

John W Clark

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/518092/publications.pdf>

Version: 2024-02-01

126
papers

2,922
citations

172386

29
h-index

189801

50
g-index

126
all docs

126
docs citations

126
times ranked

733
citing authors

#	ARTICLE	IF	CITATIONS
1	Theoretical and experimental developments in quantum spin liquid in geometrically frustrated magnets: a review. <i>Journal of Materials Science</i> , 2020, 55, 2257-2290.	1.7	18
2	Fermion Condensation: Theory and Experiment. <i>Physics of Atomic Nuclei</i> , 2020, 83, 101-117.	0.1	0
3	Universal T/B Scaling Behavior of Heavy Fermion Compounds (Brief Review). <i>JETP Letters</i> , 2020, 112, 657-665.	0.4	5
4	Topological disorder triggered by interaction-induced flattening of electron spectra in solids. <i>Physical Review B</i> , 2020, 102, .	1.1	9
5	Metamorphoses of Electron Systems Hosting a Fermion Condensate. <i>JETP Letters</i> , 2020, 111, 96-103.	0.4	1
6	Thermodynamic, Dynamic, and Transport Properties of Quantum Spin Liquid in Herbertsmithite from an Experimental and Theoretical Point of View. <i>Condensed Matter</i> , 2019, 4, 75.	0.8	5
7	Superfluidity in nuclear systems and neutron stars. <i>European Physical Journal A</i> , 2019, 55, 1.	1.0	110
8	Impact of electron-electron interactions on the superfluid density of dirty superconductors. <i>Physical Review B</i> , 2019, 99, .	1.1	10
9	Topological Scenario for High-Temperature Superconductivity in Cuprates. <i>JETP Letters</i> , 2018, 108, 260-269.	0.4	2
10	Toward a topological scenario for high-temperature superconductivity of copper oxides. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2018, 382, 3281-3286.	0.9	7
11	Microscopic study of $1S_0$ superfluidity in dilute neutron matter. <i>European Physical Journal A</i> , 2017, 53, 1.	1.0	13
12	Superfluidity and Pairing Phenomena from Cold Atomic Gases to Neutron Stars. <i>Journal of Low Temperature Physics</i> , 2017, 189, 231-233.	0.6	1
13	New State of Matter: Heavy Fermion Systems, Quantum Spin Liquids, Quasicrystals, Cold Gases, and High-Temperature Superconductors. <i>Journal of Low Temperature Physics</i> , 2017, 189, 410-450.	0.6	17
14	Three-Nucleon Forces and Triplet Pairing in Neutron Matter. <i>Journal of Low Temperature Physics</i> , 2017, 189, 361-382.	0.6	13
15	1S_0 Pairing in Neutron Matter. <i>Journal of Low Temperature Physics</i> , 2017, 189, 470-494.	0.6	15
16	Role of a fermion condensate in the structure of high-temperature pairing in cuprates. <i>JETP Letters</i> , 2017, 105, 267-272.	0.4	5
17	Topological basis for understanding the behavior of the heavy-fermion metal YbAlB_4 under application of magnetic field and pressure. <i>Physical Review B</i> , 2016, 93, .	1.1	12
18	Scaling behavior of the thermopower of the archetypal heavy-fermion metal YbRh_2Si_2 . <i>Frontiers of Physics</i> , 2016, 11, 1.	2.4	2

