

Bradley Cheal

List of Publications by Year in descending order

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82
papers

2,491
citations

196777
29
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232693
48
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83
all docs

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docs citations

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times ranked

1178
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge Radii of the Nickel Isotopes Ni_{58-68} and Electromagnetic moments of scandium isotopes and N^{28} isotones in the distinctive $0f7/2$ orbit.	2.9	27
2	Impact of Nuclear Deformation and Pairing on the Charge Radii of Palladium Isotopes. Physical Review Letters, 2022, 128, 152501.	1.5	10
3	Probing the single-particle behavior above Sn_{132} via electromagnetic moments of Sb_{133} . Evidence of a sudden increase in the nuclear size of proton-rich silver-96. Nature Communications, 2021, 12, 4596.	2.9	10
4	Proton-neutron pairing correlations in the self-conjugate nucleus ^{42}Sc . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136439.	1.1	6
5	High-resolution laser spectroscopy of Al_{27-32} . A new off-line ion source facility at IGISOL. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 382-383.	0.6	13
6	Upgrades to the collinear laser spectroscopy experiment at the IGISOL. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 437-440.	0.6	19
7	Doubly-magic character of Sn_{133} . Nuclear moments of germanium isotopes near Ge_{82} . Physical Review C, 2020, 102, 102502.	1.1	17
8	Structural trends in atomic nuclei from laser spectroscopy of tin. Communications Physics, 2020, 3, .	2.0	24
9	Charge Radius of the Short-Lived Ni_{68} and Correlation with the Dipole Polarizability. Physical Review Letters, 2020, 124, 102502.	2.9	30
10	Collinear laser spectroscopy of stable palladium isotopes at the IGISOL facility. Hyperfine Interactions, 2020, 241, 1.	0.2	3
11	Nuclear charge radii of $^{62-80}\text{Zn}$ and their dependence on cross-shell proton excitations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134805.	1.5	23
12	Laser Spectroscopy of Neutron-Rich Tin Isotopes: A Discontinuity in Charge Radii across the Shell Closure. Physical Review Letters, 2019, 122, 192502.	2.9	81
13	Isotope shifts from collinear laser spectroscopy of doubly charged yttrium isotopes. Physical Review A, 2018, 97, .	1.0	22
14	From Calcium to Cadmium: Testing the Pairing Functional through Charge Radii Measurements of $\text{Cd}_{100-130}$. Physical Review Letters, 2018, 121, 102501.	2.9	57

#	ARTICLE	IF	CITATIONS
19	Probing the large deformation of the $\langle \text{mml:math} \rangle$ isomeric state in $\langle \text{mml:math} \rangle$. $\langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle \text{Zn} \langle / \text{mml:mi} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mn} \rangle 73 \langle / \text{mml:mn} \rangle \langle \text{mml:mmultiscripts} \rangle \langle / \text{mml:math} \rangle$: An indicator for triaxiality. <i>Physical Review C</i> , 2018, 97, .	1.1	9
20	Precision Measurement of the First Ionization Potential of Nobelium. <i>Physical Review Letters</i> , 2018, 120, 263003.	2.9	56
21	Probing Sizes and Shapes of Nobelium Isotopes by Laser Spectroscopy. <i>Physical Review Letters</i> , 2018, 120, 232503.	2.9	63
22	Collinear laser spectroscopy at ISOLDE: new methods and highlights. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2017, 44, 064002.	1.4	69
23	High-resolution laser spectroscopy of long-lived plutonium isotopes. <i>Physical Review A</i> , 2017, 95, .	1.0	19
24	Impact of buffer gas quenching on the $1\text{S}0\rightarrow1\text{P}1$ ground-state atomic transition in nobelium. <i>European Physical Journal D</i> , 2017, 71, 1.	0.6	10
25	Laser spectroscopy with an electrostatic ConeTrap. <i>Hyperfine Interactions</i> , 2017, 238, 1.	0.2	1
26	Evolution of nuclear structure in neutron-rich odd-Zn isotopes and isomers. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 771, 385-391.	1.5	30
27	Laser Spectroscopic Studies of Fission Products and Nobelium. , 2017, .	0	
28	Changes in nuclear structure along the Mn isotopic chain studied via charge radii. <i>Physical Review C</i> , 2016, 94, .	1.1	23
29	Developments for resonance ionization laser spectroscopy of the heaviest elements at SHIP. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 383, 115-122.	0.6	26
30	Atom-at-a-time laser resonance ionization spectroscopy of nobelium. <i>Nature</i> , 2016, 538, 495-498.	13.7	103
31	Quadrupole moments of odd-A $53\rightarrow63$ Mn: Onset of collectivity towards N = 40. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 760, 387-392.	1.5	21
32	Simple Nuclear Structure in $\langle \text{mml:math} \rangle$. $\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Cd} \langle / \text{mml:mi} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 111 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 129 \langle / \text{mml:mn} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle / \text{mml:math} \rangle$ Atomic Isomer Shifts. <i>Physical Review Letters</i> , 2016, 116, 032501.	2.9	32
33	Cu charge radii reveal a weak sub-shell effect at N=40. <i>Physical Review C</i> , 2016, 93, .	1.1	36
34	Isomer Shift and Magnetic Moment of the Long-Lived $\langle \text{mml:math} \rangle$. $\langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{display}=\text{"inline"} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \text{stretchy}=\text{"false"} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle / \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle / \text{mml:math} \rangle \langle \text{mml:math} \rangle \text{Isomer} \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Zn} \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle / \text{mml:math} \rangle \langle \text{mml:math} \rangle \text{Atomic Isomer Shifts}$. <i>Physical Review Letters</i> , 2016, 116, 182502.	2.9	51
35	Evidence for Increased neutron and proton excitations between $51\rightarrow63$ Mn. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2015, 750, 176-180.	1.5	17
36	Spins and magnetic moments of $\langle \text{mml:math} \rangle$. $\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mi} \rangle \text{Mn} \langle / \text{mml:mi} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 58 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle, \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 60 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle, \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 62 \langle / \text{mml:mn} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:none} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Zn} \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle / \text{mml:math} \rangle \langle \text{mml:math} \rangle \text{States and Isomers}$. <i>Physical Review C</i> , 2015, 92, .	1.1	11

