

# Kathrin Wimmer

## List of Publications by Year in descending order

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172  
papers

3,328  
citations

147801

31  
h-index

197818

49  
g-index

176  
all docs

176  
docs citations

176  
times ranked

1638  
citing authors

#	ARTICLE	IF	CITATIONS
1	Studies of pear-shaped nuclei using accelerated radioactive beams. <i>Nature</i> , 2013, 497, 199-204.	27.8	268
2	Discovery of the Shape Coexisting $^{32}\text{Mg}$ in $^{32}\text{Mg}$ by a Two Neutron Transfer Reaction. <i>Physical Review Letters</i> , 2010, 105, 252501.	7.8	138
3	The Miniball spectrometer. <i>European Physical Journal A</i> , 2013, 49, 1.	2.5	126
4	Quadrupole Collectivity in Neutron-Rich Fe and Cr Isotopes. <i>Physical Review Letters</i> , 2013, 110, 242701.	7.8	77
5	A proton density bubble in the doubly magic $^{34}\text{Si}$ nucleus. <i>Nature Physics</i> , 2017, 13, 152-156.	16.7	76
6	Evidence for a Smooth Onset of Deformation in the Neutron-Rich Kr Isotopes. <i>Physical Review Letters</i> , 2012, 108, 062701.	7.8	69
7	Two-Proton Radioactivity of $^{67}\text{Kr}$ . <i>Physical Review Letters</i> , 2016, 117, 162501.	7.8	69
8	The performance of the $\hat{\Gamma}^3$ -ray tracking array GREINA for $\hat{\Gamma}^3$ -ray spectroscopy with fast beams of rare isotopes. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 847, 187-198.	1.6	62
9	Evolution of Collectivity in $^{70}\text{Kr}$ . <i>Physical Review Letters</i> , 2014, 112, 142502.	7.8	61
10	Shape Coexistence Near Neutron Number $Z=20$ : First Identification of the $E_1$ Decay from the Deformed First Excited Configuration mixing and relative transition rates between low-spin states in $^{68}\text{Ni}$ . <i>Physical Review C</i> , 2013, 88, .	7.8	60
11	First Spectroscopy of the Near Drip-line Nucleus $^{40}\text{Mg}$ .	2.9	60
12	Quadrupole collectivity in neutron-deficient Sn nuclei: $^{104}\text{Sn}$ and the role of proton excitations. <i>Physical Review C</i> , 2013, 88, .	7.8	60
13	Two-Neutron Halo is Unveiled in $^{29}\text{F}$ .	2.9	59
14	T-REX. <i>European Physical Journal A</i> , 2012, 48, 1.	7.8	57
15	Quasifree Neutron Knockout from $^{54}\text{Ca}$ .	2.5	50
16	Corroborates Arising $^{60}\text{Ni}$ .	7.8	48
17	Characterization of the low-lying $^{60}\text{Ni}$ .	7.8	44
18	First Spectroscopy of the low-lying $^{60}\text{Ni}$ .	2.9	42

#	ARTICLE	IF	CITATIONS
19	Atomic Signatures of Harmonic Oscillator Shells Far from Stability? First Spectroscopy of $Zr$ How Robust is the Subshell Closure? First Spectroscopy of $N=34$	7.8	41
20	Shape dynamics in neutron-rich Kr isotopes: Coulomb excitation of $^{92}Kr$ , $^{94}Kr$ and $^{96}Kr$ . Nuclear Physics A, 2013, 899, 1-28.	7.8	41
21	Identification of deformed intruder states in semi-magic $Ni$ $^{70}Ni$	1.5	40
22	Improving the $P$	2.9	40
23	Ray Emission from Novae Affected by Interference Effects in the $F$	2.9	39
24		2.9	39
25			