#	ARTICLE	IF	CITATIONS
19	Occurrence of flat bands in strongly correlated Fermi systems and high-T _c superconductivity of electron-doped compounds. JETP Letters, 2015, 101, 413-418.	0.4	19
20	Merging of Landau Levels in a Strongly Interacting Two-Dimensional Electron System in Silicon. Physical Review Letters, 2014, 112, 186402.	2.9	24
21	Conventional BCS, unconventional BCS, and non-BCS hidden dineutron phases in neutron matter. Physics of Atomic Nuclei, 2014, 77, 1145-1156.	0.1	5
22	Designing neural networks that process mean values of random variables. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2163-2167.	0.9	2
23	CLASSICAL BEHAVIOR OF TWO-DIMENSIONAL LIQUID ³ He NEAR A QUANTUM CRITICAL POINT. International Journal of Modern Physics B, 2013, 27, 1347005.	1.0	0
24	MEMORIAL TRIBUTE TO MANFRED L. RISTIG (1935–2011). International Journal of Modern Physics B, 2013, 27, 1347003.	1.0	0
25	Pairing with Correlated Wave Functions: BCS in CBF. , 2013, , 360-375.		2
26	Magnetic field dependence of the residual resistivity of the heavy-fermion metal CeCoIn ₅ . Physical Review B, 2012, 86, .	1.1	38
27	Phase diagram of dilute nuclear matter: Unconventional pairing and the BCS-BEC crossover. Physical Review C, 2012, 86, .	1.1	19
28	Nature of the quantum critical point as disclosed by extraordinary behavior of magnetotransport and the lorentz number in the heavy-fermion metal YbRh ₂ Si ₂ . JETP Letters, 2012, 96, 397-404.	0.4	10
29	Adaptation of the Landau-Migdal quasiparticle pattern to strongly correlated Fermi systems. Physics of Atomic Nuclei, 2011, 74, 1237-1266.	0.1	29
30	DISSECTING AND TESTING COLLECTIVE AND TOPOLOGICAL SCENARIOS FOR THE QUANTUM CRITICAL POINT. , 2011, , .		0
31	Motion processing with wide-field neurons in the retino-tecto-rotundal pathway. Journal of Computational Neuroscience, 2010, 28, 47-64.	0.6	3
32	Aspects of Entanglement in Quantum Many-Body Systems. Foundations of Physics, 2010, 40, 1200-1220.	0.6	3
33	Second wind of the Dulong-Petit law at a quantum critical point. JETP Letters, 2010, 92, 532-536.	0.4	22
34	Spontaneous breaking of fourfold rotational symmetry in two-dimensional electron systems as a topological phase transition. Physical Review B, 2010, 82, .	1.1	3
35	TOPOLOGICAL PHASE TRANSITIONS IN STRONGLY CORRELATED FERMI SYSTEMS. International Journal of Modern Physics B, 2009, 23, 4059-4073.	1.0	3
36	Contextual interactions in a generalized energy model of complex cells. Spatial Vision, 2009, 22, 301-324.	1.4	1

#	ARTICLE	IF	CITATIONS
37	Structure of the ground state of a nonsuperfluid dense quark-gluon plasma. Physics of Atomic Nuclei, 2009, 72, 1382-1389.	0.1	6
38	TOPOLOGICAL PHASE TRANSITIONS IN STRONGLY CORRELATED FERMI SYSTEMS. , 2009, , .		0
39	CHARLES CAMPBELL AT SIXTY-FIVE: A TRIBUTE TO INNOVATION AND ENDURING DEDICATION. International Journal of Modern Physics B, 2008, 22, 4291-4295.	1.0	1
40	Topology of the Fermi surface beyond the quantum critical point. Physical Review B, 2008, 78, .	1.1	95
41	THE LEGACY OF EUGENE FEENBERG AT THE CENTENARY OF HIS BIRTH. , 2008, , .		1
42	MANY-BODY METHODS FOR NUCLEAR SYSTEMS AT SUBNUCLEAR DENSITIES. , 2008, , .		0
43	CHARLES CAMPBELL AT SIXTY-FIVE: A TRIBUTE TO INNOVATION AND ENDURING DEDICATION. , 2008, , .		0
44	THE BRAIN'S VIEW OF THE NATURAL WORLD IN MOTION: COMPUTING STRUCTURE FROM FUNCTION USING DIRECTIONAL FOURIER TRANSFORMATIONS. International Journal of Modern Physics B, 2007, 21, 2493-2504.	1.0	3
45	NON-FERMI-LIQUID BEHAVIOR FROM THE FERMI-LIQUID APPROACH. International Journal of Modern Physics B, 2007, 21, 2077-2090.	1.0	1
46	Merging of Single-Particle Levels and Non-Fermi-Liquid Behavior of Finite Fermi Systems. Physical Review Letters, 2007, 98, 216404.	2.9	29
47	Merging of single-particle levels in finite Fermi systems. JETP Letters, 2007, 84, 588-592.	0.4	3
48	Nodes of the Gap Function and Anomalies in Thermodynamic Properties of the B-Phase of Superfluid ³ He. Journal of Low Temperature Physics, 2007, 147, 645-665.	0.6	0
49	THE BRAIN'S VIEW OF THE NATURAL WORLD IN MOTION: COMPUTING STRUCTURE FROM FUNCTION USING DIRECTIONAL FOURIER TRANSFORMATIONS. , 2007, , .		0
50	RAYMOND BISHOP AND HERMANN KÄœMMEL: FEENBERG MEDALISTS 2005 THE COUPLED CLUSTER METHOD. , 2006, , .		0
51	Pair condensation and bound states in fermionic systems. Physical Review C, 2006, 73, .	1.1	33
52	RAYMOND BISHOP AND HERMANN KÄœMMEL: FEENBERG MEDALISTS 2005 THE COUPLED CLUSTER METHOD. International Journal of Modern Physics B, 2006, 20, 4973-4981.	1.0	1
53	APPLICATION OF SUPPORT VECTOR MACHINES TO GLOBAL PREDICTION OF NUCLEAR PROPERTIES. International Journal of Modern Physics B, 2006, 20, 5015-5029.	1.0	17
54	Nuclear Superconductivity in Compact Stars: BCS Theory and Beyond. Series on Advances in Quantum Many-body Theory, 2006, , 135-174.	0.2	12

