

Michael S Smith

List of Publications by Year in descending order

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152
papers

2,898
citations

147801

31
h-index

189892

50
g-index

158
all docs

158
docs citations

158
times ranked

1380
citing authors

#	ARTICLE	IF	CITATIONS
19	Particle decay of proton-unbound levels in N12. Physical Review C, 2017, 95, . Spectroscopic study of ^{20}Ne reactions using the JENSA gas-jet target to constrain the astrophysical $^{20}\text{Ne}(p,\alpha)^{17}\text{O}$ Microscopic core-quasiparticle coupling model for spectroscopy of odd-mass nuclei. Physical Review C, 2017, 96, .	2.9	5
20	X-ray burst studies with the JENSA gas jet target. EPJ Web of Conferences, 2017, 165, 01043.	0.3	4
23	X-ray Burst Studies with the JENSA Gas Jet Target. , 2017, , .		1
24	Transfer Reactions with ^{134}Xe . , 2017, , .		0
25	Levels in N12 via the $^{14}\text{N}(p,\alpha)^{11}\text{C}$ reaction using the JENSA gas-jet target. Physical Review C, 2015, 92, .	2.9	5
26	Direct reaction experimental studies with beams of radioactive tin ions. AIP Conference Proceedings, 2015, , .	0.4	0
27	$^{24}\text{Mg}(p,\alpha)^{21}\text{Na}$ reaction study for spectroscopy of ^{21}Na . Journal of the Korean Physical Society, 2015, 67, 1435-1439. Constraint of the Astrophysical $^{24}\text{Mg}(p,\alpha)^{21}\text{Na}$ reaction study for spectroscopy of ^{21}Na . Journal of the Korean Physical Society, 2015, 67, 1435-1439.	0.7	2
28	Exploration of direct neutron capture with covariant density functional theory inputs. Physical Review C, 2015, 91, .	7.8	27
29	Analytical continuation from bound to resonant states in the Dirac equation with quadrupole-deformed potentials. Physical Review C, 2015, 92, . Double-Magic Nature of ^{132}Sn and ^{132}Pb states populated in ^{135}Te from ^{9}Be -induced reactions with a ^{132}Sn beam. Physical Review C, 2014, 90, .	2.9	6
30	Microscopic self-consistent study of neon halos with resonant contributions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 730, 30-35.	4.1	34
34	A gas jet target for radioactive ion beam experiments. , 2013, , .		4
35	Reactions of a ^{10}Be beam on proton and deuteron targets. Physical Review C, 2013, 88, .	2.9	36
36	Reexamining the ^{54}Ni decay of $^{53,54}\text{Ni}$, $^{52,53}\text{Co}$, ^{51}Fe , and ^{50}Mn . Physical Review C, 2013, 87, .	2.9	12

#	ARTICLE	IF	CITATIONS
37	Single-neutron levels near the N=82 shell closure. , 2013, , .		0
38	Development of the superorruba detector array and the measurement of single particle states in [⁸¹ Ge. , 2013, , .		3
39	The half-lives of [⁵⁰ Mn, [⁵¹ Fe, [^{52,53} Co, and [^{53,54} Ni. , 2013, , .		0
40	HRIBF studies of r-process nuclei and first results with the new SuperORRUBA detector. , 2013, , .		0
41	Wear measurement of highly crossâ€linked UHMWPE using a ⁷Be tracer implantation technique. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 423-429.	3.4	0
42	PROBING SINGLE-NEUTRON LEVELS IN 127,129Sn VIA TRANSFER REACTIONS. , 2013, , .		1
43	A GAS JET TARGET FOR RADIOACTIVE ION BEAM EXPERIMENTS. , 2013, , .		0
44	Structures of exotic<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mrow><mml:mn>131</mml:mn><mml:mo>, </mml:mo><mml:mn>133</mml:mn></mml:mrow></mml:msup></mml:math>Sn isotopes and effect on<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>r</mml:mi></mml:math>-process nucleosynthesis. Physical Review C, 2012, 86, .	2.9	25
45	¹⁹ Ne levels studied with the ¹⁸ F(d,n) ¹⁹ Ne*(¹⁸ F+p) reaction. Physical Review C, 2012, 85, .	2.9	14
46	Proton decay branching ratio for the 6.15-MeV<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>18</mml:mn></mml:msup></mml:math>Ne level. Physical Review C, 2012, 85, .	2.9	3
47	Neutron Single Particle Structure in<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Sn</mml:mi><mml:mprescripts /><mml:none /><mml:mn>131</mml:mn></mml:mmultiscripts></mml:math> and Direct Neutron Capture Cross Sections. Physical Review Letters, 2012, 109, 172501.	7.8	58
48	²⁶ Al+pelastic and inelastic scattering reactions and galactic abundances of ²⁶ Al. Physical Review C, 2012, 85, .	2.9	4
49			

