

Oscar Straniero

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5035913/publications.pdf>

Version: 2024-02-01

223
papers

13,348
citations

20817
60
h-index

24258
110
g-index

227
all docs

227
docs citations

227
times ranked

4661
citing authors

#	ARTICLE	IF	CITATIONS
1	Neutron Capture in Low-Mass Asymptotic Giant Branch Stars: Cross Sections and Abundance Signatures. <i>Astrophysical Journal</i> , 1999, 525, 886-900.	4.5	756
2	Evolution and Nucleosynthesis in Low-Mass Asymptotic Giant Branch Stars. II. Neutron Capture and the s-Process. <i>Astrophysical Journal</i> , 1998, 497, 388-403.	4.5	684
3	The O-Na and Mg-Al anticorrelations in turn-off and early subgiants in globular clusters. <i>Astronomy and Astrophysics</i> , 2001, 369, 87-98.	5.1	437
4	The alpha-enhanced isochrones and their impact on the FITS to the Galactic globular cluster system. <i>Astrophysical Journal</i> , 1993, 414, 580.	4.5	388
5	EVOLUTION, NUCLEOSYNTHESIS, AND YIELDS OF LOW-MASS ASYMPOTIC GIANT BRANCH STARS AT DIFFERENT METALLICITIES. <i>Astrophysical Journal</i> , 2009, 696, 797-820.	4.5	306
6	EVOLUTION, NUCLEOSYNTHESIS, AND YIELDS OF LOW-MASS ASYMPOTIC GIANT BRANCH STARS AT DIFFERENT METALLICITIES. II. THE FRUITY DATABASE. <i>Astrophysical Journal, Supplement Series</i> , 2011, 197, 17.	7.7	306
7	Revisiting the Bound on Axion-Photon Coupling from Globular Clusters. <i>Physical Review Letters</i> , 2014, 113, 191302.	7.8	300
8	Astrophysical S-factor of $^{14}\text{N}(\text{p},\gamma)^{15}\text{O}$. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 591, 61-68.	4.1	289
9	The Giant, Horizontal, and Asymptotic Branches of Galactic Globular Clusters. I. The Catalog, Photometric Observables, and Features. <i>Astronomical Journal</i> , 1999, 118, 1738-1758.	4.7	280
10	Radiative C-13 burning in asymptotic giant branch stars and s-processing. <i>Astrophysical Journal</i> , 1995, 440, L85.	4.5	252
11	EVOLUTION, NUCLEOSYNTHESIS, AND YIELDS OF AGB STARS AT DIFFERENT METALLICITIES. III. INTERMEDIATE-MASS MODELS, REVISED LOW-MASS MODELS, AND THE pH-FRUITY INTERFACE. <i>Astrophysical Journal, Supplement Series</i> , 2015, 219, 40.	7.7	243
12	Galactic Chemical Evolution of Heavy Elements: From Barium to Europium. <i>Astrophysical Journal</i> , 1999, 521, 691-702.	4.5	227
13	s process in low-mass asymptotic giant branch stars. <i>Nuclear Physics A</i> , 2006, 777, 311-339.	1.5	216
14	The Chemical Evolution of the Globular Cluster ω Centauri (NGC 5139). <i>Astronomical Journal</i> , 2000, 119, 1239-1258.	4.7	207
15	Evolution and Nucleosynthesis in Low-Mass Asymptotic Giant Branch Stars. I. Formation of Population I Carbon Stars. <i>Astrophysical Journal</i> , 1997, 478, 332-339.	4.5	206
16	S-factor of $^{14}\text{N}(\text{p},\gamma)^{15}\text{O}$ at astrophysical energies. <i>European Physical Journal A</i> , 2005, 25, 455-466.	2.5	203
17	Isotopic Compositions of Strontium, Zirconium, Molybdenum, and Barium in Single Presolar SiC Grains and Asymptotic Giant Branch Stars. <i>Astrophysical Journal</i> , 2003, 593, 486-508.	4.5	182
18	The s-process in low-metallicity stars - II. Interpretation of high-resolution spectroscopic observations with asymptotic giant branch models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 418, 284-319.	4.4	182

