D J Dean

List of Publications by Year in descending order

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128 papers	5,367 citations	76326 40 h-index	79698 73 g-index
129	129	129	2609
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Cloud Quantum Computing of an Atomic Nucleus. Physical Review Letters, 2018, 120, 210501.	7.8	269
2	Nuclear theory and science of the facility for rare isotope beams. Modern Physics Letters A, 2014, 29, 1430010.	1,2	57
3	Coupled-cluster computations of atomic nuclei. Reports on Progress in Physics, 2014, 77, 096302.	20.1	368
4	Re-entrance in nuclei: competitive phenomena. Journal of Physics: Conference Series, 2013, 445, 012029.	0.4	0
5	FROM PHYSICS TO ENERGY TO POLICY., 2013,,.		O
6	Nuclear physics in the coming decade. Journal of Physics: Conference Series, 2012, 403, 012047.	0.4	0
7	Resource Letter NSM-1: New insights into the nuclear shell model. American Journal of Physics, 2011, 79, 5-16.	0.7	4
8	Computational Science and Innovation. Journal of Physics: Conference Series, 2011, 312, 062001.	0.4	1
9	Origin of the Anomalous Long Lifetime of <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mmultiscripts> <mml:mi mathvariant="normal"> C </mml:mi> <mml:mprescripts></mml:mprescripts> <mml:none></mml:none> <mml:mn>14</mml:mn> </mml:mmultiscripts> </mml:math> . Physical Review Letters, 2011, 106, 202502.	7.8	95
10	The Challenge of Energy to Science. Nuclear Physics News, 2011, 21, 3-4.	0.4	0
11	The importance of advancing technology to America's energy goals. Energy Policy, 2010, 38, 3886-3890.	8.8	15
12	Many-body interactions and nuclear structure. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 064035.	3.6	4
13	Computation of spectroscopic factors with the coupled-cluster method. Physical Review C, 2010, 82, .	2.9	18
14	Pairing Reentrance Phenomenon in Heated Rotating Nuclei in the Shell-Model MonteÂCarlo Approach. Physical Review Letters, 2010, 105, 212504.	7.8	18
15	<i>Ab initio</i> coupled-cluster approach to nuclear structure with modern nucleon-nucleon interactions. Physical Review C, 2010, 82, .	2.9	183
16	<i>Ab initio</i> computation of neutron-rich oxygen isotopes. Physical Review C, 2009, 80, .	2.9	54
17	Solution of the Center-Of-Mass Problem in Nuclear Structure Calculations. Physical Review Letters, 2009, 103, 062503.	7.8	78
18	Shell-model Monte Carlo simulations of the BCS-BEC crossover in few-fermion systems. Physical Review A, 2009, 80, .	2. 5	20

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19	Computational aspects of nuclear coupled-cluster theory. Computational Science & Discovery, 2008, 1, 015008.	1.5	1
20	Statistical Properties of Kawai-Kerman-McVoy T-matrix. AIP Conference Proceedings, 2008, , .	0.4	1
21	Understanding nuclei: progress and challenges. AIP Conference Proceedings, 2008, , .	0.4	O
22	Parity-projected shell model Monte Carlo level densities for medium-mass nuclei., 2008,,.		0
23	Medium-Mass Nuclei from Chiral Nucleon-Nucleon Interactions. Physical Review Letters, 2008, 101, 092502.	7.8	147
24	Comment on "AbÂinitioStudy ofCa40with an Importance-Truncated No-Core Shell Model― Physical Review Letters, 2008, 101, 119201; author reply 119202.	7.8	14
25	Computational nuclear structure: exploring nuclei through INCITE. Journal of Physics: Conference Series, 2008, 125, 012062.	0.4	0
26	AB-INITIO COUPLED CLUSTER THEORY FOR OPEN QUANTUM SYSTEMS., 2008,,.		0
27	COUPLED-CLUSTER APPROACH TO AN AB-INITIO DESCRIPTION OF NUCLEI. , 2008, , .		O
28	COUPLED-CLUSTER THEORY FOR NUCLEI. , 2007, , .		0
29	Benchmark calculations forH3,He4,O16, andCa40withab initiocoupled-cluster theory. Physical Review C, 2007, 76, .	2.9	83
30	Single-neutron excitations in neutron-richGe83andSe85. Physical Review C, 2007, 76, .	2.9	47
31	Parity-projected shell model Monte Carlo level densities forfp-shell nuclei. Physical Review C, 2007, 75, .	2.9	17
32	Coupled-cluster theory for three-body Hamiltonians. Physical Review C, 2007, 76, .	2.9	147
33	RIB MEASUREMENTS FOR STELLAR CORE COLLAPSE., 2007,,.		O
34	Correlations and effective interactions in nuclear matter. Physical Review C, 2006, 74, .	2.9	13
35	COUPLED-CLUSTER THEORY FOR NUCLEI. , 2006, , .		0
36	The nuclear structure and low-energy reactions (NSLER) collaboration. Journal of Physics: Conference Series, 2006, 46, 166-170.	0.4	0

