Peter Mohr

List of Publications by Year
in descending order

51 papers	964 citations	394421 19 h-index	454955 30 g-index
51 all docs	51 docs citations	51 times ranked	607 citing authors

#	Article	IF	Citations
1	Uniform Î±-nucleus potential in a wide range of masses and energies. Physical Review C, 1996, 53, 1336-1347.	2.9	106
2	Î±-nucleus potentials for the neutron-deficientpnuclei. Physical Review C, 2000, 61, .	2.9	85
3	Alpha-cluster states ofPo212in a realistic potential model. Physical Review C, 1994, 50, 2631-2634.	2.9	50
4	Super-allowed Î± decay above doubly-magic 100Sn and properties of 104Te = 100Sn âŠ— Î±. European Physical Journal A, 2007, 31, 23-28.	2.5	47
5	Elastic alpha scattering experiments and the alpha-nucleus optical potential at low energies. Atomic Data and Nuclear Data Tables, 2013, 99, 651-679.	2.4	47
6	OPPORTUNITIES TO CONSTRAIN ASTROPHYSICAL REACTION RATES FOR THEs-PROCESS VIA DETERMINATION OF THE GROUND-STATE CROSS-SECTIONS. Astrophysical Journal, 2011, 738, 143.	4.5	43
7	The15N(Î±,Î³)19Freaction and nucleosynthesis of19F. Physical Review C, 2002, 66, .	2.9	41
8	Photo-induced nucleosynthesis: Current problems and experimental approaches. European Physical Journal A, 2007, 32, 357-369.	2.5	36
9	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -decay properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mn>118</mml:mn><mml:mprescripts /><mml:none /><mml:mn>296</mml:mn></mml:mmultiscripts></mml:math> from double-folding potentials. Physical Review C, 2017, 95, .	2.9	28
10	Successful Prediction of Total <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math> -Induced Reaction Cross Sections at Astrophysically Relevant Sub-Coulomb Energies Using a Novel Approach. Physical Review Letters, 2020, 124, 252701.	7.8	28
11	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 ETQq1 1 0.784314 rgBT	2.9	27
12	Relation between total cross sections from elastic scattering andÎ±-induced reactions: The example of64Zn. Physical Review C, 2012, 86, .	2.9	26
13	High precision<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>113</mml:mn></mml:msup></mml:math>In(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:	2.9	25
14	Neutron capture of26Mgat thermonuclear energies. Physical Review C, 1998, 58, 932-941.	2.9	24
15	Cross sections of Î±-induced reactions for targets with masses A â‰ˆ 20â€“50 at low energies. European Physical Journal A, 2015, 51, 1.	2.5	24
16	Measurement of neutron capture onCa48at thermal and thermonuclear energies. Physical Review C, 1996, 54, 2014-2022.	2.9	21
17	Role of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mi>Î±</mml:mi><mml:mo>,</mml:mo><mml:ms xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>r</mml:mi></mml:math>-process conditions in neutrino-driven winds reexamined. Physical Review C, 2016, 94, .	2.9	21
18	Properties of8Be and12C deduced from the folding-potential model. Zeitschrift FÃ¼r Physik A, 1994, 349, 339-340.	0.9	19

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19	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reaction cross sections of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Zn</mml:mi><mml:mprescripts /><mml:none /><mml:mn>64</mml:mn></mml:mmultiscripts></mml:math> at low energies. Physical	2.9	19
20	RE-EVALUATION OF THE¹⁶O(N,Î³)¹⁷O CROSS SECTION AT ASTROPHYSICAL ENERGIES AND ITS ROLE AS A NEUTRON POISON IN THEs-PROCESS. Astrophysical Journal, 2016, 827, 29.	4.5	18
21	scattering and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reaction cross sections of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi	2.9	17
22	Low-energy direct capture in theO16(Î±,Î³)Ne20reaction. Physical Review C, 2005, 72, .	2.9	16
23	display="inline"><mml:msup><mml:mrow /><mml:mn>141</mml:mn></mml:msup></mml:math>Pr(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (xmlns:	2.9	15
24	$ alpha$ Î± -cluster states in 46,54Cr from double-folding potentials. European Physical Journal A, 2017, 53, 1.	2.5	15
25	mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>Î±</mml:mi></mml:mrow><mml:mo>,</mml:mo> mathvariant="normal">O</mml:mi><mml:mprescripts /><mml:none	2.9	14
26	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reactions on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>In</mml:mi><mml:mprescripts /><mml:none /><mml:mn>115</mml:mn></mml:mmultiscripts></mml:math> : Cross section measurements and statistical model analysis. Physical Review C, 2018, 97,	2.9	13
27	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reactions on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Au</mml:mi><mml:mprescripts /><mml:none /><mml:mn>197</mml:mn></mml:mmultiscripts></mml:math> at low energies.	2.9	12
28	Astrophysical reaction rates of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e6953" altimg="si202.svg"><mml:mi>Î±</mml:mi></mml:math>-induced reactions for nuclei with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e6958" altimg="si8.svg"><mml:mrow><mml:mn>26</mml:mn><mml:mo linebreak="goodbreak" linebreakstyle="after">â‰¤</mml:mo><mml:mi>Z</mml:mi><mml:mo linebreak="goodbreak"	2.4	12
29	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ac</mml:mi><mml:mprescripts /><mml:none /><mml:mn>38</mml:mn></mml:mmultiscripts><mml:mo>+</mml:mo><mml:mi>Î±</mml:mi></mml:mrow></mml:math> reaction cross sections relevant to the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ca</mml:mi><mml:mprescripts	2.9	11
30	Low-energy Measurement of the ⁹⁶Zr(Î±,n)⁹⁹Mo Reaction Cross Section and Its Impact on Weak r-process Nucleosynthesis. Astrophysical Journal, 2021, 908, 202.	4.5	11
31	Activation thick target yield measurement of Mo100(Î±,n)Ru103 for studying the weak r -process nucleosynthesis. Physical Review C, 2021, 104, .	2.9	11
32	Relation between the 16O(Î±,Î³)20Ne reaction and its reverse 20Ne(Î³,Î±)16O reaction in stars and in the laboratory. European Physical Journal A, 2006, 27, 75-78.	2.5	10
33	Î±-Cluster States in Intermediate Mass Nuclei. The Open Nuclear & Particle Physics Journal, 2008, 1, 1-8.	1.0	9
34	Resonance strengths for the reaction28Si(Î±,Î³)32Sat low energies. Physical Review C, 2002, 66, .	2.9	8
35	Spectroscopic factors for bounds-wave states derived from neutron scattering lengths. Physical Review C, 1997, 55, 1591-1593.	2.9	7
36	Uncertainty of the astrophysical <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">O</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>17</mml:mn><mml:mo>,</mml:mo><mml:mn>18</mml:mn></mml:mrow></mml:mmultiscripts><mml:mo>(/><mml:none /><mml:mrow><mml:mn>20</mml:mn><mml:mo>,</mml:mo><mml:mn>21</mml:mn>. Physical Review C, 2017, 96, .	2.9	7

