

James P Vary

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4071473/publications.pdf>

Version: 2024-02-01

265
papers

7,466
citations

53660

45
h-index

69108

77
g-index

267
all docs

267
docs citations

267
times ranked

1675
citing authors

#	ARTICLE	IF	CITATIONS
1	Ab initio no core shell model. Progress in Particle and Nuclear Physics, 2013, 69, 131-181.	5.6	544
2	Properties of ^{12}C in the Ab Initio Nuclear Shell Model. Physical Review Letters, 2000, 84, 5728-5731.	2.9	453
3	Large-basis ab initio no-core shell model and its application to ^{12}C . Physical Review C, 2000, 62, .	1.1	369
4	Structure of A with Two- Plus Three-Nucleon Interactions from Chiral Effective Field Theory. Physical Review Letters, 2007, 99, 042501.	2.9	307
5	Ab initio no-core full configuration calculations of light nuclei. Physical Review C, 2009, 79, .	1.1	181
6	Hamiltonian light-front field theory in a basis function approach. Physical Review C, 2010, 81, .	1.1	131
7	Spectra and binding energy predictions of chiral interactions for ^7Li . Physical Review C, 2006, 73, .	1.1	118
8	Few-nucleon systems with state-of-the-art chiral nucleon-nucleon forces. Physical Review C, 2016, 93, .	1.1	106
9	Ab initio shell model for $A=10$ nuclei. Physical Review C, 2002, 66, .	1.1	103
10	Collective Modes in Light Nuclei from First Principles. Physical Review Letters, 2013, 111, 252501.	2.9	103
11	Large-basis shell model studies of light nuclei with a multivalued G -matrix effective interaction. Physical Review C, 1995, 52, 2488-2498.	1.1	96
12	Origin of the Anomalous Long Lifetime of ^8C . Physical Review Letters, 2011, 106, 202502.	2.9	95
13	Convergence properties of ab initio calculations of light nuclei in a harmonic oscillator basis. Physical Review C, 2012, 86, .	1.1	95
14	Heavy quarkonium in a holographic basis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 758, 118-124.	1.5	92
15	Evidence for Symplectic Symmetry in Ab Initio No-Core Shell Model Results for Light Nuclei. Physical Review Letters, 2007, 98, 162503.	2.9	86
16	All-charm tetraquarks. Physical Review D, 2004, 70, .	1.6	83
17	Scaling of ab-initio nuclear physics calculations on multicore computer architectures. Procedia Computer Science, 2010, 1, 97-106.	1.2	80
18	Solving two-dimensional ^4He theory by discretized light-front quantization. Physical Review D, 1987, 36, 1141-1147.	1.6	76

#	ARTICLE	IF	CITATIONS
19	Quarkonium as a relativistic bound state on the light front. <i>Physical Review D</i> , 2017, 96, .	1.6	76
20	Nucleon-nucleon interaction in the t -matrix inverse scattering approach and few-nucleon systems. <i>Physical Review C</i> , 2004, 70, .	1.1	75
21	Benchmarks of the full configuration interaction, Monte Carlo shell model, and no-core full configuration methods. <i>Physical Review C</i> , 2012, 86, .	1.1	75
22	Effective operators within the ab initio no-core shell model. <i>Physical Review C</i> , 2005, 71, .	1.1	71
23	Effective theory for trapped few-fermion systems. <i>Physical Review A</i> , 2007, 76, .	1.0	71
24	Large-space shell-model calculations for light nuclei. <i>Physical Review C</i> , 1994, 50, 2841-2849.	1.1	68
25	Few- and many-nucleon systems with semilocal coordinate-space regularized chiral two- and three-body forces. <i>Physical Review C</i> , 2019, 99, .	1.1	68
26	Structure of p -shell nuclei using three-nucleon interactions evolved with the similarity renormalization group. <i>Physical Review C</i> , 2013, 87, .	1.1	67
27	ab -initio shell model with a core. <i>Physical Review C</i> , 2008, 78, .	1.1	66
28	Parton Distribution Functions from a Light Front Hamiltonian and QCD Evolution for Light Mesons. <i>Physical Review Letters</i> , 2019, 122, 172001.	2.9	65
29	ab initio symplectic no-core shell model. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2008, 35, 123101.	1.4	64
30	ab initio nuclear structure simulations: The speculative F nucleus. <i>Physical Review C</i> , 2010, 81, .	1.1	62
31	Improving the scalability of a symmetric iterative eigensolver for multi-core platforms. <i>Concurrency Computation Practice and Experience</i> , 2014, 26, 2631-2651.	1.4	62
32	Basis light-front quantization approach to positronium. <i>Physical Review D</i> , 2015, 91, .	1.6	62
33	Prediction for a Four-Neutron Resonance. <i>Physical Review Letters</i> , 2016, 117, 182502.	2.9	62
34	Six-Nucleon Spectroscopy from a Realistic Nonlocal Hamiltonian. <i>Physical Review Letters</i> , 2001, 87, 172502.	2.9	61
35	Few-nucleon and many-nucleon systems with semilocal coordinate-space regularized chiral nucleon-nucleon forces. <i>Physical Review C</i> , 2018, 98, .	1.1	59
36	Pion and kaon parton distribution functions from basis light front quantization and QCD evolution. <i>Physical Review D</i> , 2020, 101, .	1.6	57