#	ARTICLE	IF	CITATIONS
19	s ¹³ Process Nucleosynthesis in Asymptotic Giant Branch Stars: A Test for Stellar Evolution. Astrophysical Journal, 2003, 586, 1305-1319.	4.5	162
20	Massive Stars in the Range 13–25 M _⊙ : Evolution and Nucleosynthesis. II. The Solar Metallicity Models. Astrophysical Journal, Supplement Series, 2000, 129, 625-664.	7.7	153
21	The s ¹³ Kr s ¹³ Process Branching and the Mass of Carbon Stars. Astrophysical Journal, 2001, 559, 1117-1134.	4.5	152
22	s ¹³ Process Nucleosynthesis in Carbon Stars. Astrophysical Journal, 2002, 579, 817-831.	4.5	149
23	First measurement of the d(p, γ) ³ He cross section down to the solar Gamow peak. Nuclear Physics A, 2002, 706, 203-216.	1.5	148
24	Constraints on the Progenitors of Type Ia Supernovae and Implications for the Cosmological Equation of State. Astrophysical Journal, 2001, 557, 279-291.	4.5	142
25	The lithium content of the globular cluster NGC 6397. Astronomy and Astrophysics, 2002, 390, 91-101.	5.1	138
26	Activation Measurement of the He3($\bar{\nu}$, γ)Be7 Cross Section at Low Energy. Physical Review Letters, 2006, 97, 122502.	7.8	136
27	The Evolution of a 25M _⊙ Star from the Main Sequence up to the Onset of the Iron Core Collapse. Astrophysical Journal, 1998, 502, 737-762.	4.5	129
28	The Chemical Composition of White Dwarfs as a Test of Convective Efficiency during Core Helium Burning. Astrophysical Journal, 2003, 583, 878-884.	4.5	125
29	Silicon and Carbon Isotopic Ratios in AGB Stars: SiC Grain Data, Models, and the Galactic Evolution of the Si Isotopes. Astrophysical Journal, 2006, 650, 350-373.	4.5	125
30	The Chemical Composition of Red Giants. IV. The Neutron Density at the s-Process Site. Astrophysical Journal, 1995, 450, 302.	4.5	123
31	Isochrones for hydrogen-burning globular cluster stars. I - The metallicity range (Fe/H) from -2 to -1. Astrophysical Journal, Supplement Series, 1989, 71, 47.	7.7	122
32	The bottleneck of CNO burning and the age of Globular Clusters. Astronomy and Astrophysics, 2004, 420, 625-629.	5.1	121
33	Astrophysical S-factor of the He3($\bar{\nu}$, γ)Be7 reaction measured at low energy via detection of prompt and delayed γ rays. Physical Review C, 2007, 75, .	2.9	117
34	Intermediate-mass Stars: Updated Models. Astrophysical Journal, 1999, 524, 226-241.	4.5	116
35	Isochrones for Hydrogen-burning Globular Cluster Stars. III. From the Sun to the Globular Clusters. Astrophysical Journal, 1997, 490, 425-436.	4.5	108
36			

#	ARTICLE		IF	CITATIONS
37	The $^{12}\text{C}(\bar{\nu}, \bar{\nu})^{16}\text{O}$ Reaction Rate and the Evolution of Stars in the Mass Range $0.8 \leq M/M_{\odot} \leq 25$. <i>Astrophysical Journal</i> , 2001, 558, 903-915.		4.5	105
38	Metallicities, Relative Ages, and Kinematics of Stellar Populations in α Centauri. <i>Astrophysical Journal</i> , 2005, 634, 332-343.		4.5	104
39	THE EFFECTS OF ROTATION ON s -PROCESS NUCLEOSYNTHESIS IN ASYMPTOTIC GIANT BRANCH STARS. <i>Astrophysical Journal</i> , 2013, 774, 98.		4.5	101
40	The baryon density of the Universe from an improved rate of deuterium burning. <i>Nature</i> , 2020, 587, 210-213.		27.8	101
41	Low-Mass AGB Stellar Models for $0.003 \leq Z \leq 0.02$: Basic Formulae for Nucleosynthesis Calculations. <i>Publications of the Astronomical Society of Australia</i> , 2003, 20, 389-392.		3.4	100
42	Deep FORS1 Observations of the Double Main Sequence of α Centauri. <i>Astrophysical Journal</i> , 2007, 654, 915-922.		4.5	98
43	The s -process in low-metallicity stars - III. Individual analysis of CEMP-s and CEMP-s/r with asymptotic giant branch models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 422, 849-884. First Direct Measurement of the H \rightarrow 2D γ transition. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 333-344.		4.4	96
44	Oxygen, magnesium and chromium isotopic ratios of presolar spinel grains. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4149-4165.		7.8	95
45	He3($\bar{\nu}, \bar{\nu}$)Be7 cross section at low energies. <i>Physical Review C</i> , 2007, 75, .		2.9	86
46	Evolution and Nucleosynthesis of Zero-Metal Intermediate-Mass Stars. <i>Astrophysical Journal</i> , 2001, 554, 1159-1174.		4.5	83
47	Electron screening effect in the reactions $^3\text{He}(d,p)^4\text{He}$ and $d(^3\text{He},p)^4\text{He}$. <i>Nuclear Physics A</i> , 2001, 690, 790-800.		1.5	79
48	The evolution through H and He burning of Galactic cluster stars. <i>Astrophysical Journal, Supplement Series</i> , 1992, 78, 517.		7.7	76
49	The branchings of the main s -process: their sensitivity to $\bar{\nu}$ -induced reactions on ^{13}C and ^{22}Ne and to the uncertainties of the nuclear network. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 506-527.		4.4	75
50	The Discovery of an Anomalous Subgiant Branch in the Color-Magnitude Diagram of Centauri. <i>Astrophysical Journal</i> , 2004, 603, L81-L84.		4.5	74
51	Molecular Opacities for Low-Mass Metal-poor AGB Stars Undergoing the Third Dredge-up. <i>Astrophysical Journal</i> , 2007, 667, 489-496.		4.5	74
52	The S-factor at solar energies: The prompt $\bar{\nu}$ experiment at LUNA. <i>Nuclear Physics A</i> , 2008, 814, 144-158.		1.5	71
53	BARIUM ISOTOPIC COMPOSITION OF MAINSTREAM SILICON CARBIDES FROM MURCHISON: CONSTRAINTS FOR s -PROCESS NUCLEOSYNTHESIS IN ASYMPTOTIC GIANT BRANCH STARS. <i>Astrophysical Journal</i> , 2014, 786, 66.		4.5	67

