

Tamás Szűcs

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7171747/publications.pdf>

Version: 2024-02-01

126
papers

2,271
citations

159585

30
h-index

289244

40
g-index

129
all docs

129
docs citations

129
times ranked

1207
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement of the $^{15}\text{O}(\alpha, n)^{18}\text{F}$ reaction. <i>Physical Review C</i> , 2020, 101, 054601.	2.9	15
2	^{7}Be cross section measurement around ^{7}Be known energy levels. EPJ Web of Conferences, 2022, 260, 11002.	0.3	0
3	Measurement of the $^{144}\text{Sm}(\alpha, n)^{147}\text{Eu}$ scattering at low energy. <i>Physical Review C</i> , 2021, 104, 054601.	2.9	15
4	$^{2}\text{H}(\alpha, n)^{5}\text{He}$ reaction. <i>Physical Review C</i> , 2020, 101, 054601.	2.9	15
5	Indirect determination of the astrophysical $^{26}\text{Al}(\alpha, n)^{29}\text{Si}$ factor for the ^{26}Al reaction. <i>Physical Review C</i> , 2021, 104, 054601.	1.6	21
6	$^{6}\text{Li}(\alpha, n)^{9}\text{Be}$ reaction. <i>Physical Review C</i> , 2021, 104, 054601.	2.9	15
7	$^{26}\text{Al}(\alpha, n)^{29}\text{Si}$ reaction. <i>Physical Review C</i> , 2021, 104, 054601.	2.4	12
8	Low-energy resonances in the $^{26}\text{Al}(\alpha, n)^{29}\text{Si}$ reaction. <i>Physical Review C</i> , 2021, 104, 054601.	2.9	13
9	Measurement of the $^{91}\text{Zr}(\alpha, n)^{94}\text{Nb}$ cross section motivated by type Ia supernova nucleosynthesis. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2021, 48, 105202.	3.6	5
10	Activation thick target yield measurement of $^{100}\text{Mo}(\alpha, n)^{103}\text{Ru}$ for studying the weak r -process nucleosynthesis. <i>Physical Review C</i> , 2021, 104, 054601.	2.9	11
11	Measurement of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction. <i>Physical Review C</i> , 2021, 104, 054601.	7.8	40
12	Opportunities for measurements of astrophysical $^{16}\text{O}(\alpha, n)^{19}\text{F}$ relevant alpha-capture reaction rates at CRYRING@ESR. <i>X-Ray Spectrometry</i> , 2020, 49, 129-132.	1.4	2
13	Astrophysical S-factor for the $^{3}\text{He}(\alpha, n)^{7}\text{Be}$ reaction via the asymptotic normalization coefficient (ANC) method. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 807, 135606.	4.1	30
14	The baryon density of the Universe from an improved rate of deuterium burning. <i>Nature</i> , 2020, 587, 210-213.	27.8	101
15	Determination of luminosity for in-ring reactions: A new approach for the low-energy domain. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 982, 164367.	1.6	2
16	Underground experimental study finds no evidence of low-energy resonance in the $^{6}\text{Li}(\alpha, n)^{9}\text{Be}$ reaction. <i>Physical Review C</i> , 2020, 102, 054601.	2.9	13
17	A new approach to monitor ^{13}C targets degradation in situ for $^{13}\text{C}(\alpha, n)^{16}\text{O}$. <i>Physical Review C</i> , 2020, 102, 054601.	2.5	20
18	Neutron flux and spectrum in the Dresden Felsenkeller underground facility studied by moderated ^{3}He counters. <i>Physical Review D</i> , 2020, 101, 054001.	4.7	10

