Alexander Heger

List of Publications by Year
in descending order

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229 papers	22,430 citations	16437 64 h-index	8384 147 g-index
236 all docs	236 docs citations	236 times ranked	9092 citing authors

#	Article	IF	Citations
1	The evolution and explosion of massive stars. Reviews of Modern Physics, 2002, 74, 1015-1071.	16.4	1,648
2	How Massive Single Stars End Their Life. Astrophysical Journal, 2003, 591, 288-300.	1.6	1,584
3	The Nucleosynthetic Signature of Population III. Astrophysical Journal, 2002, 567, 532-543.	1.6	1,252
4	Presupernova Evolution of Rotating Massive Stars. I. Numerical Method and Evolution of the Internal Stellar Structure. Astrophysical Journal, 2000, 528, 368-396.	1.6	784
5	Nucleosynthesis in Massive Stars with Improved Nuclear and Stellar Physics. Astrophysical Journal, 2002, 576, 323-348.	1.6	780
6	THE JINA REACLIB DATABASE: ITS RECENT UPDATES AND IMPACT ON TYPE-I X-RAY BURSTS. Astrophysical Journal, Supplement Series, 2010, 189, 240-252.	3.0	721
7	The Progenitor Stars of Gammaâ€Ray Bursts. Astrophysical Journal, 2006, 637, 914-921.	1.6	717
8	Presupernova Evolution of Differentially Rotating Massive Stars Including Magnetic Fields. Astrophysical Journal, 2005, 626, 350-363.	1.6	618
9	Supernovae, Jets, and Collapsars. Astrophysical Journal, 2001, 550, 410-425.	1.6	592
10	The GALAH survey: scientific motivation. Monthly Notices of the Royal Astronomical Society, 2015, 449, 2604-2617.	1.6	535
11	Nucleosynthesis and remnants in massive stars of solar metallicity. Physics Reports, 2007, 442, 269-283.	10.3	534
12	NUCLEOSYNTHESIS AND EVOLUTION OF MASSIVE METAL-FREE STARS. Astrophysical Journal, 2010, 724, 341-373.	1.6	505
13	Pulsational pair instability as an explanation for the most luminous supernovae. Nature, 2007, 450, 390-392.	13.7	495
14	The Effects of Binary Evolution on the Dynamics of Core Collapse and Neutron Star Kicks. Astrophysical Journal, 2004, 612, 1044-1051.	1.6	403
15	Pairâ€Instability Supernovae, Gravity Waves, and Gammaâ€Ray Transients. Astrophysical Journal, 2001, 550, 372-382.	1.6	372
16	Presupernova Evolution of Rotating Massive Stars. II. Evolution of the Surface Properties. Astrophysical Journal, 2000, 544, 1016-1035.	1.6	356
17	A single low-energy, iron-poor supernova as the source of metals in the star SMSS J031300.36â^'670839.3. Nature, 2014, 506, 463-466.	13.7	298
18	The effect of pair-instability mass loss on black-hole mergers. Astronomy and Astrophysics, 2016, 594, A97.	2.1	289