#	ARTICLE	IF	CITATIONS
55	Absolute cross section of $^{7}\text{Be}(\text{p},\gamma)^{8}\text{B}$. Nuclear Physics A, 2001, 696, 219-230.	1.5	65
56	Feasibility of low-energy radiative-capture experiments at the LUNA underground accelerator facility. European Physical Journal A, 2005, 24, 313-319.	2.5	64
57	Low energy measurement of the $^{14}\text{N}(\text{p},\gamma)^{15}\text{O}$ total cross section at the LUNA underground facility. Nuclear Physics A, 2006, 779, 297-317.	1.5	64
58	The $^{25}\text{Mg}(\text{p},\gamma)^{26}\text{Al}$ reaction at low astrophysical energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 707, 60-65.	4.1	64
59	Origin of meteoritic stardust unveiled by a revised proton-capture rate of ^{17}O . Nature Astronomy, 2017, 1, .	10.1	64
60	FLUORINE ABUNDANCES IN GALACTIC ASYMPTOTIC GIANT BRANCH STARS. Astrophysical Journal Letters, 2010, 715, L94-L98.	8.3	62
61	ON THE NEED FOR THE LIGHT ELEMENTS PRIMARY PROCESS (LEPP). Astrophysical Journal, 2015, 801, 53.	4.5	62
62	Ultra-sensitive in-beam γ -ray spectroscopy for nuclear astrophysics at LLUNA. European Physical Journal A, 2009, 39, 179-186.	2.5	59
63	Asymptotic-Giant-Branch Models at Very Low Metallicity. Publications of the Astronomical Society of Australia, 2009, 26, 139-144.	3.4	59
64	Isochrones for H-burning globular cluster stars. II - The metallicity range Fe/H = -2.3 to -0.5. Astrophysical Journal, Supplement Series, 1991, 76, 525.	7.7	59
65	ON THE NEED FOR DEEP-MIXING IN ASYMPTOTIC GIANT BRANCH STARS OF LOW MASS. Astrophysical Journal Letters, 2010, 717, L47-L51.	8.3	58
66	A study of the s-process in the carbon-rich post-AGB stars IRAS 06530-0213 and IRAS 08143-4406 on the basis of VLT-UVES spectra. Astronomy and Astrophysics, 2004, 417, 269-281.	5.1	58
67	HEAVY ELEMENTS IN GLOBULAR CLUSTERS: THE ROLE OF ASYMPTOTIC GIANT BRANCH STARS. Astrophysical Journal, 2014, 785, 77. Improved Direct Measurement of the 64.5 keV Resonance Strength in the $\text{O}_{17} + \text{H}_2$ Reaction. $\text{O}_{17} + \text{H}_2 \rightarrow \text{O}_{18} + \text{H}$	4.5	57
68	Improved Direct Measurement of the 64.5 keV Resonance Strength in the $\text{O}_{17} + \text{H}_2$ Reaction. $\text{O}_{17} + \text{H}_2 \rightarrow \text{O}_{18} + \text{H}$		

