Takashi J Moriya

List of Publications by Year
in descending order

137 papers	4,849 citations	94269 37 h-index	106150 65 g-index
141 all docs	141 docs citations	141 times ranked	4406 citing authors

#	Article	IF	Citations
1	The Hyper Suprime-Cam SSP Survey: Overview and survey design. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	566
2	A new route towards merging massive black holes. Astronomy and Astrophysics, 2016, 588, A50.	2.1	405
3	ULTRA-STRIPPED TYPE Ic SUPERNOVAE FROM CLOSE BINARY EVOLUTION. Astrophysical Journal Letters, 2013, 778, L23.	3.0	167
4	Light-curve modelling of superluminous supernova 2006gy: collision between supernova ejecta and a dense circumstellar medium. Monthly Notices of the Royal Astronomical Society, 2013, 428, 1020-1035.	1.6	140
5	Supernovae from red supergiants with extensive mass loss. Monthly Notices of the Royal Astronomical Society, 2011, 415, 199-213.	1.6	119
6	FALLBACK SUPERNOVAE: A POSSIBLE ORIGIN OF PECULIAR SUPERNOVAE WITH EXTREMELY LOW EXPLOSION ENERGIES. Astrophysical Journal, 2010, 719, 1445-1453.	1.6	116
7	Superluminous Supernovae. Space Science Reviews, 2018, 214, 1.	3.7	99
8	An analytic bolometric light curve model of interaction-powered supernovae and its application to Type IIn supernovae. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1520-1535.	1.6	97
9	A CORE-COLLAPSE SUPERNOVA MODEL FOR THE EXTREMELY LUMINOUS TYPE Ic SUPERNOVA 2007bi: AN ALTERNATIVE TO THE PAIR-INSTABILITY SUPERNOVA MODEL. Astrophysical Journal Letters, 2010, 717, L83-L86.	3.0	94
10	Mass-loss histories of Type IIn supernova progenitors within decades before their explosion. Monthly Notices of the Royal Astronomical Society, 2014, 439, 2917-2926.	1.6	88
11	The delay of shock breakout due to circumstellar material evident in most type II supernovae. Nature Astronomy, 2018, 2, 808-818.	4.2	86
12	A hot and fast ultra-stripped supernova that likely formed a compact neutron star binary. Science, 2018, 362, 201-206.	6.0	84
13	RAPIDLY RISING TRANSIENTS FROM THE SUBARU HYPER SUPRIME-CAM TRANSIENT SURVEY*. Astrophysical Journal, 2016, 819, 5.	1.6	81
14	Detection of the Gravitational Lens Magnifying a Type Ia Supernova. Science, 2014, 344, 396-399.	6.0	77
15	A surge of light at the birth of a supernova. Nature, 2018, 554, 497-499.	13.7	74
16	Ultra-luminous X-ray sources and neutron-starâ€"black-hole mergers from very massive close binaries at low metallicity. Astronomy and Astrophysics, 2017, 604, A55.	2.1	69
17	Light-curve and spectral properties of ultrastripped core-collapse supernovae leading to binary neutron stars. Monthly Notices of the Royal Astronomical Society, 2017, 466, 2085-2098.	1.6	67
18	Cosmic rates of black hole mergers and pair-instability supernovae from chemically homogeneous binary evolution. Monthly Notices of the Royal Astronomical Society, 2020, 499, 5941-5959.	1.6	65

