

Luiz Carlos Chamon

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2214514/publications.pdf>

Version: 2024-02-01

111
papers

3,959
citations

126907

33
h-index

123424

61
g-index

114
all docs

114
docs citations

114
times ranked

824
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of inelastic couplings on the $^{12}\text{C}+^{12}\text{C}$ fusion at sub-barrier energies. European Physical Journal A, 2022, 58, .	2.5	3
2	Understanding the mechanisms of nuclear collisions: A complete study of the B reaction. Physical Review C, 2021, 103, .	2.9	8
3	SÃO Paulo potential version 2 (SPP2) and Brazilian nuclear potential (BNP). Computer Physics Communications, 2021, 267, 108061.	7.5	37
4	Effect of thousands of inelastic couplings on the elastic scattering channel. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 105103.	3.6	3
5	Velocity-dependent model for the \hat{I}_{\pm} interaction in the context of the double-folding potential. Physical Review C, 2020, 101, .	2.9	7
6	A method to optimize mass discrimination of particles identified in ΔE silicon surface barrier detector systems. European Physical Journal A, 2020, 56, 1.	2.5	8
7	Investigation of the one-neutron transfer in $\text{C}^{13}+\text{Si}^{28}$ at $E_{\text{lab}}=30$ and 34 MeV. Physical Review C, 2020, 101, .	2.9	7
8	Investigation of the reaction mechanisms for B reaction. Physical Review C, 2021, 103, .	2.9	10
9	Systematic study of optical potential strengths in reactions on Au^{197} at near-barrier energies. Physical Review C, 2019, 100, .	2.9	12
10	Systematic study of optical potential strengths in reactions on Sn involving strongly bound, weakly bound, and exotic nuclei. Physical Review C, 2019, 100, .	2.9	14
11	Transfer cross sections for the B reaction. Physical Review C, 2021, 103, .	2.9	27
12	Folding-type coupling potentials in the context of the generalized rotation-vibration model. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 035104.	3.6	1
13	Elastic scattering, inelastic excitation, and neutron transfer for $\text{Li}^7+\text{Sn}^{120}$ at energies around the Coulomb barrier. Physical Review C, 2017, 95, .	2.9	16
14	pick-up transfer cross sections for B reaction. Physical Review C, 2021, 103, .	2.9	16
14	Transition densities in the context of the generalized rotation-vibration model. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 105102.	3.6	3
15	Elastic scattering, inelastic excitation, and neutron transfer for $\text{Li}^7+\text{Sn}^{120}$ at energies around the Coulomb barrier. Physical Review C, 2017, 95, .	2.9	23
16	Reinterpreting the energy dependence of the optical potential. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 015107.	3.6	7
17	Investigation of Coulomb dipole polarization effects on reactions involving exotic nuclei. Physical Review C, 2015, 92, .	2.9	9
18	Evidence of a slight nuclear transparency in the alpha-nucleus systems. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 055102.	3.6	8

#	ARTICLE	IF	CITATIONS
19	Measurement of fusion cross sections for $^{16}\text{O}+^{16}\text{O}$. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 065102.	3.6	9
20	Effects of configuration mixing in heavy-ion elastic scattering. EPJ Web of Conferences, 2014, 66, 03067.	0.3	2
21	Effect of the inelastic couplings on the scattering of alpha particles by ^{12}C at low energies. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 035101.	3.6	10
22	\hat{I}^3 -Particle coincidence technique for the study of nuclear reactions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 749, 19-26.	1.6	4
23	Calculation of deformed double-folding potentials in the context of the generalized rotation-vibration model. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 055114.	3.6	0
24	On the near-barrier fusion of the proton-halo $8\text{B} + ^{58}\text{Ni}$ system. European Physical Journal A, 2013, 49, 1.	2.5	22
25	Study of the rainbow-like pattern in the elastic scattering of ^{16}O on ^{27}Al at $E_{\text{lab.}} = 100$ MeV. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 105101.	3.6	35
26	Cluster structures observed in ^{40}Ca from $^{12}\text{C}+^{28}\text{Si}$ scattering. Journal of Physics: Conference Series, 2013, 436, 012015.	0.4	2
27	The role of couplings in nuclear rainbow formation at energies far above the barrier. , 2012, , .		2
28	Nuclear rainbow in the $^{16}\text{O}+^{27}\text{Al}$ system: The role of couplings at energies far above the barrier. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 710, 426-429.	4.1	46
29	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> \langle \text{mml:mrow} \langle \text{mml:mi} \hat{I}_{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mi} \hat{I}_{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{scattering} \rangle \rangle \rangle$ reexamined in the context of the SÃ£o Paulo potential. Physical Review C, 2011, 83, .		10
30	Approximate treatment of relativistic effects in the low-energy $\hat{I}_{\pm} + \hat{I}_{\pm}$ scattering. Physical Review C, 2011, 84, .	2.9	10
31	FUSION ENHANCEMENT/SUPPRESSION AND IRREVERSIBILITY IN REACTIONS INDUCED BY WEAKLY BOUND NUCLEI. International Journal of Modern Physics E, 2011, 20, 929-933.	1.0	5
32	Probing the $6,7\text{Li}$ nucleon densities through a new break-up process approach. Nuclear Physics A, 2010, 836, 1-10.	1.5	23
33	Systematics of nuclear densities, deformations and excitation energies within the context of the generalized rotation-vibration model. Nuclear Physics A, 2010, 846, 1-30.	1.5	16
34	Breakup Coupling Effects on Fusion of Weakly Bound Nuclei. Nuclear Physics A, 2010, 834, 151c-154c.	1.5	10
35	Astrophysical S factors for fusion reactions involving C, O, Ne, and Mg isotopes. Atomic Data and Nuclear Data Tables, 2010, 96, 541-566.	2.4	34
36	Exploring the potential of the SÃ£o Paulo Potential. EPJ Web of Conferences, 2010, 2, 02002.	0.3	2