#	ARTICLE	IF	CITATIONS
73	New ground study of the mml:math reaction relevant for explosive hydrogen burning. <i>Physical Review C</i> , 2014, 89, 1.	2.9	53
74	IMPACT OF A REVISED $^{25}\text{Mg}(\text{i}, \gamma) ^{26}\text{Al}$ REACTION RATE ON THE OPERATION OF THE Mg-Al CYCLE. <i>Astrophysical Journal</i> , 2013, 763, 100.	4.5	52
75	NGC 1866: a milestone for understanding the chemical evolution of stellar populations in the Large Magellanic Cloudâ.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 413, 837-851.	4.4	50
76	The Importance of the $^{13}\text{C}(\bar{n}, \gamma) ^{16}\text{O}$ Reaction in Asymptotic Giant Branch Stars. <i>Astrophysical Journal</i> , 2018, 859, 105.	4.5	50
77	Constraints on the coupling with photons of heavy axion-like-particles from Globular Clusters. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 809, 135709.	4.1	49
78	A new study of the $^{22}\text{Ne}(\text{p}, \gamma) ^{23}\text{Na}$ reaction deep underground: Feasibility, setup and first observation of the 186 keV resonance. <i>European Physical Journal A</i> , 2014, 50, 1.	2.5	46
79	Isochrones and Luminosity Functions for Old White Dwarfs. <i>Astrophysical Journal</i> , 2000, 529, 318-337.	4.5	47
80	FLUORINE IN ASYMPTOTIC GIANT BRANCH CARBON STARS REVISITED. <i>Astrophysical Journal</i> , 2009, 694, 971-977.	2.9	46
81	Direct measurement of the $^{15}\text{N}(\text{p}, \gamma) ^{16}\text{O}$ total cross section at novae energies. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2009, 36, 045202.	3.6	45
82	Preparation and characterisation of isotopically enriched Ta ₂ O ₅ targets for nuclear astrophysics studies. <i>European Physical Journal A</i> , 2012, 48, 1.	2.5	43
83	The Large Magellanic Cloud Globular Cluster NGC 1866: New Data, New Models, New Analysis. <i>Astronomical Journal</i> , 1999, 118, 2839-2846.	4.7	42
84	The Large Magellanic Cloud Globular Cluster NGC 1866: New Data, New Models, New Analysis. <i>Astronomical Journal</i> , 1999, 118, 2839-2846.	4.7	42
85	The Large Magellanic Cloud Globular Cluster NGC 1866: New Data, New Models, New Analysis. <i>Astronomical Journal</i> , 1999, 118, 2839-2846.	4.7	42
86			

#	ARTICLE	IF	CITATIONS
91	Measurement of the $\text{d}(3\text{He}, \text{p})4\text{He}$ reaction cross section at 13 MeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 482, 43-49.	7.8	40
92	Stopping power, electron screening and the astrophysical S(E) factor of $\text{d}(3\text{He}, \text{p})4\text{He}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 482, 43-49.	4.1	39
93	Direct measurement of low-energy $\text{n}(\text{n}, \gamma)$ resonances. Nuclear Physics A, 2000, 672, 22-29.	2.9	39
94	A high-efficiency gas target setup for underground experiments, and redetermination of the branching ratio of the 189.5 keV $^{22}\text{Ne}(\text{p}, \gamma)^{23}\text{Na}$ resonance. European Physical Journal A, 2018, 54, 1.	2.5	39
95	The RGB tip of galactic globular clusters and the revision of the axion-electron coupling bound. Astronomy and Astrophysics, 2020, 644, A166.	5.1	39
96	The Luminosity Function of M3. Astrophysical Journal, 1999, 523, 752-762.	4.5	39
97	THE FIRST FLUORINE ABUNDANCE DETERMINATIONS IN EXTRAGALACTIC ASYMPTOTIC GIANT BRANCH CARBON STARS. Astrophysical Journal Letters, 2011, 737, L8.	8.3	38
98	NITROGEN ISOTOPES IN ASYMPTOTIC GIANT BRANCH CARBON STARS AND PRESOLAR SiC GRAINS: A CHALLENGE FOR STELLAR NUCLEOSYNTHESIS. Astrophysical Journal Letters, 2013, 768, L11.	8.3	38
99	Effects of nuclear cross sections on ^{19}F nucleosynthesis at low metallicities. Astronomy and Astrophysics, 2014, 570, A46.	5.1	38
100	Neutron Capture on ^{180}Tm : Clue for an-Process Origin of Nature's Rarest Isotope. Physical Review Letters, 2001, 87, 251102.	7.8	37
101	Resonance strengths in the $^{17,18}\text{O}(\text{p}, \gamma)^{14,15}\text{N}$ reactions and background suppression underground. European Physical Journal A, 2015, 51, 1.	2.5	37
102	CARBON AND OXYGEN ISOTOPIC RATIOS FOR NEARBY MIRAS. Astrophysical Journal, 2016, 825, 38.	4.5	37
103	Big Bang 6 Li nucleosynthesis studied deep underground (LUNA collaboration). Astroparticle Physics, 2017, 89, 57-65.	4.3	37
104	Theoretical light curves of Type II-P supernovae and applications to cosmology. Monthly Notices of the Royal Astronomical Society, 2003, 345, 111-122.	4.4	36
105	A method to derive the absolute composition of the Sun, the solar system, and the stars. Astronomy and Astrophysics, 2007, 462, 1051-1062.	5.1	36
106	AGB stars of the intermediate-age LMC cluster NGC 1846. Astronomy and Astrophysics, 2008, 486, 511-521.	5.1	36
107	Calibration of stellar models. Astrophysical Journal, 1995, 445, L39.	4.5	36
108	The evolution of intermediate-mass stars through the H- and He-burning phases. Astrophysical Journal, Supplement Series, 1990, 74, 463.	7.7	34