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19	Related Progenitor Models for Long-duration Gamma-Ray Bursts and Type Ic Superluminous Supernovae. Astrophysical Journal, 2018, 858, 115.	1.6	63
20	The impact of stellar rotation on the black hole mass-gap from pair-instability supernovae. Astronomy and Astrophysics, 2020, 640, L18.	2.1	59
21	TYPE IIb SUPERNOVA 2013df ENTERING INTO AN INTERACTION PHASE: A LINK BETWEEN THE PROGENITOR AND THE MASS LOSS. Astrophysical Journal, 2015, 807, 35.	1.6	58
22	Immediate dense circumstellar environment of supernova progenitors caused by wind acceleration: its effect on supernova light curves. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 469, L108-L112.	1.2	58
23	Interacting supernovae from photoionization-confined shells around red supergiant stars. Nature, 2014, 512, 282-285.	13.7	56
24	The evolution of superluminous supernova LSQ14mo and its interacting host galaxy system. Astronomy and Astrophysics, 2017, 602, A9.	2.1	56
25	Electron-capture supernovae exploding within their progenitor wind. Astronomy and Astrophysics, 2014, 569, A57.	2.1	54
26	Type IIP supernova light curves affected by the acceleration of red supergiant winds. Monthly Notices of the Royal Astronomical Society, 2018, 476, 2840-2851.	1.6	53
27	DIVERSITY OF LUMINOUS SUPERNOVAE FROM NON-STEADY MASS LOSS. Astrophysical Journal, 2012, 747, 118.	1.6	52
28	Detectability of high-redshift superluminous supernovae with upcoming optical and near-infrared surveys. Monthly Notices of the Royal Astronomical Society, 2012, 422, 2675-2684.	1.6	49
29	Hydrogen-rich supernovae beyond the neutrino-driven core-collapse paradigm. Nature Astronomy, 2017, 1, 713-720.	4.2	48
30	The electron-capture origin of supernova 2018zd. Nature Astronomy, 2021, 5, 903-910.	4.2	47
31	Type IIn supernova light-curve properties measured from an untargeted survey sample. Astronomy and Astrophysics, 2020, 637, A73.	2.1	47
32	EXTRAORDINARY MAGNIFICATION OF THE ORDINARY TYPE Ia SUPERNOVA PS1-10afx. Astrophysical Journal Letters, 2013, 768, L20.	3.0	46
33	Supernova spectra below strong circumstellar interaction. Astronomy and Astrophysics, 2015, 574, A61.	2.1	46
34	The interaction of core-collapse supernova ejecta with a companion star. Astronomy and Astrophysics, 2015, 584, A11.	2.1	44
35	A DIP AFTER THE EARLY EMISSION OF SUPERLUMINOUS SUPERNOVAE: A SIGNATURE OF SHOCK BREAKOUT WITHIN DENSE CIRCUMSTELLAR MEDIA. Astrophysical Journal Letters, 2012, 756, L22.	3.0	41
36	The bumpy light curve of Type IIn supernova iPTF13z over 3 years. Astronomy and Astrophysics, 2017, 605, A6.	2.1	41

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37	Pulsations of red supergiant pair-instability supernova progenitors leading to extreme mass loss. Astronomy and Astrophysics, 2015, 573, A18.	2.1	39
38	Rapidly evolving faint transients from stripped-envelope electron-capture supernovae. Monthly Notices of the Royal Astronomical Society, 2016, 461, 2155-2161.	1.6	34
39	SNÂ2017ens: The Metamorphosis of a Luminous Broadlined Type Ic Supernova into an SNÂIIn. Astrophysical Journal Letters, 2018, 867, L31.	3.0	33
40	Detectability of high-redshift superluminous supernovae with upcoming optical and near-infrared surveys â€“ II. Beyond zÂ=Â6. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2483-2493.	1.6	32
41	PROPERTIES OF NEWLY FORMED DUST GRAINS IN THE LUMINOUS TYPE IIn SUPERNOVA 2010jl. Astrophysical Journal, 2013, 776, 5.	1.6	32
42	The Low-luminosity Type IIP Supernova 2016bkv with Early-phase Circumstellar Interaction. Astrophysical Journal, 2018, 859, 78.	1.6	32
43	Constraints on single-degenerate Chandrasekhar mass progenitors of Type Iax supernovae. Astronomy and Astrophysics, 2015, 574, A12.	2.1	31
44	iPTF15eqv: Multiwavelength ExposÃ© of a Peculiar Calcium-rich Transient. Astrophysical Journal, 2017, 846, 50.	1.6	30
45	Systematic Investigation of the Fallback Accretion-powered Model for Hydrogen-poor Superluminous Supernovae. Astrophysical Journal, 2018, 867, 113.	1.6	30
46	First Release of High-Redshift Superluminous Supernovae from the Subaru HIgh- <i>Z</i> SUpernova CAmpaign (SHIZUCA). I. Photometric Properties. Astrophysical Journal, Supplement Series, 2019, 241, 16.	3.0	30
47	CONSTRAINING PHYSICAL PROPERTIES OF TYPE IIn SUPERNOVAE THROUGH RISE TIMES AND PEAK LUMINOSITIES. Astrophysical Journal Letters, 2014, 790, L16.	3.0	29
48	Synthetic light curves of shocked dense circumstellar shells. Monthly Notices of the Royal Astronomical Society, 2013, 430, 1402-1407.	1.6	28
49	Cleavable Linker for Photo-Cross-Linked Small-Molecule Affinity Matrix. Bioconjugate Chemistry, 2010, 21, 182-186.	1.8	27
50	Mass loss of massive stars near the Eddington luminosity by core neutrino emission shortly before their explosion. Astronomy and Astrophysics, 2014, 564, A83.	2.1	27
51	On the nature of rapidly fading Type II supernovae. Monthly Notices of the Royal Astronomical Society, 2016, 455, 423-430.	1.6	27
52	Rapidly Evolving Transients from the Hyper Suprime-Cam SSP Transient Survey. Astrophysical Journal, 2020, 894, 27.	1.6	26
53	RADIO TRANSIENTS FROM ACCRETION-INDUCED COLLAPSE OF WHITE DWARFS. Astrophysical Journal Letters, 2016, 830, L38.	3.0	25
54	Magnetar-powered Supernovae in Two Dimensions. II. Broad-line Supernovae Ic. Astrophysical Journal, 2017, 839, 85.	1.6	25

