

Diana Carbone

List of Publications by Year in descending order

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174
papers

2,923
citations

156536

32
h-index

223390

49
g-index

175
all docs

175
docs citations

175
times ranked

705
citing authors

#	ARTICLE	IF	CITATIONS
1	<p>clean transfer in the $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \langle \text{mml:mmultiscripts} \langle \text{mml:mi} \text{ Cd} \langle \text{mml:mi} \rangle \langle \text{mml:mprescripts} \rangle \rangle \langle \text{mml:none} \rangle \rangle \rangle$</p>		

#	ARTICLE	IF	CITATIONS
19	Recent experimental activity on heavy-ion induced reactions within the NUMEN project. EPJ Web of Conferences, 2021, 252, 04001.	0.1	0
20	Study of the $4\text{He}(4\text{He},4\text{He})4\text{He}^*$ inelastic scattering at the MAGNEX facility. EPJ Web of Conferences, 2021, 252, 04007.	0.1	1
21	^{76}Ge elastic and inelastic scattering at 275 MeV. Physical Review C, 2021, 104, .	1.1	16
22	The NUMEN Technical Design Report. International Journal of Modern Physics A, 2021, 36, .	0.5	21
23	^{40}Ca -induced single-nucleon transfer reactions on ^{116}Cd system at 306 MeV. Physical Review C, 2020, 102, .	1.1	19
24	The MAGNEX magnetic spectrometer for double charge exchange reactions. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 334-338.	0.6	35
25	New Results from the NUMEN Project. , 2020, , .		0
26	Analysis of two-nucleon transfer reactions in the $^{20}\text{Ne}+^{116}\text{Cd}$ system at 306 MeV. Physical Review C, 2020, 102, .	1.1	42
27	Analysis of the background on cross-section measurements with the MAGNEX spectrometer: The (20Ne, 200) Double Charge Exchange case. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 980, 164500.	0.7	24
28	Recent results on heavy-ion direct reactions of interest for $0^+ \rightarrow 2^+$ decay at INFN - LNS. Journal of Physics: Conference Series, 2020, 1610, 012004.	0.3	0
29	The NUMEN Heavy Ion Multidetector for a Complementary Approach to the Neutrinoless Double Beta Decay. Universe, 2020, 6, 129.	0.9	26
30	First comparison of GEANT4 hadrontherapy physics model with experimental data for a NUMEN project reaction case. European Physical Journal A, 2020, 56, 1.	1.0	10
31	Spin-dipole nuclear matrix element for the double beta decay of ^{76}Ge by the ^3He charge-exchange reaction. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 05LT01.	1.4	7
32	$^9\text{Be}+p$ breakup at 5.67A MeV in a full kinematics approach. Physical Review C, 2020, 101, .	1.1	7
33	Global study of $^9\text{Be}+p$ breakup at 5.67 MeV/nucleon. Physical Review C, 2020, 101, .	1.1	6
34	A clear signature of the breakup modes for ^9Be on a proton target at 5.6 MeV/nucleon. Journal of Physics: Conference Series, 2020, 1643, 012102.	0.3	0
35	Transfer to the continuum of ^{11}Be with the application of ab-initio S-matrix. Journal of Physics: Conference Series, 2020, 1643, 012119.	0.3	0
36	Recent results on heavy-ion induced reactions of interest for neutrinoless double beta decay at INFN-LNS. Journal of Physics: Conference Series, 2020, 1643, 012074.	0.3	1