#	ARTICLE	IF	CITATIONS
109	An Empirical Calibration of the Mixing Length Parameter $\hat{\alpha}$. <i>Astrophysical Journal</i> , 2006, 642, 225-229.	4.5	33
110	An actively vetoed Clover γ -detector for nuclear astrophysics at LUNA. <i>European Physical Journal A</i> , 2010, 44, 513-519.	2.5	33
111	Very low-mass white dwarfs with a ^{14}O core. <i>Astronomy and Astrophysics</i> , 2009, 507, 1575-1583.	5.1	32
112	First detection of a lithium rich carbon star in the Draco dwarf galaxy: Evidence for a young stellar population. <i>Astronomy and Astrophysics</i> , 2004, 422, 1045-1052.	5.1	30
113	Improved background suppression for radiative capture reactions at LUNA with HPGe and BGO detectors. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2018, 45, 025203.	3.6	30
114	Direct Capture Cross Section and the $\text{E} \times \text{p}$ and 105keV Resonances in the $\text{Ne} \times \text{p}$ reaction. <i>Physical Review Letters</i> , 2018, 121, 172701.	7.8	30
115	Understanding AGB Carbon Star Nucleosynthesis from Observations. <i>Publications of the Astronomical Society of Australia</i> , 2003, 20, 314-323.	3.4	29
116	^{128}Xe and ^{130}Xe : Testing He shell Burning in Asymptotic Giant Branch Stars. <i>Astrophysical Journal</i> , 2004, 614, 363-370.	4.5	27
117	Barium Stars: Theoretical Interpretation. <i>Publications of the Astronomical Society of Australia</i> , 2009, 26, 176-183.	3.4	27
118	Type Ia supernovae and the $^{12}\text{C} + ^{12}\text{C}$ reaction rate. <i>Astronomy and Astrophysics</i> , 2011, 535, A114.	5.1	27
119	Chemical analysis of carbon stars in the Local Group. <i>Astronomy and Astrophysics</i> , 2006, 446, 1107-1118.	5.1	27
120	Fluorine in carbon-enhanced metal-poor stars: a binary scenario. <i>Astronomy and Astrophysics</i> , 2008, 484, L27-L30.	5.1	27
121	Galactic Chemical Evolution of the s Process from AGB Stars. <i>Publications of the Astronomical Society of Australia</i> , 2009, 26, 153-160.	3.4	26
122	The puzzle of the CNO isotope ratios in asymptotic giant branch carbon stars. <i>Astronomy and Astrophysics</i> , 2017, 599, A39.	5.1	26
123	The impact of the revised $^{17}\text{O}(p, \gamma)^{18}\text{N}$ reaction rate on ^{17}O stellar abundances and yields. <i>Astronomy and Astrophysics</i> , 2017, 598, A128.	5.1	25
124	Constraints on Axionlike Particles from a Hard X-Ray Observation of Betelgeuse. <i>Physical Review Letters</i> , 2021, 126, 031101.	7.8	25
125	Loss of ^8Li recoil nuclei in $^7\text{Li}(d,p)^8\text{Li}$ and implications on the $^7\text{Be}(p, \gamma)^8\text{B}$ cross section. <i>European Physical Journal A</i> , 1998, 3, 1-3.	2.5	24
126	Direct measurements of low-energy resonance strengths of the $^{23}\text{Na}(p, \gamma)^{24}\text{Mg}$ reaction for astrophysics. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 795, 122-128.	4.1	23