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37	Collinear laser spectroscopy of atomic cadmium. European Physical Journal D, 2015, 69, 1.	0.6	18
38	Recent Advances in On-Line Laser Spectroscopy. Nuclear Physics News, 2015, 25, 12-18.	0.1	0
39	Nuclear moments and charge radii of neutron-deficient francium isotopes and isomers. Physical Review C, 2015, 91, .	1.1	23
40	Collinear Laser Spectroscopy on Neutron-rich Mn Isotopes Approaching \$N=40\$. Acta Physica Polonica B, 2015, 46, 699.	0.3	3
41	Direct observation of an isomeric state in ^{98}Rb and nuclear properties of exotic rubidium isotopes measured by laser spectroscopy. European Physical Journal A, 2015, 51, 1.	1.0	15
42	Collinear laser spectroscopy techniques at JYFL. Hyperfine Interactions, 2014, 223, 63-71.	0.2	5
43	Physics highlights from laser spectroscopy at the IGISOL. Hyperfine Interactions, 2014, 223, 207-222.	0.2	5
44	Collinear laser spectroscopy at the new IGISOL 4 facility. Hyperfine Interactions, 2014, 223, 223-230.	0.2	4
45	Laser spectroscopy at IGISOL IV. Hyperfine Interactions, 2014, 227, 139-145.	0.2	4
46	First Use of High-Frequency Intensity Modulation of Narrow-Linewidth Laser Light and Its Application in Determination of Fr in ^{206}Po , ^{205}Po , ^{204}Po . Physical Review Letters, 2013, 111, 122501.	2.9	34
47	LASER SPECTROSCOPY OF EXOTIC NUCLEI AT ISOLDE AND JYFL. , 2013, , .	0	
48	Laser spectroscopy of radioactive isotopes: Role and limitations of accurate isotope-shift calculations. Physical Review A, 2012, 86, .	1.0	65
49	Nuclear mean-square charge radii of ^{63}Mn , ^{64}Mn , ^{66}Mn , ^{68}Mn , ^{32}Mg . Physical Review C, 2012, 86, .	1.1	24
50	Laser spectroscopy of gallium isotopes beyond $N = 50$. Journal of Physics: Conference Series, 2012, 381, 012071.	0.3	10
51	Nuclear moments, charge radii and spins of the ground and isomeric states in ^{175}Yb and ^{177}Yb . Journal of Physics G: Nuclear and Particle Physics, 2012, 39, 125101.	1.4	14
52	Development of the CRIS (Collinear Resonant Ionisation Spectroscopy) beam line. Journal of Physics: Conference Series, 2012, 381, 012070.	0.3	19
53	Laser assisted decay spectroscopy at the CRIS beam line at ISOLDE. Journal of Physics: Conference Series, 2012, 381, 012128.	0.3	12
54	Collinear laser spectroscopy techniques at JYFL. , 2012, , 83-91.	0	