#	ARTICLE	IF	CITATIONS
55	Isotopic $^{32}\text{S}/^{33}\text{S}$ ratio as a diagnostic of presolar grains from novae. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 737, 314-319.	4.1	17
56	Reduced transition strengths of low-lying yrast states in chromium isotopes in the vicinity of $N=40$ . <i>Physical Review C</i> , 2015, 92, .	2.9	17
57	Reaction cross sections for the $^{46}\text{Cr}(p,\alpha)^{43}\text{V}$ reaction. <i>Physical Review C</i> , 2016, 93, .	2.9	17
58	Angle-integrated measurements of the $^{26}\text{Al}(d,n)^{27}\text{Si}$ reaction cross section: a probe of spectroscopic factors and astrophysical resonance strengths. <i>European Physical Journal A</i> , 2016, 52, 1.	2.5	17
59	Study of the deformation-driving $1/2d5/2$ orbital in $^{67}\text{Ni}$ using one-neutron transfer reactions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 736, 533-538.	4.1	16
60	Coulomb excitation of $^{29}\text{Na}$ . <i>Physical Review C</i> , 2014, 89, .	2.9	16
61	Mapping the borders of the island of inversion. <i>Physical Review C</i> , 2014, 89, .	2.9	16
62	Isomeric Character of the Lowest Observed $^{30}\text{Na}$ State in $^{30}\text{Na}$ . <i>Physical Review C</i> , 2014, 89, .	7.8	16
63	Low-lying dipole response in the unstable $^{70}\text{Ni}$ nucleus. <i>Physical Review C</i> , 2018, 98, .	2.9	16
64	Shape coexistence revealed in the $N=Z$ isotope $^{72}\text{Kr}$ through inelastic scattering. <i>European Physical Journal A</i> , 2020, 56, 1.	2.5	16
65	Quadrupole Transition Strength in the $^{74}\text{Ni}$ Nucleus and Core Polarization Effects in the Neutron-Rich Ni Isotopes. <i>Physical Review Letters</i> , 2014, 113, 182501.	7.8	15
66	Direct Lifetime Measurements of the Excited States in $^{72}\text{Ni}$ . <i>Physical Review Letters</i> , 2016, 116, 122502.	7.8	15
67	Quadrupole collectivity beyond $N=50$ in neutron-rich Se and Kr isotopes. <i>Physical Review C</i> , 2017, 96, .	2.9	15
68	Shape coexistence and mixing of low-lying $0^+$ states in $^{96}\text{Sr}$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 786, 94-99.	4.1	15
69	Shape coexistence and isospin symmetry in $A\approx 70$ nuclei: Spectroscopy of the $^{70}\text{Kr}$ nucleus. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 785, 441-446.	4.1	15
70	Shape Changes in the Mirror Nuclei $^{70}\text{Kr}$ and $^{70}\text{Se}$ . <i>Physical Review C</i> , 2018, 97, .	7.8	15
71	Excitation strengths in $^{70}\text{Kr}$ and $^{70}\text{Se}$ . <i>Physical Review C</i> , 2018, 97, .	2.9	14
72	Single-neutron and collective excitations near $N=100$ in $^{100}\text{Sn}$ . <i>Physical Review C</i> , 2012, 86, .	2.9	14

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73	Coulomb excitation of $^{107}\text{Sn}$ . European Physical Journal A, 2012, 48, 1.	2.5	14
74	Isospin Symmetry at High Spin Studied via Nucleon Knockout from Isomeric States. Physical Review Letters, 2016, 117, 082502.	7.8	14
75	Bound neutron strength at in-beam $\gamma$ -ray spectroscopy of $^{49}\text{Ca}$ at relativistic energies.	2.9	13
76	Bound neutron strength at in-beam $\gamma$ -ray spectroscopy of $^{136}\text{Te}$ at relativistic energies.	2.9	13
77	Gamma-ray spectroscopy of $^{61}\text{Mn}$ to levels in Gamow-Teller transitions to $^{61}\text{Ca}$ via the $^{45}\text{Sc}$ $\beta$ -ray spectroscopy of $^{45}\text{Sc}$ .	2.9	13
78	Gamma-ray spectroscopy of $^{45}\text{Sc}$ for the thermonuclear $^{19}\text{O}$	2.9	13