#	ARTICLE	IF	CITATIONS
127	ment of 1323 and 1487 keV resonances in N^{15} + F^{19} at astrophysical energies: The 90 keV resonance and the direct capture component.	4.1	22
128	Improved astrophysical rate for the $^{18}\text{O}(\text{p},\hat{\nu})^{15}\text{N}$ reaction by underground measurements. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 237-242.	4.1	22
129	Setup commissioning for an improved measurement of the $\text{D}(\text{p},\gamma)^3\text{He}$ cross section at Big Bang Nucleosynthesis energies. European Physical Journal A, 2020, 56, 1.	2.5	22
130	Rotating Type Ia SN Progenitors: Explosion and Light Curves. Astrophysical Journal, 2006, 644, 21-29.	4.5	21
131	Interpretation of CEMP(s) and CEMP($\text{s} + \text{r}$) Stars with AGB Models. Publications of the Astronomical Society of Australia, 2009, 26, 314-321.	3.4	21
132	Properties of carbon stars in the solar neighbourhood based on <i>Gaia</i> DR2 astrometry. Astronomy and Astrophysics, 2020, 633, A135.	5.1	21
133	Characterization of the 13C neutron capture array for the measurement of the $^{13}\text{C}(\text{n},\gamma)^{14}\text{C}$ cross section.	1.6	21
134	Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 9.	5.1	21
135	White dwarf cooling sequences. Astronomy and Astrophysics, 2007, 466, 1043-1051.	2.5	20
136	A new approach to monitor targets degradation in situ for $^{13}\text{C}(\alpha,\text{n})^{14}\text{N}$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 797, 134900.	4.5	20
137	Oxygen isotopic ratios in intermediate-mass red giants. Astronomy and Astrophysics, 2015, 578, A33.	5.1	19
138	SNe Ia Keep Memory of Their Progenitor Metallicity. Astrophysical Journal Letters, 2017, 836, L9.	8.3	19
139	Energy loss of deuterons in ^3He gas: a threshold effect. European Physical Journal A, 2000, 8, 443-446.	2.5	18
140	Cross section of the reaction $^{18}\text{O}(\text{p},\hat{\nu})^{19}\text{F}$ 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
141	The puzzling dredge-up pattern in NGC 1978. Astronomy and Astrophysics, 2009, 502, 913-927.	5.1	18
142	Stellar neutron capture on Tam^{180} . II. Defining the process contribution to nature's rarest isotope. Physical Review C, 2004, 69,	2.9	16
143	The International Robotic Antarctic Infrared Telescope (IRAIT). . , 2006, . . .		16
144	The formation of the ^{13}C pocket in Asymptotic Giant Branch stars and related nucleosynthesis. Nuclear Physics A, 2001, 688, 217-220.	1.5	15

#	ARTICLE	IF	CITATIONS
145	The CARMENES search for exoplanets around M dwarfs. <i>Astronomy and Astrophysics</i> , 2020, 642, A227.	5.1	14
146	The M Supergiant High-mass X-Ray Binary 4U 1954+31. <i>Astrophysical Journal</i> , 2020, 904, 143.	4.5	14
147	Early solar system radioactivity and AGB stars. <i>New Astronomy Reviews</i> , 2004, 48, 133-138.	12.8	13
148	Effect of beam energy straggling on resonant yield in thin gas targets: The cases $\text{Ne}^{22}(p, \text{n})\text{Na}^{23}$ and $\text{N}^{14}(p, \text{n})\text{O}^{15}$. <i>Europhysics Letters</i> , 2018, 122, 52001.	2.0	13
149	The status and future of direct nuclear reaction measurements for stellar burning. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2022, 49, 010501.	3.6	13
150	On the age and mass function of the globular cluster M4: A different interpretation of recent deep HST observations. <i>Astronomy and Astrophysics</i> , 2004, 415, 971-985.	5.1	13
151	The ^{13}C Pocket in Low-Mass AGB Stars. <i>Publications of the Astronomical Society of Australia</i> , 2009, 26, 133-138.	3.4	12
152	Merging in the common envelope and the origin of early R-type stars. <i>Astronomy and Astrophysics</i> , 2010, 522, A80.	5.1	12
153	Do we really know M_{up} (i.e. the transition mass between Type Ia and core-collapse) Tj ETQq1 1 0.7843 _{0.4} ¹⁴ rgBT /Overlock 10		
154	AGB yields and Galactic Chemical Evolution: last updated. <i>Journal of Physics: Conference Series</i> , 2016, 665, 012023.	0.4	12
155	Underground experimental study finds no evidence of low-energy resonance in the $\text{Li}^{11}(\text{p}, \text{n})\text{Li}^{12}$ reaction. <i>Physical Review C</i> , 2020, 102, .		
156	A possible solution to the problem of the Galactic evolution of D and He-3. <i>Astrophysical Journal</i> , 1994, 432, L101.	4.5	12
157	Asymptotic giant branch stars as astroparticle laboratories. <i>Monthly Notices of the Royal Astronomical Society</i> , 1999, 306, L1-L7.	4.4	11
158	Si and C Isotopes in Presolar Silicon Carbide Grains From AGB Stars. <i>Nuclear Physics A</i> , 2005, 758, 348-351.	1.5	10
159	Helium burning and neutron sources in the stars. <i>European Physical Journal A</i> , 2016, 52, 1.	2.5	10
160	Pre-explosive Accretion and Simmering Phases of SNe Ia. <i>Astrophysical Journal</i> , 2022, 926, 103.	4.5	10
161	Predictions of s-process Lead in low-metallicity stars compared with spectroscopic observations. <i>Nuclear Physics A</i> , 2005, 758, 485-488.	1.5	9
162	Carbon and Oxygen Isotopic Ratios. II. Semiregular Variable M Giants. <i>Astrophysical Journal</i> , 2019, 886, 117.	4.5	9

