

S Fantoni

List of Publications by Year in descending order

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81743

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120
all docs

120
docs citations

120
times ranked

1942
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Coherent Atomic Tunneling between Two Trapped Bose-Einstein Condensates. Physical Review Letters, 1997, 79, 4950-4953.	2.9	1,121
2	Coherent oscillations between two weakly coupled Bose-Einstein condensates: Josephson effects, oscillations, and macroscopic quantum self-trapping. Physical Review A, 1999, 59, 620-633.	1.0	829
3	Spectral function of finite nuclei and scattering of GeV electrons. Nuclear Physics A, 1994, 579, 493-517.	0.6	248
4	Momentum distribution of nucleons in nuclear matter. Nuclear Physics A, 1984, 427, 473-492.	0.6	208
5	The hypernetted-chain approximation for a fermion system. Il Nuovo Cimento A, 1975, 25, 593-615.	0.2	203
6	A quantum Monte Carlo method for nucleon systems. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 446, 99-103.	1.5	149
7	Quantum Monte Carlo calculation of the equation of state of neutron matter. Physical Review C, 2009, 79, .	1.1	148
8	Microscopic calculations for normal and polarized liquid He3. Physical Review B, 1983, 28, 3770-3781.	1.1	146
9	Josephson Effects in Dilute Bose-Einstein Condensates. Physical Review Letters, 2000, 84, 4521-4524.	2.9	135
10	Scattering of GeV electrons by nuclear matter. Physical Review C, 1991, 44, 2328-2342.	1.1	123
11	Spin Susceptibility of Neutron Matter at Zero Temperature. Physical Review Letters, 2001, 87, .	2.9	116
12	Correlated basis theory of nuclear matter response functions. Nuclear Physics A, 1987, 473, 234-266.	0.6	104
13	The imaginary part of the nucleon optical potential in nuclear matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 104, 89-91.	1.5	103
14	Correlated basis theory of nucleon optical potential in nuclear matter. Nuclear Physics A, 1983, 399, 51-65.	0.6	99
15	Momentum distribution of boson and fermion systems in Jastrow theory. Il Nuovo Cimento A, 1978, 44, 191-201.	0.2	94
16	Equation of State of Superfluid Neutron Matter and the Calculation of the S_0 Pairing Gap. Physical Review Letters, 2008, 101, 132501.	2.9	88
17	Structure functions and correlations in nuclei. Nuclear Physics A, 1987, 473, 267-289.	0.6	87
18	Spin-dependent correlations in the ground state of liquid He3. Physical Review B, 1988, 38, 4523-4539.	1.1	84

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19	Bose-condensate tunneling dynamics: Momentum-shortened pendulum with damping. <i>Physical Review A</i> , 1999, 60, 487-493.	1.0	82
20	Jastrow correlations and an irreducible cluster expansion for infinite boson or fermion systems. II <i>Nuovo Cimento A</i> , 1974, 20, 179-193.	0.2	79
21	Three-body correlations in liquidHe4. <i>Physical Review B</i> , 1982, 26, 6123-6130.	1.1	79
22	Neutron matter at zero temperature with an auxiliary field diffusion Monte Carlo method. <i>Physical Review C</i> , 2003, 68, .	1.1	78
23	Microscopic calculation of the longitudinal response of nuclear matter. <i>Nuclear Physics A</i> , 1989, 503, 375-403.	0.6	77
24	Nuclear-matter green functions in correlated-basis theory. <i>Nuclear Physics A</i> , 1992, 550, 201-222.	0.6	71
25	Calculation of the two-body correlation function for Fermion systems. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÀ Italiana Di Fisica</i> , 1974, 10, 545-551.	0.4	68
26	Shadow wave function for liquid and solidHe3. <i>Physical Review B</i> , 1996, 53, 15129-15135.	1.1	65
27	Model calculations of doubly closed shell nuclei in CBF theory III. jj coupling and isospin dependence. <i>Nuclear Physics A</i> , 1996, 605, 359-386.	0.6	62
28	Microscopic calculation of the equation of state of nuclear matter and neutron star structure. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2010, 404, L35-L39.	1.2	60
29	Equation of state of low-density neutron matter, and the $\frac{1}{S} < \frac{1}{S} > < \frac{1}{S} >$ gap. <i>Physical Review C</i> , 2009, 80, .	1.1	56
30	Color transparency and correlation effects in quasielastic electron-nucleus scattering at high momentum transfer. <i>Physical Review Letters</i> , 1992, 69, 881-884.	2.9	53
31	Variational theory of bulk4Hewith shadow wave functions: Ground state and the phonon-maxon-roton spectrum. <i>Physical Review B</i> , 1998, 58, 909-924.	1.1	53
32	Quantum theory of solid-liquid coexistence and interface inHe4. <i>Physical Review Letters</i> , 1994, 72, 2589-2592.	2.9	47
33	Variational study of vacancies in solid4Hewith shadow wave functions. <i>Physical Review B</i> , 1997, 56, 5909-5917.	1.1	45
34	Model calculations of doubly closed shell nuclei in CBF theory (I). <i>Nuclear Physics A</i> , 1992, 549, 439-460.	0.6	44
35	Single-Particle Spectrum and Specific Heat of LiquidHe3. <i>Physical Review Letters</i> , 1982, 48, 878-881.	2.9	43
36	Orthogonalization of correlated states. <i>Physical Review C</i> , 1988, 37, 1697-1707.	1.1	42