#	ARTICLE	IF	CITATIONS
19	Successful Prediction of Total $\langle \sigma \rangle$ -Induced Reaction Cross Sections at Astrophysically Relevant Sub-Coulomb Energies Using a Novel Approach. Physical Review Letters, 2020, 124, 252701.	7.8	28
20	Activation measurement of α -induced cross sections for ^{197}Au : analysis in the statistical model and beyond. Journal of Physics: Conference Series, 2020, 1668, 012042.	0.4	3
21	Setup commissioning for an improved measurement of the $D(p, \gamma)^3\text{He}$ cross section at Big Bang Nucleosynthesis energies. European Physical Journal A, 2020, 56, 1.	2.5	22
22	Resonance strengths in the $N^{14}(p, \gamma)O^{15}$ astrophysical key reaction measured with activation. Physical Review C, 2019, 100, .	2.9	11
23	Direct measurements of low-energy resonance strengths of the $^{23}\text{Na}(p, \gamma)^{24}\text{Mg}$ reaction for astrophysics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 122-128.	4.1	23
24	Cross section of the reaction $^{18}\text{O}(p, \gamma)^{19}\text{F}$ at astrophysical energies: The 90 keV resonance and the direct capture component. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134900.	4.1	18
25	Improved astrophysical rate for the $^{18}\text{O}(p, \gamma)^{19}\text{F}$ reaction by underground measurements. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 237-242.	4.1	22
26	Cross section and neutron angular distribution measurements of neutron scattering on natural iron. Physical Review C, 2019, 99, .	2.9	13
27	$^{24}\text{Mg}(p, \gamma)^{25}\text{Mg}$ cross section around the $^{24}\text{Mg}(p, \gamma)^{25}\text{Mg}$ resonance. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134900.	4.1	18
28	Half-life measurement of ^{65}Ga with β^+ -spectroscopy. Applied Radiation and Isotopes, 2019, 148, 87-90.	1.5	3
29	High precision half-life measurement of ^{125}Cs and ^{125}Xe with β^+ -spectroscopy. Nuclear Physics A, 2019, 986, 213-222.	1.5	3
30	The muon intensity in the Felsenkeller shallow underground laboratory. Astroparticle Physics, 2019, 112, 24-34.	4.3	11
31	Approaching the Gamow Window with Stored Ions: Direct Measurement of $^{124}\text{Xe}(p, \gamma)$ in the ESR Storage Ring. Physical Review Letters, 2019, 122, 092701.	7.8	38
32	Background in β^+ -ray detectors and carbon beam tests in the Felsenkeller shallow-underground accelerator laboratory. European Physical Journal A, 2019, 55, 1.	2.5	13
33	α -induced reactions on ^{197}Au at sub-Coulomb energies. Physical Review C, 2019, 100, .	2.9	12
34	The new Felsenkeller 5 MV underground accelerator. , 2019, , .		6
35	Investigation of α -induced reactions on Sb isotopes relevant to the astrophysical $^{121}\text{Sb}(p, \gamma)^{122}\text{Sb}$ process. Physical Review C, 2018, 97, .	2.9	20
36	Improved background suppression for radiative capture reactions at LUNA with HPGc and BGO detectors. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 025203.	3.6	30

#	ARTICLE	IF	CITATIONS
55	Target characterizations for a $^{14}\text{N}(p, \hat{p}^3)^{15}\text{O}$ cross section measurement. EPJ Web of Conferences, 2017, 165, 01027.	0.3	1
56	\hat{p}^{\pm} -induced reaction cross section measurements on ^{197}Au . EPJ Web of Conferences, 2017, 165, 01050.	0.3	0
57	Angular distribution measurement of gamma rays from inelastic neutron scattering on ^{56}Fe at the nELBE time-of-flight facility. EPJ Web of Conferences, 2017, 146, 11040.	0.3	3
58	Towards a Total Cross Section Measurement of the $^{14}\text{N}(p, \hat{p}^{\pm})^{15}\text{O}$ Reaction by Activation. , 2017, , .		0
59	Program and status for the planned underground accelerator in the Dresden Felsenkeller. Journal of Physics: Conference Series, 2016, 665, 012030.	0.4	0
60	High precision elastic \hat{p}^{\pm} scattering on the even-odd ^{115}In nucleus at low energies. Journal of Physics: Conference Series, 2016, 665, 012035.	0.4	3
61	Alpha capture reaction cross section measurements on Sb isotopes by activation method. Journal of Physics: Conference Series, 2016, 665, 012042.	0.4	2
62	Cross section measurements for \hat{p}^{\pm} -process studies using a LEPS detector. Journal of Physics: Conference Series, 2016, 665, 012041.	0.4	1
63	Improved Direct Measurement of the 64.5 AkeV Resonance Strength in the \hat{p}^{\pm} -induced reaction cross sections of ^{15}O	2.9	17
64	Improved Direct Measurement of the 64.5 AkeV Resonance Strength in the \hat{p}^{\pm} -induced reaction cross sections of ^{15}O		

#	ARTICLE	IF	CITATIONS
73	<p>Measurement of the $^{96}\text{Ru}(\alpha, n)^{100}\text{Zr}$ reaction cross section</p> <p>Three New Low-Energy Resonances in the $^{96}\text{Ru}(\alpha, n)^{100}\text{Zr}$ Reaction</p> <p> $\text{Ru}(\alpha, n)^{100}\text{Zr}$ </p>	2.9	49
74	<p>Measurement of the $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ reaction cross section</p> <p> $\text{Ne}(\alpha, n)^{25}\text{Mg}$ </p>		