#	ARTICLE	IF	CITATIONS
37	Lithium isotopes within the <i>ab initio</i> no-core full configuration approach. Physical Review C, 2012, 86, .	1.1	56
38	Neutrino-C12 Scattering in the <i>Ab Initio</i> Shell Model with a Realistic Three-Body Interaction. Physical Review Letters, 2003, 91, 012502.	2.9	54
39	<i>AB INITIO</i> NUCLEAR STRUCTURE CALCULATIONS OF <i>p</i> -SHELL NUCLEI WITH JISP16. International Journal of Modern Physics E, 2013, 22, 1330016.	0.4	52
40	Light nuclei with semilocal momentum-space regularized chiral interactions up to third order. Physical Review C, 2021, 103, .	1.1	52
41	Variational calculation of the spectrum of two-dimensional \hat{t}^4 theory in light-front field theory. Physical Review D, 1988, 37, 3010-3013.	1.6	51
42	Coulomb-Sturmian basis for the nuclear many-body problem. Physical Review C, 2012, 86, .	1.1	50
43	Hadron optics in three-dimensional invariant coordinate space from deeply virtual Compton scattering. Physical Review D, 2007, 75, .	1.6	48
44	Electron <i>g</i> -2 in Light-front Quantization. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 737, 65-69.	1.5	46
45	Low-energy neutron-deuteron reactions with N^3LO chiral forces. European Physical Journal A, 2014, 50, 1.	1.0	45
46	Testing the density matrix expansion against <i>ab initio</i> calculations of trapped neutron drops. Physical Review C, 2011, 84, .	1.1	44
47	Electron in a Transverse Harmonic Cavity. Physical Review Letters, 2011, 106, 061603.	2.9	44
48	<i>Ab Initio</i> effective interactions for valence nucleons. Physical Review C, 2015, 91, .	1.1	44
49	Convergence Rate of Intermediate-State Summations in the Effective Shell-Model Interaction. Physical Review C, 1973, 7, 1776-1785.	1.1	43
50	Intruder states in ^8Be . Physical Review C, 2001, 64, .	1.1	43
51	Converging sequences in the <i>ab initio</i> no-core shell model. Physical Review C, 2008, 77, .	1.1	43
52	<i>Ab initio</i> nuclear structure – the large sparse matrix eigenvalue problem. Journal of Physics: Conference Series, 2009, 180, 012083.	0.3	43
53	Accelerating nuclear configuration interaction calculations through a preconditioned block iterative eigensolver. Computer Physics Communications, 2018, 222, 1-13.	3.0	43
54	Basis light front quantization for the charged light mesons with color singlet Nambu–Jona-Lasinio interactions. Physical Review C, 2019, 99, .	1.1	42

