

# Paul Henri Heenen

## List of Publications by Year in descending order

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79  
papers

6,618  
citations

66343

42  
h-index

74163

75  
g-index

80  
all docs

80  
docs citations

80  
times ranked

1836  
citing authors



#	ARTICLE	IF	CITATIONS
19	Superdeformation and shape isomerism at zero spin. Nuclear Physics A, 1989, 500, 308-322.	1.5	94
20	Beyond Mean-Field Calculations for Odd-Mass Nuclei. Physical Review Letters, 2014, 113, 162501.	7.8	94
21	Skyrme mean-field study of rotational bands in transfermium isotopes. Nuclear Physics A, 2003, 723, 354-364.	1.5	92
22	Charge distributions of Pb208, Pb206, and Tl205 and the mean-field approximation. Physical Review C, 1989, 40, 2834-2839.	2.9	90
23	Rotational properties of 252, 253, 254No: influence of pairing correlations. Nuclear Physics A, 2001, 679, 427-440.	1.5	76
24	Collectivity-induced quenching of signatures for shell closures. Physical Review C, 2008, 78, .	2.9	68
25	Microscopic study of the properties of identical bands in the A=150 mass region. Physical Review C, 1999, 59, 3120-3127.	2.9	63
26	Systematics of low-lying states of even-even nuclei in the neutron-deficient lead region from a beyond-mean-field calculation. Physical Review C, 2013, 87, .	2.9	61
27	Onset of T=0 pairing and deformations in high spin states of the N=Z nucleus 48Cr. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 437, 1-6.	4.1	59
28	Octupole softness of superdeformed Pb194. Physical Review Letters, 1991, 66, 876-879.	7.8	57
29	Systematics of Quadrupolar Correlation Energies. Physical Review Letters, 2005, 94, 102503.	7.8	57
30	Microscopic study of Pu240: Mean field and beyond. Physical Review C, 2004, 70, .	2.9	56
31	Tensor part of the Skyrme energy density functional. III. Time-odd terms at high spin. Physical Review C, 2012, 85, .	2.9	55
32	Shapes and $\hat{I}^{\pm}$ - and $\hat{I}^2$ -decays of superheavy nuclei. Nuclear Physics A, 2015, 944, 415-441.	1.5	54
33	Shape coexistence and low-lying collective states in A $\hat{\%}$ 100 Zr nuclei. Nuclear Physics A, 1993, 559, 221-238.	1.5	50
34	Solution of the Skyrme $\hat{\%}$ HF+BCS equation on a 3D mesh, II: A new version of the Ev8 code. Computer Physics Communications, 2015, 187, 175-194.	7.5	50
35	Generator coordinate method for triaxial quadrupole collective dynamics in strontium isotopes. Nuclear Physics A, 1991, 530, 149-170.	1.5	47
36	Quadrupole and octupole correlations in normal, superdeformed and hyperdeformed states of 194Pb. Nuclear Physics A, 1995, 588, 597-622.	1.5	46

#	ARTICLE	IF	CITATIONS
37	Spurious finite-size instabilities in nuclear energy density functionals. <i>Physical Review C</i> , 2013, 88, .	2.9	46
38	Generator-coordinate method for triaxial quadrupole dynamics in Sr isotopes (II). Results for particle-number-projected states. <i>Nuclear Physics A</i> , 1993, 561, 367-386.	1.5	45
39	Beyond-mean-field study of the possible "bubble" structure of $^{34}\text{Si}$ . <i>Physical Review C</i> , 2012, 86, .	2.9	45
40	Octupole excitations in light xenon and barium nuclei. <i>Physical Review C</i> , 1994, 50, 802-806.	2.9	44
41	Particle-Unstable Nuclei in the Hartree-Fock Theory. <i>Physical Review Letters</i> , 1997, 79, 2217-2220.	7.8	43
42	Global study of the spectroscopic properties of the first $2^+$ state in even-even nuclei. <i>Physical Review C</i> , 2007, 75, .	2.9	43
43	GCM analysis of the collective properties of lead isotopes with exact projection on particle numbers. <i>European Physical Journal A</i> , 2001, 11, 393-402.	2.5	41
44	Are There Signatures of Harmonic Oscillator Shells Far from Stability? First Spectroscopy of $^{110}\text{Zr}$ . <i>Physical Review Letters</i> , 2017, 118, 032501.	7.8	41
45	Angular momentum projection on a mesh of cranked Hartree-Fock wave functions. <i>Physical Review C</i> , 1984, 29, 1056-1068.	2.9	40
46	Self-consistent approach to deformation of intruder states in neutron-deficient Pb and Po. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2003, 569, 151-158.	4.1	39
47	Octupole correlations in superdeformed mercury and lead nuclei: A generator-coordinate method analysis. <i>Nuclear Physics A</i> , 1993, 551, 109-124.	1.5	37
48	Diabatic effects in $^{186}\text{Pb}$ : A generator-coordinate analysis. <i>Nuclear Physics A</i> , 1993, 551, 409-433.	1.5	32
49	New parametrization of Skyrme's interaction for regularized multireference energy density functional calculations. <i>Physical Review C</i> , 2012, 86, .	2.9	32
50	Structure of superheavy nuclei. <i>Journal of Physics: Conference Series</i> , 2013, 420, 012002.	0.4	30
51	Microscopic study of superdeformation in the $A = 150$ mass region. <i>Nuclear Physics A</i> , 1996, 598, 169-186.	1.5	28
52	Numerical accuracy of mean-field calculations in coordinate space. <i>Physical Review C</i> , 2015, 92, .	2.9	28
53	Beyond-mean-field study of elastic and inelastic electron scattering off nuclei. <i>Physical Review C</i> , 2015, 91, .	2.9	26
54	Tetrahedral correlations in $^{80}\text{Zr}$ and $^{98}\text{Zr}$ . <i>Physical Review C</i> , 2006, 74, .	2.9	25