#	ARTICLE	IF	CITATIONS
91	The Karlsruhe Astrophysical Database of Nucleosynthesis in Stars Project "Status and Prospects. Nuclear Data Sheets, 2014, 120, 171-174.	2.2	41
92	KADoNiS-p: The Astrophysical p-Process Database. Nuclear Data Sheets, 2014, 120, 191-193.	2.2	15
93	First Direct Measurement of the $\langle \sigma v \rangle$ of the ${}^6\text{Li}(p,\alpha){}^3\text{He}$ Reaction. Physical Review Letters, 2014, 112, 172501.	7.8	95
94	Cross-section measurements at astrophysically relevant energies: The LUNA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 742, 258-260.	1.6	2
95	Alpha induced reaction cross section measurements on ${}^{162}\text{Er}$ for the astrophysical \hat{p} process. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 735, 40-44.	4.1	30
96	Investigation of \hat{p} -induced reactions on the p nucleus. Nuclear Physics A, 2013, 916, 149-167.	1.5	35
97	Neutron-induced background by an \hat{p} -beam incident on a deuterium gas target and its implications for the study of the ${}^2\text{H}(\hat{p},\hat{n}){}^6\text{Li}$ reaction at LUNA. European Physical Journal A, 2013, 49, 1.	2.5	31
98	Resonance triplet at $E_{\text{th}}=4.5\text{ MeV}$ in the ${}^{40}\text{Ca}(\hat{p},\hat{n}){}^{44}\text{Ti}$ reaction. Physical Review C, 2013, 88, .	2.9	16
99	Activation measurement of the reaction cross section at high energies. Nuclear Physics A, 2013, 908, 1-11.	1.5	52
100	High precision $\langle \sigma v \rangle$ measurement of the ${}^6\text{Li}(p,\alpha){}^3\text{He}$ reaction. Physical Review Letters, 2013, 111, 172501.	2.9	25
101	Relation between total cross sections from elastic scattering and \hat{p} -induced reactions: The example of ${}^{64}\text{Zn}$. Physical Review C, 2012, 86, .	2.9	26
102	Astrophysical analysis of the measurement of (\hat{p},\hat{n}) and (\hat{p},n) cross sections of ${}^{169}\text{Tm}$. Physical Review C, 2012, 86, .	2.9	20
103	First Direct Measurement of the $\langle \sigma v \rangle$ of the ${}^6\text{Li}(p,\alpha){}^3\text{He}$ Reaction. Physical Review Letters, 2014, 112, 172501.	7.8	95
104	Investigation of \hat{p} -induced reactions on ${}^{169}\text{Tm}$. Physical Review C, 2012, 86, 035801.	2.9	0
105	Lifetime measurement of the 6.79 MeV state in ${}^{15}\text{O}$ with the AGATA demonstrator. , 2012, , .		2
106	Towards in-beam (\hat{p},\hat{n}) cross section measurements for the astrophysical \hat{p} -process. Journal of Physics: Conference Series, 2012, 337, 012063.	0.4	1
107	A possible underground accelerator in the Dresden Felsenkeller. Journal of Physics: Conference Series, 2012, 337, 012032.	0.4	1
108	The KADoNiS databases - progress and future plans. Journal of Physics: Conference Series, 2012, 337, 012033.	0.4	7

#	ARTICLE	IF	CITATIONS
109	Experimental study of \hat{I}_{\pm} -induced reactions on ^{64}Zn for the astrophysical \hat{I}^3 -process. Journal of Physics: Conference Series, 2012, 337, 012009. Investigation of \hat{I}_{\pm} -induced reactions on ^{127}I for the astrophysical \hat{I}^3 -process. Physical Review C, 2012, 86, .	0.4	2
110	Investigation of \hat{I}_{\pm} -induced reactions on ^{127}I for the astrophysical \hat{I}^3 -process. Physical Review C, 2012, 86, .	2.9	21
111	Lifetime measurement of the 6.79 MeV state in ^{15}O with the AGATA demonstrator. AIP Conference Proceedings, 2012, , .	0.4	0
112	Thin-window gas cell target for activation cross-section measurements relevant for nuclear astrophysics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 693, 220-225.	1.6	10
113	Preparation and characterisation of isotopically enriched Ta2O5 targets for nuclear astrophysics studies. European Physical Journal A, 2012, 48, 1.	2.5	43
114	Investigation of \hat{I}_{\pm} -induced reactions on ^{130}Ba and ^{132}Ba and their importance for the synthesis of heavy \hat{I}^3 -process. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 419-423.	2.9	38
115	Shallow-underground accelerator sites for nuclear astrophysics: Is the background low enough?. European Physical Journal A, 2012, 48, 1.	2.5	12
116	Half-life measurement of ^{66}Ga with. Applied Radiation and Isotopes, 2012, 70, 278-281.	1.5	6
117	Activation method combined with characteristic X-ray counting: A possibility to measure cross sections on heavy p-nuclei. Nuclear Physics A, 2011, 867, 52-65.	1.5	13
118	Half-life measurement of ^{133}mCe with γ -spectrometry. European Physical Journal A, 2011, 47, 1.	2.5	7
119	Determining reaction cross sections via characteristic X-ray detection: \hat{I}_{\pm} -induced reactions on ^{169}Tm for the astrophysical \hat{I}^3 -process. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 419-423.	4.1	44
120	Alpha-induced reactions for the astrophysical p-process: The case of ^{151}Eu . Journal of Physics: Conference Series, 2010, 202, 012004.	0.4	7
121	$^{96}\text{Ru}(p, \hat{I}^3)^{97}\text{Rh}$ measurement at the GSI storage ring. Journal of Physics: Conference Series, 2010, 202, 012011.	0.4	33
122	An actively vetoed Clover γ -detector for nuclear astrophysics at LUNA. European Physical Journal A, 2010, 44, 513-519.	2.5	33
123	Alpha-induced reaction cross section measurements on ^{151}Eu for the astrophysical \hat{I}^3 -process. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 115201.	3.6	44
124	Resonance strengths in the $^{151}\text{Eu}(\alpha, n)^{154}\text{Gd}$ reaction. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 115201.		