

George Bertsch

List of Publications by Year in descending order

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78
papers

3,439
citations

172457

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docs citations

79
times ranked

1993
citing authors

#	ARTICLE	IF	CITATIONS
1	Generator coordinate method for transition-state dynamics in nuclear fission. <i>Physical Review C</i> , 2022, 105, .	2.9	4
2	Diabatic Hamiltonian matrix elements made simple. <i>Physical Review C</i> , 2022, 105, .	2.9	2
3	Comment on "Reexamining the relation between the binding energy of finite nuclei and the equation of state of infinite nuclear matter", <i>Physical Review C</i> , 2021, 104, .	2.9	1
4	Porter-Thomas fluctuations in complex quantum systems. <i>Physical Review E</i> , 2021, 104, L052104.	2.1	4
5	Derivation of $\langle \text{d}1e45 \text{ altimg="si8.svg"} \rangle$ K -matrix reaction theory in a discrete basis formalism. <i>Annals of Physics</i> , 2020, 419, 168233.	2.8	4
6	Least action and the maximum-coupling approximations in the theory of spontaneous fission. <i>Physical Review C</i> , 2020, 102, .	2.9	6
7	Microscopic model for spontaneous fission: Validity of the adiabatic approximation. <i>Physical Review C</i> , 2020, 101, .	2.9	6
8	Schematic reaction-theory model for nuclear fission. <i>Physical Review C</i> , 2020, 101, .	2.9	9
9	Future of nuclear fission theory. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2020, 47, 113002.	3.6	105
10	Diabatic paths through the scission point in nuclear fission. <i>Physical Review C</i> , 2019, 100, .	2.9	7
11	Decay widths at the scission point in nuclear fission. <i>Physical Review C</i> , 2019, 100, .	2.9	10
12	Transmission coefficients in compound-nucleus reaction theory. <i>Physical Review C</i> , 2019, 99, .	2.9	1
13	Angular momentum of fission fragments. <i>Physical Review C</i> , 2019, 99, .	2.9	24
14	Composite-particle decay widths by the generator coordinate method. <i>Annals of Physics</i> , 2019, 403, 68-81.	2.8	13
15	Phase transitions in a symmetry-conserving framework. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
16	Monopole moments and the η -vibration in deformed nuclei. <i>European Physical Journal A</i> , 2019, 55, 1.	2.5	3
17	Nuclear deformation in the laboratory frame. <i>Physical Review C</i> , 2018, 97, .	2.9	11
18	Statistical theory of deformation distributions in nuclear spectra. <i>Physical Review C</i> , 2018, 98, .	2.9	17

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19	Neutron width statistics in a realistic resonance-reaction model. Physical Review C, 2018, 98, .	2.9	6
20	Scission dynamics with $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle K \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ partitions. Physical Review C, 2018, 97, .	2.9	18
21	Fluctuations in the U235 (n , f) cross section. Physical Review C, 2018, 98, .	2.9	5
22	The shapes of nuclei. International Journal of Modern Physics E, 2017, 26, 1740001.	1.0	5
23	The shapes of nuclei. , 2017, , 1-13.		0
24	Exit-Channel Suppression in Statistical Reaction Theory. Physical Review Letters, 2017, 119, 222504.	7.8	5
25	Nuclear Matrix Elements for Tests of Local Lorentz Invariance Violation. Physical Review Letters, 2017, 119, 192504.	7.8	5
26	Particle-number projection in the finite-temperature mean-field approximation. Physical Review C, 2017, 96, .	2.9	11
27	Estimating Parameter Uncertainty in Binding-Energy Models by the Frequency-Domain Bootstrap. Physical Review Letters, 2017, 119, 252501.	7.8	24
28	A new approach to barrier-top fission dynamics. EPJ Web of Conferences, 2016, 122, 01001.	0.3	3
29	Nuclear Deformation at Finite Temperature. Physical Review Letters, 2014, 113, 262503.	7.8	18
30	Time-dependent mean-field theory for x-ray near-edge spectroscopy. Physical Review B, 2014, 89, .	3.2	2
31	Numerical pump-probe experiments of laser-excited silicon in nonequilibrium phase. Physical Review B, 2014, 89, .	3.2	61
32	Pairing in Finite Systems: Beyond the HFB Theory. , 2013, , 89-99.		1
33	Pairing gaps in the Hartree-Fock-Bogoliubov theory with the Gogny D1S interaction. Physical Review C, 2012, 86, .	2.9	30
34	Symmetry Restoration in Hartree-Fock-Bogoliubov Based Theories. Physical Review Letters, 2012, 108, 042505.	7.8	70
35	Energy spectrum and effective mass using a nonlocal 3-body interaction. Physical Review C, 2012, 85, .	2.9	3
36	Time-dependent density functional theory for strong electromagnetic fields in crystalline solids. Physical Review B, 2012, 85, .	3.2	199

