Claus MÃ¼ller-Gatermann

List of Publications by Year
in descending order

Version: 2024-02-01

77 papers	597 citations	623734 14 h-index	752698 20 g-index
78 all docs	78 docs citations	78 times ranked	588 citing authors

#	Article	IF	Citations
1	Simple new methods for deducing lifetimes in recoil distance Doppler-shift measurements. Review of Scientific Instruments, 2022, 93, 033301.	1.3	0
2	In-flight production of an isomeric beam of Â16N. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1032, 166612.	1.6	5
3	Lifetime measurements of yrast states in $$^{mathbf {178}}$$Pt using the charge plunger method with a recoil separator. European Physical Journal A, 2021, 57, 1.	2.5	1
4	Triaxiality in the mid-shell nucleus Pd112. Physical Review C, 2021, 103, .	2.9	3
5	Accessing tens-to-hundreds femtoseconds nuclear state lifetimes with low-energy binary heavy-ion reactions. European Physical Journal A, 2021, 57, 1.	2.5	6
6	Lifetime measurements in $$^{182}hbox {Pt}$$ using $$gamma $$â€“$$gamma $$ fast-timing. European Physical Journal A, 2021, 57, 1.	2.5	0
7	Strongly enhanced quadrupole deformation in a class of Nâ‰ˆ Z nuclei driven by large-scale clustering? *. Chinese Physics C, 2021, 45, 064002.	3.7	0
8	Microscopic structure of the one-phonon <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:msup></mml states of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Po</mml:mi><mml:mprescripts /><mml:none /><mml:mn>208</mml:mn></mml:mmultiscripts></mml:math> . Physical Review C, 2021, 104,	2.9	4
9	Lifetime measurements in the even-even <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:msubsup><mml:mrow><mml:mn>4</mml:mn></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mro linebreak="badbreak" linebreakstyle="after">+</mml:mo></mml:mrow></mml:msubsup></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"	4.1	5
10	Lifetime measurements in the even-even <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Cd</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>102</mml:mn><mml:mo>â€“</mml:mo><mml:mn>108</mml:mn></mml:mrow></mml:mmultiscripts></mm isotopes. Physical Review C, 2021, 104,	2.9	12
11	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Bi</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>185</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>. Physical Review Letters, 2021, 127, 202501.	7.8	10
12	Performing the differential decay curve method on Î³-ray transitions with unresolved Doppler-shifted components. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 950, 162965.	1.6	3
13	Method developments for accelerator mass spectrometry at CologneAMS, 53Mn/3He burial dating and ultra-small 14CO2 samples. Global and Planetary Change, 2020, 184, 103053.	3.5	10
14	Experimental evidence for low-lying quadrupole isovector excitation of ^{208}Po. European Physical Journal A, 2020, 56, 1.	2.5	3
15	Collectivity of the 21+ state in Zâ‰ˆ82 even-even nuclei probed by a ratio involving dynamic and static electromagnetic E2 moments: Evolution of the quadrupole degrees of freedom and a new signature for shape coexistence. Physical Review C, 2020, 102, .	2.9	1
16	Lifetime measurements of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Er</mml:mi><mml:mprescripts /><mml:none /><mml:mn>162</mml:mn></mml:mmultiscripts></mml:math> : Evolution of collectivity in the rare-earth region. Physical Review C, 2020, 102, .	2.9	9
17	Lifetime measurement of excited states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ce</mml:mi><mml:mprescripts /><mml:none /><mml:mn>144</mml:mn></mml:mmultiscripts></mml:math> : Enhanced <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>E</mml:mi><mml:mn>1</mml:mn></mml:mrow></mml strengths in a candidate for octupole deformation. Physical Review C, 2020, 102, .	2.9	5
18	A charge plunger device to measure the lifetimes of excited nuclear states where transitions are dominated by internal conversion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 979, 164454.	1.6	2

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19	Lifetime measurements using a plunger device and the EUCLIDES Si array at the GALILEO <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e419" altimg="si67.svg"><mml:mi>Î³</mml:mi></mml:math>-ray spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 979, 164345.	1.6	5
20	Evolution of the structure of the ${4}_{1}^{+}$ states in Po isotopes. Journal of Physics: Conference Series, 2020, 1555, 012019.	0.4	2
21	Tests of collectivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Zr</mml:mi><mml:mprescripts /><mml:none /><mml:mn>98</mml:mn></mml:mmultiscripts></mml:math> by absolute transition rates. Physical Review C, 2020, 102, .	2.9	15
22	Lifetime measurements of excited states in neutron-rich <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ti</mml:mi><mml:mprescripts /><mml:none /><mml:mn>53</mml:mn></mml:mmultiscripts></mml:math> : Benchmarking effective shell-model interactions. Physical Review C, 2020, 102, .	2.9	5
23	Lifetime measurements in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ti</mml:mi><mml:mprescripts /><mml:none /><mml:mn>44</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2020, 102, .	2.9	4
24	Pairing-quadrupole interplay in the neutron-deficient tin nuclei: First lifetime measurements of low-lying states in 106,108Sn. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 806, 135474.	4.1	16
25	Shell structure in neutron-rich nuclei: Lifetime measurements of second <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:msup></mml state in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none	2.9	14
26	Evolution of collectivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Xe</mml:mi><mml:mprescripts /><mml:none /><mml:mn>118</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2020, 102, .	2.9	4
27	Spectroscopy of Neutron-rich Nitrogen Isotopes with AGATA+PARIS+VAMOS. Acta Physica Polonica B, 2020, 51, 709.	0.8	1
28	Lifetime measurements of the low-lying excited states of 208Po. Journal of Physics: Conference Series, 2020, 1555, 012020.	0.4	0
29	Short-range Lifetime Measurements for Deep-inelastic Reaction Products: the (^{19})O Test Case. Acta Physica Polonica B, 2020, 51, 699.	0.8	0
30	New lifetime measurements for the lowest quadrupole states in Ne20,22 and possible explanations of the high collectivity of the depopulating E2 transitions. Physical Review C, 2019, 100, .	2.9	4
31	Isomer spectroscopy in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ba</mml:mi><mml:mprescripts /><mml:none /><mml:mn>133</mml:mn></mml:mmultiscripts></mml:math> and high-spin structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ba</mml:mi><mml:mprescripts /><mml:none /><mml:mn>134</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2019, 100,	2.9	11
32	Evidence of octupole-phonons at high spin in 207Pb. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134797.	4.1	6
33	A new dedicated plunger device for the GALILEO <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e263" altimg="si20.gif"><mml:mi>Î³</mml:mi></mml:math>-ray detector array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 920, 95-99.	1.6	16
34	Shape coexistence in Hg178. Physical Review C, 2019, 99, .	2.9	9
35	Lifetime measurement of excited states in 46Ti. European Physical Journal A, 2019, 55, 1.	2.5	3
36	Probing isospin symmetry in the (Fe50,ÂMn50,ÂCr50) isobaric triplet via electromagnetic transition rates. Physical Review C, 2019, 99, .	2.9	6