#	ARTICLE	IF	CITATIONS
55	Effective shell-model interaction through second order for the sd-shell. <i>Physical Review C</i> , 1977, 15, 1545-1557.	1.1	41
56	Gamow-Teller Strengths in the $A=14$ Multiplet: A Challenge to the Shell Model. <i>Physical Review Letters</i> , 2006, 97, 062502.	2.9	40
57	Nucleon-nucleon scattering in a harmonic potential. <i>Physical Review C</i> , 2010, 82, .	1.1	40
58	Scattering in time-dependent basis light-front quantization. <i>Physical Review D</i> , 2013, 88, .	1.6	40
59	Emergence of rotational bands in <i>ab initio</i> no-core configuration interaction calculations of the Be isotopes. <i>Physical Review C</i> , 2015, 91, .	1.1	40
60	Stability of the vacuum in scalar field models in 1+1 dimensions. <i>Physical Review D</i> , 1988, 37, 1076-1078.	1.6	39
61	<i>Ab initio</i> no-core solutions for ${}^6\text{Li}$. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2017, 44, 075103.	1.4	38
62	White paper: from bound states to the continuum. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2020, 47, 123001.	1.4	38
63	Thermal properties of ${}^{16}\text{O}$ and ${}^{40}\text{Ca}$ with a realistic effective Hamiltonian. <i>Physical Review C</i> , 1985, 31, 1909-1919.	1.1	37
64	Microscopic calculations of the spectra of light nuclei. <i>Physical Review C</i> , 1993, 48, 1083-1091.	1.1	37
65	Deep learning: Extrapolation tool for <i>ab initio</i> nuclear theory. <i>Physical Review C</i> , 2019, 99, .	1.1	36
66	Bc mesons in a Bethe-Salpeter model. <i>Physical Review D</i> , 1999, 59, .	1.6	34
67	Dominant role of symplectic symmetry in <i>ab initio</i> no-core shell model results for light nuclei. <i>Physical Review C</i> , 2007, 76, .	1.1	34
68	Efficacy of the SU(3) scheme for <i>ab initio</i> large-scale calculations beyond the lightest nuclei. <i>Computer Physics Communications</i> , 2016, 207, 202-210.	3.0	34
69	Structure of ${}^7\text{Li}$ nuclei with two- plus three-nucleon interactions from chiral effective field theory. <i>Physical Review C</i> , 2013, 87, .	1.1	33
70	Shell model states in the continuum. <i>Physical Review C</i> , 2016, 94, .	1.1	33
71	Proton structure from a light-front Hamiltonian. <i>Physical Review D</i> , 2020, 102, .	1.6	32
72	Effective operators from exact many-body renormalization. <i>Physical Review C</i> , 2009, 80, .	1.1	31

#	ARTICLE	IF	CITATIONS
73	Nucleon structure from basis light-front quantization. Physical Review D, 2021, 104, .	1.6	31
74	Solving momentum-space integral equations for quarkonium spectra with confining potentials. III. Bethe-Salpeter equation with spin. Physical Review C, 1993, 47, 1282-1293.	1.1	30
75	Light-front Hamiltonian approach to relativistic two- and three-body bound-state problems in 1+1 dimensions. Physical Review D, 1988, 37, 1064-1069.	1.6	29
76	Ab initio nuclear many-body perturbation calculations in the Hartree-Fock basis. Physical Review C, 2016, 94, .	1.1	28
77	Extrapolation method for the no-core shell model. Physical Review C, 2004, 69, .	1.1	27
78	Ab initio results for the broken phase of scalar light front field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 617, 92-98.	1.5	27
79	Non-perturbative quantum time evolution on the light-front. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 856-860.	1.5	27
80	Diffractive charmonium spectrum in high energy collisions in the basis light-front quantization approach. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 769, 477-484.	1.5	27
81	$B_{\mu\nu}$ mesons and their properties on the light front. Physical Review D, 2018, 98, .	1.6	27
82	Heavy-light mesons on the light front. European Physical Journal C, 2020, 80, 1.	1.4	27
83	Halo nuclei He6 and He8 with the Coulomb-Sturmian basis. Physical Review C, 2014, 90, .	1.1	26
84	Light-Front Field Theory on Current Quantum Computers. Entropy, 2021, 23, 597.	1.1	26
85	Light mesons with one dynamical gluon on the light front. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 825, 136890.	1.5	25
86	Collective rotation from ab initio theory. International Journal of Modern Physics E, 2015, 24, 1541002.	0.4	24
87	Radiative transitions between $B_{\mu\nu}$ and $B_{\mu\nu}^*$ heavy quarkonia on the light front. Physical Review D, 2018, 98, .	1.6	24
88	Parton distribution functions of heavy mesons on the light front. Physical Review D, 2020, 102, .	1.6	24
89	Simulating hadronic physics on noisy intermediate-scale quantum devices using basis light-front quantization. Physical Review A, 2021, 103, .	1.0	24
90	Ab initio No-Core Shell Model --Recent results and future prospects. European Physical Journal A, 2005, 25, 475-480.	1.0	23