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37	Spectral function of medium-heavy nuclei and electron scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 323, 267-272.	1.5	42
38	Microscopic calculations for a model Fermi liquid. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1976, 16, 531-534.	0.4	41
39	Auxiliary Field Diffusion Monte Carlo Calculation of Nuclei with A with Tensor Interactions. Physical Review Letters. 2007, 99, 022507.	2.9	40
40	The fermi-hypernetted-chain method for state-dependent Jastrow-correlated functions. Il Nuovo Cimento A, 1978, 43, 413-432.	0.2	39
41	Model calculations of doubly closed shell nuclei in CBF theory. Nuclear Physics A, 1994, 568, 73-89.	0.6	38
42	Auxiliary field diffusion Monte Carlo calculation of ground state properties of neutron drops. Nuclear Physics A, 2004, 742, 255-268.	0.6	38
43	Microscopic calculation of the imaginary part of the nucleon optical potential. Nuclear Physics A, 1982, 386, 1-28.	0.6	31
44	Unconstrained Jastrow variational calculation on nuclear matter. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1976, 15, 217-220.	0.4	30
45	Extension of the FHNC method to finite systems. Nuclear Physics A, 1979, 328, 478-489.	0.6	30
46	Correlated basis function results for the Argonne models of nuclear matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 298, 263-266.	1.5	27
47	Correlated BCS theory. Nuclear Physics A, 1981, 363, 381-398.	0.6	26
48	Auxiliary field diffusion Monte Carlo calculation of properties of oxygen isotopes. Physical Review C, 2006, 73, .	1.1	26
49	Higher-order effects in inclusive electron-nucleus scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 359, 8-12.	1.5	25
50	Calculations of nuclear matter with state-dependent correlations and a semirealistic nucleon-nucleon potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1977, 70, 1-5.	1.5	24
51	Microscopic calculations of the excitation spectrum of oneHe3impurity in liquidHe4. Physical Review B, 1986, 33, 6057-6067.	1.1	24
52	Application of Fermi-hypernetted-chain theory to composite-fermion quantum Hall states. Physical Review B, 1997, 56, 13290-13295.	1.1	24
53	Variational calculation of nuclear matter. Nuclear Physics A, 1979, 328, 127-142.	0.6	23
54	FHNC expression for the three-body term of the kinetic energy in the Jackson-Feenberg form. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1979, 84, 23-24.	1.5	22

