

Gerda Neyens

List of Publications by Year in descending order

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59
papers

2,732
citations

172457

29
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175258

52
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60
all docs

60
docs citations

60
times ranked

1388
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge Radii of the Nickel Isotopes. $\langle r^2 \rangle_{Ni} = 58 \langle r^2 \rangle_{68} + 12 \langle r^2 \rangle_{70}$ Physical Review Letters, 2022, 128, 022502.	7.8	27
2	Electromagnetic moments of scandium isotopes and $N=28$ isotones in the distinctive $0f_{7/2}$ orbit. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 829, 137064.	4.1	10
3	Nuclear moments of indium isotopes reveal abrupt change at magic number 82. Nature, 2022, 607, 260-265.	27.8	22
4	Probing the single-particle behavior above $Z=82$ via electromagnetic moments of $Z=83$ isotopes. Physical Review Letters, 2022, 128, 022502.	2.9	6
5	Isotope Shifts of Radium Monofluoride Molecules. Physical Review Letters, 2021, 127, 033001.	7.8	23
6	Charge radii of exotic potassium isotopes challenge nuclear theory and the magic character of $N=32$. Nature Physics, 2021, 17, 439-443.	16.7	79
7	High-resolution laser spectroscopy of ^{27}Al . Physical Review Letters, 2021, 126, 022502.	2.9	17
8	High-accuracy liquid-sample ^{129}Xe -NMR setup at ISOLDE. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1020, 165862.	1.6	4
9	Optimising the Collinear Resonance Ionisation Spectroscopy (CRIS) experiment at CERN-ISOLDE. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 384-389.	1.4	13
10	Resonance ionization schemes for high resolution and high efficiency studies of exotic nuclei at the CRIS experiment. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 398-402.	1.4	7
11	Doubly-magic character of ^{132}Sn studied via electromagnetic moments of ^{133}Sn . Physical Review C, 2020, 102, 014307.	2.9	8
12	Nuclear moments of germanium isotopes near $Z=50$. Physical Review C, 2020, 102, 014307.	2.9	8
13	Tin resonance-ionization schemes for atomic- and nuclear-structure studies. Physical Review A, 2020, 102, 013401.	2.5	12
14	Structural trends in atomic nuclei from laser spectroscopy of tin. Communications Physics, 2020, 3, 1-10.	5.3	24
15	Charge Radius of the Short-Lived ^{68}Ni and Correlation with the Dipole Polarizability. Physical Review Letters, 2020, 124, 132502.	7.8	30
16	Analytic response relativistic coupled-cluster theory: the first application to indium isotope shifts. New Journal of Physics, 2020, 22, 012001.	2.9	21
17	Measurement and microscopic description of odd-even staggering of charge radii of exotic copper isotopes. Nature Physics, 2020, 16, 620-624.	16.7	76
18	Magnetic Moments of Short-Lived Nuclei with Part-per-Million Accuracy: Toward Novel Applications of ^{129}Xe -Detected NMR in Physics, Chemistry, and Biology. Physical Review X, 2020, 10, 011043.	8.9	2

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19	Nuclear charge radii of ^{62}Zn and their dependence on cross-shell proton excitations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134805.	4.1	23
20	Precision measurements of the charge radii of potassium isotopes. Physical Review C, 2019, 100, .	2.9	22
21	Simulation of the relative atomic populations of elements ^{1}Zn following charge exchange tested with collinear resonance ionization spectroscopy of indium. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 153, 61-83.	2.9	21
22	Laser Spectroscopy of Neutron-Rich Tin Isotopes: A Discontinuity in Charge Radii across the $N=82$ Shell Closure. Physical Review Letters, 2019, 122, 192502.	7.8	81
23	A new beamline for laser spin-polarization at ISOLDE. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 925, 24-32.	1.6	10
24	Analysis of counting data: Development of the SATLAS Python package. Computer Physics Communications, 2018, 222, 286-294.	7.5	42
25	High-Precision Multiphoton Ionization of Accelerated Laser-Ablated Species. Physical Review X, 2018, 8, .	8.9	17
26	From Calcium to Cadmium: Testing the Pairing Functional through Charge Radii Measurements of ^{100}Cd and ^{130}Cd Isomeric state in ^{130}Cd . Physical Review C, 2018, 97, 054307.	7.8	57
27	Charge radii of ^{73}Zn and $^{73}\text{Zn}^*$: An indicator for triaxiality. Physical Review C, 2018, 97, 054307.	2.9	9
28	Nuclear moments of the low-lying isomeric 1^+ state of ^{34}Al : Investigation on the neutron $1p_{1/2}$ excitation across $N=20$ in the island of inversion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 782, 619-626.	4.1	8
29	Efficient, high-resolution resonance laser ionization spectroscopy using weak transitions to long-lived excited states. Physical Review A, 2017, 95, .	2.5	32
30	Collinear laser spectroscopy at ISOLDE: new methods and highlights. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 064002.	3.6	69
31	Probing the ground-state properties in the region near $Z=28$. Physical Review C, 2017, 95, 054307.	2.9	15
32	Dipole and quadrupole moments of ^{73}Cu as a test of the robustness of the ^{73}Zn charge radii. Physical Review C, 2017, 95, 054307.	2.9	41
33	New laser polarization line at the ISOLDE facility. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 084005.	3.6	9
34	Evolution of nuclear structure in neutron-rich odd-Zn isotopes and isomers. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 385-391.	4.1	30
35	Changes in nuclear structure along the Mn isotopic chain studied via charge radii. Physical Review C, 2016, 94, .	2.9	23
36	High-resolution laser spectroscopy with the Collinear Resonance Ionisation Spectroscopy (CRIS) experiment at CERN-ISOLDE. Nuclear Instruments & Methods in Physics Research B, 2016, 376, 284-287.	1.4	16

