

Alexander S Volya

List of Publications by Year in descending order

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143
papers

2,564
citations

218677

26
h-index

223800

46
g-index

174
all docs

174
docs citations

174
times ranked

1406
citing authors

#	ARTICLE	IF	CITATIONS
1	<p>Evidence for $\hat{I} \pm$ -cluster resonances in ^{11}Be. Physical Review Letters, 2022, 128, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>$\hat{I} \pm$</mml:mi></mml:math> -cluster resonances in ^{11}Be. Physical Review Letters, 2022, 128, .</p>	2.9	6
2	<p>Search for the high-spin members of the ^{11}Be band in ^{11}Be. Physical Review Letters, 2022, 128, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>$\hat{I} \pm$</mml:mi></mml:math> -cluster structure in ^{11}Be. Physical Review C, 2022, 105, .</p>	2.9	5
3	<p>Observation of a Near-Threshold Proton Resonance in ^{11}Be. Physical Review Letters, 2022, 128, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N_e</mml:mi></mml:math> Multiparticle-hole excitations in nuclei near $N = Z = 20$: ^{41}K. European Physical Journal A, 2022, 58, .</p>	2.5	1
4	<p>White paper: from bound states to the continuum. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 123001.</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mrow><mml:mi>B</mml:mi></mml:mrow></mml:math> Observation of a Near-Threshold Proton Resonance in ^{11}Be. Physical Review Letters, 2022, 128, .</p>	7.8	10
5	<p>Time-dependent relaxation of observables in complex quantum systems. Journal of Physics Complexity, 2020, 1, 025007.</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>$\hat{I} \pm$</mml:mi></mml:math> band in ^{11}Be. Physical Review Letters, 2022, 128, .</p>	2.9	3
6	<p>Evolution of the ^{20}Ne and 28 shell gaps and two-particle-two-hole states in the FSU interaction. Physical Review Research, 2020, 2, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N</mml:mi></mml:math> White paper: from bound states to the continuum. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 123001.</p>	3.6	38
7	<p>Assessment of the beta-delayed proton decay rate of ^{11}Be. Europhysics Letters, 2020, 130, 12001.</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N</mml:mi></mml:math> Time-dependent relaxation of observables in complex quantum systems. Journal of Physics Complexity, 2020, 1, 025007.</p>	2.2	7
8	<p>High spin structure of ^{39}Ar and the FSU cross-shell interaction. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N</mml:mi></mml:math> Evolution of the ^{20}Ne and 28 shell gaps and two-particle-two-hole states in the FSU interaction. Physical Review Research, 2020, 2, .</p>	3.6	20
9	<p>Analyzing powers and the role of multistep processes in the $^{12}\text{C}(\text{Li}7, t)\text{O}16$ reaction. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>\hat{I}^2</mml:mi></mml:math> Assessment of the beta-delayed proton decay rate of ^{11}Be. Europhysics Letters, 2020, 130, 12001.</p>	2.0	10
10	<p>Backbending, seniority, and Pauli blocking of pairing correlations at high rotational frequencies in rapidly rotating nuclei. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>T</mml:mi></mml:math> High spin structure of ^{39}Ar and the FSU cross-shell interaction. Physical Review C, 2019, 100, .</p>	2.9	4
11	<p>Inverse-kinematics proton scattering from ^{41}K. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>z</mml:mi></mml:math> Analyzing powers and the role of multistep processes in the $^{12}\text{C}(\text{Li}7, t)\text{O}16$ reaction. Physical Review C, 2019, 100, .</p>	2.9	4
12	<p>Structure of ^{41}K and the quest for a comprehensive shell model interaction. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>P</mml:mi></mml:math> Inverse-kinematics proton scattering from ^{41}K. Physical Review C, 2019, 100, .</p>	2.9	13
13	<p>Clustering in structure and reactions using configuration interaction techniques. Physical Review C, 2019, 100, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>$\hat{I} \pm$</mml:mi></mml:math> Structure of ^{41}K and the quest for a comprehensive shell model interaction. Physical Review C, 2019, 100, .</p>	2.9	21
14	<p>Evidence for $\hat{I} \pm$ -cluster structure in ^{11}Be. Physical Review Letters, 2022, 128, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N_e</mml:mi></mml:math> Clustering in structure and reactions using configuration interaction techniques. Physical Review C, 2019, 100, .</p>	2.9	13
15	<p>Resonant ^{11}Be intruder configurations of excited states in the neutron-rich isotopes ^{33}P and ^{34}P. Physical Review C, 2018, 97, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N_e</mml:mi></mml:math> Evidence for $\hat{I} \pm$ -cluster structure in ^{11}Be. Physical Review Letters, 2022, 128, .</p>	2.9	6
16	<p>Resonant ^{11}Be intruder configurations of excited states in the neutron-rich isotopes ^{33}P and ^{34}P. Physical Review C, 2018, 97, .</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" <mml:mi>N_e</mml:mi></mml:math> Resonant ^{11}Be intruder configurations of excited states in the neutron-rich isotopes ^{33}P and ^{34}P. Physical Review C, 2018, 97, .</p>	2.9	3