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55	Revealing the binary origin of Type Ic superluminous supernovae through nebular hydrogen emission. Astronomy and Astrophysics, 2015, 584, L5.	2.1	25
56	SN 2016jhj at redshift 0.34: extending the Type II supernova Hubble diagram using the standard candle method. Monthly Notices of the Royal Astronomical Society, 2017, 472, 4233-4243.	1.6	24
57	Carnegie Supernova Project II: The Slowest Rising Type Ia Supernova LSQ14fmg and Clues to the Origin of Super-Chandrasekhar/03fg-like Events*. Astrophysical Journal, 2020, 900, 140.	1.6	24
58	PROGENITORS OF RECOMBINING SUPERNOVA REMNANTS. Astrophysical Journal Letters, 2012, 750, L13.	3.0	23
59	Progenitor Mass Distribution of Core-collapse Supernova Remnants in Our Galaxy and Magellanic Clouds Based on Elemental Abundances. Astrophysical Journal, 2018, 863, 127.	1.6	23
60	Supernova Ejecta Interacting with a Circumstellar Disk. I. Two-dimensional Radiation-hydrodynamic Simulations. Astrophysical Journal, 2019, 887, 249.	1.6	23
61	Early ultraviolet signatures from the interaction of Type Ia supernova ejecta with a stellar companion. Monthly Notices of the Royal Astronomical Society, 2015, 454, 1192-1201.	1.6	22
62	Superluminous Transients at AGN Centers from Interaction between Black Hole Disk Winds and Broad-line Region Clouds. Astrophysical Journal Letters, 2017, 843, L19.	3.0	22
63	The Hyper Suprime-Cam SSP transient survey in COSMOS: Overview. Publication of the Astronomical Society of Japan, 2019, 71, .	1.0	22
64	Probing the extragalactic fast transient sky at minute time-scales with DECam. Monthly Notices of the Royal Astronomical Society, 2020, 491, 5852-5866.	1.6	22
65	SN 2009ip: CONSTRAINING THE LATEST EXPLOSION PROPERTIES BY ITS LATE-PHASE LIGHT CURVE. Astrophysical Journal Letters, 2015, 803, L26.	3.0	21
66	Low-energy Population III supernovae and the origin of extremely metal-poor stars. Monthly Notices of the Royal Astronomical Society, 2017, 467, 4731-4738.	1.6	21
67	Properties of Type Ibn Supernovae: Implications for the Progenitor Evolution and the Origin of a Population of Rapid Transients. Astrophysical Journal, 2022, 927, 25.	1.6	21
68	Statistical Properties of the Nebular Spectra of 103 Stripped-envelope Core-collapse Supernovae*. Astrophysical Journal, 2022, 928, 151.	1.6	21
69	SN 2009js AT THE CROSSROADS BETWEEN NORMAL AND SUBLUMINOUS TYPE IIP SUPERNOVAE: OPTICAL AND MID-INFRARED EVOLUTION. Astrophysical Journal, 2013, 767, 166.	1.6	20
70	Luminous Type II Short-Plateau Supernovae 2006Y, 2006ai, and 2016egz: A Transitional Class from Stripped Massive Red Supergiants. Astrophysical Journal, 2021, 913, 55.	1.6	20
71	The Final Months of Massive Star Evolution from the Circumstellar Environment around SN Ic 2020oi. Astrophysical Journal, 2021, 918, 34.	1.6	20
72	CIRCUMSTELLAR AND EXPLOSION PROPERTIES OF TYPE Ibn SUPERNOVAE. Astrophysical Journal, 2016, 824, 100.	1.6	19

