Maria B Barbaro

List of Publications by Year
in descending order

79	1,879	218677	265206
papers	citations	26 h-index	42 g-index

81	81	81	421
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using electron scattering superscaling to predict charge-changing neutrino cross sections in nuclei. Physical Review C, 2005, 71, .	2.9	153
2	Meson-exchange currents and quasielastic neutrino cross sections in the superscaling approximation model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 696, 151-155.	4.1	112
3	Charged-current neutrino-nucleus reactions within the superscaling meson-exchange current approach. Physical Review D, 2016, 94, .	4.7	88
4	Superscaling in Charged Current Neutrino Quasielastic Scattering in the Relativistic Impulse Approximation. Physical Review Letters, 2005, 95, 252502.	7.8	84
5	Extensions of superscaling from relativistic mean field theory: The SuSAv2 model. Physical Review C, 2014, 90, .	2.9	79
6	Meson-Exchange Currents and Quasielastic Antineutrino Cross Sections in the Superscaling Approximation. Physical Review Letters, 2012, 108, 152501.	7.8	73
7	Relativistic analyses of quasielastic neutrino cross sections at MiniBooNE kinematics. Physical Review D, 2011, 84, .	4.7	68
8	Semirelativistic description of quasielastic neutrino reactions and superscaling in a continuum shell model. Physical Review C, 2005, 71, .	2.9	64
9	Meson-exchange currents and quasielastic predictions for charged-current neutrino-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>12</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>scattering in the superscaling approach. Physical Review D, 2015, 91, .	4.7	64
10	Inclusive electron scattering within the SuSAv2 meson-exchange current approach. Physical Review D, 2016, 94, .	4.7	61
11	Relativistic Descriptions of Final-State Interactions in Charged-Current Quasielastic Neutrino-Nucleus Scattering at MiniBooNE Kinematics. Physical Review Letters, 2011, 107, 172501.	7.8	51
12	Inelastic electron-nucleus scattering and scaling at high inelasticity. Physical Review C, 2004, 69, .	2.9	48
13	Relativistic model of 2p-2h meson exchange currents in (anti)neutrino scattering. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 065105.	3.6	48
14	Final-state interactions and superscaling in the semi-relativistic approach to quasielastic electron and neutrino scattering. Physical Review C, 2007, 75, .	2.9	46
15	Superscaling and neutral current quasielastic neutrino-nucleus scattering. Physical Review C, 2006, 73, .	2.9	45
16	Probing nucleon strangeness with neutrinos: Nuclear model dependences. Physical Review C, 1996, 54, 1954-1969.	2.9	40
17	Superscaling analysis of inclusive electron scattering and its extension to charge-changing neutrino-nucleus cross sections beyond the relativistic Fermi gas approach. Physical Review C, 2006, 74, .	2.9	40
18	Pionic correlations and meson-exchange currents in two-particle emission induced by electron scattering. Physical Review C, 2010, 82, .	2.9	38