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37	Number-conserving theory of nuclear pairing gaps: A global assessment. <i>Physical Review C</i> , 2011, 83, .	2.9	24
38	Application of the gradient method to Hartree-Fock-Bogoliubov theory. <i>Physical Review C</i> , 2011, 84, .	2.9	59
39	Structure of even-even nuclei using a mapped collective Hamiltonian and the D1S Gogny interaction. <i>Physical Review C</i> , 2010, 81, .	2.9	381
40	Coherent phonon generation in time-dependent density functional theory. <i>Physical Review B</i> , 2010, 82, .	3.2	77
41	Model space truncation in shell-model fits. <i>Physical Review C</i> , 2009, 80, .	2.9	4
42	Odd-even mass differences from self-consistent mean field theory. <i>Physical Review C</i> , 2009, 79, .	2.9	118
43	Whence the odd-even staggering in nuclear binding?. <i>European Physical Journal A</i> , 2009, 41, 109-113.	2.5	13
44	Hartree-Fock-Bogoliubov theory of polarized Fermi systems. <i>Physical Review A</i> , 2009, 79, .	2.5	29
45	Systematics of the first 2^+ state in spherical nuclei with the Skryme quasiparticle random-phase approximation. <i>Physical Review C</i> , 2008, 78, .	2.9	42
46	Collectivity-induced quenching of signatures for shell closures. <i>Physical Review C</i> , 2008, 78, .	2.9	68
47	Many-body approximations in the sd -shell ϵ box. <i>Physical Review C</i> , 2008, 78, .	2.9	5
48	Accuracy of BCS-based approximations for pairing in small Fermi systems. <i>Physical Review C</i> , 2008, 78, .	2.9	42
49	Global study of the spectroscopic properties of the first 2^+ state in even-even nuclei. <i>Physical Review C</i> , 2007, 75, .	2.9	43
50	Systematics of the First 2^+ Excitation with the Gogny Interaction. <i>Physical Review Letters</i> , 2007, 99, 032502.		75
51	Neutron-proton pairing reexamined. <i>Physical Review C</i> , 2007, 76, .	2.9	23
52	Real-time, real-space implementation of the linear response time-dependent density-functional theory. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1121-1138.	1.5	195
53	Global study of quadrupole correlation effects. <i>Physical Review C</i> , 2006, 73, .	2.9	171
54	Effective quadrupole-quadrupole interaction from density functional theory. <i>Physical Review C</i> , 2006, 74, .	2.9	10

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55	Correlation Energies By The Projected Generator Coordinate Method. AIP Conference Proceedings, 2005, , .	0.4	0
56	Nuclear moment of inertia and spin distribution of nuclear levels. Physical Review C, 2005, 72, .	2.9	31
57	Correlation energies by the generator coordinate method: Computational aspects for quadrupolar deformations. Physical Review C, 2004, 69, .	2.9	22
58	Resource Letter FNP-1: Frontiers of nuclear physics. American Journal of Physics, 2004, 72, 983-991.	0.7	4
59	Excited states dynamics in time-dependent density functional theory. European Physical Journal D, 2004, 28, 211-218.	1.3	126
60	Ionization dynamics of simple metal clusters in intense fields by the Thomas-Fermi-Vlasov method. European Physical Journal D, 2004, 29, 367-378.	1.3	76
61	Quadrupole correlation energy by the generator coordinate method. Physical Review C, 2003, 68, .	2.9	15
62	Nuclear level statistics: Extending shell model theory to higher temperatures. Physical Review C, 2003, 68, .	2.9	71
63	Projection and ground state correlations made simple. Physical Review C, 2002, 65, .	2.9	21
64	Mean-field theory for global binding systematics. Physics of Atomic Nuclei, 2001, 64, 588-594.	0.4	4
65	Real-space computation of dynamic hyperpolarizabilities. Journal of Chemical Physics, 2001, 115, 8773-8783.	3.0	50
66	Comparison of transfer-to-continuum and eikonal models of projectile fragmentation reactions. Physical Review C, 2001, 63, .	2.9	36
67	Real-space, real-time method for the dielectric function. Physical Review B, 2000, 62, 7998-8002.	3.2	326
68	Parity Dependence of Nuclear Level Densities. Physical Review Letters, 2000, 84, 4313-4316.	7.8	78
69	Cluster ionization via two-plasmon excitation. Physical Review A, 2000, 61, .	2.5	16
70	Time-dependent local-density approximation in real time: Application to conjugated molecules. International Journal of Quantum Chemistry, 1999, 75, 55-66.	2.0	184
71	Time-dependent local-density approximation in real time: Application to conjugated molecules. , 1999, 75, 55.		8
72	Time-dependent local-density approximation in real time: Application to conjugated molecules. International Journal of Quantum Chemistry, 1999, 75, 55.	2.0	6

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73	Orderly Spectra from Random Interactions. Physical Review Letters, 1998, 80, 2749-2753.	7.8	155
74	Optical response of small carbon clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1997, 42, 219-225.	1.0	47
75	Shell Model Monte Carlo Studies of ^{13}C -Soft Nuclei. Physical Review Letters, 1996, 77, 1444-1447.	7.8	40
76	Ionic core effects on the mie resonance in lithium clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1995, 32, 329-336.	1.0	11
77	Inelastic electron scattering on C60 clusters. Journal of Chemical Physics, 1994, 100, 5580-5587.	3.0	6
78	Large-amplitude motion in superfluid fermi droplets. Nuclear Physics A, 1990, 512, 253-274.	1.5	30