Filomena M Nunes

List of Publications by Year
in descending order

106 papers	3,879 citations	136950 32 h-index	144013 57 g-index
109 all docs	109 docs citations	109 times ranked	2050 citing authors

#	Article	IF	Citations
1	Solar fusion cross sections. II. The<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mi>p</mml:mi></mml:math>chain and CNO cycles. Reviews of Modern Physics, 2011, 83, 195-245.	45.6	574
2	Transfer and/or Breakup Modes in theH6e+B209iReaction near the Coulomb Barrier. Physical Review Letters, 2000, 84, 5058-5061.	7.8	185
3	Calculations of three-body observables in8Bbreakup. Physical Review C, 2001, 63, .	2.9	165
4	Core excitation in one neutron halo systems. Nuclear Physics A, 1996, 596, 171-186.	1.5	124
5	Multistep effects in sub-Coulomb breakup. Physical Review C, 1999, 59, 2652-2659.	2.9	107
6	Core excitation in three-body systems: Application to 12Be. Nuclear Physics A, 1996, 609, 43-73.	1.5	95
7	Three-body description of direct nuclear reactions: Comparison with the continuum discretized coupled channels method. Physical Review C, 2007, 76, .	2.9	87
8	FaCE: a tool for three body Faddeev calculations with core excitation. Computer Physics Communications, 2004, 161, 87-107.	7.5	85
9	Halo Nucleus<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>11</mml:mn></mml:mmultiscripts></mml:math>: A Spectroscopic Study via Neutron Transfer. Physical Review Letters, 2012, 108, 192701.	7.8	79
10	Extended continuum discretized coupled channels method: Core excitation in the breakup of exotic nuclei. Physical Review C, 2006, 74, .	2.9	72
11	Optical potential from first principles. Physical Review C, 2017, 95, .	2.9	71
12	Testing the continuum-discretized coupled channels method for deuteron-induced reactions. Physical Review C, 2012, 85, .	2.9	63
13	Direct reaction measurements with a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>132</mml:mn></mml:msup></mml:math>Sn radioactive ion beam. Physical Review C, 2011, 84, .	2.9	62
14	Toward a complete theory for predicting inclusive deuteron breakup away from stability. European Physical Journal A, 2017, 53, 1.	2.5	62
15	Nuclear theory and science of the facility for rare isotope beams. Modern Physics Letters A, 2014, 29, 1430010.	1.2	57
16	Direct Comparison between Bayesian and Frequentist Uncertainty Quantification for Nuclear Reactions. Physical Review Letters, 2019, 122, 232502.	7.8	54
17	Scaling and interference in the dissociation of halo nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 640, 91-95.	4.1	51
18	Are spectroscopic factors from transfer reactions consistent with asymptotic normalization coefficients?. Physical Review C, 2007, 75, .	2.9	50

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19	Nuclear interference effects in8Bsub-Coulomb breakup. Physical Review C, 1998, 57, R2818-R2820.	2.9	46
20	Adiabatic approximation versus exact Faddeev method for (d,p) and (p,d) reactions. Physical Review C, 2011, 84, .	2.9	46
21	Reaction models to probe the structure of light exotic nuclei. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, R89-R132.	3.6	45
22	Get on the BAND Wagon: a Bayesian framework for quantifying model uncertainties in nuclear dynamics. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 072001.	3.6	42
23	Combined method to extract spectroscopic information. Physical Review C, 2005, 72, .	2.9	41
24	Microscopic optical potentials for calcium isotopes. Physical Review C, 2018, 98, .	2.9	41
25	Comparing nonperturbative models of the breakup of neutron-halo nuclei. Physical Review C, 2012, 85, .	2.9	40
26	Explicit inclusion of nonlocality in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>(</mml:mo><mml:mi>d</mml:mi><mml:mo>,</mml:mo reactions. Physical Review C, 2016, 93, .	2.9	39
27	Transfer to the continuum and breakup reactions. Nuclear Physics A, 2006, 767, 138-154.	1.5	38
28	White paper: from bound states to the continuum. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 123001.	3.6	38
29	Reactions of a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow /><mml:mn>10</mml:mn></mml:msup></mml:math>Be beam on proton and deuteron targets. Physical Review C, 2013, 88, .	2.9	36
30	Searching for a polarization potential in the breakup of8B. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 513-521.	3.6	35
31	Extracting (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 287 Td (d direct capture cross sections from Coulomb dissociation: Application to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none		