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55	Single-nucleon transfer reactions on ^{18}F . Physical Review C, 2011, 84, .	2.9	20
56	Comment on "Properties of ^{26}Mg and ^{26}Si in the shell model and the determination of the $^{25}\text{Al}(p, \hat{1}^3)^{26}\text{Si}$ reaction rate". Physical Review C, 2011, 84, .	2.9	3
57	First proton-transfer study of ^{18}F . Search for a resonant enhancement of the $^{18}\text{F}(p, \hat{1}^3)^{19}\text{Ne}$ resonances. Physical Review C, 2011, 84, .	2.9	33
58	$^{7}\text{Be} + \text{Be}$ reaction and primordial d . Physical Review C, 2011, 84, .	2.9	39
59	Nuclear Data for Astrophysics Research: A New Online Paradigm. Journal of the Korean Physical Society, 2011, 59, 761-766.	0.7	4
60	Radioactive Beam Measurements to Probe Stellar Explosions. Nuclear Physics A, 2010, 834, 631c-634c.	1.5	0
61	Spin assignments to excited states in ^{22}Na through ^{22}Mg .	2.9	7
62	Inelastic $^{17}\text{F}(p, p)^{17}\text{F}$ scattering at $E_{\text{c.m.}} = 3 \text{ MeV}$ and the $^{14}\text{O}(\hat{1}^{\pm}, p)^{17}\text{F}$ reaction rate. Physical Review C, 2010, 81, .	2.9	5
63	Comment on "Low-energy $^{17}\text{F}(p, p)^{17}\text{F}$ scattering at $E_{\text{c.m.}} = 3 \text{ MeV}$ and the $^{14}\text{O}(\hat{1}^{\pm}, p)^{17}\text{F}$ reaction rate". Physical Review C, 2010, 81, .		