#	ARTICLE	IF	CITATIONS
163	Minute steps on the quest of the s-process. Nuclear Physics A, 2003, 718, 181-188.	1.5	8
164	<scp>montage</scp>: AGB Nucleosynthesis with Full <i>s</i>-Process Calculations. Publications of the Astronomical Society of Australia, 2009, 26, 217-224.	3.4	8
165	Constraining Heavy Axionlike Particles by Energy Deposition in Globular Cluster Stars. Physical Review Letters, 2022, 129, .	7.8	8
166	The FRUITY database on AGB stars: past, present and future. Journal of Physics: Conference Series, 2016, 665, 012019.	0.4	6
167	Influence of the $^{12}\text{C}(\bar{\nu}, \bar{\nu})^{16}\text{O}$ reaction rate on the evolution of a 15M_{\odot} star. Nuclear Physics A, 2001, 688, 249-253.	1.5	5
168	Two barium stars in the Galactic bulge. Astronomy and Astrophysics, 2013, 554, A30.	5.1	5
169	The new s-process in low mass TP-AGB stars. Nuclear Physics A, 1997, 621, 423-430.	1.5	4
170	Recent results from the LUNA facility at Gran Sasso. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1537-S1540.	3.6	3
171	CEMP α Stars: AGB Yield Predictions and Thermohaline Mixing. , 2008, , .		3
172	Fluorine Abundances in AGB Carbon Stars: New Results?. Publications of the Astronomical Society of Australia, 2009, 26, 351-353.	3.4	3
173	Asymptotic Giant Branch Stars. Astrophysics and Space Science Library, 2000, , 429-443.	2.7	3
174	The evolutionary history of a 25 M_{\odot} star. Nuclear Physics A, 1997, 621, 453-456.	1.5	2
175	S-process nucleosynthesis in low mass AGB Stars: do we really need an improved determination of the $^{13}\text{C}(\bar{\nu}, \bar{\nu})^{16}\text{O}$ reaction rate?. Nuclear Physics A, 2005, 758, 509-512.	1.5	2
176	Ground state capture in $^{14}\text{N}(\bar{\nu}, \bar{\nu})^{15}\text{O}$ studied above the 259 keV resonance at LUNA. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014019.	3.6	2
177	Comparison of the LUNA $^{3}\text{He}(\bar{\nu}, \bar{\nu})^{7}\text{Be}$ activation results with earlier measurements and model calculations. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014002.	3.6	2
178	Time-Scales of the <i>s</i> Process: from Minutes to Ages. Publications of the Astronomical Society of Australia, 2009, 26, 209-216.	3.4	2
179	He-accreting WDs as SNe Ia Progenitors. Proceedings of the International Astronomical Union, 2011, 7, 209-212.	0.0	2
180	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

#	ARTICLE	IF	CITATIONS
181	The oldest galactic open clusters: New CCD photometry and colour-magnitude diagrams. <i>Astrophysics and Space Science</i> , 1990, 169, 41-44.	1.4	1
182	The fate of Li and Be in stars and in the laboratory. <i>Zeitschrift fÃ¼r Physik A</i> , 1996, 354, 237-248.	0.9	1
183	The IRAIT Project Infrared Astronomy from Antarctica. <i>EAS Publications Series</i> , 2005, 14, 181-186.	0.3	1
184	CNO hydrogen burning studied deep underground. <i>European Physical Journal A</i> , 2006, 27, 161-170.	2.5	1
185	First time-series optical photometry from Dome C. <i>EAS Publications Series</i> , 2008, 33, 267-270.	0.3	1
186	C/O white dwarfs of very low mass: 0.33-0.5 M _{sun} . <i>Journal of Physics: Conference Series</i> , 2009, 172, 012011.	0.4	1
187	The long-standing problem of ¹⁷⁶ Lu/ ¹⁷⁶ Hf branching: A new approach with full stellar evolutionary models. <i>Journal of Physics: Conference Series</i> , 2010, 202, 012033.	0.4	1
188	science with the irait telescope: the commissioning phase. <i>EAS Publications Series</i> , 2010, 40, 165-170.	0.3	1
189	Carbon and oxygen isotopes in AGB stars. From the cores of AGB stars to presolar dust. <i>Proceedings of the International Astronomical Union</i> , 2018, 14, 447-448.	0.0	1
190	On the mass of supernova progenitors. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	1
191	The Evolutionary Properties of Zero Metal Stars in the Mass Range between 4 and 100 M _{sun} . <i>Astrophysics and Space Science Library</i> , 2002, , 47-54.	2.7	1
192	The Explosive Yields of Massive Stars. <i>Astrophysics and Space Science Library</i> , 2000, , 417-427.	2.7	1
193	AMICA: the Antarctic Mid-Infrared CAmera for the IRAIT telescope. <i>EAS Publications Series</i> , 2005, 14, 337-342.	0.3	1
194	Extremely Metal-Poor Asymptotic Giant Branch Stars. <i>Universe</i> , 2022, 8, 44.	2.5	1
195	Deep CCD photometry of stars in the globular cluster M3. <i>Astrophysics and Space Science</i> , 1990, 169, 15-18.	1.4	0
196	Infrared photometry of open clusters: the main sequence of NGC 752. <i>Astrophysics and Space Science</i> , 1990, 169, 49-53.	1.4	0
197	Nucleosynthesis in FG Sge. <i>Nuclear Physics A</i> , 2003, 718, 536-538.	1.5	0
198	The Antarctic Mid-Ir Camera (AMICA) for the IRAIT telescope. <i>Astronomische Nachrichten</i> , 2004, 325, 664-664.	1.2	0

