

# Benjamin Kay

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1760872/publications.pdf>

Version: 2024-02-01

96  
papers

2,165  
citations

218677

26  
h-index

243625

44  
g-index

96  
all docs

96  
docs citations

96  
times ranked

1517  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct measurement of the $^{13}\text{O}$ ground state $\beta$ -decay. Physical Review C, 2022, 105, .	2.9	1
2	Single-nucleon energies changing with nucleon number. Physical Review C, 2022, 105, .	2.9	1
3	Heavy-ion fusion cross section formula and barrier height distribution. Physical Review C, 2022, 105, .	2.9	3
4	Experimental study of the isomeric state in $^{16}\text{O}$ using the $^{16}\text{O}$ reaction relevant for core-c. Physical Review C, 2022, 105, .	2.9	1
5	Consistency of nucleon-transfer sum rules in well-deformed nuclei. Physical Review C, 2021, 103, .	2.9	4
6	Coriolis coupling effects in proton-pickup spectroscopic factors from B12. Physical Review C, 2021, 103, .	2.9	0
7	Configuration mixing in $^{28}\text{Mg}$ and the $^{28}\text{Mg}$ ground state. Physical Review C, 2021, 103, .	2.9	3
8	Evolution of single-particle structure near the N=20 island of inversion. Physical Review C, 2021, 104, .	2.9	7
9	Neutron occupancies and single-particle energies across the stable tin isotopes. Physical Review C, 2021, 104, .	2.9	7
10	First Exploration of Neutron Shell Structure below Lead and beyond $^{126}\text{N}$ . Physical Review Letters, 2020, 124, 062502.	7.8	18
11	Neutron-hole strength in N=81 nuclei. Physical Review C, 2020, 101, .	2.9	1
12	Search for the $1/2^+$ intruder state in P35. Physical Review C, 2020, 102, .	2.9	0
13	Experimental study of the low-lying negative-parity states in $^{11}\text{Be}$ using the $^{11}\text{Be}$ reaction relevant for core-c. Physical Review C, 2020, 102, .	2.9	0

#	ARTICLE	IF	CITATIONS
19	Development of an Isomeric beam of <sup>26</sup> Al for nuclear reaction studies. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 899, 6-9.	1.6	3
20	Experimental study of the effective nucleon-nucleon interaction using the F21(d,p)F22 reaction. Physical Review C, 2018, 98, .	2.9	3
21	<p> <math>\hat{I}_{\pm}</math> </p> <p> <math>T_j</math> </p>	1.0784314	rgB