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37	Background estimate in heavy-ion two-body reactions measured by the MAGNEX spectrometer. Journal of Physics: Conference Series, 2020, 1643, 012019.	0.3	0
38	Application of an S matrix to data analysis of transfer reactions to the continuum populating Be on O on ^{16}O	1.1	12
39	Recent results on Heavy-Ion induced reactions of interest for ^{12}O decay. Journal of Physics: Conference Series, 2019, 1308, 012002.	1.1	16
40	Recent results on Heavy-Ion induced reactions of interest for ^{12}O decay. Journal of Physics: Conference Series, 2019, 1308, 012002.	0.3	0
41	The NUMEN project @ LNS: Status and perspectives. AIP Conference Proceedings, 2019, , .	0.3	1
42	New experimental campaign of NUMEN project. AIP Conference Proceedings, 2019, , .	0.3	0
43	The NUMEN project @ LNS: Status and perspectives. AIP Conference Proceedings, 2019, , .	0.3	0
44	^{20}Ne elastic and inelastic scattering at 306 MeV. Physical Review C, 2019, 100, .	1.1	36
45	Charge-state distributions of ^{20}Ne ions emerging from thin foils. Results in Physics, 2019, 13, 102191.	2.0	22
46	Recent results on heavy-ion induced reactions of interest for neutrinoless double beta decay at INFN-LNS. EPJ Web of Conferences, 2019, 223, 01009.	0.1	0
47	Study of continuum excitation by light weakly bound projectiles on proton target. EPJ Web of Conferences, 2019, 223, 01058.	0.1	0
48	Giant Pairing Vibrations in light nuclei. European Physical Journal A, 2019, 55, 1.	1.0	10
49	Role of correlations in two-neutron transfer reactions. EPJ Web of Conferences, 2019, 223, 01035.	0.1	0
50	Coherent coupled-reaction-channels analysis of existing and new p + Be data between 1.7 and 15 MeV/nucleon. Physical Review C, 2019, 99, .	0.1	7
51	Two-Neutron Transfer in the $^{18}O + ^{28}Si$ System. Springer Proceedings in Physics, 2019, , 181-183.	0.1	0
52	A view of recent results and perspectives on nuclear structure with MAGNEX at the INFN-LNS laboratory. Journal of Physics: Conference Series, 2018, 966, 012008.	0.3	0
53	Mini-phoswich and SiPM for heavy ion detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 912, 128-131.	0.7	5
54	Analysis of pairing correlations in neutron transfer reactions and comparison to the constrained molecular dynamics model. Physical Review C, 2018, 97, .	1.1	19

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55	The nuclear matrix elements of $0\hat{1}\frac{1}{2}\hat{1}^2\hat{1}^2$ decay and the NUMEN project at INFN-LNS. EPJ Web of Conferences, 2018, 194, 02001.	0.1	1
56	Post-stripper study for the (^{20}Ne , ^{20}O) double charge exchange reaction at zero degrees with the MAGNEX spectrometer. Journal of Physics: Conference Series, 2018, 1056, 012052.	0.3	0
57	Experimental challenges for the measurement of the ^{116}Cd (^{20}Ne , ^{20}O) ^{116}Sn double charge exchange reaction at 15 AMeV. Journal of Physics: Conference Series, 2018, 1023, 012006.	0.3	0
58	Data reduction for experimental measurements within the NUMEN project. Journal of Physics: Conference Series, 2018, 1056, 012010.	0.3	0
59	The $\hat{1}\pm$ -decay of the Hoyle state in ^{12}C : a new high-precision investigation. EPJ Web of Conferences, 2018, 184, 01005.	0.1	2
60	Pulse Shape Discrimination with EJ299 scintillators. Journal of Physics: Conference Series, 2018, 966, 012064.	0.3	1
61	Short-range (pairing) versus long-range (collective) correlations in two-neutron transfer reactions induced by ^{18}O . Journal of Physics: Conference Series, 2018, 1056, 012035.	0.3	0
62	Analysis of the one-neutron transfer to ^{16}O and ^{28}Si in $^{18}\text{O} + ^{16}\text{O}$ and $^{18}\text{O} + ^{28}\text{Si}$ reactions. Journal of Physics: Conference Series, 2018, 1056, 012034.	1.1	21
63	A new measurement of the direct alpha-decay width of the Hoyle state in ^{12}C . AIP Conference Proceedings, 2018, , .	0.3	1
64	Nuclear structure studies performed using the (^{18}O , ^{16}O) two-neutron transfer reactions. Journal of Physics: Conference Series, 2018, 966, 012016.	0.3	0
65	Measuring nuclear reaction cross sections to extract information on neutrinoless double beta decay. Journal of Physics: Conference Series, 2018, 966, 012021.	0.3	1
66	The Front-end for the new focal plane detector for the NUMEN project. Journal of Physics: Conference Series, 2018, 1056, 012007.	0.3	0
67	Experimental challenges in the measurement of double charge exchange reactions within the NUMEN project. Journal of Physics: Conference Series, 2018, 1078, 012008.	0.3	1
68	SiCilia – Silicon Carbide Detectors for Intense Luminosity Investigations and Applications. Sensors, 2018, 18, 2289.	2.1	51
69	Experimental issues for the measurement of the double charge exchange reactions within the NUMEN project. Journal of Physics: Conference Series, 2018, 1056, 012011.	0.3	0
70	Heavy-ion particle identification for the transfer reaction channels for the system $^{18}\text{O} + ^{116}\text{Sn}$ under the NUMEN Project. Journal of Physics: Conference Series, 2018, 1056, 012015.	0.3	0
71	Challenges for high rate signal processing for the NUMEN experiment. Journal of Physics: Conference Series, 2018, 1056, 012034.	0.3	5
72	Important role of projectile excitation in $^{18}\text{O} + ^{16}\text{O}$ and $^{18}\text{O} + ^{28}\text{Si}$ reactions. Journal of Physics: Conference Series, 2018, 1056, 012034.	1.1	21