#	ARTICLE	IF	CITATIONS
55	Comparison between the zero point motion and generalized frozen approximation models in accounting for heavy-ion fusion data. <i>Physical Review C</i> , 2007, 76, .	2.9	2
56	Structure effects in the elastic scattering for the $^{16}\text{O} + ^{46,50}\text{Ti}$ systems. <i>Nuclear Physics A</i> , 2007, 781, 342-349.	1.5	6
57	The São Paulo Potential. <i>Nuclear Physics A</i> , 2007, 787, 198-205.	1.5	42
58	Hindrance of fusion induced by ^6He . <i>Nuclear Physics A</i> , 2007, 787, 225-230.	1.5	5
59	Elastic scattering and total reaction cross section for the $^6\text{He} + ^{27}\text{Al}$ system. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 647, 30-35.	4.1	102
60	Tunneling through a parabolic barrier coupled to an oscillatory degree of freedom: Application to heavy-ion fusion at sub-barrier energies. <i>Nuclear Physics A</i> , 2007, 786, 90-106.	1.5	6
61	Comparison between heavy-ion reaction and fusion processes for hundreds of systems. <i>Nuclear Physics A</i> , 2006, 764, 135-148.	1.5	72
62	Disentangling the reaction mechanisms of weakly bound nuclei. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2006, 634, 356-361.	4.1	53
63	Low Energy Transfer Cross-Section for Borromean Halo Nuclei and the Breakup Threshold Anomaly. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
64	Fusion and Breakup of Weakly Bound Nuclei. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	1
65	Elastic Scattering and Reaction Cross Section of the $^6\text{He}+^{27}\text{Al}$ System Close to the Coulomb Barrier. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
66	$^{18}\text{O}+^{110}\text{Pd}$: Measurements and realistic coupled-channel analysis in a transitional region. <i>Physical Review C</i> , 2006, 74, .	2.9	12
67	Reaction dynamics of the $^{18}\text{O}+^{58}\text{Ni}$ system: A wide-ranging test. <i>Physical Review C</i> , 2006, 73, .	2.9	20
68	New manifestation of the dispersion relation: Breakup threshold anomaly. <i>Physical Review C</i> , 2006, 73, .	2.9	128
69	Comprehensive study of reaction mechanisms for the $^9\text{Be}+^{144}\text{Sm}$ system at near- and sub-barrier energies. <i>Physical Review C</i> , 2006, 73, .	2.9	144
70	Consistent analysis of peripheral reaction channels and fusion for the $^{16,18}\text{O}+^{58}\text{Ni}$ systems. <i>Nuclear Physics A</i> , 2005, 748, 59-74.	1.5	45
71	Study of the effects of Pauli blocking and Pauli nonlocality on the optical potential. <i>Nuclear Physics A</i> , 2005, 753, 83-93.	1.5	17
72	Pycnonuclear reaction rates between neutron-rich nuclei. <i>Nuclear Physics A</i> , 2005, 758, 134-137.	1.5	3