#	ARTICLE	IF	CITATIONS
199	The Metal Enrichment History of the Stellar System α Centauri. Proceedings of the International Astronomical Union, 2005, 1, 411-412.	0.0	0
200	Chemical pollution from AGB Stars. Proceedings of the International Astronomical Union, 2005, 1, 483-484.	0.0	0
201	Abundances of s-elements in Extragalactic Carbon Stars. Proceedings of the International Astronomical Union, 2005, 1, 533-534.	0.0	0
202	Expected Changes of SNe with Redshift due to Evolution of Their Progenitors. International Astronomical Union Colloquium, 2005, 192, 567-572.	0.1	0
203	Expected Changes of SNe with Redshift due to Evolution of Their Progenitors. Springer Proceedings in Physics, 2005, , 567-572.	0.2	0
204	Design and construction of the moving optical systems of IRAIT. Proceedings of the International Astronomical Union, 2006, 2, 702-704.	0.0	0
205	Underground measurement of $^{14}\text{N}(\text{p}, \gamma)^{15}\text{O}$ astrophysical factor at low energy. Journal of Physics: Conference Series, 2006, 39, 263-265.	0.4	0
206	Low energy underground study of $^{14}\text{N}(\text{p}, \gamma)^{15}\text{O}$ cross section. AIP Conference Proceedings, 2006, , .	0.4	0
207	Moving Optical Systems of IRAIT: Design and Construction. EAS Publications Series, 2007, 25, 221-224.	0.3	0
208	$^{12}\text{C}(\text{p}, \gamma)^{13}\text{O}$: A Template for Nuclear Astrophysics. EAS Publications Series, 2007, 27, 161-169.	0.3	0
209	Infrared Observations of Supernovae with IRAIT at Dome C. EAS Publications Series, 2008, 33, 239-242.	0.3	0
210	A study of AGB stars in LMC clusters. Proceedings of the International Astronomical Union, 2008, 4, 397-402.	0.0	0
211	AMICA Control System Progress Status. EAS Publications Series, 2010, 40, 177-181.	0.3	0
212	Stellar modelling: the AGB zoo. EAS Publications Series, 2013, 63, 395-400.	0.3	0
213	CEMP-s and CEMP-s/r stars: last update. EAS Publications Series, 2013, 63, 25-34.	0.3	0
214	Dark matter constraints from stellar evolution. Journal of Physics: Conference Series, 2016, 665, 012015.	0.4	0
215	Explosive Nucleosynthesis of Massive Stars The Effect of the Metallicity. Astrophysics and Space Science Library, 2000, , 473-479.	2.7	0
216	Explosive Yields of Metal-Free SNII and the Abundances in Extremely Metal-Poor Stars. Astrophysics and Space Science Library, 2002, , 199-206.	2.7	0

#	ARTICLE	IF	CITATIONS
217	New Determination of $^{12}\text{C}(\text{He},\gamma)^{13}\text{O}$ Reaction Rate And Impact on WD Models. , 2003, , 25-26.	0	0
218	Nuclear reactions. , 2010, , 351-357.	0	0
219	Rotation: CO White Dwarfs Near the Chandrasekhar Limiting Mass. <i>Astrophysics and Space Science Library</i> , 1997, , 75-78.	2.7	0
220	A Phenomenological Approach to the Formation of Massive CO White Dwarfs. , 1997, , 177-186.	0	0
221	Axions and the Final Fate of Stars. <i>Springer Proceedings in Physics</i> , 2019, , 147-150.	0.2	0
222	CNO hydrogen burning studied deep underground. , 2006, , 161-170.	0	0
223	Type Ia SN progenitors: pre-explosion phase in nearly Chandrasekhar mass WDs. <i>EPJ Web of Conferences</i> , 2022, 260, 06001.	0.3	0