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55	Variational calculations for He3 impurities on He4 droplets. Physical Review B, 1994, 49, 15253-15257.	1.1	22
56	Inclusive cross section ratios at $x > 1$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 343, 47-52.	1.5	22
57	Fermi hypernetted chain calculations in a periodic box. Nuclear Physics A, 2001, 690, 456-470.	0.6	22
58	Ambiguities in the Implementation of the Impulse Approximation for the Response of Many-Fermion Systems. Physical Review Letters, 2001, 87, 052501.	2.9	22
59	Quantum Monte Carlo Algorithm Based on Two-Body Density Functional Theory for Fermionic Many-Body Systems: Application to He3. Physical Review Letters, 2004, 93, 170202.	2.9	22
60	Fermi-hypernetted-chain study of unprojected wave functions to describe the half-filled state of the fractional quantum Hall effect. Physical Review B, 1998, 58, 7898-7905.	1.1	19
61	Homogeneous nucleation of crystalline order in superdense liquid He4. Physical Review B, 1995, 52, 7564-7571.	1.1	18
62	A new hypernetted-chain treatment for Laughlin quantum Hall states. Europhysics Letters, 1996, 36, 663-668.	0.7	17
63	Correlated-basis-function method for fermions on a lattice: The one-dimensional Hubbard model. Physical Review B, 1990, 41, 11479-11493.	1.1	15
64	Spin-orbit induced backflow in neutron matter with auxiliary field diffusion Monte Carlo method. Physical Review C, 2003, 67, .	1.1	15
65	Final-state interactions in the response of nuclear matter. Physical Review C, 2003, 67, .	1.1	14
66	Linked-cluster perturbative expansion in correlated-basis theory. Physical Review B, 1984, 29, 2544-2550.	1.1	13
67	Electric-dipole sum rule in nuclear matter. Nuclear Physics A, 1985, 435, 448-460.	0.6	13
68	Multiple hadron production in electron scattering off nuclear targets. Physical Review C, 1997, 55, 244-252.	1.1	12
69	Optimization of Three-Body Correlations in Liquid Helium. Europhysics Letters, 1995, 30, 93-98.	0.7	11
70	The polarization energy of normal liquid ^3He . Molecular Physics, 2003, 101, 1705-1711.	0.8	11
71	The nuclear-matter problem with central spin- and isospin-dependent potentials. Il Nuovo Cimento A, 1978, 44, 414-426.	0.2	10
72	Nuclear Effects in the Diffractive Electroproduction of π^+ Mesons. Physical Review Letters, 1995, 74, 3565-3568.	2.9	10

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73	Hypernetted-chain treatment and the extended shadow wave functions for fractional quantum Hall hierarchical states. <i>Physical Review B</i> , 1997, 55, 13739-13744.	1.1	10
74	Application of the Fermi Hypernetted-Chain theory and Effective Correlation Factor method for Laughlin quantum Hall states. <i>Journal of Low Temperature Physics</i> , 1997, 108, 357-371.	0.6	10
75	Possible equivalence of Feynman's backflow and spin-dependent correlations. <i>Physical Review B</i> , 1997, 55, 5647-5650.	1.1	9
76	The spectra of mixed ^3He - ^4He droplets. <i>Journal of Chemical Physics</i> , 2005, 123, 054503.	1.2	9
77	Variational study of ^3He impurity and of a vacancy in solid ^4He . <i>Physical Review B</i> , 1997, 55, 3122-3127.	1.1	7
78	Deep-inelastic response of liquid helium. <i>Physical Review B</i> , 1998, 58, 11607-11612.	1.1	7
79	Excitation spectra of ^3He impurity on ^4He clusters. <i>Physical Review A</i> , 2004, 70, .	1.0	7
80	Fermi hypernetted-chain theory for correlated spin-density-wave states. <i>Physical Review B</i> , 1992, 46, 8894-8905.	1.1	6
81	Microscopic theory of the liquid-solid interface of ^4He . <i>Journal of Low Temperature Physics</i> , 1995, 101, 543-548.	0.6	6
82	Consistent treatment of color transparency effects in diffractive electroproduction of vector mesons off nuclei. <i>Journal of Experimental and Theoretical Physics</i> , 1997, 84, 421-431.	0.2	6
83	A new quantum Monte Carlo method for nucleon systems. <i>Progress in Particle and Nuclear Physics</i> , 2000, 44, 63-73.	5.6	6
84	Number-conserving model for boson pairing. <i>Physical Review A</i> , 2002, 66, .	1.0	6
85	FHNC calculations of momentum distribution. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1980, 28, 283-288.	0.4	5
86	Microscopic calculations of the enhancement factor in the electric dipole sum rule. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1985, 156, 277-282.	1.5	5
87	Deuteron distribution in nuclei and the Levinger's factor. <i>Physical Review C</i> , 2003, 67, .	1.1	5
88	Correlations in infinite systems. , 1981, , 1-49.		5
89	Variational Monte Carlo calculations for solid-liquid coexistence and interface in ^4He with shadow wave function. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 967-968.	1.3	4
90	The longitudinal asymmetry of the $(e, e'p)$ missing momentum distribution as a signal of color transparency. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1995, 358, 191-196.	1.5	4