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73	Analysis of Al^{25} energy levels observed in the $Si^{28}(p, \hat{\pm})Al^{25}$ reaction. Physical Review C, 2009, 80, .	2.9	2
74	The $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mmultiscripts\rangle\langle mml:mi mathvariant="normal">F\langle mml:mi\rangle\langle mml:mprescripts\rangle\rangle\langle mml:none\rangle\rangle\langle mml:mrow\rangle\langle mml:mn>17\langle mml:mn\rangle\langle mml:mrow\rangle\langle mml:mmultiscripts\rangle\langle mml:math\rangle(\langle mml:math\rangle Tj ETQqO 0 0 r g B T / O v e r l o c k 10$		
75	First Direct Measurement of the $F^{17}(p, \hat{\pm})Ne^{18}$ Cross Section. Physical Review Letters, 2009, 102, 152502. Constraint on the astrophysical $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mmultiscripts\rangle\langle mml:mi mathvariant="normal">Ne\langle mml:mi\rangle\langle mml:mprescripts\rangle\rangle\langle mml:none\rangle\rangle\langle mml:mrow\rangle\langle mml:mn>18\langle mml:mn\rangle\langle mml:mrow\rangle\langle mml:mmultiscripts\rangle\langle mml:mrow\rangle\langle mml:mo stretchy="false">(\langle mml:mo\rangle\langle mml:mi\rangle\hat{\pm}\langle mml:mi\rangle\langle mml:mo\rangle,\langle mml:mo\rangle\langle mml:mi\rangle p\langle mml:mi\rangle\langle mml:mo\rangle Tj ETQqO 0 0 r g B T / O v e r l o c k$	7.8	26
76	$\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mmultiscripts\rangle\langle mml:mi mathvariant="normal">Na\langle mml:mi\rangle\langle mml:mprescripts\rangle\rangle\langle mml:none\rangle\rangle\langle mml:mrow\rangle\langle mml:mn>130\langle mml:mn\rangle\langle mml:mrow\rangle\langle mml:mmultiscripts\rangle\langle mml:math\rangle(\langle mml:math\rangle Tj ETQqO 0 0 r g B T / O v e r l o c k$	2.9	28
77	Neutron capture on ^{130}Sn during r -process freeze-out. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 025201.	3.6	32
78	Studies of nuclei close to $[sup 132]Sn$ using single-neutron transfer reactions. , 2009, , .		3
79	Direct measurements of (p, γ) cross-sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator. European Physical Journal A, 2009, 42, 457.	2.5	9
80	Big bang nucleosynthesis with independent neutrino distribution functions. Physical Review D, 2009, 79, .	4.7	16
81	Development of the ORRUBA Silicon Detector Array. , 2009, , .		3
82	Searching for Resonances in the Unbound Nucleus $[sup 6]Be$. , 2009, , .		0
83	Elemental Discrimination of Low-Energy Ions using Risetime Analysis of Silicon-Strip Detector Signals. , 2009, , .		1
84	Spectroscopic study of low-lying $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mmultiscripts\rangle\langle mml:mi mathvariant="normal">N\langle mml:mi\rangle\langle mml:mprescripts\rangle\rangle\langle mml:none\rangle\rangle\langle mml:mrow\rangle\langle mml:mn>16\langle mml:mn\rangle\langle mml:mrow\rangle\langle mml:mmultiscripts\rangle\langle mml:math\rangle$ levels. Physical Review C, 2008, 78, .	2.9	18
85	ORNL Radioactive Beams for Stellar Explosion Studies. AIP Conference Proceedings, 2008, , .	0.4	0
86	Big Bang Nucleosynthesis: Impact of Nuclear Physics Uncertainties on Baryonic Matter Density Constraints. AIP Conference Proceedings, 2008, , .	0.4	0
87	Waiting Points in Nova and X-ray burst Nucleosynthesis. AIP Conference Proceedings, 2008, , .	0.4	1
88	Thermonuclear Reaction Rate Libraries and Software Tools for Nuclear Astrophysics Research. AIP Conference Proceedings, 2008, , .	0.4	0
89	DEVELOPMENT OF ORRUBA: A SILICON ARRAY FOR THE MEASUREMENT OF TRANSFER REACTIONS IN INVERSE KINEMATICS. , 2008, , .		3
90	Measurement of the 183 keV resonance in $O^{17}(p, \hat{\pm})N^{14}$ using a novel technique. Physical Review C, 2007, 75, .	2.9	27

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91	Nuclear structure properties of astrophysical importance for ^{19}Ne above the proton threshold energy. Physical Review C, 2007, 75, .	2.9	46
92	Single-neutron excitations in neutron-rich ^{83}Ge and ^{85}Se . Physical Review C, 2007, 76, .	2.9	47
93	Astrophysically important ^{31}S states studied with the $^{32}\text{S}(p,d)^{31}\text{S}$ reaction. Physical Review C, 2007, 76, .	2.9	34
94	^{30}S studied with the $^{30}\text{S}(p,d)^{29}\text{S}$ reaction. Physical Review C, 2007, 76, .	2.9	19
95	Nuclear data for astrophysics: resources, challenges, strategies, and software solutions. , 2007, , .		2
96	Neutron-Transfer Reactions with Exotic Neutron-Rich Beams: Surrogates for Neutron-Capture Reactions. AIP Conference Proceedings, 2006, , .	0.4	1
97	Computational Infrastructure for Nuclear Astrophysics. AIP Conference Proceedings, 2006, , .	0.4	4
98	Radioactive Beams and Exploding Stars at ORNL. AIP Conference Proceedings, 2006, , .	0.4	0
99	Astrophysics at RIA (ARIA) Working Group. AIP Conference Proceedings, 2006, , .	0.4	0
100	Neutron single particle strengths from the (d,p) reaction on ^{18}F . Physical Review C, 2006, 73, .	2.9	15
101	Astrophysically important ^{26}Si states studied with the $^{28}\text{Si}(p,t)^{26}\text{Si}$ reaction. II. Spin of the 5.914-MeV ^{26}Si level and galactic ^{26}Al production. Physical Review C, 2006, 74, .	2.9	38
102	First experimental constraints on the interference of ^{32}S resonances in the $^{18}\text{F}(p,\hat{1}\pm)^{15}\text{O}$ reaction. Physical Review C, 2006, 74, .	2.9	29
103	New ^{19}Ne resonance observed using an exotic ^{18}F beam. European Physical Journal A, 2005, 25, 643-644.	2.5	0
104	Developing techniques to study $A \approx 1/4$ 132 nuclei with (d, p) reactions in inverse kinematics. European Physical Journal A, 2005, 25, 283-285.	2.5	1
105	Single-neutron excitations in neutron-rich $N = 51$ nuclei. European Physical Journal A, 2005, 25, 371-374.	2.5	3
106	Studies Of Neutron-Rich Nuclei With (d,p) Reactions In Inverse Kinematics At The HRIBF. AIP Conference Proceedings, 2005, , .	0.4	0
107	Future of Nuclear Data for Nuclear Astrophysics. AIP Conference Proceedings, 2005, , .	0.4	1
108	New Evaluations and Computational Infrastructure for Management and Visualization of Nuclear Astrophysics Data. AIP Conference Proceedings, 2005, , .	0.4	0