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73	Silicon Carbide detectors for nuclear physics experiments at high beam luminosity. Journal of Physics: Conference Series, 2018, 1056, 012032.	0.3	3
74	The NUMEN project: NUclear Matrix Elements for Neutrinoless double beta decay. European Physical Journal A, 2018, 54, 1.	1.0	146
75	Competition between direct and sequential two-neutron transfers in the $^{18}\text{O} + ^{28}\text{Si}$ collision at 84 MeV. Physical Review C, 2018, 97, 014601.	1.1	36
76	First Measurement of the $^{116}\text{Cd}(^{20}\text{Ne}, ^{20}\text{O})^{116}\text{Sn}$ Reaction at 15,5 MeV. Acta Physica Polonica B, 2018, 49, 275.	0.3	37
77	Study of the $^{18}\text{O} + ^{64}\text{Ni}$ Two-neutron Transfer Reaction at 84 MeV by MAGNEX. Acta Physica Polonica B, 2018, 49, 381.	0.3	0
78	Microscopic Cluster Model for the Description of ($^{18}\text{O}, ^{16}\text{O}$) Two-neutron Transfer Reactions. Acta Physica Polonica B, 2018, 49, 373.	0.3	0
79	Investigation of the Li10 shell inversion by neutron continuum transfer reaction. Physical Review Letters, 2017, 118, 012701.	2.9	30
80	Microscopic cluster model for the description of new experimental results on the $^{18}\text{O} + ^{16}\text{O}$ reaction.		

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91	A new high-precision upper limit of direct \hat{I}^{\pm} -decays from the Hoyle state in ^{12}C . EPJ Web of Conferences, 2017, 165, 01020.	0.1	3
92	Two-neutron clustering aspects in the transitions induced by the $^{13}\text{C}(\text{O},\text{O})^{15}\text{C}$ reaction at 84 MeV incident energy. Journal of Physics: Conference Series, 2017, 863, 012068.	0.3	0
93	A NEW COOLING TECHNIQUE FOR TARGETS OPERATING UNDER VERY INTENSE BEAMS. , 2017, , .		27
94	Extracting the cross section angular distributions for ^{15}C high-energy resonance excited via the ($^{18}\text{O},^{16}\text{O}$) two-neutron transfer reaction. EPJ Web of Conferences, 2016, 117, 04004.	0.1	0
95	Preliminary study of the ^{10}Li nucleus via one-neutron transfer. EPJ Web of Conferences, 2016, 117, 06009.	0.1	0
96	The Giant Pairing Vibration in Carbon isotopes. Journal of Physics: Conference Series, 2016, 730, 012007.	0.3	0
97	NUMEN Project @ LNS : Heavy Ions Double Charge Exchange as a tool towards the $0\hat{I}^{1/2} \langle i \rangle \hat{I}^2 \langle /i \rangle$ Nuclear Matrix Element. Journal of Physics: Conference Series, 2016, 724, 012001.	0.3	0
98	Neutron decay of the Giant Pairing Vibration in ^{15}C . Journal of Physics: Conference Series, 2016, 724, 012006.	0.3	0
99	Interplay of the elastic and inelastic channels in the $^{16}\text{O}+^{27}\text{Al}$ scattering at $E_{\text{lab}} = 280$ MeV. European Physical Journal A, 2016, 52, 1.	1.0	25
100	The nuclear matrix elements of $0\hat{I}^{1/2} \hat{I}^2$ decay and the NUMEN project at INFN-LNS. EPJ Web of Conferences, 2016, 117, 10003.	0.1	2
101	The MAGNEX spectrometer: Results and perspectives. European Physical Journal A, 2016, 52, 1.	1.0	120
102	A mini-phoswich scintillator as a possible stop detector for the NUMEN project. Results in Physics, 2016, 6, 863-865.	2.0	18
103	Silicon carbide detectors study for NUMEN project. EPJ Web of Conferences, 2016, 117, 10006.	0.1	27
104	Probing the cluster structure of ^{7}Li via elastic scattering on protons and deuterons in inverse kinematics. Physical Review C, 2016, 94, .	1.1	16
105			

