain ^{179}Tl .	2.9	13
54	New laser setup at the IRIS facility. Magnetic moments and mean squared charge radii of neutron deficient ^{179}Tl isotopes. Hyperfine Interactions, 2013, 216, 27-31.	0.5	1

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73	Electron beam plasma ionizing target for the production of neutron-rich nuclides. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4294-4297.	1.4	1
74	Measurement of delayed neutron yields and time spectra from 1 GeV protons interacting with thick natPb targets. European Physical Journal A, 2007, 32, 1-4.	2.5	5
75	Recent developments and on-line tests of uranium carbide targets for production of nuclides far from stability. European Physical Journal: Special Topics, 2007, 150, 297-300.	2.6	3
76	Target-ion source unit ionization efficiency measurement by a method of stable ion beam implantation. European Physical Journal: Special Topics, 2007, 150, 301-302.	2.6	0
77	Combined target-ion source unit for production of rare nuclides. Review of Scientific Instruments, 2006, 77, 03A705.	1.3	7
78	Absolute branching intensities in the decay of Rb92 to Sr92. Physical Review C, 2006, 74, .	2.9	10
79	Development of uranium carbide targets for the on-line production of neutron-rich isotopes. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 888-894.	1.4	7
80	On-line production of Rb and Cs isotopes from uranium carbide targets. European Physical Journal A, 2005, 23, 257-264.	2.5	14
81	Integrated target-ion source unit for on-line production of radioactive short-lived isotopes. European Physical Journal A, 2005, 26, 147-150.	2.5	3
82	Laser spectroscopic studies of Gd145, Gd145m, and Gd143m. Physical Review C, 2005, 72, .	2.9	9
83	High temperature electron beam ion source for on-line production of isotopes of refractory elements. Review of Scientific Instruments, 2004, 75, 1634-1636.	1.3	2
84	Enhancement of ionization efficiency of surface, electron bombardment and laser ion sources by axial magnetic field application. Review of Scientific Instruments, 2004, 75, 1585-1587.	1.3	1
85	Proton- and neutron-induced fission on uranium carbide target. European Physical Journal A, 2004, 19, 341-345.	2.5	13
86	Changes in the mean square charge radii of neutron-deficient europium isotopes measured by the laser ion source resonance ionization spectroscopy. European Physical Journal A, 2004, 22, 69-74.	2.5	8
87	Production of neutron rich nuclides from uranium carbide targets of different density. Nuclear Instruments & Methods in Physics Research B, 2003, 204, 267-271.	1.4	12
88	High temperature electron beam ion source for the production of single charge ions of most elements of the Periodic Table. Nuclear Instruments & Methods in Physics Research B, 2003, 204, 382-386.	1.4	4
89	High temperature uranium carbide targets. , 2003, , 495-495.		1
90	Charge radius and electromagnetic moments of 153Yb. , 2003, , 83-84.		0

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91	Release and yields of lithium isotopes from high temperature targets. , 2003, , 480-480.		0
92	High temperature ion sources with ion confinement. Review of Scientific Instruments, 2002, 73, 738-740.	1.3	14
93	Measurements of charge radii and electromagnetic moments of nuclei far from stability by photoionization spectroscopy in a Laser Ion Source. AIP Conference Proceedings, 2002, , .	0.4	5
94	Production of neutron-rich isotopes by one- and two-step processes in ISOL targets. Nuclear Instruments & Methods in Physics Research B, 2002, 194, 193-206.	1.4	11
95	Development of high temperature targets at IRIS facility. Nuclear Physics A, 2002, 701, 470-475.	1.5	8
96	Nuclear spins, magnetic moments and β^\pm -decay spectroscopy of long-lived isomeric states in ^{185}Pb . European Physical Journal A, 2002, 14, 63-75.	2.5	22
97	Selective high temperature refractory target " laser ion source unit of IRIS facility. , 2000, 127, 421-424.		3
98	Application of the laser ion source for isotope shift and hyperfine structure investigation. , 2000, 127, 425-430.		8
99	Mean square charge radii of the neutron-deficient rare-earth isotopes in the region of the nuclear shell $N=82$ measured by the laser ion source spectroscopy technique. Physical Review C, 2000, 61, .	2.9	31
100	Application of the laser ion source for isotope shift and hyperfine structure investigations. , 1998, , .		0
101	A mass-separator laser ion source. Nuclear Instruments & Methods in Physics Research B, 1997, 126, 85-87.	1.4	17
102	Investigation of the release properties of MeCx targets at IRIS. Nuclear Instruments & Methods in Physics Research B, 1997, 126, 150-153.	1.4	14
103	Isotonic and isobaric dependencies of nuclear charge radii for rare-earth nuclei. Zeitschrift für Physik A, 1993, 346, 265-268.	0.9	10
104	Laser spectroscopic studies of nuclei with neutron number $N < 82$ (Eu, Sm and Nd isotopes). Journal of Physics G: Nuclear and Particle Physics, 1992, 18, 1177-1193.	3.6	33
105	Hyperfine structure and isotope shift investigations of ^{145}Pm and ^{147}Pm . Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, 571-576.	1.5	8
106	A new highly efficient method of atomic spectroscopy for nuclides far from stability. Nuclear Instruments & Methods in Physics Research B, 1992, 69, 517-520.	1.4	53
107	Resonance Ionization Spectroscopy of Rare-Earth Elements at Iris Facility. NATO ASI Series Series B: Physics, 1992, , 81-86.	0.2	0
108	Laser photoionization spectroscopy of rare-earth elements: New results on nuclear electromagnetic moments and charge radii of Eu, Gd and Tb isotopes. Hyperfine Interactions, 1990, 61, 1335-1338.	0.5	1

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109	Odd-even staggering in nuclear charge radii of neutron-rich europium isotopes. Zeitschrift für Physik A, Atomic Nuclei, 1990, 337, 257-259.	0.3	3
110	Electromagnetic moments and nuclear charge radii for neutron-deficient Tb isotopes and the deformation jump near $Z=64, N=90$. Zeitschrift für Physik A, Atomic Nuclei, 1990, 337, 367-370.	0.3	4
111	Nuclear deformation of holmium isotopes. Nuclear Physics A, 1989, 504, 549-561.	1.5	43
112	Nuclear electromagnetic moments and charge radii of deformed thulium isotopes with the mass numbers $A = 157$ to 172 . Nuclear Physics A, 1988, 477, 37-54.	1.5	56
113	Resonance photoionization spectroscopy and laser separation of ^{141}Sm and ^{164}Tm nuclear isomers. Optics Communications, 1987, 61, 383-386.	2.1	13
114	Atomic lines isotope shifts of short-lived radioactive Eu studied by high-sensitive laser resonance photoionization method in <i>on-line</i> experiments with proton beams. Optics Communications, 1984, 52, 24-28.	2.1	47
115	TARGET DEVELOPMENT FOR MEDICAL RADIONUCLIDES CU-67 AND SR-82 PRODUCTION. , 0, , .		1