#	ARTICLE	IF	CITATIONS
91	Long- and short-range correlations in the ab-initio core shell model. Physical Review C, 2006, 73, .	1.1	23
92	Accelerating configuration interaction calculations for nuclear structure. , 2008, , .		23
93	C^{12} properties with evolved chiral three-nucleon interactions. Physical Review C, 2014, 90, .	1.1	23
94	Inverse scattering-matrix approach to nucleon-nucleus scattering and the shell model. Physical Review C, 2009, 79, .	1.1	22
95	Effective interactions in the ^{16}O shell. Physical Review C, 2019, 100, .		
96	\hat{I}_{\pm} -Clustering in atomic nuclei from first principles with statistical learning and the Hoyle state character. Nature Communications, 2022, 13, 2234.	5.8	22
97	Transition in the spectrum of the topological sector of $\mathbb{C}P^2$ theory at strong coupling. Physical Review D, 2005, 71, .	1.6	21
98	On mathematical structure of effective observables. Journal of Mathematical Physics, 2001, 42, 2055.	0.5	20
99	Large-scale ab initio configuration interaction calculations for light nuclei. Journal of Physics: Conference Series, 2012, 403, 012019.	0.3	20
100	Electron-scattering form factors for ^6Li in the ab initio symmetry-guided framework. Physical Review C, 2015, 91, .	1.1	20
101	Hartree-Fock approximation for the ab-initio core shell model. Physical Review C, 2004, 69, .	1.1	19
102	Light mesons within the basis light-front quantization framework. Physical Review C, 2020, 102, .	1.1	19
103	Form factors and generalized parton distributions in basis light-front quantization. Physical Review C, 2016, 93, .	1.1	18
104	Nucleon- \hat{I}_{\pm} scattering and resonances in ^6He and ^5He and ^6Li Form factors and generalized parton distributions of heavy quarkonia in basis light front quantization. Physical Review C, 2019, 99, .	1.1	18
105	Form factors and generalized parton distributions of heavy quarkonia in basis light front quantization. Physical Review C, 2019, 99, .	1.1	18
106	Quantum simulation of nuclear inelastic scattering. Physical Review A, 2021, 104, .	1.0	18
107	Natural orbital description of the halo nucleus ^6He . Nuclear Science and Techniques/Hewuli, 2017, 28, 1.	1.3	17
108	Simple approximation for the starting-energy-independent two-body effective interaction with applications to ^6Li . Physical Review C, 1994, 49, 1999-2004.	1.1	16

#	ARTICLE	IF	CITATIONS
109	Radiative decays of B_c mesons in a Bethe-Salpeter model. <i>Physical Review D</i> , 2005, 71, .	1.6	16
110	Excitation of the $\omega(3,3)$ resonance in compressed finite nuclei from a constrained mean-field method. <i>Physical Review C</i> , 1987, 36, 2649-2660.	1.1	15
111	Phase transition in light-front (1+1)-dimensional $\mathcal{N}=4$ theory. <i>Physical Review D</i> , 2004, 69, .	1.6	15
112	Basis Light-Front Quantization: Recent Progress and Future Prospects. <i>Few-Body Systems</i> , 2016, 57, 695-702.	0.7	15
113	Description of resonant states in the shell model. <i>Physics of Particles and Nuclei</i> , 2017, 48, 84-89.	0.2	15
114	Comparison of two Minkowski-space approaches to heavy quarkonia. <i>European Physical Journal C</i> , 2017, 77, 1.	1.4	15
115	Probing ab initio emergence of nuclear rotation. <i>European Physical Journal A</i> , 2020, 56, 1.	1.0	15
116	Light-front holography with chiral symmetry breaking. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 825, 136860.	1.5	15
117	Nuclear shell model with delta excitations. <i>Nuclear Physics A</i> , 1994, 570, 355-362.	0.6	14
118	Underlying symmetries of realistic interactions and the nuclear many-body problem. <i>Physical Review C</i> , 2006, 73, .	1.1	14
119	All-charm tetraquark in front form dynamics. <i>Physical Review D</i> , 2022, 105, .	1.6	14
120	Angular momentum and generalized parton distributions for the proton with basis light-front quantization. <i>Physical Review D</i> , 2022, 105, .	1.6	14
121	Excitation of the $\omega(3,3)$ resonance in compressed finite nuclei. <i>Physical Review C</i> , 1987, 36, 2180-2182.	1.1	13
122	Delta excitations in compressed finite nuclei. <i>Physical Review C</i> , 1994, 50, 202-212.	1.1	13
123	Statistical error propagation in ab initio no-core full configuration calculations of light nuclei. <i>Physical Review C</i> , 2015, 92, .	1.1	13
124	Frame dependence of form factors in light-front dynamics. <i>Physical Review D</i> , 2018, 97, .	1.6	13
125	Kinetic-energy operator in the effective shell-model interaction. <i>Physical Review C</i> , 1992, 46, 2333-2339.	1.1	12
126	NN potentials from the t -matrix inverse scattering approach. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2005, 31, S1283-S1289.	1.4	12

