

Carlo Barbieri

List of Publications by Year in descending order

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77

papers

3,016

citations

172457

29

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155660

55

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all docs

78

docs citations

78

times ranked

1255

citing authors

#	ARTICLE	IF	CITATIONS
1	Self-consistent Green's function method for nuclei and nuclear matter. <i>Progress in Particle and Nuclear Physics</i> , 2004, 52, 377-496.	14.4	412
2	Isotopic Chains Around Oxygen from Evolved Chiral Two- and Three-Nucleon Interactions. <i>Physical Review Letters</i> , 2013, 111, 062501.	7.8	150
3	Chiral two- and three-nucleon forces along medium-mass isotope chains. <i>Physical Review C</i> , 2014, 89, .	2.9	140
4	<i>Ab initio</i> Gorkov-Green's function calculations of open-shell nuclei. <i>Physical Review C</i> , 2013, 87, .	2.9	129
5	Radii and Binding Energies in Oxygen Isotopes: A Challenge for Nuclear Forces. <i>Physical Review Letters</i> , 2016, 117, 052501.	7.8	109
6	<i>Ab initio</i> self-consistent Gorkov-Green's function calculations of semimagic nuclei: Formalism at second order with a two-nucleon interaction. <i>Physical Review C</i> , 2011, 84, .	2.9	103
7	Self-consistent Green's functions formalism with three-body interactions. <i>Physical Review C</i> , 2013, 88, .	2.9	103
8	Role of Long-Range Correlations in the Quenching of Spectroscopic Factors. <i>Physical Review Letters</i> , 2009, 103, 202502.	7.8	94
9	Probing the N=32 Shell Closure below the Magic Proton Number Z=20: Mass Measurements of the Exotic Isotopes K52,53. <i>Physical Review Letters</i> , 2015, 114, 202501.	7.8	92
10	Novel chiral Hamiltonian and observables in light and medium-mass nuclei. <i>Physical Review C</i> , 2020, 101, .	2.9	88
11	Dawning of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi><mml:mo>=</mml:mo><mml:mn>32</mml:mn></mml:math> Shell Closure Seen through Precision Mass Measurements of Neutron-Rich Titanium Isotopes. <i>Physical Review Letters</i> , 2018, 120, 062503.	7.8	81
12	Chiral three-nucleon forces and the evolution of correlations along the oxygen isotopic chain. <i>Physical Review C</i> , 2015, 92, .	2.9	78
13	Limited Asymmetry Dependence of Correlations from Single Nucleon Transfer. <i>Physical Review Letters</i> , 2013, 110, 122503. Quasifree (<i>math display="block">Tj \cdot ETQq_0 \cdot 0 \cdot rgBT / Overline{10} \cdot Tf \cdot 50 \cdot 242 \cdot Td</i>)	7.8	76
14	Reactions on Oxygen Isotopes: Observation of Isospin Independence of the Reduced Single-Particle Strength. <i>Physical Review Letters</i> , 2018, 120, 052501.	7.8	69
15	<i>Ab initio</i> self-consistent Gorkov-Green's function calculations of semi-magic nuclei: Numerical implementation at second order with a two-nucleon interaction. <i>Physical Review C</i> , 2014, 89, .	2.9	64
16	Quenching of single-particle strength from direct reactions with stable and rare-isotope beams. <i>Progress in Particle and Nuclear Physics</i> , 2021, 118, 103847.	14.4	64
17	Quasiparticle and quasi-hole states of nuclei around <math display="block">Ni_{56}. <i>Physical Review C</i> , 2009, 79, .	2.9	59
18	<i>Ab initio</i> calculation of the potential bubble nucleus <math display="block">Si_{34}. <i>Physical Review C</i> , 2017, 95, .	2.9	59