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19	Study of clustering in isotopes of beryllium. , 2018, , .		5
20	Search for the high spin members of the $I_{\pi}^{\pm}:2n:I_{\pi}^{\pm}$ band in ^{10}Be . AIP Conference Proceedings, 2018, , .	0.4	0
21	Resonance reactions at Astana cyclotron. AIP Conference Proceedings, 2018, , .	0.4	0
22	$\langle mml:math \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle mml:mi \rangle I_{\pi}^{\pm} \langle /mml:mi \rangle \langle /mml:math \rangle$ -unbound levels in $\langle mml:math \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle mml:mmultiscripts \rangle \langle mml:mi \rangle \text{Ar} \langle /mml:mi \rangle \langle mml:mprescripts \rangle \langle /mml:math \rangle$ $\langle mml:math \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle mml:mrow \rangle \langle mml:mmultiscripts \rangle \langle mml:mi \rangle \text{Ar} \langle /mml:mi \rangle \langle mml:mprescripts \rangle \langle /mml:math \rangle$		

#	ARTICLE	IF	CITATIONS
55	Non-exponential and oscillatory decays in quantum mechanics. Europhysics Letters, 2014, 107, 40001.	2.0	42
56	Cluster properties of nuclear states in the modern shell model approach. Journal of Physics: Conference Series, 2014, 569, 012054.	0.4	6
57	Structure and decay correlations of two-neutron systems beyond the dripline. Journal of Physics: Conference Series, 2014, 569, 012033.	0.4	4
58	Split Isobaric Analog State in Ni55: Case of Strong Isospin Mixing. Physical Review Letters, 2013, 111, 262501.	7.8	17
59	Structure of light nuclei in resonance scattering experiments. , 2013, , .		0
60	Pairing Beyond BCS. , 2013, , 73-88.		2
61	First observation of the ^{13}Li ground state. Physical Review C, 2013, 87, .	2.9	33
62	Exploring the neutron dripline two neutrons at a time: The first observations of the ^{26}O and ^{16}Be ground state resonances. Journal of Physics: Conference Series, 2013, 420, 012052.	0.4	1
63	Observation of Ground-state Two-neutron Decay. Acta Physica Polonica B, 2013, 44, 543.	0.8	7
64	^{45}Cl -ray spectroscopy of one-proton knockout from ^{43}Cl . Physical Review C, 2012, 86, .	2.9	7
65	High-spin spectrum of ^{24}Mg studied through multiparticle angular correlations. Physical Review C, 2012, 85, .	2.9	10
66	Spyrouet Aal.Replies:. Physical Review Letters, 2012, 109, .	7.8	11
67	Multi-intruder structures in ^{34}P . Physical Review C, 2012, 85, .	2.9	13
68	Physics of unstable nuclei: from structure to sequential decays. EPJ Web of Conferences, 2012, 38, 03003.	0.3	12
69	First Observation of Ground State Dineutron Decay: ^{16}Be . Physical Review Letters, 2012, 108, 102501.	7.8	117
70	A model study of scattering of a composite object. Journal of Physics: Conference Series, 2011, 312, 092011.	0.4	0
71	Porter-Thomas distribution in unstable many-body systems. Physical Review C, 2011, 83, .	2.9	14
72	Triple configuration coexistence in ^{44}S . Physical Review C, 2011, 83, .	2.9	64