#	Article	IF	Citations
19	Models for Type I Xâ€Ray Bursts with Improved Nuclear Physics. Astrophysical Journal, Supplement Series, 2004, 151, 75-102.	3.0	286
20	Detailed Abundances for 28 Metalâ€poor Stars: Stellar Relics in the Milky Way. Astrophysical Journal, 2008, 681, 1524-1556.	1.6	269
21	Coreâ€Collapse Simulations of Rotating Stars. Astrophysical Journal, 2000, 541, 1033-1050.	1.6	240
22	The Supernova Channel of Superâ€AGB Stars. Astrophysical Journal, 2008, 675, 614-625.	1.6	240
23	The Propagation and Eruption of Relativistic Jets from the Stellar Progenitors of Gammaâ€Ray Bursts. Astrophysical Journal, 2004, 608, 365-377.	1.6	212
24	PAIR INSTABILITY SUPERNOVAE: LIGHT CURVES, SPECTRA, AND SHOCK BREAKOUT. Astrophysical Journal, 2011, 734, 102.	1.6	196
25	THE REMARKABLE DEATHS OF 9â€“11 SOLAR MASS STARS. Astrophysical Journal, 2015, 810, 34.	1.6	192
26	Fallback and Black Hole Production in Massive Stars. Astrophysical Journal, 2008, 679, 639-654.	1.6	190
27	Supernova simulations from a 3D progenitor model â€“ Impact of perturbations and evolution of explosion properties. Monthly Notices of the Royal Astronomical Society, 2017, 472, 491-513.	1.6	184
28	Presupernova Evolution with Improved Rates for Weak Interactions. Astrophysical Journal, 2001, 560, 307-325.	1.6	178
29	Neutrino nucleosynthesis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 606, 258-264.	1.5	174
30	NUGRID STELLAR DATA SET. I. STELLAR YIELDS FROM H TO BI FOR STARS WITH METALLICITIES Z = 0.02 and Z = 0.01. Astrophysical Journal, Supplement Series, 2016, 225, 24.	3.0	172
31	On the Stability of Very Massive Primordial Stars. Astrophysical Journal, 2001, 550, 890-896.	1.6	157
32	A High-resolution Study of Presupernova Core Structure. Astrophysical Journal, 2018, 860, 93.	1.6	151
33	A simple approach to the supernova progenitorâ€“explosion connection. Monthly Notices of the Royal Astronomical Society, 2016, 460, 742-764.	1.6	146
34	A wide starâ€“black-hole binary system from radial-velocity measurements. Nature, 2019, 575, 618-621.	13.7	142
35	Three-dimensional simulations of neutrino-driven core-collapse supernovae from low-mass single and binary star progenitors. Monthly Notices of the Royal Astronomical Society, 2019, 484, 3307-3324.	1.6	137
36	NEW TWO-DIMENSIONAL MODELS OF SUPERNOVA EXPLOSIONS BY THE NEUTRINO-HEATING MECHANISM: EVIDENCE FOR DIFFERENT INSTABILITY REGIMES IN COLLAPSING STELLAR CORES. Astrophysical Journal, 2012, 761, 72.	1.6	136

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37	LONG GAMMA-RAY TRANSIENTS FROM COLLAPSARS. Astrophysical Journal, 2012, 752, 32.	1.6	135
38	Which massive stars are gamma-ray burst progenitors?. Astronomy and Astrophysics, 2005, 435, 247-259.	2.1	132
39	Presupernova Collapse Models with Improved Weak-Interaction Rates. Physical Review Letters, 2001, 86, 1678-1681.	2.9	131
40	Nucleosynthesis in the Innermost Ejecta of Neutrino-driven Supernova Explosions in Two Dimensions. Astrophysical Journal, 2018, 852, 40.	1.6	128
41	The Detectability of Pairâ€Production Supernovae atzâ‰² 6. Astrophysical Journal, 2005, 633, 1031-1041.	1.6	124
42	Binary Merger Progenitors for Gammaâ€Ray Bursts and Hypernovae. Astrophysical Journal, 2005, 623, 302-313.	1.6	117
43	DEPENDENCE OF X-RAY BURST MODELS ON NUCLEAR REACTION RATES. Astrophysical Journal, 2016, 830, 55.	1.6	115
44	Titans of the early Universe: The Prato statement on the origin of the first supermassive black holes. Publications of the Astronomical Society of Australia, 2019, 36, .	1.3	114
45	White dwarf spins from low-mass stellar evolution models. Astronomy and Astrophysics, 2008, 481, L87-L90.	2.1	113
46	THE NUCLEOSYNTHETIC IMPRINT OF 15â€“40M_{â˜‰}PRIMORDIAL SUPERNOVAE ON METAL-POOR STARS. Astrophysical Journal, 2010, 709, 11-26.	1.6	113
47	THE LAST MINUTES OF OXYGEN SHELL BURNING IN A MASSIVE STAR. Astrophysical Journal, 2016, 833, 124.	1.6	107
48	The evolution of supermassive Population III stars. Monthly Notices of the Royal Astronomical Society, 2018, 474, 2757-2773.	1.6	98
49	Self-consistent 3D Supernova Models From â˜’7 Minutes to +7 s: A 1-bethe Explosion of a â¼19 M _{âŠ™} Progenitor. Astrophysical Journal, 2021, 915, 28.	1.6	97
50	Models of Type I X-Ray Bursts from GS 1826-24: A Probe of rp-Process Hydrogen Burning. Astrophysical Journal, 2007, 671, L141-L144.	1.6	93
51	MIXING IN ZERO- AND SOLAR-METALLICITY SUPERNOVAE. Astrophysical Journal, 2009, 693, 1780-1802.	1.6	93
52	PRODUCTION OF²⁶Al,⁴⁴Ti, AND⁶⁰Fe IN CORE-COLLAPSE SUPERNOVAE: SENSITIVITY TO THE RATES OF THE TRIPLE ALPHA AND¹²C(Î±, Î³)¹⁶O REACTIONS. Astrophysical Journal, 2010, 718, 357-367.	1.6	90
53	The Pair-instability Mass Gap for Black Holes. Astrophysical Journal Letters, 2021, 912, L31.	3.0	90
54	On the Maximum Mass of Accreting Primordial Supermassive Stars. Astrophysical Journal Letters, 2017, 842, L6.	3.0	89