#	ARTICLE	IF	CITATIONS
37	Ordering of the $d_5$ levels in light nuclei. Physical Review C, 2016, 94, .	2.9	13
38	In-beam $\beta^3$ -ray spectroscopy of Mn63. Physical Review C, 2016, 93, .	2.9	4
39	Change of nuclear configurations in the neutrinoless double- $\beta^2$ decay of $^{130}\text{Te}$ and $^{136}\text{Xe}$ . Physical Review C, 2016, 93, .	2.9	26
40	Direct Evidence of Octupole Deformation in Neutron-Rich $^{144}\text{Ba}$ . Physical Review Letters, 2016, 116, 112503.	7.8	118
41	Rearrangement of valence neutrons in the neutrinoless double- $\beta^2$ decay of $^{136}\text{Xe}$ . Physical Review C, 2016, 94, .	2.9	23
42	The $^{20}\text{Ne}(\text{d},\text{p})^{21}\text{Ne}$ transfer reaction in relation to the $s$ -process abundances. Journal of Physics: Conference Series, 2016, 665, 012026.	0.4	0
43	Exploring the stability of super heavy elements: First Measurement of the Fission Barrier of $^{254}\text{No}$ . EPJ Web of Conferences, 2014, 66, 02046.	0.3	2
44	Fission Barrier of Superheavy Nuclei and Persistence of Shell Effects at High Spin: Cases of $^{254}\text{No}$ and $^{254}\text{Lr}$ . Physical Review Letters, 2014, 112, 112503.	7.8	34
45	Nuclear Structure of Light Nuclei Near Threshold. Nuclear Physics News, 2014, 24, 16-21.	0.4	1
46	Upper limit on the two-photon emission branch for the $0_2^+ \rightarrow 0_1^+$ transition in $^{98}\text{Mo}$ . Physical Review C, 2014, 89, .	2.9	5
47	Neutron $s$ states in loosely bound nuclei. Physical Review C, 2014, 89, .	2.9	35
48	Quenching of Cross Sections in Nucleon Transfer Reactions. Physical Review Letters, 2013, 111, 042502.	7.8	64
49	Valence nucleon populations in the Ni isotopes. Physical Review C, 2013, 87, .	2.9	51
50	Evidence for rigid triaxial deformation at low energy in $^{76}\text{Ge}$ . Physical Review C, 2013, 87, .	2.9	82
51	New AMS method to measure the atom ratio $^{146}\text{Sm}/^{147}\text{Sm}$ for a half-life determination of $^{146}\text{Sm}$ . Nuclear Instruments & Methods in Physics Research B, 2013, 294, 143-146.	1.4	4
52	Nuclear structure relevant to neutrinoless double beta decay candidate $^{130}\text{Te}$ and other recent results. , 2013, , .		1
53	Transfer Reactions and the Structure of Neutron-rich Nuclei. Acta Physica Polonica B, 2013, 44, 349.	0.8	0
54	Proton pair correlations and the neutrinoless double- $\beta^2$ decay of $^{76}\text{Ge}$ . Physical Review C, 2013, 87, .	2.9	13

#	ARTICLE	IF	CITATIONS
55	Neutron single-particle strength outside the $N=50$ core. Physical Review C, 2013, 87, .	2.9	32
56	Valence neutron properties relevant to the neutrinoless double- $\beta^2$ decay of $^{130}\text{Te}$ . Physical Review C, 2013, 87, .	2.9	37
57	Single-neutron excitations in $^{18}\text{N}$ . Physical Review C, 2013, 88, .	2.9	8
58	Neutron pair correlations in $^{100}\text{N}$ involved in neutrinoless double- $\beta^2$ decay. Physical Review C, 2012, 86, .	2.9	18
59	Test of Sum Rules in Nucleon Transfer Reactions. Physical Review Letters, 2012, 108, 022501.	7.8	55
60	Core-coupled protons, $f_{7/2}$ intruder states, and competing $g_{9/2}$ proton and neutron structures in $^{65,67}\text{Cu}$ . Physical Review C, 2012, 85, .	2.9	26
61	Experimental study of the $^{19}\text{O}$ ( $T_{1/2} = 0.784314$ s) $\beta$ decay. Physical Review C, 2012, 86, .	2.9	19
62	Neutron-hole strength in the $N=81$ isotones. Journal of Physics: Conference Series, 2012, 381, 012098.	0.4	1
63	Investigating trends in proton single-particle states in $Z=51$ isotopes using transfer reactions. Journal of Physics: Conference Series, 2012, 381, 012099.	0.4	1
64	HELIOS - progress and possibilities. Journal of Physics: Conference Series, 2012, 381, 012095.	0.4	1
65	Trends in the $g_{7/2}$ and $h_{11/2}$ neutron single-particle energies in $N=51$ isotones. Journal of Physics: Conference Series, 2012, 381, 012100.	0.4	0
66	Studying X-ray Burst Nucleosynthesis in the Laboratory. Journal of Physics: Conference Series, 2012, 403, 012033.	0.4	2
67	Constraining neutrinoless double- $\beta^2$ decay matrix elements in $^{130}\text{Te}$ . Journal of Physics: Conference Series, 2012, 381, 012043.	0.4	1
68	$\beta$ -ray spectroscopy of the odd-odd $N=Z+2$ deformed proton emitter $^{112}\text{Cs}$ . Physical Review C, 2012, 85, .	2.9	11
69	Yrast structure of $^{206}\text{Bi}$ : Isomeric states and one-proton-particle, three-neutron-hole excitations. Physical Review C, 2012, 86, .	2.9	15
70	Storage ring at HIE-ISOLDE. European Physical Journal: Special Topics, 2012, 207, 1-117.	2.6	101
71	Study of valence neutrons in $^{136}\text{Xe}$ with HELIOS. Journal of Physics: Conference Series, 2011, 312, 092034.	0.4	0
72	First measurement of the $^{33}\text{Cl}$ ( $T_{1/2} = 0.000000$ s) $\beta$ decay. Physical Review C, 2012, 86, .	2.9	19