#	Article	IF	Citations
19	Electron- versus neutrino-nucleus scattering. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 124001.	3.6	33
20	Superscaling of non-quasielastic electron-nucleus scattering. Physical Review C, 2009, 80, .	2.9	32
21	Relativistic effects in two-particle emission for electron and neutrino reactions. Physical Review D, 2014, 90, .	4.7	30
22	Quasielastic Charged-Current Neutrino-Nucleus Scattering. Physical Review Letters, 2007, 98, 242501.	7.8	29
23	Deuteron analysing powers in the charge exchange reaction. Nuclear Physics A, 1991, 529, 653-674.	1.5	28
24	Nuclear effects in neutrino and antineutrino charged-current quasielastic scattering at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>MINER</mml:mtext><mml:mi>Î½</mml:mi><mml:mi mathvariant="normal">A</mml:mi></mml:mrow></mml:math>kinematics. Physical Review D, 2014, 89, .	4.7	28
25	Charged-current inclusive neutrino cross sections in the superscaling model including quasielastic, pion production and meson-exchange contributions. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 045101.	3.6	28
26	Neutrinoâ€“oxygen CC0Ï€ scattering in the SuSAv2-MEC model. Journal of Physics G: Nuclear and Particle Physics, 2019, 46, 015104.	3.6	28
27	Constraints in modeling the quasielastic response in inclusive lepton-nucleus scattering. Physical Review C, 2020, 101, .	2.9	27
28	Scaling function, spectral function, and nucleon momentum distribution in nuclei. Physical Review C, 2011, 83, .	2.9	25
29	Superscaling and neutral current quasielastic neutrino-nucleus scattering beyond the relativistic Fermi gas model. Physical Review C, 2007, 75, .	2.9	22
30	Superscaling and charge-changing neutrino scattering from nuclei in the Î” region beyond the relativistic Fermi gas model. Physical Review C, 2008, 77, .	2.9	22
31	Relativistic description of final-state interactions in neutral-current neutrino and antineutrino cross sections. Physical Review C, 2013, 88, .	2.9	22
32	Charged-current quasielastic neutrino scattering cross sections on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow /><mml:mn>12</mml:mn></mml:msup></mml:math>C with realistic spectral and scaling functions. Physical Review C, 2014, 89, .	2.9	22
33	Mean-field and two-body nuclear effects in inclusive electron scattering on argon, carbon, and titanium: The superscaling approach. Physical Review C, 2019, 99, .	2.9	19
34	Realistic spectral function model for charged-current quasielastic-like neutrino and antineutrino scattering cross sections on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>12</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2019, 99, .	2.9	17
35	Angular distribution in two-particle emission induced by neutrinos and electrons. Physical Review D, 2014, 90, .	4.7	16
36	Semirelativistic meson-exchange currents in(e,eâ€²)and(e,eâ€²p)reactions. Physical Review C, 2003, 68, .	2.9	15

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37	Scaling function and nucleon momentum distribution. Physical Review C, 2010, 81, .	2.9	15
38	Density dependence of 2p-2h meson-exchange currents. Physical Review C, 2017, 95, .	2.9	15
39	New evaluation of the axial nucleon form factor from electron- and neutrino-scattering data and impact on neutrino-nucleus cross sections. Physical Review C, 2020, 101, .	2.9	14
40	Analysis of the MINERvA antineutrino double-differential cross sections within the SuSAv2 model including meson-exchange currents. Physical Review D, 2019, 99, .	4.7	13
41	Neutrino-nucleus scattering in the SuSA model. European Physical Journal: Special Topics, 2021, 230, 4321-4338.	2.6	12
42	An analysis of eta -production via the p6Li to eta7Be reaction. Journal of Physics G: Nuclear and Particle Physics, 1993, 19, 403-415.	3.6	11
43	Longitudinal and transverse scaling functions within the coherent density fluctuation model. Physical Review C, 2009, 79, .	2.9	11
44	Meson-exchange currents and final-state interactions in quasielastic electron scattering at high momentum transfers. Physical Review C, 2010, 81, .	2.9	10
45	Estimate of the theoretical uncertainty of the cross sections for nucleon knockout in neutral-current neutrino-oxygen interactions. Physical Review C, 2015, 92, .	2.9	10
46	Neutrino energy reconstruction from semi-inclusive samples. Physical Review C, 2022, 105, .	2.9	10
47	Emission of neutron-proton and proton-proton pairs in electron scattering induced by meson-exchange currents. Physical Review C, 2016, 94, .	2.9	9
48	Semi-inclusive charged-current neutrino-nucleus cross sections in the relativistic plane-wave impulse approximation. Physical Review C, 2020, 102, .	2.9	9
49	Superscaling in electron- and neutrino-nucleus scattering. Nuclear Physics, Section B, Proceedings Supplements, 2006, 159, 186-191.	0.4	8
50	Asymmetric relativistic Fermi gas model for quasielastic lepton-nucleus scattering. Physical Review C, 2018, 98, .	2.9	8
51	Neutral current quasielastic (anti)neutrino scattering beyond the Fermi gas model at MiniBooNE and BNL kinematics. Physical Review C, 2015, 91, .	2.9	7
52	The SuSA Model for Neutrino Oscillation Experiments: From Quasielastic Scattering to the Resonance Region. Universe, 2021, 7, 140.	2.5	7
53	The generalised relativistic Lindhard functions. European Physical Journal A, 2005, 25, 299-318.	2.5	6
54	Model for BCS-type correlations in superscaling. Physical Review C, 2008, 78, .	2.9	5