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55	Formation of high mass X-ray black hole binaries. New Astronomy, 2001, 6, 457-470.	0.8	83
56	Dense matter with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	81
57	Three-dimensional models of core-collapse supernovae from low-mass progenitors with implications for Crab. Monthly Notices of the Royal Astronomical Society, 2020, 496, 2039-2084.	1.6	78
58	Black Hole Formation and Fallback during the Supernova Explosion of a 40 M_{âŠ™} Star. Astrophysical Journal Letters, 2018, 852, L19.	3.0	75
59	SEEING THE FIRST SUPERNOVAE AT THE EDGE OF THE UNIVERSE WITH JWST. Astrophysical Journal Letters, 2013, 762, L6.	3.0	74
60	FINDING THE FIRST COSMIC EXPLOSIONS. I. PAIR-INSTABILITY SUPERNOVAE. Astrophysical Journal, 2013, 777, 110.	1.6	74
61	Stellar origin of the ¹⁸² Hf cosmochronometer and the presolar history of solar system matter. Science, 2014, 345, 650-653.	6.0	73
62	Stellar(n,Î³)Cross Section ofNi62. Physical Review Letters, 2005, 94, 092504.	2.9	72
63	Millihertz Quasiâ€periodic Oscillations from Marginally Stable Nuclear Burning on an Accreting Neutron Star. Astrophysical Journal, 2007, 665, 1311-1320.	1.6	72
64	Gamow-Teller Strength in the Exotic Odd-Odd NucleiLa138andTa180and Its Relevance for Neutrino Nucleosynthesis. Physical Review Letters, 2007, 98, 082501.	2.9	70
65	TWO-DIMENSIONAL SIMULATIONS OF PULSATIONAL PAIR-INSTABILITY SUPERNOVAE. Astrophysical Journal, 2014, 792, 28.	1.6	67
66	On the Sensitivity of Massive Star Nucleosynthesis and Evolution to Solar Abundances and to Uncertainties in Heliumâ€Burning Reaction Rates. Astrophysical Journal, 2007, 671, 821-827.	1.6	65
67	Multiple ring nebulae around blue supergiants. Astronomy and Astrophysics, 2008, 488, L37-L41.	2.1	63
68	Fast evolving pair-instability supernova models: evolution, explosion, light curves. Monthly Notices of the Royal Astronomical Society, 2017, 464, 2854-2865.	1.6	63
69	MULTI-INSTRUMENT X-RAY OBSERVATIONS OF THERMONUCLEAR BURSTS WITH SHORT RECURRENCE TIMES. Astrophysical Journal, 2010, 718, 292-305.	1.6	62
70	METAL-POOR STARS OBSERVED WITH THEMAGELLANTELESCOPE. III. NEW EXTREMELY AND ULTRA METAL-POOR STARS FROM SDSS/SEGUE AND INSIGHTS ON THE FORMATION OF ULTRA METAL-POOR STARS. Astrophysical Journal, 2015, 809, 136.	1.6	60
71	NUCLEOSYNTHESIS IN A PRIMORDIAL SUPERNOVA: CARBON AND OXYGEN ABUNDANCES IN SMSS J031300.36â€“670839.3. Astrophysical Journal Letters, 2015, 806, L16.	3.0	59
72	Nebular spectra of pair-instability supernovae. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3207-3229.	1.6	58