#	ARTICLE	IF	CITATIONS
73	Elastic, inelastic scatterings and transfer reactions for $^{16,18}\text{O}$ on ^{58}Ni described by the São Paulo potential. Brazilian Journal of Physics, 2005, 35, 909-911.	1.4	10
74	Near-Barrier Elastic Scattering of Weakly Bound Nuclei and the Threshold Anomaly. AIP Conference Proceedings, 2005, , .	0.4	0
75	Pycnonuclear $^{12}\text{C}+^{12}\text{C}$ reaction at zero temperature. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1859-S1863.	3.6	1
76	Reliable potential for studying fusion of weakly bound nuclei. Physical Review C, 2005, 72, .	2.9	51
77	Nuclear fusion in dense matter: Reaction rate and carbon burning. Physical Review C, 2005, 72, .	2.9	128
78	General behavior of the effective nucleon-nucleon interaction as a function of the relative velocity. Physical Review C, 2005, 72, .	2.9	2
79	Effect of the breakup on the fusion and elastic scattering of weakly bound projectiles on ^{64}Zn . Physical Review C, 2005, 71, .	2.9	121
80	Fusion, break-up and elastic scattering of weakly bound nuclei. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1669-S1673.	3.6	68
81	Threshold anomaly with weakly bound projectiles: Elastic scattering of $^{9}\text{Be}+^{27}\text{Al}$. Physical Review C, 2004, 70, .	2.9	70
82	Coulomb and nuclear potentials between deformed nuclei. Physical Review C, 2004, 70, .	2.9	31
83	Global and consistent analysis of the heavy-ion elastic scattering and fusion processes. Physical Review C, 2004, 69, .	2.9	63
84	Accurate approximation for the Coulomb potential between deformed nuclei. Physical Review C, 2004, 70, .	2.9	15
85	Fusion, reaction and break-up cross sections of weakly bound projectiles on ^{64}Zn . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 601, 20-26.	4.1	110
86	Quasi-free ^{238}U cross section in macroscopic–microscopic approach. Nuclear Physics A, 2003, 713, 24-44.	1.5	7
87	A parameter-free optical potential for the heavy-ion elastic scattering process. Nuclear Physics A, 2003, 723, 93-103.	1.5	134
88	Coulomb excitation of ^{11}B reexamined. Physical Review C, 2003, 67, .	2.9	25
89	Systematical study of the optical potential for systems like $A+^{58}\text{Ni}$ from sub-barrier data analyses. Physical Review C, 2003, 67, .	2.9	21
90	Experimental determination of the surface density for the ^6He exotic nucleus. Physical Review C, 2003, 67, .	2.9	52

#	ARTICLE	IF	CITATIONS
91	Toward a global description of the nucleus-nucleus interaction. Physical Review C, 2002, 66, .	2.9	481
92	Determination of the ^{12}C nuclear density through heavy-ion elastic scattering experiments. Physical Review C, 2002, 65, .	2.9	30
93	Effect of the ^{18}O nuclear density on the nuclear potentials of the $^{18}\text{O}+^{58,60}\text{Ni}$ systems. Nuclear Physics A, 2002, 707, 325-342.	1.5	34
94	Precise nuclear matter densities from heavy-ion collisions. Physical Review C, 2001, 65, .	2.9	18
95	The heavy-ion nuclear potential: determination of a systematic behavior at the region of surface interaction distances. Nuclear Physics A, 2001, 679, 287-303.	1.5	48
96	Experimental determination of the ion-ion potential in the $N = 50$ target region: A tool to probe ground-state nuclear densities. Nuclear Physics A, 1999, 656, 187-208.	1.5	46
97	Nonlocal effects in the ^8Be breakup. Physical Review C, 1998, 58, 1627-1633.	2.9	5
98	Parameterfree account of quasielastic scattering of stable and radioactive nuclei. Physical Review C, 1998, 58, 576-578.	2.9	64
99	The ion - ion potential and neutron transfer processes in the systems at sub-barrier energies. Journal of Physics G: Nuclear and Particle Physics, 1997, 23, 1473-1477.	3.6	2
100	Nonlocal Description of the Nucleus-Nucleus Interaction. Physical Review Letters, 1997, 79, 5218-5221.	7.8	239
101	Pauli Nonlocality in Heavy-Ion Rainbow Scattering: A Further Test of the Folding Model. Physical Review Letters, 1997, 78, 3270-3273.	7.8	97
102	Fusion and peripheral processes in the $^{16,18}\text{O}+^{58,60,64}\text{Ni}$ systems. Physical Review C, 1997, 55, 3155-3158.	2.9	31
103	Target characteristics and the precision of nuclear measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 397, 163-171.	1.6	2
104	Isotopic dependence of the ion-ion potential in the systems $^{16}\text{O}+^{58,60,62,64}\text{Ni}$. Nuclear Physics A, 1996, 597, 253-268.	1.5	38
105	Experimental investigation of the ion-ion potential for the system at large interaction distances. Nuclear Physics A, 1995, 582, 305-313.	1.5	14
106	Second order effects in the algebraic potential for heavy-ion systems near the Coulomb barrier. Physical Review C, 1994, 50, 3033-3036.	2.9	8
107	Thickness measurements of carbon stripper foils using optical transmittance. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 334, 181-184.	1.6	1
108	Pair transfer and the sub-barrier fusion of $^{18}\text{O}+^{58}\text{Ni}$. Physical Review C, 1992, 46, 2360-2363.	2.9	51

#	ARTICLE	IF	CITATIONS
109	Isotopic dependence of the fusion cross section in the systems $^{16,18}\text{O} + ^{63,65}\text{Cu}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 275, 29-32.	4.1	16
110	Effect of the threshold anomaly on the fusion cross sections for the systems $^{16}\text{O} + ^{63,65}\text{Cu}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 220, 347-350.	4.1	18
111	Role of inelastic couplings in the $^4\text{He} + ^{208}\text{Pb}$ elastic scattering in a wide energy range. Journal of Physics G: Nuclear and Particle Physics, 0, , .	3.6	1