#	ARTICLE	IF	CITATIONS
127	Benchmark neutrinoless double- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \hat{1}^2 \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ decay matrix elements in a light nucleus. Physical Review C, 2020, 102, .	1.1	12
128	Thermodynamic coefficients of hot nuclei. Physical Review C, 1988, 37, 1267-1280.	1.1	11
129	Auxiliary potential in no-core shell-model calculations. Physical Review C, 1995, 51, 2471-2476.	1.1	11
130	Benchmark calculation of no-core Monte Carlo shell model in light nuclei. , 2011, , .		11
131	An Out-of-Core Dataflow Middleware to Reduce the Cost of Large Scale Iterative Solvers. , 2012, , .		11
132	No Core CI calculations for light nuclei with chiral 2- and 3-body forces. Journal of Physics: Conference Series, 2013, 454, 012063.	0.3	11
133	A High Performance Block Eigensolver for Nuclear Configuration Interaction Calculations. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 1550-1563.	4.0	11
134	Heavy quarkonia production at energies available at the CERN Large Hadron Collider and future electron-ion colliding facilities using basis light-front quantization wave functions. Physical Review C, 2019, 100, .	1.1	11
135	Ultrarelativistic quark-nucleus scattering in a light-front Hamiltonian approach. Physical Review D, 2020, 101, .	1.6	11
136	Generalized parton distributions and spin structures of light mesons from a light-front Hamiltonian approach. Physical Review D, 2021, 104, .	1.6	11
137	Mean-field calculation of compressed finite nuclei with $\hat{1}^n$ excitations. Physical Review C, 1997, 56, 3063-3069.	1.1	10
138	Variational Tamm-Dancoff treatment of quantum chromodynamics. II. A semianalytic treatment of the hadrons in the valence quark approximation. Physical Review C, 1999, 59, 1762-1771.	1.1	10
139	Pion to photon transition form factors with basis light-front quantization. Physical Review D, 2021, 104, .	1.6	10
140	Basis light-front quantization approach to photon. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 137005.	1.5	10
141	Photoionization of hydrogen atoms near the ionization threshold. Journal of Chemical Physics, 1990, 93, 1480-1481.	1.2	9
142	$\hat{1}^n$ excitations in compressed finite nuclei. II. Nucleon-nucleon interaction dependence. Physical Review C, 1996, 54, 3035-3042.	1.1	9
143	Trends and Progress in Nuclear and Hadron Physics: A Straight or Winding Road. Few-Body Systems, 2017, 58, 1.	0.7	9
144	Particle distribution in intense fields in a light-front Hamiltonian approach. Physical Review D, 2017, 95, .	1.6	9

#	ARTICLE	IF	CITATIONS
145	Transverse structure of electron in momentum space in basis light-front quantization. Physical Review D, 2021, 103, .	1.6	9
146	Integration of Ab Initio Nuclear Physics Calculations with Optimization Techniques. Lecture Notes in Computer Science, 2008, , 833-842.	1.0	9
147	Ground-state properties of light α -particle self-conjugate nuclei in <i>ab initio</i> no-core Monte Carlo shell model calculations with nonlocal interactions. Physical Review C, 2021, 104, .	1.1	9
148	Natural orbitals for the <i>ab initio</i> no-core configuration interaction approach. Physical Review C, 2022, 105, .	1.1	9
149	Nuclear binding energies from moment methods: Realistic effective no-core Hamiltonian. Physical Review C, 1983, 28, 907-915.	1.1	8
150	Strong Higgs binding of heavy-fermion systems. Physical Review D, 1992, 46, 4029-4042.	1.6	8
151	Effects of the single-particle potential insertions in the effective interaction. Physical Review C, 1993, 48, 1765-1769.	1.1	8
152	Effect of neutron excess on $\hat{\pi}$ excitations in exotic nuclei. Physical Review C, 1999, 61, .	1.1	8
153	Study of $qq\hat{\Lambda}$ states in transverse lattice QCD using alternative fermion formulations. Physical Review D, 2004, 69, .	1.6	8
154	An Out-of-Core Eigensolver on SSD-equipped Clusters. , 2012, , .		8
155	Applications of Basis Light-Front Quantization to QED. Nuclear Physics, Section B, Proceedings Supplements, 2014, 251-252, 10-15.	0.5	8
156	Nucleon-nucleon scattering with the complex scaling method and realistic interactions. Physical Review C, 2015, 91, .	1.1	8
157	Ab initio no-core properties of ${}^7\text{Li}$ and ${}^7\text{Be}$ with the JISP16 and chiral NNLO _{opt} interactions. Physical Review C, 2017, 95, .	1.1	8
158	Coulomb excitation of the deuteron in peripheral collisions with a heavy ion. Physical Review C, 2018, 97, .	1.1	8
159	Improved description of light nuclei through chiral effective field theory at leading order. Physical Review C, 2020, 102, .	1.1	8
160	Temperature-dependent shell effects in ${}^{16}\text{O}$ and ${}^{40}\text{Ca}$ with a realistic effective Hamiltonian. Physical Review C, 1988, 37, 1240-1244.	1.1	7
161	GENERALIZED COVARIANT TWO-BODY WAVE EQUATION. Modern Physics Letters A, 1993, 08, 3537-3545.	0.5	7
162	Medium-mass nuclei with $\hat{\pi}$ excitations under compression. Physical Review C, 2001, 64, .	1.1	7