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73	Multidimensional simulations of ultrastripped supernovae to shock breakout. Monthly Notices of the Royal Astronomical Society, 2018, 479, 3675-3689.	1.6	57
74	On Heavy Element Enrichment in Classical Novae. Astrophysical Journal, 2004, 602, 931-937.	1.6	56
75	OBSERVATIONAL CONSTRAINTS ON FIRST-STAR NUCLEOSYNTHESIS. II. SPECTROSCOPY OF AN ULTRA METAL-POOR CEMP-no STAR*. Astrophysical Journal, 2016, 833, 21.	1.6	56
76	Role of Core-collapse Supernovae in Explaining Solar System Abundances of p Nuclides. Astrophysical Journal, 2018, 854, 18.	1.6	55
77	Supernova Reverse Shocks: SiC Growth and Isotopic Composition. Astrophysical Journal, 2003, 594, 312-325.	1.6	54
78	THE GENERAL RELATIVISTIC INSTABILITY SUPERNOVA OF A SUPERMASSIVE POPULATION III STAR. Astrophysical Journal, 2014, 790, 162.	1.6	54
79	Uncertainties in the production ofpnuclei in massive stars obtained from Monte Carlo variations. Monthly Notices of the Royal Astronomical Society, 2016, 463, 4153-4166.	1.6	53
80	PAIR INSTABILITY SUPERNOVAE OF VERY MASSIVE POPULATION III STARS. Astrophysical Journal, 2014, 792, 44.	1.6	52
81	SULFUR ISOTOPIC COMPOSITIONS OF SUBMICROMETER SiC GRAINS FROM THE MURCHISON METEORITE. Astrophysical Journal, 2015, 799, 156.	1.6	51
82	New Neutron-capture Site in Massive Pop III and Pop II Stars as a Source for Heavy Elements in the Early Galaxy. Astrophysical Journal, 2018, 865, 120.	1.6	51
83	Observatory science with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	50
84	The Î½-Process in the Light of an Improved Understanding of Supernova Neutrino Spectra. Astrophysical Journal, 2018, 865, 143.	1.6	49
85	DEPENDENCE OFs-PROCESS NUCLEOSYNTHESIS IN MASSIVE STARS ON TRIPLE-ALPHA AND¹²C(Î±, Î³)¹⁶O REACTION RATE UNCERTAINTIES. Astrophysical Journal, 2009, 702, 1068-1077.	1.6	48
86	The Formation of a 70 M_{âŠ™} Black Hole at High Metallicity. Astrophysical Journal, 2020, 890, 113.	1.6	48
87	SUPERBURST MODELS FOR NEUTRON STARS WITH HYDROGEN- AND HELIUM-RICH ATMOSPHERES. Astrophysical Journal, 2012, 752, 150.	1.6	46
88	THE METALLICITY DEPENDENCE OF THE MINIMUM MASS FOR CORE-COLLAPSE SUPERNOVAE. Astrophysical Journal Letters, 2013, 765, L43.	3.0	46
89	MULTI-ZONE MODELS OF SUPERBURSTS FROM ACCRETING NEUTRON STARS. Astrophysical Journal, 2011, 743, 189.	1.6	45
90	Progress of Jinping Underground laboratory for Nuclear Astrophysics (JUNA). Science China: Physics, Mechanics and Astronomy, 2016, 59, 1.	2.0	45