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37	Cross-sections at sub-Coulomb energies: Full optical model versus barrier transmission for 40Ca + Î±. International Journal of Modern Physics E, 2019, 28, 1950029.	1.0	6
38	First direct measurement of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Cu</mml:mi><mml:mprescripts /><mml:none /><mml:mn>59</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>p</mml:mi><mml:mo>,</mml:mo><mml:mi>Î±</mml:mi><mml:none /><mml:mn>56</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> : A step towards constraining the Ni-Cu cycle in the cosmos. Physical Review C, 2021, 104, .	2.9	6
39	Fusion cross sectionAof <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reactions for heavy target nuclei. Physical Review C, 2022, 105, .	2.9	4
40	The ⁹⁵Zr(n, Î³)⁹⁶Zr Cross Section from the Surrogate Ratio Method and Its Effect on s-process Nucleosynthesis. Astrophysical Journal, 2017, 848, 98.	4.5	3
41	Cross sections of Î± -induced reactions slightly below doubly magic Ca40 from the statistical model. Physical Review C, 2018, 98, .	2.9	3
42	Activation measurement of a-induced cross sections for 197Au: analysis in the statistical model and beyond. Journal of Physics: Conference Series, 2020, 1668, 012042.	0.4	3
43	Impact of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Mo</mml:mi><mml:mprescripts /><mml:none /><mml:mn>100</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>Î±</mml:mi><mml:mo>,</mml:mo><mml:mi>x</mml:mi>	2.9	3
44	High-precision Â<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Sm</mml:mi><mml:mprescripts /><mml:none /><mml:mn>144</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>Î±</mml:mi><mml:none /><mml:mn>144</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> scattering at low energies and the rate of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:none /><mml:mn>9</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>n</mml:mi><mml:mo>,</mml:mo><mml:mi>Î³</mml:mi><mml:none /><mml:mn>10</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>. Physical Review C, 2019, 99, .	2.9	3
45	Physical Review	2.9	2
46	Activation cross section measurement of the ¹⁰⁰Mo(Î±,n)¹⁰³Ru reaction for optical potential studies. Journal of Physics: Conference Series, 2020, 1668, 012041.	0.4	2
47	Yrast band in the heavy N = Z nucleus ^{88}Ru: $$alpha $$-cluster approach. European Physical Journal A, 2020, 56, 1.	2.5	2
48	The ⁵⁹Fe (n,Î³) ⁶⁰Fe Cross Section from the Surrogate Ratio Method and Its Effect on the ⁶⁰Fe Nucleosynthesis. Astrophysical Journal, 2021, 919, 84.	4.5	2
49	First direct measurement of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">N</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>Î±</mml:mi><mml:mo>,</mml:mo><mml:mi>p</mml:mi>	2.9	2
50	Comment on â€œObservation of annual modulation induced by <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> rays from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mrow><mml:mi>Î±</mml:mi></mml:mo><mml:mo>,</mml:mo> reactions at the Soudan Underground Laboratoryâ€• Physical Review C, 2020, 101, .	2.9	0
51	Exploring the uncertainties of (Î±, xn) reactions for the weak r-process. EPJ Web of Conferences, 2022, 260, 07003.	0.3	0