#	ARTICLE	IF	CITATIONS
55	APPLICATION OF SUPPORT VECTOR MACHINES TO GLOBAL PREDICTION OF NUCLEAR PROPERTIES. , 2006, , .		0
56	Damping effects and the metal-insulator transition in a two-dimensional electron gas. JETP Letters, 2005, 81, 315-320.	0.4	14
57	Computing relative motion with complex cells. Visual Neuroscience, 2005, 22, 225-236.	0.5	2
58	Thermodynamic properties of Fermi systems with flat single-particle spectra. Europhysics Letters, 2005, 72, 256-262.	0.7	6
59	Elliptical orbits in the Bloch sphere. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, S277-S282.	1.4	6
60	Anomalous low-temperature behavior of strongly correlated Fermi systems. Physical Review B, 2005, 71, .	1.1	80
61	Mechanisms driving alteration of the Landau state in the vicinity of a second-order phase transition. Journal of Physics Condensed Matter, 2004, 16, 6431-6444.	0.7	6
62	Phase Transitions in Nucleonic Matter and Neutron-Star Cooling. Physical Review Letters, 2004, 93, 151101.	2.9	31
63	Neural Representation of Probabilistic Information. Neural Computation, 2003, 15, 1843-1864.	1.3	34
64	Final-state interactions in the response of nuclear matter. Physical Review C, 2003, 67, .	1.1	14
65	CONTROL OF QUANTUM SYSTEMS. International Journal of Modern Physics B, 2003, 17, 5397-5411.	1.0	30
66	Non-BCS pairing in anisotropic strongly correlated electron systems in solids. JETP Letters, 2002, 76, 302-306.	0.4	0
67	Bose-Einstein Condensation and the λ Transition in Liquid Helium. Journal of Low Temperature Physics, 2002, 129, 143-170.	0.6	29
68	CONTROL OF QUANTUM SYSTEMS. , 2002, , .		2
69	Impact of spin-isospin fluctuations on single-particle degrees of freedom in dense neutron matter. Physics of Atomic Nuclei, 2001, 64, 619-626.	0.1	7
70	ANTHONY LEGGETT: FEENBERG MEDALIST 1999 CONDENSED MATTER AS A TEST-BED FOR FUNDAMENTAL QUANTUM MECHANICS. International Journal of Modern Physics B, 2001, 15, 1305-1311.	1.0	2
71	STATISTICAL MODELING OF NUCLEAR SYSTEMATICS. , 2001, , .		1
72	Edwin Thompson Jaynes. Physics Today, 2000, 53, 71-72.	0.3	2