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91	The impact of fallback on the compact remnants and chemical yields of core-collapse supernovae. Monthly Notices of the Royal Astronomical Society, 2020, 495, 3751-3762.	1.6	45
92	Large-scale Mixing in a Violent Oxygenâ€“Neon Shell Merger Prior to a Core-collapse Supernova. Astrophysical Journal, 2020, 890, 94.	1.6	44
93	Ca40(Î±,Î³)Ti44Reaction in the Energy Regime of Supernova Nucleosynthesis. Physical Review Letters, 2006, 96, 041102.	2.9	42
94	FINDING THE FIRST COSMIC EXPLOSIONS. II. CORE-COLLAPSE SUPERNOVAE. Astrophysical Journal, 2013, 768, 95.	1.6	42
95	THE SUPERNOVA THAT DESTROYED A PROTOGALAXY: PROMPT CHEMICAL ENRICHMENT AND SUPERMASSIVE BLACK HOLE GROWTH. Astrophysical Journal, 2013, 774, 64.	1.6	42
96	PRODUCTION OF CARBON-RICH PRESOLAR GRAINS FROM MASSIVE STARS. Astrophysical Journal Letters, 2013, 767, L22.	3.0	42
97	Gamma-Ray Emission of ⁶⁰Fe and ²⁶Al Radioactivity in Our Galaxy. Astrophysical Journal, 2020, 889, 169.	1.6	41
98	Nuclear data needs for the study of nucleosynthesis in massive stars. Nuclear Physics A, 2003, 718, 3-12.	0.6	40
99	Presupernova Evolution of Rotating Massive Stars and the Rotation Rate of Pulsars. Symposium - International Astronomical Union, 2004, 215, 591-600.	0.1	40
100	FINDING THE FIRST COSMIC EXPLOSIONS. III. PULSATIONAL PAIR-INSTABILITY SUPERNOVAE. Astrophysical Journal, 2014, 781, 106.	1.6	40
101	On the Rotation of Supermassive Stars. Astrophysical Journal Letters, 2018, 853, L3.	3.0	40
102	Code dependencies of pre-supernova evolution and nucleosynthesis in massive stars: evolution to the end of core helium burning. Monthly Notices of the Royal Astronomical Society, 2015, 447, 3115-3129.	1.6	39
103	The Molecular Hydrogen Deficit in Gammaâ€Ray Burst Afterglows. Astrophysical Journal, 2008, 682, 1114-1123.	1.6	38
104	THE IMPACT OF NEUTRINO MAGNETIC MOMENTS ON THE EVOLUTION OF MASSIVE STARS. Astrophysical Journal, 2009, 696, 608-619.	1.6	38
105	THE BIGGEST EXPLOSIONS IN THE UNIVERSE. Astrophysical Journal, 2013, 775, 107.	1.6	38
106	ARE MODELS FOR CORE-COLLAPSE SUPERNOVA PROGENITORS CONSISTENT WITH THE PROPERTIES OF SUPERNOVA REMNANTS?. Astrophysical Journal, 2015, 803, 101.	1.6	38
107	Black Hole Hyperaccretion Inflowâ€“Outflow Model. I. Long and Ultra-long Gamma-Ray Bursts. Astrophysical Journal, 2018, 852, 20.	1.6	38
108	SUPERMASSIVE POPULATION III SUPERNOVAE AND THE BIRTH OF THE FIRST QUASARS. Astrophysical Journal, 2013, 778, 17.	1.6	37