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73	Quadrupole collectivity in the two-body random ensemble. Physical Review C, 2011, 84, .	2.9	5
74	Low-lying states in B . Physical Review C, 2010, 82, .	2.9	15
75	Quantum tunneling and scattering of a composite object reexamined. Physical Review C, 2010, 82, .	2.9	17
76	Tripartite. Physical Review Letters, 2010, 104, .	7.8	5
77	Time-dependent approach to the continuum shell model. Physical Review C, 2009, 79, .	2.9	39
78	Lowest $l < 0$ proton resonance in Si . Physical Review C, 2010, 82, .	2.9	37
79	Manifestation of three-body forces in $f_{7/2}$ -shell nuclei. Europhysics Letters, 2009, 86, 52001.	2.0	10
80	Approaching the P island of inversion. Physical Review C, 2009, 80, .	2.9	28
81	Emergence of Symmetry from Random n -Body Interactions. Physical Review Letters, 2008, 100, 162501.	7.8	14
82	Nuclear Schiff moment and soft vibrational modes. Physical Review C, 2008, 78, .	2.9	14
83	Intruder excitations in P . Nuclear Structure of ^{35}Zn . Physical Review C, 2008, 78, .	2.9	16
84	Intruder excitations in N and the neighboring N isotone. Physical Review C, 2008, 77, .	2.9	18
85	Complementary studies of $T=2A130$ and the systematics of intruder states. Physical Review C, 2008, 77, .	2.9	16
86	Intruder Configurations in the $A=33$ Isobars: Mg . Physical Review C, 2008, 78, .	7.8	56
87	NUCLEAR MANY-BODY PHYSICS WHERE STRUCTURE AND REACTIONS MEET. , 2008, , .		2
88	^{16}C AND ^{18}N : LIFETIME MEASUREMENTS OF THEIR FIRST-EXCITED STATES. , 2008, , .		0
89	Competition between normal and intruder states inside the $^{\infty}$ island of inversion. Physical Review C, 2007, 76, .	2.9	28
90	\hat{I}^2 -delayed \hat{I}^{\pm} emission of $N18$: Broad \hat{I}^{\pm} states in the $C14 + \hat{I}^{\pm}$ system. Physical Review C, 2007, 75, .	2.9	16

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91	Shell Gap near $Z=50$ in ^{100}Sn from Intermediate-Energy Coulomb Excitations in Even Mass ^{100}Sn . Physical Review C, 2007, 76, .	7.8	112
92	Electromagnetic transitions in neutron-rich ^{22}F . Physical Review C, 2007, 76, .	2.9	6
93	Thermodynamics of pairing in mesoscopic systems. Physical Review C, 2007, 76, .	2.9	36
94	Collective many-body dynamics in the vicinity of nuclear driplines. Nuclear Physics A, 2007, 788, 251-259.	1.5	3
95	APPLICATIONS OF CONTINUUM SHELL MODEL. , 2007, , .		0
96	Continuum shell model. Physical Review C, 2006, 74, .	2.9	121
97	From nuclear structure to reactions with a unified continuum shell model approach. Journal of Physics: Conference Series, 2006, 49, 67-72.	0.4	2
98	Continuum Shell Model, Reactions and Giant Resonances. AIP Conference Proceedings, 2006, , .	0.4	0
99	Quantum chaos and nuclear physics. Physica Scripta, 2006, T125, 147-150.	2.5	5
100	Structure of ^{12}N using ^{11}C +preonance scattering. Physical Review C, 2006, 74, .	2.9	17
101	\hat{I}^2 -delayed \hat{I}^3 spectroscopy of neutron rich $^{27,28,29}\text{Na}$. Physical Review C, 2006, 73, .	2.9	45
102	RANDOM INTERACTIONS AND GROUND STATE SPIN OF FINITE FERMI SYSTEMS. International Journal of Modern Physics B, 2006, 20, 2730-2738.	2.0	1
103	Collective dipole excitations in the continuum shell model. Physica Scripta, 2006, T125, 224-225.	2.5	1
104	RANDOM INTERACTIONS AND GROUND STATE SPIN OF FINITE FERMI SYSTEMS. , 2006, , .		0
105	FROM SUPER-RADIANCE TO CONTINUUM SHELL MODEL. , 2006, , .		0
106	Many-Body Physics On The Border Of Nuclear Stability. AIP Conference Proceedings, 2005, , .	0.4	0
107	The nuclear pairing problem: new perspectives. Nuclear Physics A, 2005, 752, 325-334.	1.5	11
108	Nuclear pairing and Coriolis effects in proton emitters. European Physical Journal A, 2005, 25, 161-163.	2.5	7