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109	F19±widths and theF18+preaction rates. Physical Review C, 2005, 71, .	2.9	25
110	New constraints on theF18(p,±)O15rate in novae from the(d,p)reaction. Physical Review C, 2005, 71, .	2.9	39
111	First study of the level structure of ther-process nucleusGe83. Physical Review C, 2005, 71, .	2.9	48
112	Elastic scattering of the proton drip-line nucleusF17. Physical Review C, 2005, 72, .	2.9	30
113	Single-neutron excitations in neutron-rich N = 51 nuclei. , 2005, , 371-374.		0
114	New 19Ne resonance observed using an exotic 18F beam. , 2005, , 643-644.		0
115	Developing techniques to study A $\hat{\sim}$ 1/4 132 nuclei with (d, p) reactions in inverse kinematics. , 2005, , 283-285.		0
116	Search for astrophysically importantNe19levels with a thick-targetF18(p,p)F18measurement. Physical Review C, 2004, 70, .	2.9	30
117	Element synthesis calculations for stellar explosions: robust uncertainties, sensitivities, and radioactive ion beam measurements. Nuclear Physics A, 2004, 746, 565-568.	1.5	2
118	Nuclear data on unstable nuclei for astrophysics. Nuclear Physics A, 2004, 746, 569-572.	1.5	1
119	Study of theSn(d,p)124reaction in inverse kinematics close to the Coulomb barrier. Physical Review C, 2004, 70, .	2.9	23
120	RECENT NUCLEAR ASTROPHYSICS DATA ACTIVITIES AT ORNL. , 2004, , .		0
121	Nuclear data for astrophysics. Nuclear Physics A, 2003, 718, 339-346.	1.5	6
122	New Astrophysical Reaction Rates for 18 F(p, \hat{A}) 15 O and 18 F(p, \hat{A}) 19 Ne. Chinese Physics Letters, 2003, 20, 1470-1473.	3.3	14
123	A New17F(p, \hat{A})18Ne Reaction Rate and Its Implications for Nova Nucleosynthesis. Astrophysical Journal, 2003, 598, 1239-1245.	4.5	25
124	WEB-BASED NUCLEAR DATA INFORMATION FOR ASTROPHYSICS. , 2003, , .		0
125	PROBING STELLAR EXPLOSIONS WITH RADIOACTIVE BEAMS AT ORNL. , 2003, , .		0
126	NUCLEAR DATA ON NEUTRON-RICH NUCLEI FOR ASTROPHYSICS. , 2003, , .		0