#	ARTICLE	IF	CITATIONS
163	Dynamic Adaptations in ab-initio Nuclear Physics Calculations on Multicore Computer Architectures. , 2011, , .		7
164	Nonperturbative solution of scalar Yukawa model in two- and three-body Fock space truncations. Physical Review D, 2016, 94, .	1.6	7
165	Hamiltonian, Path Integral and BRST Formulations of the Vector Schwinger Model with a Photon Mass Term with Faddeevian Regularization. International Journal of Theoretical Physics, 2016, 55, 338-360.	0.5	7
166	Hadron Spectra, Decays and Scattering Properties Within Basis Light Front Quantization. Few-Body Systems, 2018, 59, 1.	0.7	7
167	Tetraneutron resonance: Theory. AIP Conference Proceedings, 2018, , .	0.3	7
168	Two-photon transitions of charmonia on the light front. Physical Review D, 2022, 105, .	1.6	7
169	From non-Hermitian effective operators to large-scale no-core shell model calculations for light nuclei. Journal of Physics A, 2006, 39, 9983-9992.	1.6	6
170	Frame dependence of transition form factors in light-front dynamics. Physical Review D, 2019, 100, .	1.6	6
171	Description of Continuum Spectrum States of Light Nuclei in the Shell Model. Physics of Particles and Nuclei, 2019, 50, 537-543.	0.2	6
172	Basis light-front quantization for a chiral nucleon-pion Lagrangian. Physical Review C, 2020, 101, .	1.1	6
173	Longitudinal dynamics for mesons on the light cone. Physical Review D, 2022, 105, .	1.6	6
174	COOPER PAIRS AND TF-SCALED HIGH-TEMPERATURE SUPERCONDUCTIVITY. Modern Physics Letters B, 1991, 05, 805-819.	1.0	5
175	Compactification near and on the light front. Physical Review D, 2000, 62, .	1.6	5
176	Spectroscopy of light nuclei with realistic NN interaction JISP. Physics of Atomic Nuclei, 2008, 71, 1232-1238.	0.1	5
177	Electron Anomalous Magnetic Moment in Basis Light-Front Quantization Approach. Few-Body Systems, 2012, 52, 339-344.	0.7	5
178	Hamiltonian Light-Front Field Theory: Recent Progress and Tantalizing Prospects. Few-Body Systems, 2012, 52, 331-338.	0.7	5
179	Hamiltonian, path integral and BRST formulations of large N scalar QCD $_{2}$ on the light-front and spontaneous symmetry breaking. European Physical Journal C, 2015, 75, 1.	1.4	5
180	Non-perturbative Calculation of the Positronium Mass Spectrum in Basis Light-Front Quantization. Few-Body Systems, 2015, 56, 489-494.	0.7	5

#	ARTICLE	IF	CITATIONS
181	Non-perturbative Calculation of the Scalar Yukawa Theory in Four-Body Truncation. Few-Body Systems, 2015, 56, 495-501.	0.7	5
182	Effective operators in two-nucleon systems. Physical Review C, 2018, 98, .	1.1	5
183	Positronium: an illustration of nonperturbative renormalization in a basis light-front approach. , 2020, , .		5
184	HOW EFFECTIVE ARE STRONG INTERACTIONS. International Journal of Modern Physics E, 2005, 14, 1-9.	0.4	4
185	Large-scale parallel null space calculation for nuclear configuration interaction. , 2011, , .		4
186	Efficient Shared-array Accesses in Ab Initio Nuclear Structure Calculations on Multicore Architectures. Procedia Computer Science, 2012, 9, 256-265.	1.2	4
187	Recent development of Monte Carlo shell model and its application to no-core calculations. Journal of Physics: Conference Series, 2013, 454, 012066.	0.3	4
188	Performance analysis of distributed symmetric sparse matrix vector multiplication algorithm for multi-€core architectures. Concurrency Computation Practice and Experience, 2015, 27, 5019-5036.	1.4	4
189	The Performance and Scalability of the SHMEM and Corresponding MPI-3 Routines on a Cray XC30. , 2017, , .		4
190	Description of Continuum States within the No-Core Shell Model: Single-State HORSE Method. Physics of Atomic Nuclei, 2019, 82, 537-548.	0.1	4
191	Thermal properties of ^{40}Ca and ^{90}Zr . Physical Review C, 1998, 58, 2754-2764.	1.1	3
192	The no-core shell model with general radial bases. Journal of Physics: Conference Series, 2012, 403, 012014.	0.3	3
193	Oscillator basis, scattering and nuclear structure. Journal of Physics: Conference Series, 2012, 403, 012021.	0.3	3
194	Quantum Hamiltonian Physics with Supercomputers. Nuclear Physics, Section B, Proceedings Supplements, 2014, 251-252, 155-164.	0.5	3
195	Nucleon-deuteron scattering with the JISP16 potential. Physical Review C, 2018, 97, .	1.1	3
196	Perspectives on Nuclear Structure and Scattering with the Ab-Initio No-Core Shell Model. , 2018, , .		3
197	Dynamical basis generation and structure of the Hartree-Fock approximation. Zeitschrift f€ur Physik A, 1985, 321, 429-434.	1.4	2
198	Model for cold dark matter. Zeitschrift f€ur Physik A, 1992, 342, 239-244.	0.9	2

