Paul Henri Heenen

List of Publications by Year
in descending order

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
1	Search for octupole-deformed actinium isotopes using resonance ionization spectroscopy. Physical Review C, 2019, 100, .	2.9	22
2	Impact of the surface energy coefficient on the deformation properties of atomic nuclei as predicted by Skyrme energy density functionals. Physical Review C, 2019, 99, .	2.9	20
3	Are There Signatures of Harmonic Oscillator Shells Far from Stability? First Spectroscopy of ^{110}Zr. Physical Review Letters, 2017, 118, 032501.	7.8	41
4	De-excitation of the strongly coupled band in Au177 and implications for core intruder configurations in the light Hg isotopes. Physical Review C, 2017, 95, .	2.9	9
5	Beyond-mean-field correlations and the description of superheavy elements. EPJ Web of Conferences, 2016, 131, 02001.	0.3	6
6	Numerical accuracy of mean-field calculations in coordinate space. Physical Review C, 2015, 92, .	2.9	28
7	Beyond-mean-field study of elastic and inelastic electron scattering off nuclei. Physical Review C, 2015, 91, .	2.9	26
8	Shapes and Î±- and Î²-decays of superheavy nuclei. Nuclear Physics A, 2015, 944, 415-441.	1.5	54
9	Solution of the Skyrmeâ€"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
10	Beyond Mean-Field Calculations for Odd-Mass Nuclei. Physical Review Letters, 2014, 113, 162501.	7.8	94
11	Shape Coexistence in the Neutron-Deficient Even-Even $^{182-188}Hg$ Studied via Coulomb Excitation. Physical Review Letters, 2014, 112, 162701.	7.8	96
12	Spurious finite-size instabilities in nuclear energy density functionals. Physical Review C, 2013, 88, .	2.9	46
13	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
14	Structure of superheavy nuclei. Journal of Physics: Conference Series, 2013, 420, 012002.	0.4	30
15	Beyond-mean-field study of the possible â€œbubbleâ€•structure of34Si. Physical Review C, 2012, 86, .	2.9	45
16	SYMMETRY RESTORATION FOR ODD-MASS NUCLEI WITH A SKYRME ENERGY DENSITY FUNCTIONAL. International Journal of Modern Physics E, 2012, 21, 1250026.	1.0	4
17	New parametrization of Skyrme's interaction for regularized multireference energy density functional calculations. Physical Review C, 2012, 86, .	2.9	32
18	Tensor part of the Skyrme energy density functional. III. Time-odd terms at high spin. Physical Review C, 2012, 85, .	2.9	55

#	Article	IF	Citations
19	The Hartree-Fock method. Scholarpedia Journal, 2012, 7, 10545.	0.3	3
20	What can be learned from binding energy differences about nuclear structure: The example of $\hat{I}V_{pn}$. Physical Review C, 2011, 83, .	2.9	21
21	REGULARIZATION OF MULTI-REFERENCE ENERGY DENSITY FUNCTIONAL CALCULATIONS. International Journal of Modern Physics E, 2011, 20, 259-269.	1.0	4
22	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
23	Nuclear tetrahedral configurations at spin zero. Physical Review C, 2009, 79, .	2.9	20
24	Configuration mixing of angular-momentum and particle-number projected triaxial Hartree-Fock-Bogoliubov states using the Skyrme energy density functional. Physical Review C, 2008, 78, .	2.9	163
25	Collectivity-induced quenching of signatures for shell closures. Physical Review C, 2008, 78, .	2.9	68
26	QUANTUM FLUCTUATIONS AND STABILITY OF TETRAHEDRAL DEFORMATIONS IN ATOMIC NUCLEI. International Journal of Modern Physics E, 2007, 16, 533-540.	1.0	1
27	Global study of the spectroscopic properties of the first $2+$ state in even-even nuclei. Physical Review C, 2007, 75, .	2.9	43
28	Editorial: International Collaboration in Nuclear Physics. Nuclear Physics News, 2007, 17, 3-4.	0.4	0
29	Neutrons cross the line. Nature, 2007, 449, 992-993.	27.8	5
30	Shape coexistence in neutron-deficient Kr isotopes: Constraints on the single-particle spectrum of self-consistent mean-field models from collective excitations. Physical Review C, 2006, 74, .	2.9	104
31	Global study of quadrupole correlation effects. Physical Review C, 2006, 73, .	2.9	171
32	Beyond mean field study of excited states: Analysis within the Lipkin model. Physical Review C, 2006, 74, .	2.9	13
33	Tetrahedral correlations in $Zr80$ and $Zr98$. Physical Review C, 2006, 74, .	2.9	25
34	Shape coexistence and triaxiality in the superheavy nuclei. Nature, 2005, 433, 705-709.	27.8	208
35	Excited states of the mean field. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1367-S1375.	3.6	0
36	Systematics of Quadrupolar Correlation Energies. Physical Review Letters, 2005, 94, 102503.	7.8	57