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109	The nuclear matrix elements of $0\nu\hat{1}^2\hat{1}^2$ decay and the NUMEN project at INFN-LNS. Journal of Physics: Conference Series, 2016, 730, 012006.	0.3	1
110	Collective Excitations in the ^{14}C Nucleus Populated by the $^{12}\text{C}(\text{O},\text{O})$ Reaction at 84 MeV. Acta Physica Polonica B, 2016, 47, 937.	0.3	0
111	Using Double Charge Exchange Reactions Towards $0\nu\text{e}^-\text{e}^-$ Nuclear Matrix Elements. Acta Physica Polonica B, 2016, 47, 929.	0.3	0
112	Reexamination of ^6Li scattering in inverse kinematics. Physical Review C, 2015, 91, .	1.1	20
113	^{10}Li low-lying resonances populated by one-neutron transfer. AIP Conference Proceedings, 2015, , .	0.3	0
114	NUMEN Project @ LNS : Heavy ions double charge exchange reactions towards the $0\nu\hat{1}^2\hat{1}^2$ nuclear matrix element determination. AIP Conference Proceedings, 2015, , .	0.3	1
115	Elastic scattering for the system $^6\text{Li}+p$ at near barrier energies with MAGNEX. , 2015, , .		2
116	Multipolarity analysis for ^{14}C high-energy resonance populated by $(^{18}\text{O},^{16}\text{O})$ two-neutron transfer reaction. AIP Conference Proceedings, 2015, , .	0.3	0
117	Exploring the ^{10}Li structure by the $d(^9\text{Li},p)^{10}\text{Li}$ transfer reaction. Journal of Physics: Conference Series, 2015, 590, 012037.	0.3	2
118	The $d(^9\text{Li},p)^{10}\text{Li}$ reaction as a tool to explore the ^{10}Li structure. Journal of Physics: Conference Series, 2015, 630, 012019.	0.3	1
119	Exploring the $^{12}\text{C}(^{18}\text{O},^{16}\text{O})^{14}\text{C}$ two-neutron transfer reaction at energies far above the Coulomb barrier. Journal of Physics: Conference Series, 2015, 590, 012030.	0.3	3
120	The role of nuclear reactions in the problem of $0\nu\hat{1}^2\hat{1}^2$ decay and the NUMEN project at INFN-LNS. Journal of Physics: Conference Series, 2015, 630, 012018.	0.3	47
121	Heavy Ions Double Charge Exchange reactions: towards the $0\nu\hat{1}^2\hat{1}^2$ Nuclear Matrix Element determination. Nuclear and Particle Physics Proceedings, 2015, 265-266, 28-30.	0.2	44
122	Signals of the Giant Pairing Vibration in ^{14}C and ^{15}C nuclei populated by $(^{18}\text{O},^{16}\text{O})$ two-neutron transfer reactions. European Physical Journal Plus, 2015, 130, 1.	1.2	43
123	Study of the $^6\text{Li} + p \rightarrow ^3\text{He} + ^4\text{He}$ reaction in inverse kinematics. European Physical Journal A, 2015, 51, 1.	1.0	10
124	Total reaction cross sections for $^8\text{Li} + ^{90}\text{Zr}$ at near-barrier energies. European Physical Journal A, 2015, 51, 1.	1.0	33
125	Signatures of the Giant Pairing Vibration in the ^{14}C and ^{15}C atomic nuclei. Nature Communications, 2015, 6, 6743.	5.8	86
126	Important influence of single neutron stripping coupling on near-barrier $^8\text{Li} + ^{90}\text{Zr}$ quasi-elastic scattering. European Physical Journal A, 2015, 51, 1.	1.0	9