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127	Astrophysically important ^{26}Si states studied with the $^{28}\text{Si}(p,t)^{26}\text{Si}$ reaction. <i>Physical Review C</i> , 2002, 65, .	2.9	42
128	Strength of the $^{18}\text{F}(p,\hat{1}\pm)^{15}\text{O}$ Resonance at $E_{c.m.}=330\hat{\text{a}}\text{e}\%{\hat{\text{a}}}\%{\hat{\text{e}}}\%{\text{keV}}$. <i>Physical Review Letters</i> , 2002, 89, 262501.	7.8	73
129	Nova Nucleosynthesis Calculations: Robust Uncertainties, Sensitivities, and Radioactive Ion Beam Measurements. <i>AIP Conference Proceedings</i> , 2002, , .	0.4	3
130	Nuclear physics at Oak Ridge National Laboratory. <i>Nuclear Physics News</i> , 2002, 12, 4-12.	0.4	2
131	Nuclear Data Relevant for Astrophysics. <i>Journal of Nuclear Science and Technology</i> , 2002, 39, 19-24.	1.3	7
132	Study of the $^{18}\text{F}(p,\hat{1}\pm)^{15}\text{O}$ Reaction at Energies Relevant for ^{18}F Nucleosynthesis in Novae. <i>AIP Conference Proceedings</i> , 2002, , .	0.4	0
133	Nuclear Data Strategies for Mapping the Cosmos. <i>AIP Conference Proceedings</i> , 2002, , .	0.4	0
134	Radioactive beams in nuclear astrophysics. <i>AIP Conference Proceedings</i> , 2001, , .	0.4	0
135	NUCLEAR ASTROPHYSICS MEASUREMENTS WITH RADIOACTIVE BEAMS. <i>Annual Review of Nuclear and Particle Science</i> , 2001, 51, 91-130.	10.2	67
136	Destruction of ^{18}F via $^{18}\text{F}(p,\hat{1}\pm)^{15}\text{O}$ burning through the $E_{c.m.}=665\text{keV}$ resonance. <i>Physical Review C</i> , 2001, 63, .	2.9	107
137	The astrophysically important $3+$ state in ^{18}Ne and the $^{17}\text{F}(p,\hat{1}^3)^{18}\text{Ne}$ stellar rate. <i>Physical Review C</i> , 2000, 62, .	2.9	54
138	Kinematically complete measurement of the $^{1}\text{H}(^{18}\text{F},p)^{18}\text{F}$ excitation function for the astrophysically important 7.08-MeV state in ^{19}Ne . <i>Physical Review C</i> , 2000, 62, .	2.9	22
139	Observation of the Astrophysically Important $3+$ State in ^{18}Ne via Elastic Scattering of a Radioactive ^{17}F Beam from ^1H . <i>Physical Review Letters</i> , 1999, 83, 45-48.	7.8	104
140	High-resolution study of the ^{18}Ne excited states relevant to the hot CNO cycle. <i>Physical Review C</i> , 1999, 59, 1182-1184.	2.9	26
141	Stellar Reactions with Short-Lived Nuclei: $^{17}\text{F}(p,\hat{1}\pm)^{14}\text{O}$. <i>Physical Review Letters</i> , 1999, 82, 3964-3967.	7.8	44
142	Breakout from the hot CNO cycle: The $^{18}\text{F}(p,\hat{1}^3)$ vs $^{18}\text{F}(p,\hat{1}\pm)$ branching ratio. <i>Physical Review C</i> , 1998, 57, 2731-2739.	2.9	69
143	High resolution neutron capture and transmission measurements on ^{137}Ba and their impact on the interpretation of meteoric barium anomalies. <i>Physical Review C</i> , 1998, 57, R1558-R1561.	2.9	17
144	Expressions for the $^{14}\text{O}(\hat{1}\pm,p)^{17}\text{F}$ and $^{17}\text{F}(p,\hat{1}^3)^{18}\text{Ne}$ astrophysical reaction rates. <i>Physical Review C</i> , 1997, 56, 1647-1650.	2.9	13

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145	Constraining ^{26}Al resonances using $^{26}\text{Al}(^3\text{He},d)^{27}\text{Si}$. <i>Physical Review C</i> , 1996, 53, 1945-1949.	2.9	41
146	Measurement of $^7\text{Li}(n,^3\text{He})^8\text{Li}$ cross sections at $E_n = 1.5$ – 1340 eV. <i>Physical Review C</i> , 1996, 54, 383-388.	2.9	36
147	Resonance neutron capture and transmission measurements and the stellar neutron capture cross sections of ^{134}Ba and ^{136}Ba . <i>Physical Review C</i> , 1996, 54, 1463-1477.	2.9	45
148	Structure of ^{18}Ne and the breakout from the hot CNO cycle. <i>Physical Review C</i> , 1996, 54, 1999-2013.	2.9	68
149	Gamma width of $^{14}\text{O}^*(5.17\text{ MeV})$ and the stellar $^{13}\text{N}(p,^3\text{He})^{14}\text{O}$ reaction rate. <i>Physical Review C</i> , 1993, 47, 2740-2750.	2.9	17
150	Search for the $K^\pi = 1^+$ two-proton band in ^{166}Er . <i>Physical Review C</i> , 1993, 47, 1943-1950.	2.9	4
151	Experimental, computational, and observational analysis of primordial nucleosynthesis. <i>Astrophysical Journal, Supplement Series</i> , 1993, 85, 219.	7.7	348
152	The "missing" 3^+ state of ^{18}Ne and explosive $^{17}\text{F}(p,^3\text{He})$ burning. <i>Physical Review C</i> , 1991, 43, 2012-2019.	2.9	36