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55	Shell effects in superdeformed minima. <i>Physical Review C</i> , 1998, 57, 1719-1726.	2.9	23
56	Correlation energies by the generator coordinate method: Computational aspects for quadrupolar deformations. <i>Physical Review C</i> , 2004, 69, .	2.9	22
57	Search for octupole-deformed actinium isotopes using resonance ionization spectroscopy. <i>Physical Review C</i> , 2019, 100, .	2.9	22
58	What can be learned from binding energy differences about nuclear structure: The example of $\hat{V}_{pn}$ . <i>Physical Review C</i> , 2011, 83, .	2.9	21
59	Hartree-Fock-Bogoliubov description of quasiparticle excitations in the superdeformed wells of $^{191,192}\text{Hg}$ and $^{192,193}\text{Tl}$ . <i>Physical Review C</i> , 1998, 57, 159-165.	2.9	20
60	Nuclear tetrahedral configurations at spin zero. <i>Physical Review C</i> , 2009, 79, .	2.9	20
61	Impact of the surface energy coefficient on the deformation properties of atomic nuclei as predicted by Skyrme energy density functionals. <i>Physical Review C</i> , 2019, 99, .	2.9	20
62	Exotic nuclear phases in the inner crust of neutron stars in the light of Skyrme-Hartree-Pock theory. <i>Nuclear Physics A</i> , 2003, 719, C217-C220.	1.5	19
63	Proton-rich exotic heavy nuclei: Self-consistent calculations. <i>Physical Review C</i> , 1988, 38, 550-552.	2.9	15
64	Beyond mean field study of excited states: Analysis within the Lipkin model. <i>Physical Review C</i> , 2006, 74, .	2.9	13
65	De-excitation of the strongly coupled band in $\text{Au}^{177}$ and implications for core intruder configurations in the light Hg isotopes. <i>Physical Review C</i> , 2017, 95, .	2.9	9
66	NEUTRON STARS AND THE FERMIONIC CASIMIR EFFECT. <i>International Journal of Modern Physics A</i> , 2002, 17, 1059-1064.	1.5	6
67	Beyond-mean-field correlations and the description of superheavy elements. <i>EPJ Web of Conferences</i> , 2016, 131, 02001.	0.3	6
68	Coupling of the giant dipole resonance to low lying octupole modes - generator coordinate method study. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 381, 12-16.	4.1	5
69	Neutrons cross the line. <i>Nature</i> , 2007, 449, 992-993.	27.8	5
70	Calculation of the Peierls-Yoccoz translational mass for Hartree-Fock wave functions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1984, 134, 287-289.	4.1	4
71	REGULARIZATION OF MULTI-REFERENCE ENERGY DENSITY FUNCTIONAL CALCULATIONS. <i>International Journal of Modern Physics E</i> , 2011, 20, 259-269.	1.0	4
72	SYMMETRY RESTORATION FOR ODD-MASS NUCLEI WITH A SKYRME ENERGY DENSITY FUNCTIONAL. <i>International Journal of Modern Physics E</i> , 2012, 21, 1250026.	1.0	4

#	ARTICLE	IF	CITATIONS
73	The Hartree-Fock method. Scholarpedia Journal, 2012, 7, 10545.	0.3	3
74	Configuration mixing of mean-field states. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1611-S1616.	3.6	1
75	QUANTUM FLUCTUATIONS AND STABILITY OF TETRAHEDRAL DEFORMATIONS IN ATOMIC NUCLEI. International Journal of Modern Physics E, 2007, 16, 533-540.	1.0	1
76	Excited states of the mean field. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1367-S1375.	3.6	0
77	Editorial: International Collaboration in Nuclear Physics. Nuclear Physics News, 2007, 17, 3-4.	0.4	0
78	THE DESCRIPTION AND ROLE OF FLUCTUATIONS IN COLLECTIVE DEGREES OF FREEDOM IN MODELS OF NUCLEAR STRUCTURE BASED ON THE SELF-CONSISTENT MEAN FIELD. Modern Physics Letters A, 2010, 25, 1787-1791.	1.2	0
79	UNEXPECTED GOINGS-ON IN THE STRUCTURE OF A NEUTRON STAR CRUST. , 2004, , .		0