#	ARTICLE	IF	CITATIONS
73	Rearrangement of the Fermi Surface of Dense Neutron Matter and the Direct Urca Cooling of Neutron Stars. <i>Astrophysical Journal</i> , 2000, 533, L127-L130.	1.6	22
74	ANTHONY LEGGETT: FEENBERG MEDALIST 1999 CONDENSED MATTER AS A TEST-BED FOR FUNDAMENTAL QUANTUM MECHANICS. , 2000, , .		0
75	Higher-order probabilistic perceptrons as Bayesian inference engines. <i>Physical Review E</i> , 1999, 59, 6161-6174.	0.8	9
76	THE TRANSVERSE ISING MODEL BY CBF. <i>International Journal of Modern Physics B</i> , 1999, 13, 741-747.	1.0	2
77	Toward a Microscopic Theory of the λ Transition in Liquid ^4He . <i>Journal of Low Temperature Physics</i> , 1999, 114, 317-348.	0.6	8
78	Transverse Ising model at zero temperature. <i>Physical Review B</i> , 1998, 57, 56-59.	1.1	13
79	Universalities of Triplet Pairing in Neutron Matter. <i>Physical Review Letters</i> , 1998, 81, 3828-3831.	2.9	45
80	A modified backpropagation algorithm for training neural networks on data with error bars. <i>Computer Physics Communications</i> , 1995, 88, 1-22.	3.0	10
81	Fermi hypernetted-chain evaluation of a generalized momentum distribution for model nuclear matter. <i>Physical Review C</i> , 1995, 51, 1849-1858.	1.1	7
82	Surface modes of liquid ^4He . <i>Physical Review B</i> , 1994, 49, 15836-15848.	1.1	20
83	Resonant states of the ^4He liquid-vapor interface. <i>Journal of Low Temperature Physics</i> , 1994, 96, 153-175.	0.6	16
84	Vacuum ground and excited states of the $U(1)$ lattice gauge Hamiltonian. <i>Physical Review D</i> , 1991, 43, 1978-1990.	1.6	29
85	Relative entropy and learning rules. <i>Physical Review A</i> , 1991, 43, 1061-1070.	1.0	16
86	Elementary excitations of spin-aligned deuterium. <i>Physical Review B</i> , 1990, 41, 757-760.	1.1	5
87	Two-body density matrix of a normal Fermi fluid. <i>Physical Review B</i> , 1990, 41, 8811-8823.	1.1	11
88	Experiments in artificial psychology: conditioning of asynchronous neutral network models. <i>Mathematical Biosciences</i> , 1990, 99, 77-104.	0.9	5
89	Two-body density matrix of a Bose fluid. <i>Physical Review B</i> , 1989, 40, 4355-4368.	1.1	30
90	Ground-state phases of polarized deuterium species. <i>Physical Review B</i> , 1987, 36, 5527-5539.	1.1	19

#	ARTICLE	IF	CITATIONS
91	Clustered quark matter. <i>Physical Review C</i> , 1986, 33, 703-708.	1.1	10
92	Brain without mind: Computer simulation of neural networks with modifiable neuronal interactions. <i>Physics Reports</i> , 1985, 123, 215-273.	10.3	55
93	Ground-state properties of spin-aligned deuterium. <i>Physical Review B</i> , 1985, 32, 2945-2951.	1.1	16
94	Variational Monte Carlo study of heavy-atom impurities in liquidHe4. <i>Physical Review B</i> , 1985, 32, 2952-2959.	1.1	7
95	Variational Monte Carlo study of spin-dependent correlations in liquidHe3. <i>Physical Review B</i> , 1984, 30, 1342-1348.	1.1	11
96	Self-organization of neural networks. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 102, 207-211.	0.9	10
97	On the controllability of quantum-mechanical systems. <i>Journal of Mathematical Physics</i> , 1983, 24, 2608-2618.	0.5	342
98	Properties of elementary excitations in spin-polarized liquidHe3. <i>Physical Review B</i> , 1983, 28, 5088-5099.	1.1	38
99	Abnormal occupation in boson matter. <i>Physical Review C</i> , 1982, 25, 560-570.	1.1	7
100	Variational Monte Carlo Calculations for Spin-Aligned Deuterium. <i>Physical Review Letters</i> , 1982, 48, 1675-1677.	2.9	20
101	Ground-state energetics of helium and deuterium fermion fluids. <i>Physical Review B</i> , 1981, 24, 6383-6403.	1.1	65
102	Modelling of quantum mechanical control systems. <i>Mathematical Modelling</i> , 1980, 1, 109-121.	0.2	44
103	Density matrix and spin-dependent correlations of normal liquidHe3. <i>Physical Review B</i> , 1979, 19, 3539-3551.	1.1	20
104	Variational theory of nuclear matter. <i>Progress in Particle and Nuclear Physics</i> , 1979, 2, 89-199.	5.6	232
105	Theoretical momentum distributions for liquidHe3. <i>Physical Review B</i> , 1978, 17, 1147-1151.	1.1	14
106	Density matrix and momentum distribution of helium liquids and nuclear matter. <i>Physical Review B</i> , 1977, 16, 222-230.	1.1	43
107	Density matrix of quantum fluids. <i>Physical Review B</i> , 1976, 14, 2875-2887.	1.1	69
108	Evidence against solidification of a model neutron system. <i>Physical Review D</i> , 1975, 11, 3365-3369.	1.6	5