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37	Influence of the projectile description on breakup calculations. Physical Review C, 2006, 73, .	2.9	30
38	Finite-range effects in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mi>d</mml:mi><mml:mo>,</mml:mo><mml:mi>p</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock	2.9	30
39	Testing the Perey effect. Physical Review C, 2014, 89, .	2.9	30
40	Effects of nonlocal potentials on(p,d)transfer reactions. Physical Review C, 2015, 92, .	2.9	30
41	Core transitions in the breakup of exotic nuclei. Physical Review C, 2006, 73, .	2.9	29
42	Asymptotic normalization coefficients from the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>14</mml:mn></mml:msup></mml:math>C(<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (xmlns:mml="http://w	2.9	29
43	Core excitation in 12Be. Nuclear Physics A, 2002, 703, 593-602.	1.5	28
44	Reaction mechanisms in the scattering of8Lion208Pbaround the Coulomb barrier. Physical Review C, 2003, 68, .	2.9	28
45	Peripherality of breakup reactions. Physical Review C, 2007, 75, .	2.9	27
46	Benchmark on neutron capture extracted from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mi>d</mml:mi><mml:mo>,</mml:mo><mml:mi>p</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock	2.9	27
47	Theory of (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 357 Td (dis and (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 337 Td (display reactions including breakup: Comparison of methods. Physical Review C, 2009, 80, .	2.9	25
48	Constraining transfer cross sections using Bayes' theorem. Physical Review C, 2018, 97, .	2.9	25
49	Toward emulating nuclear reactions using eigenvector continuation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 823, 136777.	4.1	24
50	Transfer reaction code with nonlocal interactions. Computer Physics Communications, 2016, 207, 499-517.	7.5	23
51	Indirect techniques in nuclear astrophysics. European Physical Journal A, 2006, 27, 205-215.	2.5	22
52	Systematic uncertainties in direct reaction theories. Journal of Physics G: Nuclear and Particle Physics, 2015, 42, 034014.	3.6	22
53	Uncertainty quantification for optical model parameters. Physical Review C, 2017, 95, .	2.9	22
54	Valence pairing, core deformation and the development of two-neutron halos. Nuclear Physics A, 2005, 757, 349-359.	1.5	19

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55	Separable representation of phenomenological optical potentials of Woods-Saxon type. Physical Review C, 2013, 88, .	2.9	19
56	Energy dependence of nonlocal optical potentials. Physical Review C, 2017, 96, .	2.9	19
57	Low energy behavior of the astrophysical S-factor in radiative captures to loosely bound final states. Nuclear Physics A, 2002, 708, 437-459.	1.5	18
58	Two-neutron overlap functions for 6He from a microscopic structure model. Nuclear Physics A, 2010, 847, 1-23.	1.5	18
59	Exploration of the energy dependence of proton nonlocal optical potentials. Physical Review C, 2018, 98, .	2.9	18
60	Exploring experimental conditions to reduce uncertainties in the optical potential. Physical Review C, 2019, 100, .	2.9	18
61	Nuclear Reactions in Astrophysics: A Review of Useful Probes for Extracting Reaction Rates. Annual Review of Nuclear and Particle Science, 2020, 70, 147-170.	10.2	18
62	Recent advances in the quantification of uncertainties in reaction theory. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 014001.	3.6	18
63	Effects of deformation in the three-body structure of. Nuclear Physics A, 2006, 775, 23-34.	1.5	17
64	Three-body model for the two-neutron emission of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>16</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2017, 95, .	2.9	17
65	Uncertainty quantification due to optical potentials in models for (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 Td (x	2.9	16
66	Insight into continuum couplings. Nuclear Physics A, 2004, 736, 255-268.	1.5	15
67	One-neutron halo structure by the ratio method. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 705, 112-115.	4.1	15
68	Breakup and core coupling in14N(7Be,8B)13C. Physical Review C, 2003, 67, .	2.9	14
69	Be7breakup on heavy and light targets. Physical Review C, 2004, 70, .	2.9	14
70	Examining the effect of nonlocality in(d,n)transfer reactions. Physical Review C, 2016, 94, .	2.9	13
71	Separable representation of proton-nucleus optical potentials. Physical Review C, 2014, 90, .	2.9	12
72	Statistical tools for a better optical model. Physical Review C, 2021, 104, .	2.9	11