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109	Voyage to the "island of Inversion" ^{29}Na . European Physical Journal A, 2005, 25, 101-103.	2.5	8
110	Many-Body Dynamics Coupled to Continuum and "Pygmy" Resonances. AIP Conference Proceedings, 2005, , .	0.4	0
111	Shell Gap Reduction in Neutron-Rich Systems and Cross-Shell Excitations in ^{20}O . Physical Review Letters, 2005, 94, 132501.	7.8	20
112	^{29}Na : Defining the Edge of the Island of Inversion for $Z=11$. Physical Review Letters, 2005, 94, 162501.	7.8	73
113	Discrete and Continuum Spectra in the Unified Shell Model Approach. Physical Review Letters, 2005, 94, 052501.	7.8	145
114	Super-radiance and open quantum systems. AIP Conference Proceedings, 2005, , .	0.4	15
115	SUPER-RADIANCE: FROM NUCLEAR PHYSICS TO PENTAQUARKS. , 2005, , .		0
116	Voyage to the "island of Inversion" ^{29}Na . , 2005, , 101-103.		0
117	Order Generated by Random Many-Body Dynamics. Acta Physica Hungarica A Heavy Ion Physics, 2004, 19, 221-225.	0.4	0
118	Pairing correlations in nuclei: old knowledge and new ideas. Nuclear Physics A, 2004, 731, 299-310.	1.5	5
119	"Super-radiance" and the width of exotic baryons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 590, 45-50.	4.1	17
120	Nuclear structure, random interactions and mesoscopic physics. Physics Reports, 2004, 391, 311-352.	25.6	77
121	Invariant correlational entropy as a signature of quantum phase transitions in nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 574, 27-34.	4.1	32
122	Sensitivities of rp-process calculations to nuclear mass uncertainties. Nuclear Physics A, 2003, 718, 617-619.	1.5	5
123	Nuclear pairing: New perspectives. Physics of Atomic Nuclei, 2003, 66, 1781-1801.	0.4	43
124	Exploring quantum dynamics in an open many-body system: transition to superradiance. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S450-S456.	1.4	14
125	Non-Hermitian effective Hamiltonian and continuum shell model. Physical Review C, 2003, 67, .	2.9	98
126	Dynamic polarization effects in Coulomb excitation. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S407-S412.	1.4	0

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127	Role of $E1$ – $E2$ interplay in multiphonon Coulomb excitation. <i>Physical Review C</i> , 2002, 66, .	2.9	4
128	Coherent and chaotic properties of nuclear pairing. <i>Physical Review C</i> , 2002, 65, .	2.9	19
129	Interplay of pairing and multipole interactions in a simple model. <i>Physical Review C</i> , 2002, 65, .	2.9	16
130	Random interactions, isospin, and the ground states of odd-A and odd-odd nuclei. <i>Physical Review C</i> , 2002, 66, .	2.9	9
131	Proton drip-line calculations and the r process. <i>Physical Review C</i> , 2002, 65, .	2.9	117
132	Towards a Better Understanding of Nuclear Pairing and Its Interplay with Other Residual Interactions. <i>Progress of Theoretical Physics Supplement</i> , 2002, 146, 636-637.	0.1	5
133	RANDOMNESS AND COLLECTIVITY IN NUCLEAR STRUCTURE: THREE THEORETICAL PUZZLES. , 2002, , .		2
134	Shell Model with Random Interactions. , 2002, , 345-352.		0
135	Exact solution of the nuclear pairing problem. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 509, 37-42.	4.1	98
136	Random interactions: Shedding light on nuclear structure. <i>Nuclear Physics A</i> , 2001, 682, 229-235.	1.5	11
137	Do we understand the role of incoherent interactions in many-body physics?. <i>Physics of Atomic Nuclei</i> , 2001, 64, 525-535.	0.4	11
138	Multiple pion production from an oriented chiral condensate. <i>Nuclear Physics A</i> , 2000, 671, 617-643.	1.5	5
139	Geometric Chaoticity Leads to Ordered Spectra for Randomly Interacting Fermions. <i>Physical Review Letters</i> , 2000, 85, 4016-4019.	7.8	73
140	Exploring the nuclear pion dispersion relation through the anomalous coupling γ – π . <i>Journal of Physics G: Nuclear and Particle Physics</i> , 1999, 25, 2049-2058.	3.6	0
141	Chaotic Wave Functions and Exponential Convergence of Low-Lying Energy Eigenvalues. <i>Physical Review Letters</i> , 1999, 82, 2064-2067.	7.8	64
142	Modeling pionic fusion. <i>Physical Review C</i> , 1999, 59, 305-316.	2.9	7
143	Intruder Configurations in the $A=33$ Isobars: Mg^{33} and Al^{33} . , 0, .		1