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127	Heavy-ion double charge exchange reactions: A tool toward ^{10}Be nuclear matrix elements. European Physical Journal A, 2015, 51, 1.	1.0	118
128	New structures in the continuum of light nuclei populated by two-neutron transfer reactions. EPJ Web of Conferences, 2014, 66, 03015.	0.1	3
129	Fragmentation cross sections at intermediate energies for hadrontherapy and space radiation protection. EPJ Web of Conferences, 2014, 66, 10004.	0.1	0
130	Alpha Cluster Structure in ^{16}O . EPJ Web of Conferences, 2014, 66, 02093.	0.1	1
131	Effects of configuration mixing in heavy-ion elastic scattering. EPJ Web of Conferences, 2014, 66, 03067.	0.1	2
132	First application of the ^{9}Be optical potential to the study of the ^{10}Be continuum via the $(^{18}\text{O}, ^{17}\text{O})$ neutron-transfer reaction. Physical Review C, 2014, 90, .	1.1	30
133	The Continuum of ^{11}Be Populated by the $(^{18}\text{O}, ^{16}\text{O})$ Two-neutron Transfer Reaction. Acta Physica Polonica B, 2014, 45, 431.	0.3	7
134	High Excitation Energy Modes in ^{118}Sn Populated by the $^{120}\text{Sn}(p,t)^{118}\text{Sn}$ Reaction at 35 MeV. Acta Physica Polonica B, 2014, 45, 437.	0.3	5
135	Natural Parity States Excited via $(^{18}\text{O}, ^{16}\text{O})$ Two-neutron Transfer Reaction. Acta Physica Polonica B, 2014, 45, 411.	0.3	2
136	Measurement of Fragment Production Cross Sections in the $^{12}\text{C}+^{12}\text{C}$ and $^{12}\text{C}+^{197}\text{Au}$ Reactions at 62 MeV for Hadrontherapy and Space Radiation Protection. Acta Physica Polonica B, 2014, 45, 565.	0.3	0
137	$(^{18}\text{O}, ^{18}\text{Ne})$ double charge-exchange with MAGNEX. , 2014, , .		6
138	Two-neutron stripping in $(^{18}\text{O}, ^{16}\text{O})$ and (t,p) reactions. , 2014, , .		1
139	The $(^{18}\text{O}, ^{16}\text{O})$ reaction as a probe for nuclear spectroscopy. , 2014, , .		1
140	Selectivity of the $^{12}\text{C}(^{18}\text{O}, ^{16}\text{O})^{14}\text{C}$ reaction. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 605-606.	0.1	1
141	Transfer to the continuum of ^{14}C via $(^{18}\text{O}, ^{16}\text{O})$ reaction. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 607-610.	0.1	1
142	Study of new resonances at high excitation energy by the $^{120}\text{Sn}(p,t)^{118}\text{Sn}$ reaction at 35 MeV. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 588-590.	0.1	0
143	A broad angular-range measurement of elastic and inelastic scatterings in the ^{16}O on ^{27}Al reaction at 17.5 MeV/u. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 314-319.	0.7	50
144	Interference effects between direct and sequential processes in the $(^{18}\text{O}, ^{16}\text{O})$ reaction. EPJ Web of Conferences, 2014, 66, 03017.	0.1	4

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163	Two-Neutron Excitations in light nuclei via the ($^{18}\text{O},^{16}\text{O}$) reaction at 84 MeV. Journal of Physics: Conference Series, 2011, 312, 092020.	0.3	2
164	Enhancement of the two neutron transfer channel in ^{18}O induced reactions at 84 MeV. Journal of Physics: Conference Series, 2011, 312, 082016.	0.3	26
165	Transport efficiency in large acceptance spectrometers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 637, 77-87.	0.7	69
166	Measuring the ions momentum vector with a large acceptance magnetic spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 638, 74-82.	0.7	100
167	Challenging measurement of the $^{16}\text{O}+^{27}\text{Al}$ elastic and inelastic angular distributions up to large angles. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 648, 46-51.	0.7	39
168	Preliminary Study of Two-Neutron States via the ($^{18}\text{O},^{16}\text{O}$) Reaction at 84 MeV. , 2011, , .		4
169	First results and planned experiments with the INFN-LNS ray-tracing magnetic spectrometer MAGNEX. , 2010, , .		1
170	A particle identification technique for large acceptance spectrometers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 621, 419-423.	0.7	97
171	The MAGNEX large acceptance spectrometer. , 2010, , .		4
172	Study of the ^{19}O states via the ($^7\text{Li},^7\text{Be}$) reaction at 52 MeV. AIP Conference Proceedings, 2010, , .	0.3	1
173	States of ^{15}C via the ($^{18}\text{O},^{16}\text{O}$) reaction. AIP Conference Proceedings, 2010, , .	0.3	0
174	First Results from The MAGNEX Large Acceptance Spectrometer. , 2008, , .		1