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73	The ratio method: A new tool to study one-neutron halo nuclei. Physical Review C, 2013, 88, .	2.9	10
74	Coulomb problem in momentum space without screening. Physical Review C, 2014, 90, .	2.9	10
75	Li6 in a three-body model with realistic Forces: Separable versus nonseparable approach. Physical Review C, 2017, 96, .	2.9	10
76	Deuteron- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> scattering: Separable versus nonseparable Faddeev approach. Physical Review C, 2019, 100, .	2.9	10
77	Informing direct neutron capture on tin isotopes near the N=82 shell closure. Physical Review C, 2019, 99, .	2.9	10
78	Asymptotic normalization of mirror states and the effect of couplings. Physical Review C, 2011, 84, .	2.9	9
79	Nonlocal interactions in the (d,p) surrogate method for (n,Î³) reactions. Physical Review C, 2018, 98, .	2.9	8
80	Constraining spectroscopic factors near the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>r</mml:mi></mml:math> -process path using combined measurements: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Kr</mml:mi><mml:mprescripts /><mml:none /><mml:mn>86</mml:mn></mml:mmultiscripts></mml:math> <mml:math		

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91	Study of cluster structures in nuclei through the ratio method. European Physical Journal A, 2020, 56, 1.	2.5	3
92	The continuum in reactions with light exotic nuclei. Brazilian Journal of Physics, 2003, 33, 195.	1.4	2
93	Recent developments in the eikonal description of the breakup of exotic nuclei. Journal of Physics: Conference Series, 2016, 724, 012005.	0.4	2
94	Properties of a separable representation of optical potentials. Physical Review C, 2020, 102, .	2.9	2
95	The ratio method: a new way to look at halo nuclei. EPJ Web of Conferences, 2014, 66, 03014.	0.3	1
96	Considering nonlocality in the optical potentials within eikonal models. Physical Review C, 2021, 104, .	2.9	1
97	Progress on reactions with exotic nuclei. European Physical Journal A, 2005, 25, 295-297.	2.5	0
98	7Be breakup on heavy and light targets. European Physical Journal A, 2005, 25, 647-648.	2.5	0
99	COUPLING EFFECTS IN THE EXTRACTION OF SPECTROSCOPIC FACTORS. International Journal of Modern Physics E, 2011, 20, 934-937.	1.0	0
100	Mechanisms of direct reactions with halo nuclei. Journal of Physics: Conference Series, 2013, 436, 012040.	0.4	0
101	Separable Potentials for (d,p) Reaction Calculations. Journal of Physics: Conference Series, 2016, 724, 012014.	0.4	0
102	Towards a Faddeev-AGS description of (d,p) reactions with heavy nuclei: Regularizing integrals with Coulomb functions.. EPJ Web of Conferences, 2016, 113, 03016.	0.3	0
103	Two neutron decay of16Be. EPJ Web of Conferences, 2016, 113, 06015.	0.3	0
104	Extracting capture from transfer reactions. Journal of Physics: Conference Series, 2020, 1668, 012030.	0.4	0
105	Single Neutron Structure of Neutron-Rich N = 50 Nuclei. , 2017, , .		0
106	Progress on reactions with exotic nuclei. , 2005, , 295-297.		0