#	ARTICLE	IF	CITATIONS
199	Isospin multiplet structure in ultraheavy fermion bound states. Physical Review D, 1994, 49, 2514-2524.	1.6	2
200	Dominance of Low Spin and High Deformation in Ab Initio Approaches to the Structure of Light Nuclei. , 2009, , .		2
201	Ab initioNo Core Shell Model. Nuclear Physics News, 2011, 21, 5-12.	0.1	2
202	Light nuclei in ab initio approach with realistic inverse scattering NN-interaction. Bulletin of the Russian Academy of Sciences: Physics, 2011, 75, 463-467.	0.1	2
203	Web Service andWorkflow Abstractions to Large Scale Nuclear Physics Calculations. , 2012, , .		2
204	Benchmark of the No-Core Monte Carlo Shell Model in Light Nuclei. Few-Body Systems, 2013, 54, 1371-1375.	0.7	2
205	Leveraging GPUs in Ab Initio Nuclear Physics Calculations. , 2013, , .		2
206	Ab initio no core full configuration approach for light nuclei. International Journal of Modern Physics E, 2014, 23, 1461004.	0.4	2
207	Light-Front BRST Quantization of the Vector Schwinger Model with a Photon Mass Term. International Journal of Theoretical Physics, 2014, 53, 4230-4243.	0.5	2
208	Vector Schwinger Model with a Photon Mass Term with Faddeevian Regularization. Few-Body Systems, 2015, 56, 559-563.	0.7	2
209	Challenges in Developing MPI Fault-Tolerant Fortran Applications. , 2018, , .		2
210	Daejeon16 interaction with contact-term corrections for heavy nuclear systems. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 085105.	1.4	2
211	Semileptonic decay of B_c to \bar{c} and \bar{c} and \bar{c} and \bar{c} . Physical Review D, 2021, 104, .		2
212	Positronium on the light front. , 2020, , .		2
213	Recent progress in basis light-front quantization. , 2020, , .		2
214	ROLE OF DEFORMED SYMPLECTIC CONFIGURATIONS in <i>AB INITIO</i> NO-CORE SHELL MODEL RESULTS. , 2008, , .		2
215	Light meson parton distribution functions from basis light-front quantization and QCD evolution. , 2020, , .		2
216	Critical coupling for two-dimensional $\bar{\psi}\psi$ theory in discretized light-cone quantization. Physical Review D, 2022, 105, .	1.6	2

#	ARTICLE	IF	CITATIONS
217	Centre-of-mass effects at finite temperature. Il Nuovo Cimento A, 1987, 97, 359-363.	0.2	1
218	Model for enhanced photonium production. Zeitschrift für Physik A, 1992, 344, 67-71.	0.9	1
219	Simple model for photonium production. Zeitschrift für Physik A, 1993, 344, 443-446.	0.9	1
220	Canonical formulation of light-front gluodynamics and quantization of non-Abelian plane waves. Physical Review D, 2001, 63, .	1.6	1
221	Effective operators in the NCSM formalism. European Physical Journal A, 2005, 25, 489-490.	1.0	1
222	Nonlocal nucleon-nucleon interaction JISP. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 754-763.	0.1	1
223	SYMPLECTIC NO-CORE SHELL MODEL. International Journal of Modern Physics E, 2008, 17, 133-145.	0.4	1
224	Ab INITIO NO CORE METHODS: APPLICATIONS TO LIGHT NUCLEI. International Journal of Modern Physics E, 2008, 17, 109-121.	0.4	1
225	The Ab Initio No-core Shell Model. Few-Body Systems, 2009, 45, 111-114.	0.7	1
226	Ab-initio Hamiltonian approach to light nuclei and to quantum field theory. Pramana - Journal of Physics, 2010, 75, 39-49.	0.9	1
227	Phase-equivalent transformation which does not affect bound state properties and its manifestation in many-body systems. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 496-501.	0.1	1
228	Microscopic Shell Model Calculations for sd-Shell Nuclei. , 2017, , .		1
229	Charmonium spectrum and diffractive production in a light-front Hamiltonian approach. Nuclear and Particle Physics Proceedings, 2017, 289-290, 409-413.	0.2	1
230	On Reducing I/O Overheads in Large-Scale Invariant Subspace Projections. Lecture Notes in Computer Science, 2012, , 305-314.	1.0	1
231	Valence structures of light and strange mesons from the basis light-front quantization framework. , 2020, , .		1
232	Light-Front Hamiltonian, Path Integral and BRST Formulations of the Chern-Simons-Higgs Theory in the Broken Symmetry Phase. Journal of Modern Physics, 2013, 04, 38-48.	0.3	1
233	Quark distributions in nuclei from lepton experiments. AIP Conference Proceedings, 1984, , .	0.3	0
234	A New Qualitative Prediction of the Parton Model for High-Energy Hadron Collisions. Foundations of Physics, 2000, 30, 519-527.	0.6	0