#	ARTICLE	IF	CITATIONS
109	Embedding of the Brueckner Approximation in the Extended Jastrow Scheme. <i>Physical Review C</i> , 1973, 7, 1792-1803.	1.1	19
110	Role of the Dispersion Effect in the Method of Correlated Basis Functions. <i>Physical Review C</i> , 1972, 5, 1233-1237.	1.1	8
111	Tensor Correlations in Nuclear Matter: Three-Body Effects. <i>Physical Review C</i> , 1972, 5, 695-706.	1.1	15
112	Subsidiary Conditions on Nuclear Many-Body Theories. <i>Physical Review C</i> , 1972, 5, 1553-1561.	1.1	13
113	The Crystallization of Neutronic Matter. <i>Nature: Physical Science</i> , 1972, 236, 37-39.	0.8	27
114	Fission and the ion-ion interaction. <i>Annals of Physics</i> , 1971, 62, 464-491.	1.0	13
115	Tensor Correlations in Nuclear Matter. <i>Physical Review C</i> , 1971, 3, 1504-1513.	1.1	53
116	Cluster-expansion procedures for the correlated charge form factor. <i>Il Nuovo Cimento A</i> , 1970, 70, 313-322.	0.2	22
117	Nuclear Heavy-ion-Heavy-ion Collisions and the Intermediate-State Model. <i>Physical Review Letters</i> , 1969, 22, 951-955.	2.9	31
118	Magnetic Susceptibility of Neutron Matter. <i>Physical Review Letters</i> , 1969, 23, 1463-1466.	2.9	42
119	Effect of attractive nuclear forces on the onset of ferromagnetism in neutron star matter. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1969, 2, 185-188.	0.4	46
120	Cluster Expansions in Many-Fermion Theory. I. "Factor-Cluster" Formalisms. <i>Journal of Mathematical Physics</i> , 1968, 9, 131-148.	0.5	113
121	Cluster Expansions in Many-Fermion Theory. II. Rearrangements of Primitive Decomposition Equations. <i>Journal of Mathematical Physics</i> , 1968, 9, 149-154.	0.5	34
122	Method of Correlated Basis Functions. <i>Physical Review</i> , 1966, 141, 833-857.	2.7	154
123	Theory of $\hat{\pm}$ matter. <i>Annals of Physics</i> , 1966, 40, 127-152.	1.0	37
124	THE ROLE OF REPULSIVE CORES IN THE PHOTONUCLEAR EFFECT. <i>Canadian Journal of Physics</i> , 1961, 39, 385-392.	0.4	14
125	Effective spin-orbit potential in correlated heavy nuclei. <i>Annals of Physics</i> , 1960, 11, 483-500.	1.0	8
126	Simplified Treatment for Strong Short-Range Repulsions in N-Particle Systems. I. General Theory. <i>Physical Review</i> , 1959, 113, 388-399.	2.7	102