#	ARTICLE	IF	CITATIONS
91	Lifetime measurements of C17 excited states and three-body and continuum effects. Physical Review C, 2015, 92, .	2.9	10
92	Spallation reaction study for the long-lived fission product 107Pd. Progress of Theoretical and Experimental Physics, 2017, 2017, .	6.6	10
93	Shell structure of S43 and collapse of the N=28 shell closure. Physical Review C, 2020, 102, .	2.9	10
94	Shell closure below calcium: Low-lying structure of $^{32}\text{Ar}$ . Physical Review C, 2020, 102, .	2.9	10
95	Elastic breakup cross sections of well-bound nucleons. Physical Review C, 2014, 90, .	2.9	9
96	Experimental study of the $^{66}\text{Ni}(d,p)^{67}\text{Ni}$ one-neutron transfer reaction. Physical Review C, 2015, 91, .	2.9	9
97	Magnetic response of the halo nucleus $^{19}\text{C}$ studied via lifetime measurements. Physical Review C, 2015, 91, .	2.9	9
98	Nuclear astrophysics with radioactive ions at FAIR. Journal of Physics: Conference Series, 2016, 665, 012044.	0.4	9
99	Structure of $^{107}\text{Sn}$ studied through metastable states of $^{107}\text{Sb}$ . Physical Review C, 2016, 93, 014307.	2.9	9
100	Identification of an Oblate $^{92}\text{K}$ Isomer of $^{94}\text{Zn}$ . Physical Review Letters, 2016, 116, 022501.	2.9	9
101	Mirror energy differences above the $^{7/2}$ shell: First $\beta^+$ -ray spectroscopy of the $^{56}\text{Zn}$ nucleus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 823, 136784.	4.1	9
102	Study of the $^{133}\text{Ba}$ nucleus with the $(d, p)$ reaction. European Physical Journal A, 2009, 41, 299-313.	2.5	8
103	Production of $^{26}\text{Al}$ in stellar hydrogen-burning environments: Spectroscopic properties of states in $^{27}\text{Si}$ . Physical Review C, 2017, 94, 044304.	2.9	8
104	Spectroscopy of $^{28}\text{Na}$ : Shell evolution toward the drip line. Physical Review C, 2015, 92, .	2.9	8
105	Collectivity in the light radon nuclei measured directly via Coulomb excitation. Physical Review C, 2015, 91, .	2.9	8
106	IsoTagger: Identification of isomeric nuclear states produced in fragmentation reactions with radioactive beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 769, 65-71.	1.6	8
107	Neutron knockout from $^{40}\text{Ca}$ : Lifetime measurement of the $^{40}\text{Ca}$ nucleus. Physical Review C, 2015, 92, .	2.9	8
108	Lifetime measurement of the $^{58}\text{Ni}$ nucleus with the recoil distance method. Physical Review C, 2016, 94, .	2.9	8



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109	Microscopic structure of coexisting $0^+$ states in $^{68}\text{Ni}$ probed via two-neutron transfer. <i>Physical Review C</i> , 2019, 99, .	2.9	8
110	OEDO, the energy-degrading beamline at RI Beam Factory. <i>Progress of Theoretical and Experimental Physics</i> , 2019, 2019, .	6.6	8
111	First spectroscopy of $^{61}\text{Ti}$ and the transition to the Island of Inversion at $N=40$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 792, 16-20.	4.1	8
112	Gamow-Teller decay population of $^{64}\text{Ni}$ levels in the decay of $^{64}\text{Co}$ . <i>Physical Review C</i> , 2012, 86, .	2.9	7
113	Low-energy Coulomb excitation of $^{62}\text{Fe}$ and $^{62}\text{Mn}$ following in-beam decay of $^{62}\text{Mn}$ . <i>European Physical Journal A</i> , 2015, 51, 1.	2.5	7
114	Lifetime measurement of the $21^+$ state in $^{74}\text{Rb}$ and isospin properties of quadrupole transition strengths at $N=Z$ . <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 787, 198-203.	4.1	7
115	Formation of $^{22}\text{Ti}$ in inclusive $^{68}\text{Ni}$ fragmentation. <i>Physical Review Letters</i> , 2018, 120, 122701.	2.9	7