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37	Shell model Monte Carlo method in thepn-formalism and applications to the Zr and Mo isotopes. Physical Review C, 2006, 73, .	2.9	17
38	Coupled-cluster calculations for valence systems aroundO16. Physical Review C, 2006, 74, .	2.9	64
39	High-spin intruder states in thefp-shell nuclei and isoscalar proton-neutron correlations. Physical Review C, 2006, 73, .	2.9	15
40	COUPLED-CLUSTER THEORY FOR NUCLEI. International Journal of Modern Physics B, 2006, 20, 5338-5345.	2.0	4
41	Terascale input physics: the role of nuclear electron capture in core collapse supernovae. Journal of Physics: Conference Series, 2005, 16, 400-404.	0.4	0
42	NEUTRINO-NUCLEUS INTERACTIONS IN CORE COLLAPSE SUPERNOVAE. , 2005, , .		0
43	Neutral-current neutrino–nucleus cross sections for nuclei. Nuclear Physics A, 2005, 747, 87-108.	1.5	52
44	Nuclear Structure Calculations with Coupled Cluster Methods from Quantum Chemistry. Nuclear Physics A, 2005, 752, 299-308.	1.5	16
45	Thermal properties of isotones. Nuclear Physics A, 2005, 757, 360-372.	1.5	21
46	Nuclear electron capture in core collapse supernovae. Nuclear Physics A, 2005, 758, 31-34.	1.5	4
47	Ab initio coupled cluster calculations for nuclei using methods of quantum chemistry. European Physical Journal A, 2005, 25, 485-488.	2.5	3
48	New level information on Z = 51 isotopes, $111Sb60$ and 134 , $135Sb83$, 84 . European Physical Journal A, 2005 , 25 , $121-122$.	2.5	9
49	Shell model analysis of intruder states and high- K isomers in the fp shell. European Physical Journal A, 2005, 25, 509-510.	2.5	4
50	Coupled-Cluster Theory For Nuclear Structure. AIP Conference Proceedings, 2005, , .	0.4	0
51	Density matrix renormalization group and wavefunction factorization for nuclei. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1377-S1383.	3.6	22
52	Identification of low-spin states inSb111: Test of spin-orbit coupling in light nuclei. Physical Review C, 2005, 71, .	2.9	10
53	Quadrupole Deformation of the Self-Conjugate NucleusKr72. Physical Review Letters, 2005, 95, 022502.	7.8	80
54	Gamow-TellerGT+distributions in nuclei with massA=90â^'97. Physical Review C, 2005, 72, .	2.9	25

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55	Coupled-cluster calculations for ground and excited states of closed- and open-shell nuclei using methods of quantum chemistry. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1291-S1299.	3.6	8
56	Nuclear forces and the quantum many-body problem. Journal of Physics G: Nuclear and Particle Physics, 2005, 31 , .	3.6	6
57	Interaction between benzenedithiolate and gold: Classical force field for chemical bonding. Journal of Chemical Physics, 2005, 122, 244721.	3.0	27
58	Ab-InitioCoupled-Cluster Study ofO16. Physical Review Letters, 2005, 94, 212501.	7.8	100
59	Ab initio coupled cluster calculations for nuclei using methods of quantum chemistry. , 2005, , 485-488.		0
60	Solution of large scale nuclear structure problems by wave function factorization. Physical Review C, 2004, 69, .	2.9	22
61	Shifted-Contour Monte Carlo Method for Nuclear Structure. AIP Conference Proceedings, 2004, , .	0.4	0
62	Effective interactions and the nuclear shell-model. Progress in Particle and Nuclear Physics, 2004, 53, 419-500.	14.4	56
63	Pairing correlations and transitions in nuclear systems. Nuclear Physics A, 2004, 731, 381-391.	1.5	13
64	Coupled-cluster approach to nuclear physics. Physical Review C, 2004, 69, .	2.9	122
65	Coupled Cluster Calculations of Ground and Excited States of Nuclei. Physical Review Letters, 2004, 92, 132501.	7.8	119
66	Intersections of Nuclear Physics and Astrophysics. EAS Publications Series, 2004, 11, 175-189.	0.3	0
67	COMPUTATIONAL CHALLENGES OF QUANTUM MANY-BODY PROBLEMS IN NUCLEAR STRUCTURE: COUPLED-CLUSTER THEORY. , 2004, , .		0
68	APPLICATION OF GROUND-STATE FACTORIZATION TO NUCLEAR STRUCTURE PROBLEMS. , 2004, , .		0
69	Shell model Monte Carlo studies of nuclei in the Aâ^1/480 mass region. Nuclear Physics A, 2003, 728, 109-117.	1.5	41
70	Neutrino-nucleus interactions in core-collapse supernova. Nuclear Physics A, 2003, 718, 452-454.	1.5	2
71	How magic is the magic68Ninucleus?. Physical Review C, 2003, 67, .	2.9	93
72	NWChem for materials science. Computational Materials Science, 2003, 28, 209-221.	3.0	25