#	ARTICLE	IF	CITATIONS
55	Physics highlights from laser spectroscopy at the IGISOL. , 2012, , 271-286.	0	
56	Collinear laser spectroscopy at the new IGISOL 4 facility. , 2012, , 287-294.	0	
57	Ground-state spins and moments of Cu^{72} , Cu^{74} , and Cu^{76} nuclei. Physical Review C, 2011, 84, 014311.	1.1	32
58	Magnetic and quadrupole moments of neutron deficient $^{58-62}\text{Cu}$ isotopes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 703, 34-39.	1.5	35
59	Nuclear charge radii and electromagnetic moments of radioactive scandium isotopes and isomers. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 025104.	1.4	45
60	Status of the LASER-IGISOL collaboration at the University of Jyväskylä. Hyperfine Interactions, 2010, 196, 143-150.	0.2	11
61	Ground state properties of manganese isotopes across the shell closure. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 690, 346-351.	1.5	53
62	Nuclear spin determination of ^{100}Mg by collinear laser spectroscopy of optically pumped ions. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 105103.	1.4	29
63	Nuclear Spins and Moments of Ga Isotopes Reveal Sudden Structural Changes between Ga^{40} and Ga^{50} . Discovery of a long-lived low-lying isomeric state in Ga^{40} . Physical Review C, 2010, 82, 024314.	2.9	154
64	mathvariant="normal"> Ga^{40} and Ga^{50} . Physical Review C, 2010, 82, 024314.	1.1	35
65	Nuclear spins, magnetic moments, and quadrupole moments of Cu isotopes from N=28 to N=46: Probes for core polarization effects. Physical Review C, 2010, 82, 024314.	1.1	86
66	Experimental determination of an Fe^{56} ground state in $\text{Cu}^{72,74}$. Physical Review C, 2010, 82, .	1.1	30
67	Progress in laser spectroscopy at radioactive ion beam facilities. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 113101.	1.4	147
68	Status of the LASER-IGISOL collaboration at the University of Jyväskylä. , 2010, , 143-150.	0	
69	Laser Spectroscopy of Niobium Fission Fragments: First Use of Optical Pumping in an Ion Beam Cooler Buncher. Physical Review Letters, 2009, 102, 222501.	2.9	88
70	Nuclear Spins and Magnetic Moments of Nb^{71} and Nb^{73} . Inversion of Nb^{71} and Nb^{73} . European Physical Journal A, 2009, 42, 503-507.	2.9	150
71	Nuclear charge radii of molybdenum fission fragments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 23-27.	1.5	83
72	An ion cooler-buncher for high-sensitivity collinear laser spectroscopy at ISOLDE. European Physical Journal A, 2009, 42, 503-507.	1.0	94

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73	Laser pumping of ions in a cooler buncher. <i>Hyperfine Interactions</i> , 2008, 181, 107-110.		0.2	2
74	Laser pumping of ions in a cooler buncher. , 2008, , 627-630.		0	
75	The shape transition in the neutron-rich yttrium isotopes and isomers. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 645, 133-137.		1.5	92
76	On the decrease in charge radii of multi-quasi particle isomers. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 645, 330-334.		1.5	35
77	Investigation of the low-lying isomer in ^{229}Th by collinear laser spectroscopy. <i>Hyperfine Interactions</i> , 2006, 171, 197-201.		0.2	11
78	Nuclear charge radii and electromagnetic moments of scandium isotopes and isomers in the f7/2 shell. <i>Hyperfine Interactions</i> , 2006, 171, 209-215.		0.2	9
79	Resonance ionization spectroscopy of bismuth at the IGISOL facility. <i>Hyperfine Interactions</i> , 2006, 171, 135-141.		0.2	12
80	Model independent determination of the spin of the Ta^{180} naturally occurring isomer. <i>Physical Review C</i> , 2006, 74, .		1.1	16
81	Laser spectroscopy of radioactive Ti, Zr and Hf isotopes and isomers at the JYFL laser-IGISOL facility. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2003, 58, 1069-1076.		1.5	3
82	Collinear laser spectroscopy of neutron-rich cerium isotopes near the $N= 88$ shape transition. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2003, 29, 2479-2484.		1.4	14