

# Wouter Gins

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3522385/publications.pdf>

Version: 2024-02-01

48

papers

951

citations

430874

18

h-index

477307

29

g-index

50

all docs

50

docs citations

50

times ranked

716

citing authors

#	ARTICLE	IF	CITATIONS
1	Towards high-resolution laser ionization spectroscopy of the heaviest elements in supersonic gas jet expansion. <i>Nature Communications</i> , 2017, 8, 14520.	12.8	90
2	Laser Spectroscopy of Neutron-Rich Tin Isotopes: A Discontinuity in Charge Radii across the $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle = \langle \text{mml:mo} \rangle 82 \langle \text{mml:mn} \rangle \langle \text{mml:math} \rangle \text{ Shell Closure. Physical Review Letters}$	7.8	81
3	Measurement and microscopic description of odd-even staggering of charge radii of exotic copper isotopes. <i>Nature Physics</i> , 2020, 16, 620-624. <i>Isomer Shift and Magnetic Moment of the Long-Lived</i> $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \text{ stretchy="false" } \rangle \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{ Isomer in}$ $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle Zn \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle / \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{ Physical Review Letters}$ , 2016, 116, 182502.	16.7	76
4	Analysis of counting data: Development of the SATLAS Python package. <i>Computer Physics Communications</i> , 2018, 222, 286-294.	7.5	42
5	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.	4.1	30
6	Charge Radius of the Short-Lived $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle Ni \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mprescripts} / \rangle \langle \text{mml:none} / \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 68 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{ and Correlation with the Dipole Polarizability. Physical Review Letters}$	7.8	30
7	In-gas laser ionization and spectroscopy of actinium isotopes near the N=126 closed shell. <i>Physical Review C</i> , 2017, 96, . <i>Nuclear Charge Radii of the Nickel Isotopes</i> $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle Ni \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mprescripts} / \rangle \langle \text{mml:none} / \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 58 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \text{~} \langle \text{mml:mn} \rangle 68 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 70 \langle \text{mml:math} \rangle \text{ Physical Review Letters}$ , 2022, 128, 022502.	2.9	27
8	Structural trends in atomic nuclei from laser spectroscopy of tin. <i>Communications Physics</i> , 2020, 3, .	5.3	24
9	Changes in nuclear structure along the Mn isotopic chain studied via charge radii. <i>Physical Review C</i> , 2016, 94, .	2.9	23
10	Nuclear charge radii of $62\tilde{8}0Zn$ and their dependence on cross-shell proton excitations. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 797, 134805.	4.1	23
11	Precision measurements of the charge radii of potassium isotopes. <i>Physical Review C</i> , 2019, 100, .	2.9	22
12	Nuclear moments of indium isotopes reveal abrupt change at magic number 82. <i>Nature</i> , 2022, 607, 260-265.	27.8	22
13	Quadrupole moments of odd-A $53\tilde{6}3Mn$ : Onset of collectivity towards N = 40. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 760, 387-392.	4.1	21
14	Laser-spectroscopy studies of the nuclear structure of neutron-rich radium. <i>Physical Review C</i> , 2018, 97, .	2.9	21
15	Simulation of the relative atomic populations of elements $1\tilde{8}Z\tilde{8}9$ following charge exchange tested with collinear resonance ionization spectroscopy of indium. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2019, 153, 61-83.	2.9	21
16	Analytic response relativistic coupled-cluster theory: the first application to indium isotope shifts. <i>New Journal of Physics</i> , 2020, 22, 012001.	2.9	21

#	ARTICLE	IF	CITATIONS
19	Evidence of a sudden increase in the nuclear size of proton-rich silver-96. <i>Nature Communications</i> , 2021, 12, 4596.	12.8	19
20	Evidence for Increased neutron and proton excitations between $^{51}\text{Al}$ - $^{63}\text{Mn}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2015, 750, 176-180.	4.1	17
21	High-Precision Multiphoton Ionization of Accelerated Laser-Ablated Species. <i>Physical Review X</i> , 2018, 8, .	8.9	17
22	High-resolution laser spectroscopy of $^{27}\text{Al}$ . <i>Physical Review C</i> , 2021, 103, .	2.9	17
23	High-resolution laser spectroscopy with the Collinear Resonance Ionisation Spectroscopy (CRIS) experiment at CERN-ISOLDE. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 376, 284-287. Probing the $^{29}\text{Zn}$ ground-state properties in the region near $^{28}\text{Mg}$ .	1.4	16
24	$\text{Zn}^{28}$ and $\text{Mg}^{29}$ ground-state properties in the region near $^{28}\text{Mg}$ . <i>Physical Review Letters</i> , 2021, 127, 272301.	2.9	15
25	Electron-Capture: A New Candidate for Neutrino Mass Determination. <i>Physical Review Letters</i> , 2021, 127, 272301.	7.8	15
26	Development of a sensitive setup for laser spectroscopy studies of very exotic calcium isotopes. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2017, 44, 044003.	3.6	13
27	Optimising the Collinear Resonance Ionisation Spectroscopy (CRIS) experiment at CERN-ISOLDE. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2020, 463, 384-389.	1.4	13
28	Characterization of Supersonic Gas Jets for High-Resolution Laser Ionization Spectroscopy of Heavy Elements. <i>Physical Review X</i> , 2018, 8, .	8.9	12
29	Spins and magnetic moments of $^{72}\text{Ge}$ . <i>Physical Review Letters</i> , 2015, 115, 252501.	2.9	11
30	Quadrupole moment of $^{58}\text{Mn}$ . <i>Physical Review C</i> , 2015, 92, .	2.9	11
31	A new beamline for laser spin-polarization at ISOLDE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 925, 24-32.	1.6	10
32	Impact of Nuclear Deformation and Pairing on the Charge Radii of Palladium Isotopes. <i>Physical Review Letters</i> , 2022, 128, 152501.	7.8	10
33	New laser polarization line at the ISOLDE facility. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2017, 44, 084005.	3.6	9
34	Investigating the large deformation of the $^{34}\text{Al}$ isomeric state in $^{34}\text{Al}$ . <i>Physical Review C</i> , 2018, 97, 054307.	2.9	9
35	Nuclear moments of the low-lying isomeric $1^+$ state of $^{34}\text{Al}$ : Investigation on the neutron $1p_{1/2}$ excitation across $\Delta E = 20$ in the island of inversion. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 782, 619-626.	4.1	8