#	ARTICLE	IF	CITATIONS
127	Discovery of $^{68}\text{Br}$ in secondary reactions of radioactive beams. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 266-270.	4.1	5
128	Transfer Reactions on Neutron-rich Nuclei at REX-ISOLDE. , 2009, , .		4
129	Strength of the $E_R=127\text{keV}, \text{Al}^{26}(p, ^3\text{Si})^{27}\text{Si}$ resonance. Physical Review C, 2014, 90, .	2.9	4
130	Study of bound states in $^{10}\text{Be}$ by one neutron removal reactions of $^{11}\text{Be}$ . Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 044009.	3.6	4
131	Inclusive cross sections for one- and multi-nucleon removal from Sn, Sb, and Te projectiles beyond the $N=Z=82$ shell closure. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 356-361.	4.1	4
132	Angle-tunable wedge degrader for an energy-degrading RI beamline. Progress of Theoretical and Experimental Physics, 2019, 2019, .	6.6	4
133	Structure of $^{30}\text{Mg}$ explored via in-beam $^{13}\text{C}$ -ray	2.9	4
134	First spectroscopic study of $^{63}\text{V}$	2.9	4
135	Two-proton Radioactivity: the Interesting Case of $^{67}\text{Kr}$ and Further Studies. Acta Physica Polonica B, 2020, 51, 577.	0.8	4
136	Spallation reaction study for long-lived fission products in nuclear waste. EPJ Web of Conferences, 2020, 239, 06003.	0.3	4
137	A first glimpse at the shell structure beyond $^{54}\text{Ca}$ : Spectroscopy of $^{55}\text{K}$ , $^{55}\text{Ca}$ , and $^{57}\text{Ca}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 136953.	4.1	4
138	Characterization of low energy radioactive beams using direct reactions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 714, 176-187.	1.6	3
139	Low-energy magnetic radiation: Deviations from GOE. , 2014, , .		3
140	Shape coexistence in $^{67}\text{Co}$ , $^{66,68,70,72}\text{Ni}$ , and $^{71}\text{Cu}$ . AIP Conference Proceedings, 2015, , .	0.4	3
141	Low-Energy Magnetic Radiation. EPJ Web of Conferences, 2015, 93, 04002.	0.3	3
142	Recent Direct Reaction Experimental Studies with Radioactive Tin Beams. Acta Physica Polonica B, 2015, 46, 537.	0.8	3
143	Spectroscopy and lifetime measurements in $^{66}\text{Ge}$ , $^{69}\text{Se}$ , and $^{65}\text{Ga}$ using fragmentation reactions. Physical Review C, 2015, 91, .	2.9	3
144	Spallation reaction study for the long-lived fission products in nuclear waste: Cross section measurements for $^{137}\text{Cs}$ , $^{90}\text{Sr}$ and $^{107}\text{Pd}$ using inverse kinematics method. Energy Procedia, 2017, 131, 127-132.	1.8	3