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37	High-precision quadrupole moment reveals significant intruder component in Al201333 ground state. Physical Review C, 2016, 94, .	2.9	13
38	Cu charge radii reveal a weak sub-shell effect at N=40. Physical Review C, 2016, 93, .	2.9	36
39	Isomer Shift and Magnetic Moment of the Long Lived ^{78}Zn in ^{78}Zn . Physical Review Letters, 2016, 116, 182502.	7.8	51
40	Unexpectedly large charge radii of neutron-rich calcium isotopes. Nature Physics, 2016, 12, 594-598.	16.7	257
41	Use of a Continuous Wave Laser and Pockels Cell for Sensitive High-Resolution Collinear Resonance Ionization Spectroscopy. Physical Review Letters, 2015, 115, 132501.	7.8	54
42	Ground-state electromagnetic moments of calcium isotopes. Physical Review C, 2015, 91, .	2.9	40
43	Billion-Fold Enhancement in Sensitivity of Nuclear Magnetic Resonance Spectroscopy for Magnesium Ions in Solution. ChemPhysChem, 2014, 15, 3929-3932.	2.1	19
44	Nuclear charge radii of potassium isotopes beyond ^{32}K . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 731, 97-102.	4.1	63
45	Evaluation of the ground-state quadrupole moments of the (sd) nuclei. Atomic Data and Nuclear Data Tables, 2013, 99, 391-415.	2.4	51
46	Collinear Resonance Ionization Spectroscopy of Neutron-Deficient Francium Isotopes. Physical Review Letters, 2013, 111, 212501.	7.8	63
47	Nuclear Charge Radii of ^{21}Mg . Nuclear mean-square charge radii of ^{32}Ca .	7.8	71
48	Nuclear Charge Radii of ^{64}Zn and ^{66}Zn nuclei: No anomalous behavior at ^{64}Zn . Physical Review Letters, 2010, 104, 252502.	2.9	24
49	Ground-State Spins and Moments of ^{32}Ca and ^{37}Ca Isotopes Reveal Sudden Structural Changes between ^{32}Ca and ^{37}Ca . Nuclear Spins and Moments of ^{40}Ca and ^{50}Ca Isotopes.	2.9	32
50	Nuclear Spins and Moments of ^{40}Ca and ^{50}Ca Isotopes. Physical Review Letters, 2010, 104, 252502.	7.8	154
51	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, .	2.9	86
52	Nuclear Spins and Magnetic Moments of ^{71}Cu and ^{73}Cu . Inversion of ^{75}Cu . An ion cooler-buncher for high-sensitivity collinear laser spectroscopy at ISOLDE. European Physical Journal A, 2009, 42, 503-507.	7.8	150
53	Precision Measurement of ^{11}Li Moments: Influence of Halo Neutrons on the ^{11}Li Core. Physical Review Letters, 2008, 101, 1325	2.5	94
54	Precision Measurement of ^{11}Li Moments: Influence of Halo Neutrons on the ^{11}Li Core. Physical Review Letters, 2008, 101, 1325	7.8	67

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55	Spin and Magnetic Moment of Mg33: Evidence for a Negative-Parity Intruder Ground State. Physical Review Letters, 2007, 99, 212501.	7.8	91
56	Nuclear Moments. , 2006, , 135-189.		27
57	g factors of $^{31,32,33}\text{Al}$: Indication for intruder configurations in the ^{33}Al ground state. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 643, 257-262.	4.1	42
58	Measurement of the Spin and Magnetic Moment of Mg31: Evidence for a Strongly Deformed Intruder Ground State. Physical Review Letters, 2005, 94, 022501.	7.8	164
59	Nuclear magnetic and quadrupole moments for nuclear structure research on exotic nuclei. Reports on Progress in Physics, 2003, 66, 633-689.	20.1	163