#	ARTICLE	IF	CITATIONS
37	The MORA project. <i>Hyperfine Interactions</i> , 2019, 240, 1.  Doubly-magic character of $\langle \text{mml:math} \rangle$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}>\langle \text{mml:mmultiscripts} \rangle\langle \text{mml:mi} \rangle\text{Sn}\langle / \text{mml:mi} \rangle\langle \text{mml:mprescripts} \rangle\langle \text{mml:none} \rangle\langle \text{mml:mn} \rangle132\langle / \text{mml:mn} \rangle\langle / \text{mml:mmultiscripts} \rangle\langle / \text{mml:math} \rangle$ studied via electromagnetic moments of $\langle \text{mml:math} \rangle$	0.5	8
38	$\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}>\langle \text{mml:mmultiscripts} \rangle\langle \text{mml:mi} \rangle\text{Sn}\langle / \text{mml:mi} \rangle\langle \text{mml:mprescripts} \rangle\langle \text{mml:none} \rangle\langle \text{mml:mn} \rangle133\langle / \text{mml:mn} \rangle\langle / \text{mml:mmultiscripts} \rangle\langle / \text{mml:math} \rangle$ . Physical Review C, 2020, 102,	2.9	8
39	Resonance ionization schemes for high resolution and high efficiency studies of exotic nuclei at the CRIS experiment. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2020, 463, 398-402.	1.4	7
40	High-precision measurement of a low Q value for allowed $\hat{\tau}^2\hat{\alpha}^2$ -decay of $^{131}\text{I}$ related to neutrino mass determination. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 830, 137135.  Direct determination of the atomic mass difference of the pairs $\langle \text{mml:math} \rangle$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}>\langle \text{mml:mrow} \rangle\langle \text{mml:mmultiscripts} \rangle\langle \text{mml:mi} \rangle\text{As}\langle / \text{mml:mi} \rangle\langle \text{mml:mprescripts} \rangle\langle \text{mml:none} \rangle\langle \text{mml:mn} \rangle76\langle / \text{mml:mn} \rangle\langle / \text{mml:mmultiscripts} \rangle\langle \text{mml:mtext} \rangle\hat{\alpha}^2\langle / \text{mml:mtext} \rangle\langle \text{mml:mmultiscripts} \rangle\langle \text{mml:mi} \rangle\text{Se}\langle / \text{mml:mi} \rangle\langle \text{mml:mprescripts} \rangle\langle \text{mml:none} \rangle\langle \text{mml:mn} \rangle76\langle / \text{mml:mn} \rangle\langle / \text{mml:mmultiscripts} \rangle\langle / \text{mml:mrow} \rangle\langle / \text{mml:math} \rangle$ and $\langle \text{mml:math} \rangle$	4.1	7
41	High-accuracy liquid-sample $\langle \text{mml:math} \rangle$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}>\langle \text{mml:math} \rangle\text{display}=\text{"inline"}\text{id}=\text{"d1e101"}\text{altimg}=\text{"s142.svg"}\langle \text{mml:mi} \rangle\hat{\tau}^2\langle / \text{mml:mi} \rangle\langle / \text{mml:math} \rangle$ -NMR setup at ISOLDE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021, 1020, 165862.	1.6	4
43	Collinear Laser Spectroscopy on Neutron-rich Mn Isotopes Approaching \$N=40\$. <i>Acta Physica Polonica B</i> , 2015, 46, 699.	0.8	3
44	A simple decay-spectroscopy station at CRIS-ISOLDE. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 844, 14-18.	1.6	3
45	Radium ionization scheme development: The first observed autoionizing states and optical pumping effects in the hot cavity environment. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 150, 99-104.	2.9	3
46	A compact RFQ cooler buncher for CRIS experiments. <i>Hyperfine Interactions</i> , 2019, 240, 1.	0.5	3
47	Collinear laser spectroscopy of stable palladium isotopes at the IGISOL facility. <i>Hyperfine Interactions</i> , 2020, 241, 1.	0.5	3
48	Magnetic Moments of Short-Lived Nuclei with Part-per-Million Accuracy: Toward Novel Applications of $\hat{\tau}^2$ -Detected NMR in Physics, Chemistry, and Biology. <i>Physical Review X</i> , 2020, 10, .	8.9	2