#	ARTICLE	IF	CITATIONS
73	Single-particle and collective structures in Cr55 and V55. Physical Review C, 2011, 83, .	2.9	10
74	Single-neutron energies outside $^{136}\text{Xe}$ . Physical Review C, 2011, 84, .	2.9	28
75	Seniority, collectivity, and $^{72}\text{Ni}$ . Physical Review C, 2011, 84, .	2.9	22
76	Commissioning of the HELIOS spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 622, 97-106.	1.6	58
77	Cross-shell excitations in $^{30}\text{Al}$ and $^{30}\text{Si}$ at high spin. Nuclear Physics A, 2010, 847, 149-167.	1.5	14
78	Collectivity of $^{64}\text{Cr}$ . Physical Review C, 2010, 82, .	2.9	107
79	Cross-shell excitations near the $^{64}\text{Cr}$ island of inversion. Structure of $^{64}\text{Cr}$ . Physical Review C, 2010, 82, .	2.9	22
80	Population of positive-parity states in $^{53}\text{Sc}$ through one-proton knockout. Physical Review C, 2010, 81, .	2.9	9
81	Pair correlations in the neutrinoless double- $\beta^2$ decay candidate $^{130}\text{Te}$ . Physical Review C, 2010, 82, .	2.9	18
82	First Experiment with HELIOS: The Structure of $^{13}\text{B}$ . Physical Review Letters, 2010, 104, 132501.	7.8	36
83	Bands in the neutron-rich $^{73}\text{Ga}$ . Physical Review C, 2009, 80, .	2.9	24
84	High-lying, non-yrast shell structure in $^{52}\text{Ti}$ . Physical Review C, 2009, 80, .	2.9	13
85	$^{73}\text{Ge}$ decay: The valence protons in $^{73}\text{Ge}$ . Physical Review C, 2009, 80, .	2.9	108
86	Properties of excited states in $^{77}\text{Ge}$ . Physical Review C, 2009, 80, .	2.9	4
87	Experiments to Further the Understanding of the Triple-Alpha Process in Hot Astrophysical Scenarios. , 2009, , .		2
88	High-j single-particle neutron states outside the core. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 658, 216-221.	4.1	40

#	ARTICLE	IF	CITATIONS
91	Structure Relevant to Neutrinoless Double $\hat{I}^2$ Decay: $^{76}\text{Ge}$ and $^{76}\text{Se}$ . Physical Review C, 2007, 75, .	7.8	131
92	Pair correlations in nuclei involved in neutrinoless double $\hat{I}^2$ decay: $^{76}\text{Ge}$ and $^{76}\text{Se}$ . Physical Review C, 2007, 75, .	2.9	34
93	One-particle excitations outside the $^{54}\text{Ti}$ semi-magic core: The $^{55}\text{V}$ and $^{55}\text{Ti}$ yrast structures. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 650, 135-140.	4.1	17
94	Cross-shell excitation in two-proton knockout: Structure of $^{52}\text{Ca}$ . Physical Review C, 2006, 74, .	2.9	104
95	One-neutron knockout in the vicinity of the $N=32$ sub-shell closure: $^{9}\text{Be}(^{57}\text{Cr}, ^{56}\text{Cr} + \hat{I}^3)X$ . Physical Review C, 2006, 74, .	2.9	13
96	Spectroscopy of the odd-odd fp-shell nucleus $^{52}\text{Sc}$ from secondary fragmentation. Physical Review C, 2006, 73, .	2.9	11