#	Article	IF	Citations
37	Configuration mixing of mean-field states. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1611-S1616.	3.6	1
38	Microscopic study ofPu240: Mean field and beyond. Physical Review C, 2004, 70, .	2.9	56
39	Correlation energies by the generator coordinate method: Computational aspects for quadrupolar deformations. Physical Review C, 2004, 69, .	2.9	22
40	Configuration mixing of angular momentum projected self-consistent mean-field states for neutron-deficient Pb isotopes. Physical Review C, 2004, 69, .	2.9	119
41	UNEXPECTED GOINGS-ON IN THE STRUCTURE OF A NEUTRON STAR CRUST. , 2004, , .		0
42	Self-consistent approach to deformation of intruder states in neutron-deficient Pb and Po. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 569, 151-158.	4.1	39
43	Exotic nuclear phases in the inner crust of neutron stars in the light of Skyrme-Hartree-Pock theory. Nuclear Physics A, 2003, 719, C217-C220.	1.5	19
44	Skyrme mean-field study of rotational bands in transfermium isotopes. Nuclear Physics A, 2003, 723, 354-364.	1.5	92
45	Self-consistent mean-field models for nuclear structure. Reviews of Modern Physics, 2003, 75, 121-180.	45.6	1,994
46	NEUTRON STARS AND THE FERMIONIC CASIMIR EFFECT. International Journal of Modern Physics A, 2002, 17, 1059-1064.	1.5	6
47	Hartree-Fock mass formulas and extrapolation to new mass data. Physical Review C, 2002, 66, .	2.9	207
48	A Hartree–Fock–Bogoliubov mass formula. Nuclear Physics A, 2002, 700, 142-156.	1.5	164
49	Pairing correlations. II. Microscopic analysis of odd-even mass staggering in nuclei. Physical Review C, 2001, 65, .	2.9	110
50	GCM analysis of the collective properties of lead isotopes with exact projection on particle numbers. European Physical Journal A, 2001, 11, 393-402.	2.5	41
51	Rotational properties of 252, 253, 254No: influence of pairing correlations. Nuclear Physics A, 2001, 679, 427-440.	1.5	76
52	Pairing correlations. I. Description of odd nuclei in mean-field theories. Physical Review C, 2001, 65, .	2.9	98
53	Configuration mixing of mean-field wave functions projected on angular momentum and particle number: Application to Mg. Nuclear Physics A, 2000, 671, 145-164.	1.5	98
54	Microscopic study of the properties of identical bands in theA=150mass region. Physical Review C, 1999, 59, 3120-3127.	2.9	63

#	Article	IF	Citations
55	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
56	Hartree-Fock-Bogoliubov description of quasiparticle excitations in the superdeformed wells of191,192Hg and192,193Tl. Physical Review C, 1998, 57, 159-165.	2.9	20
57	Shell effects in superdeformed minima. Physical Review C, 1998, 57, 1719-1726.	2.9	23
58	Particle-Unstable Nuclei in the Hartree-Fock Theory. Physical Review Letters, 1997, 79, 2217-2220.	7.8	43
59	Deformation of nuclei close to the two-neutron drip line in the Mg region. Nuclear Physics A, 1997, 621, 706-718.	1.5	129
60	Microscopic study of superdeformation in the A = 150 mass region. Nuclear Physics A, 1996, 598, 169-186.	1.5	28
61	Coupling of the giant dipole resonance to low lying octupole modes - generator coordinate method study. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 381, 12-16.	4.1	5
62	3D solution of Hartree-Fock-Bogoliubov equations for drip-line nuclei. Nuclear Physics A, 1996, 600, 371-386.	1.5	107
63	Shell structure of the superheavy elements. Nuclear Physics A, 1996, 611, 211-246.	1.5	374
64	Quadrupole and octupole correlations in normal, superdeformed and hyperdeformed states of 194Pb. Nuclear Physics A, 1995, 588, 597-622.	1.5	46
65	Superdeformed rotational bands with density dependent pairing interactions. Nuclear Physics A, 1995, 593, 1-20.	1.5	107
66	Octupole excitations in light xenon and barium nuclei. Physical Review C, 1994, 50, 802-806.	2.9	44
67	Generator-coordinate method for triaxial quadrupole dynamics in Sr isotopes (II). Results for particle-number-projected states. Nuclear Physics A, 1993, 561, 367-386.	1.5	45
68	Shape coexistence and low-lying collective states in A ≈ 100 Zr nuclei. Nuclear Physics A, 1993, 559, 221-238.	1.5	50
69	Octupole correlations in superdeformed mercury and lead nuclei: A generator-coordinate method analysis. Nuclear Physics A, 1993, 551, 109-124.	1.5	37
70	Diabatic effects in 186Pb: A generator-coordinate analysis. Nuclear Physics A, 1993, 551, 409-433.	1.5	32
71	Self-consistent calculation of charge radii of Pb isotopes. Nuclear Physics A, 1993, 551, 434-450.	1.5	110
72	Octupole softness of superdeformedPb194. Physical Review Letters, 1991, 66, 876-879.	7.8	57

#	Article	IF	Citations
73	Generator coordinate method for triaxial quadrupole collective dynamics in strontium isotopes. Nuclear Physics A, 1991, 530, 149-170.	1.5	47
74	Analysis of the generator coordinate method in a study of shape isomerism in 194Hg. Nuclear Physics A, 1990, 510, 466-502.	1.5	182
75	Charge distributions ofPb208,Pb206, andTl205and the mean-field approximation. Physical Review C, 1989, 40, 2834-2839.	2.9	90
76	Superdeformation and shape isomerism at zero spin. Nuclear Physics A, 1989, 500, 308-322.	1.5	94
77	Proton-rich exotic heavy nuclei: Self-consistent calculations. Physical Review C, 1988, 38, 550-552.	2.9	15
78	Angular momentum projection on a mesh of cranked Hartree-Fock wave functions. Physical Review C, 1984, 29, 1056-1068.	2.9	40
79	Calculation of the Peierls-Yoccoz translational mass for Hartree-Fock wave functions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 134, 287-289.	4.1	4