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37	Lifetimes in At211 and their implications for the nuclear structure above Pb208. Physical Review C, 2019, 99, .	2.9	15
38	Preliminary results of lifetime measurements in neutron-rich 53Ti. EPJ Web of Conferences, 2019, 223, 01022.	0.3	1
39	Structural investigation of neutron-deficient Pt isotopes: the case of 178Pt. EPJ Web of Conferences, 2019, 223, 01016.	0.3	2
40	Lifetime measurements in Ti52,54 to study shell evolution toward N=32. Physical Review C, 2019, 100, .	2.9	14
41	Lifetimes of the 41+ states of Po206 and Po204 : A study of the transition from noncollective seniority-like mode to collectivity. Physical Review C, 2019, 100, .	2.9	9
42	Identification of high-spin proton configurations in Ba136 and Ba137. Physical Review C, 2019, 99, .	2.9	5
43	Improvements in the measurement of small 14CO2 samples at CologneAMS. Nuclear Instruments & Methods in Physics Research B, 2019, 439, 70-75.	1.4	9
44	On the imprecisions that may be induced when applying the Blaugrund approximation for the analysis of Doppler-shift attenuation lifetime measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 915, 40-46.	1.6	1
45	Operating the 120Â° Dipol-Magnet at the CologneAMS in a gas-filled mode. Nuclear Instruments & Methods in Physics Research B, 2019, 438, 184-188.	1.4	3
46	Spectroscopy of Neutron-rich C, O, N and F Isotopes with the AGATA+PARIS+VAMOS Setup at GANIL. Acta Physica Polonica B, 2019, 50, 625.	0.8	0
47	Determination of Lifetimes of Excited States in Neutron-rich ^{20}O Isotope from Experiment with the AGATA+PARIS+VAMOS Setup. Acta Physica Polonica B, 2019, 50, 615.	0.8	0
48	Low-lying electromagnetic transition strengths in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Pt</mml:mi><mml:mprescripts /><mml:none /><mml:mn>180</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2018, 97, .	2.9	6
49	Lifetimes and electromagnetic transition strength in 124Ba. EPJ Web of Conferences, 2018, 194, 03004.	0.3	0
50	Enhanced collectivity along the N = Z line: lifetime measurements in 44Ti, 48Cr, and 52Fe. Journal of Physics: Conference Series, 2018, 966, 012029.	0.4	1
51	The first (53Mn/55Mn) isotopic ratio measurements at the Cologne FN-Tandem Accelerator. Nuclear Instruments & Methods in Physics Research B, 2018, 437, 87-92.	1.4	6
52	Evidence for Coexisting Shapes through Lifetime Measurements in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Zr</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>98</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>.	7.8	34
53	Physical Review C, 2018, 97, .	2.9	4
54	Low collectivity of the first 2⁺ states of ^{212,210}Po. Journal of Physics: Conference Series, 2018, 1023, 012019.	0.4	0

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55	Unique coexistence and collective low-spin states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Sn</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>112</mml:mn><mml:mo>,</mml:mo><mml:mn>114</mml:mn></mml:mrow></mml:mmultiscripts></mml:m studied with the <mml:math		

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73	Reduced Î³â€“Î³ time walk to below 50 ps using the multiplexed-start and multiplexed-stop fast-timing technique with LaBr3(Ce) detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 823, 72-82.	1.6	39
74	On the time response of background obtained in Î³-ray spectroscopy experiments using LaBr3(Ce) detectors with different shielding. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 811, 42-48.	1.6	14
75	The Î³-ray spectrometer HORUS and its applications for nuclear astrophysics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 754, 94-100.	1.6	37
76	A new beam profile monitor and time of flight system for CologneAMS. Nuclear Instruments & Methods in Physics Research B, 2013, 294, 410-415.	1.4	4
77	The first year of operation of CologneAMS; performance and developments. EPJ Web of Conferences, 2013, 63, 03006.	0.3	11