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73	Computational chemistry for molecular electronics. Computational Materials Science, 2003, 28, 321-341.	3.0	41
74	Density matrix renormalization group study of critical behavior of thespinâ^12alternating Heisenberg chain. Physical Review B, 2003, 68, .	3.2	29
75	Consequences of Nuclear Electron Capture in Core Collapse Supernovae. Physical Review Letters, 2003, 91, 201102.	7.8	198
76	Factorization of shell-model ground states. Physical Review C, 2003, 67, .	2.9	25
77	Electron Capture Rates on Nuclei and Implications for Stellar Core Collapse. Physical Review Letters, 2003, 90, 241102.	7.8	240
78	Pairing in nuclear systems: from neutron stars to finite nuclei. Reviews of Modern Physics, 2003, 75, 607-656.	45.6	391
79	THERMAL PHASES IN FINITE QUANTUM SYSTEMS. International Journal of Modern Physics B, 2003, 17, 5093-5100.	2.0	1
80	Toward Coupled-Cluster Implementations In Nuclear Structure. AIP Conference Proceedings, 2003, , .	0.4	0
81	COUPLED-CLUSTER THEORY FOR NUCLEAR SCIENCE., 2003,,.		0
82	100Sncore excitations in 102In. Physical Review C, 2002, 65, .	2.9	14
83	Breakup of the doubly magic100Sncore. Physical Review C, 2002, 66, .	2.9	20
84	Excited states of the proton emitter105Sb. Physical Review C, 2002, 65, .	2.9	11
85	Temperature dependence of the symmetry energy. Physical Review C, 2002, 66, .	2.9	27
86	First observation of $109\text{Te}\hat{l}^2$ + and electron capture decay to levels of 109Sb . Physical Review C, 2002 , 66 , .	2.9	11
87	MANY-BODY CORRELATIONS IN NUCLEI AND QUANTUM DOTS. , 2002, , .		0
88	THERMAL PHASES IN FINITE QUANTUM SYSTEMS. , 2002, , .		0
89	Robust physics from random interactions. Nuclear Physics A, 2001, 682, 194-199.	1.5	3
90	Unblocking of the Gamow-Teller strength in stellar electron capture on neutron-rich germanium isotopes. Physical Review C, 2001, 63, .	2.9	84