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109	Parameterizing the Supernova Engine and Its Effect on Remnants and Basic Yields. Astrophysical Journal, 2018, 856, 63.	1.6	36
110	The Deaths of Very Massive Stars. Astrophysics and Space Science Library, 2015, , 199-225.	1.0	36
111	CONSTRAINTS ON EXPLOSIVE SILICON BURNING IN CORE-COLLAPSE SUPERNOVAE FROM MEASURED Ni/Fe RATIOS. Astrophysical Journal, 2015, 807, 110.	1.6	35
112	CAN DIRECT COLLAPSE BLACK HOLES LAUNCH GAMMA-RAY BURSTS AND GROW TO SUPERMASSIVE BLACK HOLES?. Astrophysical Journal, 2015, 810, 64.	1.6	35
113	Sensitivity of the C and O production on the 3Î± rate. Astrophysics and Space Science, 2004, 291, 27-56.	0.5	33
114	Pulsational Analysis of the Cores of Massive Stars and Its Relevance to Pulsar Kicks. Astrophysical Journal, 2004, 615, 460-474.	1.6	33
115	Thermonuclear Bursts with Short Recurrence Times from Neutron Stars Explained by Opacity-driven Convection. Astrophysical Journal, 2017, 842, 113.	1.6	32
116	The Limiting Stellar Initial Mass for Black Hole Formation in Close Binary Systems. Astrophysical Journal, 2002, 578, 335-347.	1.6	32
117	THE BIGGEST EXPLOSIONS IN THE UNIVERSE. II.. Astrophysical Journal, 2013, 777, 99.	1.6	31
118	PAIR-INSTABILITY SUPERNOVAE IN THE LOCAL UNIVERSE. Astrophysical Journal, 2014, 797, 9.	1.6	31
119	The Î½-process with Fully Time-dependent Supernova Neutrino Emission Spectra. Astrophysical Journal, 2019, 876, 151.	1.6	31
120	REACTION RATE AND COMPOSITION DEPENDENCE OF THE STABILITY OF THERMONUCLEAR BURNING ON ACCRETING NEUTRON STARS. Astrophysical Journal, 2014, 787, 101.	1.6	30
121	THE INFLUENCE OF ACCRETION RATE AND METALLICITY ON THERMONUCLEAR BURSTS: PREDICTIONS FROM KEPLER MODELS. Astrophysical Journal, 2016, 819, 46.	1.6	30
122	The mass distribution of Population III stars. Monthly Notices of the Royal Astronomical Society, 2017, 468, 418-425.	1.6	30
123	The Lack of Gammaâ€Ray Bursts from Population III Binaries. Astrophysical Journal, 2007, 664, 986-999.	1.6	29
124	THE IMPACT OF HELIUM-BURNING REACTION RATES ON MASSIVE STAR EVOLUTION AND NUCLEOSYNTHESIS. Astrophysical Journal, 2013, 769, 2.	1.6	29
125	Evidence from stable isotopes and 10Be for solar system formation triggered by a low-mass supernova. Nature Communications, 2016, 7, 13639.	5.8	29
126	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">B</mml:mi><mml:mprescripts /><mml:none /><mml:mn>11</mml:mn></mml:mmultiscripts></mml:math>and Constraints on Neutrino Oscillations and Spectra from Neutrino Nucleosynthesis. Physical Review Letters, 2011, 106, 152501.	2.9	27

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127	Accretion in strong field gravity with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	27
128	Mass and metallicity requirement in stellar models for galactic chemical evolution applications. Monthly Notices of the Royal Astronomical Society, 2016, 463, 3755-3767.	1.6	26
129	First Direct Measurement of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>12</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow><mml:mo		