#	ARTICLE	IF	CITATIONS
235	Neutral current effects in ^{16}O . Physical Review C, 2000, 61, .	1.1	0
236	The Ab Initio Large-Basis No-Core Shell Model. AIP Conference Proceedings, 2004, , .	0.3	0
237	Ab Initio Large-Basis No-Core Shell Model. AIP Conference Proceedings, 2005, , .	0.3	0
238	Nonlocal inverse-scattering nucleon-nucleon interaction and spectra of s-and p-shell nuclei. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 764-768.	0.1	0
239	Charge-dependent NN interaction in the J-matrix inverse scattering approach. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 806-810.	0.1	0
240	Elements of the ab initio No Core Shell Model. AIP Conference Proceedings, 2008, , .	0.3	0
241	Effective Interactions from No Core Shell Model. , 2008, , .		0
242	Resonant parameters of ^5He and ^5Li states and nucleon- ^4He scattering. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 745-749.	0.1	0
243	Significance of Symplectic Symmetry in Many-nucleon Dynamics. , 2009, , .		0
244	Further development of realistic JISP16 NN interaction. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 538-541.	0.1	0
245	Nonperturbative Quantum Field Evolution. Few-Body Systems, 2014, 55, 555-560.	0.7	0
246	Emergence of Simple Patterns in Complex Atomic Nuclei from First Principles. Journal of Physics: Conference Series, 2015, 639, 012008.	0.3	0
247	Deriving the nuclear shell model from first principles. Journal of Physics: Conference Series, 2015, 580, 012003.	0.3	0
248	Light-Front Quantization of the Restricted Gauge Theory of QCD 2. Few-Body Systems, 2016, 57, 669-673.	0.7	0
249	Light-Front Quantization of the Vector Schwinger Model with a Photon Mass Term in Faddeevian Regularization. Few-Body Systems, 2016, 57, 573-577.	0.7	0
250	Instant-Form and Light-Front Quantization of Field Theories. Few-Body Systems, 2018, 59, 1.	0.7	0
251	<i>AB-INITIO</i> NO-CORE SHELL MODEL. , 2001, , .		0
252	LIGHT-FRONT QUANTIZATION OF GLUODYNAMICS REVISITED. , 2002, , .		0

#	ARTICLE	IF	CITATIONS
253	THE AB INITIO LARGE-BASIS NO-CORE SHELL MODEL. , 2005, , .		0
254	NO-CORE SHELL MODEL FOR NUCLEAR STRUCTURE AND REACTIONS. , 2007, , .		0
255	FERMION SYSTEMS WITH FUZZY SYMMETRIES: (LEVERAGING THE KNOWN TO UNDERSTAND THE UNKNOWN). , 2007, , .		0
256	SYMPLECTIC NO-CORE SHELL MODEL. , 2008, , .		0
257	<i>AB INITIO</i> AND <i>AB EXITU</i> NO CORE SHELL MODEL. , 2008, , .		0
258	DEVELOPING NEW MANY-BODY APPROACHES FOR NO-CORE SHELL MODEL CALCULATIONS. , 2008, , .		0
259	SYMMETRY-ADAPTED NO-CORE SHELL MODEL FOR LIGHT NUCLEI. , 2013, , .		0
260	Ab initio no core full configuration approach for light nuclei. , 2014, , .		0
261	Title is missing!. , 2017, , .		0
262	Title is missing!. , 2017, , .		0
263	Title is missing!. , 2017, , .		0
264	Title is missing!. , 2018, , .		0
265	Three-dimensional imaging of proton in basis light-front quantization. , 2020, , .		0