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91	Relativistic heavy-ion collisions in the dynamical string-parton model. Physical Review C, 2001, 63, .	2.9	O
92	Quantum dots in magnetic fields: Thermal response of broken-symmetry phases. Physical Review B, 2001, 64, .	3.2	6
93	CALCULATING NEUTRINO-NUCLEUS INTERACTIONS., 2001,,.		0
94	Competition of Electron Capture and Betaâ€Decay Rates in Supernova Collapse. Astrophysical Journal, Supplement Series, 2000, 126, 493-499.	7.7	55
95	Shell model Monte Carlo investigation of rare earth nuclei. Physical Review C, 2000, 61, .	2.9	29
96	Sum rules regarding the sign problem in Monte Carlo shell model calculations. Physical Review C, 2000, 61 , .	2.9	1
97	Shape coexistence and the effective nucleon-nucleon interaction. Physical Review C, 1999, 60, .	2.9	316
98	Rotational Bands in the Doubly Magic NucleusN56i. Physical Review Letters, 1999, 82, 3763-3766.	7.8	139
99	Generalized seniority from random Hamiltonians. Physical Review C, 1999, 61, .	2.9	72
100	Calculation of exciton densities in the shell-model Monte Carlo method. Physical Review C, 1999, 60, .	2.9	9
101	Hadronic structure functions as distributions of classical strings. Physical Review C, 1999, 59, 2289-2292.	2.9	2
102	Shell-model Monte Carlo studies of neutron-rich nuclei in the1sâ^'Odâ^'1pâ^'Ofshells. Physical Review C, 1999, 59, 2474-2486.	2.9	64
103	BB intermeson potentials in the quark model. Physical Review C, 1999, 60, .	2.9	43
104	Monte Carlo methods and applications for the nuclear shell model. , 1999, , .		0
105	Orderly Spectra from Random Interactions. Physical Review Letters, 1998, 80, 2749-2753.	7.8	155
106	Electron capture on iron group nuclei. Physical Review C, 1998, 58, 536-544.	2.9	63
107	RESULTS FROM SHELL-MODEL MONTE CARLO STUDIES. Annual Review of Nuclear and Particle Science, 1997, 47, 463-504.	10.2	36
108	Gamow-Teller strength distributions infp-shell nuclei. Physical Review C, 1997, 56, 3079-3086.	2.9	45

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109	Shell Model Monte Carlo Studies of Î ³ -Soft Nuclei. Physical Review Letters, 1996, 77, 1444-1447.	7.8	40
110	Temperature dependence of pair correlations in nuclei in the iron region. Nuclear Physics A, 1996, 602, 244-262.	1.5	30
111	Shell Model Monte Carlo Method for Two-Neutrino Double Beta Decay. Physical Review Letters, 1996, 76, 2642-2645.	7.8	27
112	Thermal Properties of F54e. Physical Review Letters, 1995, 74, 2909-2912.	7.8	61
113	Shell-model Monte Carlo studies offp-shell nuclei. Physical Review C, 1995, 52, 718-725.	2.9	125
114	Comparison of flux-correcting and spline algorithms for solving (3+1)-dimensional relativistic hydrodynamics. Physical Review E, 1994, 49, 1726-1733.	2.1	5
115	Complete 0ÄSω calculations of Gamow-Teller strengths for nuclei in the iron region. Physical Review Letters, 1994, 72, 4066-4069.	7.8	28
116	Practical solution to the Monte Carlo sign problem: Realistic calculations ofFe54. Physical Review Letters, 1994, 72, 613-616.	7.8	134
117	Demonstration of the auxiliary-field Monte Carlo approach forsd-shell nuclei. Physical Review C, 1994, 49, 1422-1427.	2.9	63
118	Monteâ€Carloâ€Zugang zum Kernschalenmodell. Physik Journal, 1994, 50, 341-343.	0.1	0
119	SPLINE TECHNIQUES FOR SOLVING RELATIVISTIC CONSERVATION EQUATIONS. International Journal of Modern Physics C, 1993, 04, 723-747.	1.7	4
120	PARALLEL IMPLEMENTATION OF 3 + 1-DIMENSIONAL RELATIVISTIC HYDRODYNAMICS. International Journal of Modern Physics C, 1993, 04, 1023-1040.	1.7	2
121	Dynamical evolution of hadronic matter in relativistic collisions. Physical Review C, 1993, 48, 2433-2442.	2.9	3
122	Multiparticle production in lepton-nucleus collisions and relativistic string models. Physical Review C, 1992, 46, 2066-2076.	2.9	12
123	Dynamical string-parton model for relativistic heavy-ion collisions. Physical Review C, 1992, 45, 400-414.	2.9	8
124	A dynamical picture of hardon-hadron collisions with the String-Parton model. AIP Conference Proceedings, 1992, , .	0.4	0
125	A dynamical string-parton model for relativistic heavy-ion collisions. Nuclear Physics A, 1992, 544, 475-478.	1.5	0
126	Nuclear Hartree-Fock calculations with splines. Physical Review C, 1991, 44, 2512-2521.	2.9	49

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127	Velocity dependence of prompt, high-energy nucleon emission. Physical Review C, 1989, 40, 1213-1218.	2.9	1
128	Atomic oxygen simulation and analysis. Acta Astronautica, 1987, 15, 887-891.	3.2	0