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55	Theoretical description of semi-inclusive T2K, <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>MINER</mml:mi><mml:mi>Î½</mml:mi><mml:mi mathvariant="normal">A</mml:mi></mml:mrow></mml:math> and MicroBooNE neutrino-nucleus data in the relativistic plane wave impulse approximation. Physical Review D, 2021, 104, .	4.7	5
56	SuSAv2 model for inelastic neutrino-nucleus scattering. Physical Review D, 2022, 105, .	4.7	5
57	Relativistic Hamiltonians in many-body theories. Physical Review C, 1996, 53, 2801-2808.	2.9	4
58	Goldstone bosons in the pairing Hamiltonian: The path integral approach. Physical Review C, 2004, 70, .	2.9	4
59	On the Semi-Classical Charge Longitudinal Response in ¹² C and ⁴⁰ Ca. Europhysics Letters, 1987, 4, 415-420.	2.0	3
60	Spin correlation parameters in the dp to (pp)n reaction. Journal of Physics G: Nuclear and Particle Physics, 1989, 15, L69-L72.	3.6	3
61	A model for cluster confinement in one dimensional many-body systems. Zeitschrift FÃ¼r Physik A, 1992, 341, 327-337.	0.9	3
62	The many levels pairing Hamiltonian for two pairs. European Physical Journal A, 2004, 22, 377-390.	2.5	3
63	Charged-current quasielastic (anti)neutrino cross sections on 12C with realistic spectral functions including meson-exchange contributions. AIP Conference Proceedings, 2019, , .	0.4	3
64	Pairing Hamiltonian for one pair of identical nucleons bound in a potential well. Physical Review C, 2001, 64, .	2.9	2
65	Fermion propagators in space-time. Physical Review C, 2009, 80, .	2.9	2
66	Neutrino Interactions Importance to Nuclear Physics. AIP Conference Proceedings, 2009, , .	0.4	2
67	Nuclear effects in charged-current quasielastic neutrino-nucleus scattering. Journal of Physics: Conference Series, 2011, 336, 012024.	0.4	2
68	Connecting scaling with short-range correlations. Physical Review C, 2011, 84, .	2.9	2
69	Relativistic models for quasi-elastic neutrino-nucleus scattering. , 2012, , .		2
70	Superscaling analyses of inclusive electron scattering and their extension to charge-changing neutrino cross sections in nuclei. AIP Conference Proceedings, 2007, , .	0.4	1
71	Nuclear effects in electron reactions and their impact on neutrino processes. , 2009, , .		1
72	Nuclear response functions for the N-Nâˆ—(1440) transition. AIP Conference Proceedings, 2006, , .	0.4	0

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73	Nuclear effects in neutrino-nucleus interactions. Journal of Physics: Conference Series, 2010, 205, 012015.	0.4	0
74	Superscaling predictions for NC and CC quasi-elastic neutrino-nucleus scattering. , 2011, , .		0
75	Scaling ideas in neutrino scattering reactions: application to the MiniBooNE experiment. Journal of Physics: Conference Series, 2012, 366, 012006.	0.4	0
76	Scaling properties of the pairing problem in the strong coupling limit. Annals of Physics, 2013, 337, 221-237.	2.8	0
77	Superscaling in electron-nucleus scattering and its link to CC and NC QE neutrino-nucleus scattering. AIP Conference Proceedings, 2015, , .	0.4	0
78	Charged-current inclusive neutrino cross sections in the SuperScaling model. AIP Conference Proceedings, 2016, , .	0.4	0
79	Meson-exchange currents and quasielastic predictions for neutrino-nucleus scattering. , 2018, , .		0