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19	<i>Ab initio</i> Optical Potentials and Nucleon Scattering on Medium Mass Nuclei. Physical Review Letters, 2019, 123, 092501.	7.8	55
20	Faddeev description of two-hole “one-particle motion and the single-particle spectral function. Physical Review C, 2001, 63, .	2.9	54
21	Neutrino-nucleus cross section within the extended factorization scheme. Physical Review C, 2019, 99, .	2.9	51
22	Faddeev treatment of long-range correlations and the one-hole spectral function of ^{16}O . Physical Review C, 2002, 65, .	2.9	50
23	Microscopic self-energy calculations and dispersive optical-model potentials. Physical Review C, 2011, 84, .	2.9	50
24	Quasifree Neutron Knockout from Ca Corroborates Arising $\text{N} = \text{Neutr}$ Nuclear charge radii and electromagnetic moments of radioactive scandium isotopes and isomers. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 025104.	7.8	48
25	Quasiparticles in neon using the Faddeev random-phase approximation. Physical Review A, 2007, 76, .	3.6	45
26	Shell structure of potassium isotopes deduced from their magnetic moments. Physical Review C, 2014, 90, .	2.9	39
27	Nucleon-nucleus optical potential in the particle-hole approach. Physical Review C, 2005, 72, .	2.9	35
28	<i>Ab initio</i> Computation of Charge Densities for Sn and Xe Isotopes. Physical Review Letters, 2020, 125, 182501.	7.8	33
29	Extension of the random phase approximation including the self-consistent coupling to two-phonon contributions. Physical Review C, 2003, 68, .	2.9	27
30	SPECTROSCOPIC FACTORS IN ^{16}O AND NUCLEON ASYMMETRY. International Journal of Modern Physics A, 2009, 24, 2060-2068.	1.5	27
31	Nuclear Charge Radii of the Nickel Isotopes $\text{Ni} = 58, 68, 70$. Physical Review Letters, 2022, 128, 022502.	7.8	27
32	Effects of nuclear correlations on the $\text{O}^{16}(\text{e}, \text{e}'\text{pN})$ reactions to discrete final states. Physical Review C, 2004, 70, .	2.9	26
33	Lepton scattering from Ar and Ti in the quasielastic peak region. Physical Review C, 2019, 100, .	2.9	26
34	Algebraic diagrammatic construction formalism with three-body interactions. Physical Review C, 2018, 97, .	2.9	25
35	36		

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37	Single particle spectra based on modern effective interactions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 643, 268-272.	4.1	22
38	Nuclear electromagnetic dipole response with the self-consistent Green's function formalism. Physical Review C, 2019, 99, .	2.9	22
39	Inclusive electron-nucleus cross section within the self-consistent Green's function approach. Physical Review C, 2018, 98, .	2.9	21
40	Moving away from singly-magic nuclei with Gorkov Greenâ€™s function theory. European Physical Journal A, 2021, 57, 1.	2.5	21
41	Effects of rescattering in($e,e\gamma^2p$)reactions within a semiclassical model. Physical Review C, 2004, 70, .	2.9	20
42	Self-Consistent Greenâ€™s Function Approaches. Lecture Notes in Physics, 2017, , 571-644.	0.7	18
43	First measurements of the $^{16}\text{O}(e, e'pn)^{14}\text{N}$ reaction. European Physical Journal A, 2006, 29, 261-270.	2.5	17
44	Faddeev random-phase approximation for molecules. Physical Review A, 2011, 83, .	2.5	16
45	Nuclear energy density functionals grounded in <i><math>\langle\langle ab initio\rangle\rangle</math></i> calculations. Physical Review C, 2021, 104, .	2.9	16
46	Pygmy dipole response of proton-rich argon nuclei in random-phase approximation and no-core shell model. Physical Review C, 2008, 77, .	2.9	15
47	Pygmy dipole response of proton-rich argon nuclei in random-phase approximation and no-core shell model. Physical Review C, 2008, 77, .	4.1	14
48	Doubly magic nuclei from lattice QCD forces at MPS=469MeV/c2. Physical Review C, 2018, 97, .	2.9	13
49	Model nuclear energy density functionals derived from ab initio calculations. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 085107.	3.6	13
50	Neutron spectroscopic factors of ^{55}Ni hole-states from $\langle\langle ab initio\rangle\rangle</math>$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 137-141.	4.1	12
51	Examining the N=28 shell closure through high-precision mass measurements of Ar^{46-48} . Physical Review C, 2020, 102, .	2.9	12
52	Ab Initio Optical Potentials and Nucleon Scattering on Medium Mass Nuclei. Acta Physica Polonica B, 2017, 48, 273.	0.8	11
53	Many-body Propagator Theory with Three-Body Interactions: a Path to Exotic Open Shell Isotopes. Journal of Physics: Conference Series, 2014, 529, 012005.	0.4	9
54	Knockout of proton-neutron pairs from ^{16}O with electromagnetic probes. European Physical Journal A, 2010, 43, 137-143.	2.5	8