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91	Q ² dependence of deep inelastic lepton scattering off nuclear targets. Physical Review C, 1998, 57, 1532-1535.	1.1	4
92	Nuclear structure functions and off-shell corrections. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 502, 69-73.	1.5	4
93	Deuteron distribution in nuclear matter. Nuclear Physics A, 2002, 703, 70-82.	0.6	4
94	Variational methods for nuclear systems with dynamical mesons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 314, 260-264.	1.5	3
95	Fermi-hypernetted-chain scheme for Gutzwiller correlated wave functions. Physical Review B, 1994, 49, 10027-10030.	1.1	3
96	Path integral variational methods for strongly correlated systems. Physical Review C, 1996, 54, 1622-1635.	1.1	3
97	Coherent State Wave Function for Systems with Spin-Dependent Correlations. Physical Review Letters, 1997, 78, 1846-1849.	2.9	3
98	Q ² -dependence of backward pion multiplicity in neutrino-nucleus interactions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 527, 73-79.	1.5	3
99	A CONSTRAINED PATH MONTE CARLO METHOD FOR NUCLEON SYSTEMS. International Journal of Modern Physics B, 2001, 15, 1510-1518.	1.0	2
100	Constrained path calculations of the 4 He and 16 O nuclei. European Physical Journal A, 2003, 17, 469-473.	1.0	2
101	Hadron multiplicity in semi-inclusive lepton-nucleon and lepton-nucleus scattering. European Physical Journal A, 2004, 19, 147-151.	1.0	2
102	Determination of the finite temperature equation of state of dense matter. Physics of Atomic Nuclei, 2012, 75, 866-869.	0.1	2
103	Longitudinal spin-dependent correlations in nuclear matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 100, 507-510.	1.5	1
104	Perturbation theory in a correlated basis. , 1984, , 289-298.		1
105	A study of spin dependent correlations and Feynman's backflow. European Physical Journal D, 1996, 46, 267-268.	0.4	1
106	Coherent state wavefunction for spin-dependent systems. European Physical Journal D, 1996, 46, 269-270.	0.4	1
107	Quantum theory of solid-liquid coexistence and interface in ⁴ He. European Physical Journal D, 1996, 46, 277-278.	0.4	1
108	Q ² -dependence of semi-inclusive electron-nucleus scattering and nucleon-nucleon correlations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 415, 311-314.	1.5	1

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109	BOSON JOSEPHSON JUNCTION WITH TRAPPED ATOMS. International Journal of Modern Physics B, 1999, 13, 633-641.	1.0	1
110	Correlated Spin-Density-Wave Theory. , 1990, , 203-208.		1
111	Fermi Hyper-Netted Chain Theory on a Lattice: The Hubbard Model. , 1990, , 297-313.		1
112	Kinematical Q ² -dependence of nuclear deep inelastic scattering. Nuclear Physics A, 2000, 663-664, 385c-388c.	0.6	0
113	THE NUCLEAR MANY-BODY PROBLEM. Series on Advances in Quantum Many-body Theory, 2002, , 379-406.	0.2	0
114	Neutrino opacity in cold neutron matter. Physics of Atomic Nuclei, 2006, 69, 1962-1966.	0.1	0
115	STABILITY AND SPECTRA OF SMALL 3He-4He CLUSTERS. International Journal of Modern Physics B, 2006, 20, 5071-5080.	1.0	0
116	QUANTUM MONTE CARLO CALCULATIONS FOR NUCLEI AND NUCLEAR MATTER. , 2008, , .		0
117	HNC Theory for Shadow Wave Functions. , 1992, , 233-244.		0
118	Microscopic calculations on pair-condensed states of infinite fermi systems. , 1981, , 288-302.		0