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145	Multi-epoch X-ray burst modelling: MCMC with large grids of 1D simulations. Monthly Notices of the Royal Astronomical Society, 2020, 494, 4576-4589.	1.6	20
146	Observational signatures of the surviving donor star in the double-detonation model of Type Ia supernovae. Astronomy and Astrophysics, 2021, 654, A103.	2.1	20
147	Evolution and Explosion of Very Massive Primordial Stars. , 0, , 369-375.		20
148	Nucleosynthesis in rotating massive stars. Nuclear Physics A, 1997, 621, 457-466.	0.6	19
149	Binary Evolution Models with Rotation. Symposium - International Astronomical Union, 2004, 215, 535-544.	0.1	19
150	On the detection of supermassive primordial stars â€“ II. Blue supergiants. Monthly Notices of the Royal Astronomical Society, 2019, 488, 3995-4003.	1.6	19
151	Neutrino Losses in Type I Thermonuclear X-Ray Bursts: An Improved Nuclear Energy Generation Approximation. Astrophysical Journal, 2019, 870, 64.	1.6	19
152	The quest for blue supergiants: binary merger models for the evolution of the progenitor of SN 1987A. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	18
153	Simulating X-ray bursts during a transient accretion event. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2112-2118.	1.6	18
154	A Bayesian approach to matching thermonuclear X-ray burst observations with models. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2228-2240.	1.6	18
155	On monolithic supermassive stars. Monthly Notices of the Royal Astronomical Society, 2020, 494, 2236-2243.	1.6	18
156	Supernova 1987A: 3D Mixing and Light Curves for Explosion Models Based on Binary-merger Progenitors. Astrophysical Journal, 2021, 914, 4.	1.6	18
157	Multidimensional simulations of pair-instability supernovae. Computer Physics Communications, 2011, 182, 254-256.	3.0	17
158	Very Massive Stars in the local Universe. Proceedings of the International Astronomical Union, 2012, 10, 51-79.	0.0	17
159	Cu and Zn in different stellar populations: Inferring their astrophysical origin. Nuclear Physics A, 2005, 758, 284-287.	0.6	16
160	Numerical approaches for multidimensional simulations of stellar explosions. Astronomy and Computing, 2013, 3-4, 70-78.	0.8	16
161	On the Evolution of Supermassive Primordial Stars in Cosmological Flows. Astrophysical Journal, 2021, 915, 110.	1.6	16
162	Effective Helium Burning Rates and the Production of the Neutrino Nuclei. Physical Review Letters, 2014, 112, 111101.	2.9	15

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163	Supernovae, Gamma-Ray Bursts and Stellar Rotation. Symposium - International Astronomical Union, 2004, 215, 601-612.	0.1	14
164	COSMOLOGICAL IMPACT OF POPULATION III BINARIES. Astrophysical Journal, 2015, 802, 13.	1.6	14
165	X-Ray and Gamma-Ray Emission from Core-collapse Supernovae: Comparison of Three-dimensional Neutrino-driven Explosions with SN 1987A. Astrophysical Journal, 2019, 882, 22.	1.6	14
166	Stability of Supernova Ia Progenitors against Radial Oscillations. Astrophysical Journal, 2004, 615, 378-382.	1.6	14
167	Hydrostatic and explosive nucleosynthesis in massive stars using improved nuclear and stellar physics. Nuclear Physics A, 2003, 718, 463-465.	0.6	13
168	New Primary Mechanisms for the Synthesis of Rare<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>9</mml:mn></mml:mmultiscripts></mml:math>in Early Supernovae. Physical Review Letters, 2013, 110, 141101.	2.9	13
169	Carbon production on accreting neutron stars in a new regime of stable nuclear burning. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 456, L11-L15.	1.2	13
170	Fallback Accretion-powered Supernova Light Curves Based on a Neutrino-driven Explosion Simulation of a 40 M_{âŠ™} Star. Astrophysical Journal, 2019, 880, 21.	1.6	13
171	Presupernova neutrino signals as potential probes of neutrino mass hierarchy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 796, 126-130.	1.5	13
172	Reducing Uncertainties in the Production of the Gamma-emitting Nuclei ²⁶Al, ⁴⁴Ti, and ⁶⁰Fe in Core-collapse Supernovae by Using Effective Helium Burning Rates. Astrophysical Journal Letters, 2017, 839, L9.	3.0	12
173	Nucleosynthesis in Primordial Hypernovae. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	12
174	Nucleosynthesis in massive stars revisited. Nuclear Physics A, 2001, 688, 193-196.	0.6	11
175	Helium and nitrogen enrichment in massive main-sequence stars: mechanisms and implications for the origin of WNL stars. Monthly Notices of the Royal Astronomical Society, 2020, 494, 3861-3879.	1.6	11
176	On the origin of nitrogen at low metallicity. Monthly Notices of the Royal Astronomical Society, 2021, 502, 4359-4376.	1.6	11
177	Origin of the Elements. , 2003, , 1-15.		10
178	Advancement of Photospheric Radius Expansion and Clocked Type-I X-Ray Burst Models with the New <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Mg</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>22</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow><mml:mo		

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181	Neutrino-Induced Nucleosynthesis in Helium Shells of Early Core-Collapse Supernovae. EPJ Web of Conferences, 2016, 109, 06001.	0.1	9
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