#	ARTICLE	IF	CITATIONS
55	Accuracy of the Faddeev random phase approximation for light atoms. <i>Physical Review A</i> , 2012, 85, .	2.5	7
56	Gorkov algebraic diagrammatic construction formalism at third order. <i>Physical Review C</i> , 2022, 105, .	2.9	7
57	Three-nucleon forces in exotic open-shell isotopes. <i>EPJ Web of Conferences</i> , 2014, 66, 02005.	0.3	6
58	Core-polarization effects and effective charges in O and Ni isotopes from chiral interactions. <i>Physical Review C</i> , 2019, 100, .	2.9	6
59	Investigation of the ground-state spin inversion in the neutron-rich $\text{^{16}O}$ and $\text{^{18}O}$ isotopes. <i>Physical Review C</i> , 2021, 104, .	2.9	6
60	Examination of the sensitivity of quasifree reactions to details of the bound-state overlap functions. <i>Physical Review C</i> , 2021, 104, .	2.9	6
61	Study of the $\text{^{16}O}(p,\gamma)$ Reaction at Astrophysical Energies. <i>Nuclear Physics A</i> , 2005, 758, 395-398.	1.5	5
62	Recent Applications of Self-Consistent Green's Function Theory to Nuclei. <i>Journal of Physics: Conference Series</i> , 2018, 966, 012015.	0.4	5
63	Editorial: The Future of Nuclear Structure: Challenges and Opportunities in the Microscopic Description of Nuclei. <i>Frontiers in Physics</i> , 2021, 8, .	2.1	5
64	Many-body approach to proton emission and the role of spectroscopic factors. <i>Physical Review C</i> , 2003, 68, .	2.9	4
65	Two-step rescattering in $(e,e'\gamma p)$ reactions. <i>European Physical Journal A</i> , 2005, 24, 85-89.	2.5	4
66	Final state interactions in electron scattering at high missing energies and momenta. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2006, 159, 174-179.	0.4	4
67	A first glimpse at the shell structure beyond 54Ca: Spectroscopy of 55K, 55Ca, and 57Ca. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 827, 136953.	4.1	4
68	Toward a Global Dispersive Optical Model for the Driplines. <i>Nuclear Physics A</i> , 2010, 834, 788c-791c.	1.5	2
69	Differential cross section measurement of the $\text{^{12}C}(e,e'pp)\text{^{10}Be}$ reaction. <i>European Physical Journal A</i> , 2016, 52, 1.	2.5	2
70	Self-consistent Green's function calculations of $\text{^{16}O}$ at small missing energies. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2005, 31, S1301-S1309.	3.6	1
71	Reply to "Comment on 'Pygmy dipole response of proton-rich argon nuclei in random-phase approximation and no-core shell model'" Physical Review C, 2008, 78, .	2.9	1
72	ONE- AND TWO-NUCLEON STRUCTURE FROM GREEN'S FUNCTION THEORY. <i>Modern Physics Letters A</i> , 2010, 25, 1927-1930.	1.2	1

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73	Faddeev Random Phase Approximation for molecules. Computer Physics Communications, 2011, 182, 1995-1998.	7.5	1
74	Gorkov self-consistent Green's function calculations of semi-magic nuclei. Journal of Physics: Conference Series, 2011, 321, 012039.	0.4	1
75	Self-consistent Gorkov Green's function calculations of one-nucleon spectral properties. Journal of Physics: Conference Series, 2012, 337, 012001.	0.4	1
76	Ab initio optical potentials and nucleon scattering on medium mass nuclei. Journal of Physics: Conference Series, 2018, 981, 012005.	0.4	1
77	Three-Nucleon Forces in Neutron Rich Isotopes. , 2015, , .	0	