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145	Isotope production in proton-, deuteron-, and carbon-induced reactions on Nb93 at 113 MeV/nucleon. Physical Review C, 2019, 100, .	2.9	3
146	Coulomb breakup reactions of 93,94Zr in inverse kinematics. Progress of Theoretical and Experimental Physics, 2019, 2019, .	6.6	3
147	Isomeric states in neutron-rich nuclei near $N=20$ . Physical Review C, 2021, 104, .		
148	Evolution of collectivity in the $^{78}\text{Ni}$ region: Coulomb excitation of $^{74}\text{Ni}$ at intermediate energies.. EPJ Web of Conferences, 2014, 66, 02066.	0.3	2
149	Determination of the $B(E3, 0^+ \rightarrow 3^+)$ -excitation strength in octupole-correlated nuclei near $A=224$ by the means of Coulomb excitation at REX-ISOLDE. Journal of Physics: Conference Series, 2014, 533, 012007.	0.4	2
150	Strongly coupled rotational band in $^{29}\text{Mg}$ . Physical Review C, 2017, 96, .	2.9	2
151	Spallation reaction study for fission products in nuclear waste: Cross section measurements for $^{137}\text{Cs}$ , $^{90}\text{Sr}$ and $^{107}\text{Pd}$ on proton and deuteron. EPJ Web of Conferences, 2017, 146, 09022.	0.3	2
152	New energy-degrading beamline for in-flight RI beams, OEDO. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 143-147.	1.4	2
153	$^{13}\text{C}$ -ray spectroscopy of $^{29}\text{Mg}$ via direct reactions. Physical Review C, 2022, 105, .	2.9	2
154	Identification of the slow $E3$ transition in $^{136}\text{Cs}$ with conversion electrons [Phys. Rev. C 84, 014329 (2011)]. Physical Review C, 2011, 84, .	2.9	1
155	Probing core polarization around $^{78}\text{Ni}$ : intermediate energy Coulomb excitation of $^{74}\text{Ni}$ . EPJ Web of Conferences, 2013, 63, 01021.	0.3	1
156	$^{67}\text{Kr}$ Two-proton Radioactivity: Results and Theoretical Interpretations. Acta Physica Polonica B, 2019, 50, 399.	0.8	1
157	Investigating the Role of $^{1/2}p$ -Process: Preparations for the Measurement of the $^{56}\text{Co}(p, n)^{56}\text{Ni}$ Reaction. , 2017, , .		1
158	Improving the $^{33}\text{S}(p, ^{13}\text{C})^{34}\text{Cl}$ Reaction Rate for Models of Classical Nova Explosions. , 2011, , .		0
159	Electron capture in core-collapse supernovae investigated through configuration mixing in neutron-rich nuclei. Journal of Physics: Conference Series, 2012, 381, 012119.	0.4	0
160	Recent results on intermediate-energy nucleon knockout reactions. , 2013, , .		0
161	Measurement of astrophysically important excitation energies of $^{58}\text{Zn}$ with GRETINA. EPJ Web of Conferences, 2014, 66, 07013.	0.3	0
162	Direct reaction experimental studies with beams of radioactive tin ions. AIP Conference Proceedings, 2015, , .	0.4	0

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163	Do nuclei go pear-shaped? Coulomb excitation of $^{220}\text{Rn}$ and $^{224}\text{Ra}$ at REX-ISOLDE (CERN). EPJ Web of Conferences, 2015, 93, 01038.	0.3	0
164	Cross sections for nuclide production in proton- and deuteron-induced reactions on $^{93}\text{Nb}$ measured using the inverse kinematics method. EPJ Web of Conferences, 2017, 146, 11046.	0.3	0
165	Cross section measurement of residues produced in proton- and deuteron-induced spallation reactions on $^{93}\text{Zr}$ at 105 MeV/u using the inverse kinematics method. EPJ Web of Conferences, 2017, 146, 03012.	0.3	0
166	Neutron knockout from $^{68,70}\text{Ni}$ ground and isomeric states.. Journal of Physics: Conference Series, 2018, 966, 012048.	0.4	0
167	Decoherence of collective motion in warm nuclei. EPJ Web of Conferences, 2019, 223, 01017.	0.3	0
168	Spectroscopy of neutron-rich scandium isotopes. Journal of Physics: Conference Series, 2020, 1555, 012026.	0.4	0
169	TWO-PROTON RADIOACTIVITY OF $^{67}\text{Kr}$ . , 2017, , .		0
170	Signatures of triaxiality in low-spin spectra of $^{86}\text{Ge}$ . Journal of Physics: Conference Series, 2018, 1023, 012023.	0.4	0
171	Isomer Spectroscopy in Odd–Even Ti Isotopes: Approaching $N=40$ . Acta Physica Polonica B, 2019, 50, 669.	0.8	0
172	Performance of the OEDO beamline. Journal of Physics: Conference Series, 2020, 1643, 012035.	0.4	0