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73	Properties of Magnetars Mimicking ⁵⁶Ni-Powered Light Curves in Type IC Superluminous Supernovae. Astrophysical Journal, 2017, 835, 177.	1.6	19
74	The Carnegie Supernova Project II. Astronomy and Astrophysics, 2020, 638, A92.	2.1	18
75	OGLE-2014-SN-073 as a fallback accretion powered supernova. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 475, L11-L14.	1.2	17
76	First Release of High-redshift Superluminous Supernovae from the Subaru HIgh-Z SUpernova CAmpaign (SHIZUCA). II. Spectroscopic Properties. Astrophysical Journal, Supplement Series, 2019, 241, 17.	3.0	17
77	EMPRESS. IV. Extremely Metal-poor Galaxies Including Very Low-mass Primordial Systems with M _* = 10⁴â€“10⁵ M _{âŠ™} and 2%â€“3% (O/H): High (Fe/O) Suggestive of Metal Enrichment by Hypernovae/Pair-instability Supernovae. Astrophysical Journal, 2022, 925, 111.	1.6	16
78	Constraining the ellipticity of strongly magnetized neutron stars powering superluminous supernovae. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 460, L55-L58.	1.2	15
79	Luminous Type II supernovae for their low expansion velocities. Monthly Notices of the Royal Astronomical Society, 2020, 494, 5882-5901.	1.6	15
80	SUPERNOVAE POWERED BY MAGNETARS THAT TRANSFORM INTO BLACK HOLES. Astrophysical Journal, 2016, 833, 64.	1.6	14
81	The nature of PISN candidates: clues from nebular spectra. Monthly Notices of the Royal Astronomical Society, 2019, 484, 3451-3462.	1.6	14
82	Late-phase Spectropolarimetric Observations of Superluminous Supernova SN 2017egm to Probe the Geometry of the Inner Ejecta. Astrophysical Journal, 2020, 894, 154.	1.6	14
83	Variable thermal energy injection from magnetar spin-down as a possible cause of stripped-envelope supernova light-curve bumps. Monthly Notices of the Royal Astronomical Society, 2022, 513, 6210-6218.	1.6	14
84	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
85	Searches for Population III pair-instability supernovae: Predictions for ULTIMATE-Subaru and WFIRST. Publication of the Astronomical Society of Japan, 2019, 71, .	1.0	13
86	A Systematic Study on the Rise Timeâ€“Peak Luminosity Relation for Bright Optical Transients Powered by Wind Shock Breakout. Astrophysical Journal, 2020, 899, 56.	1.6	13
87	Observable fractions of core-collapse supernova light curves brightened by binary companions. Monthly Notices of the Royal Astronomical Society, 2015, 450, 3264-3269.	1.6	12
88	Explosions of Thorneâ€“Å»ytkow objects. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 475, L49-L51.	1.2	12
89	Observational Signature of Circumstellar Interaction and ⁵⁶Ni-mixing in the Type II Supernova 2016gfy. Astrophysical Journal, 2019, 882, 68.	1.6	12
90	Calcium-rich Transient SN 2019ehk in a Star-forming Environment: Yet Another Candidate for a Precursor of a Double Neutron-star Binary. Astrophysical Journal, 2021, 912, 30.	1.6	12

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91	The Carnegie Supernova Project II. Astronomy and Astrophysics, 2020, 639, A103.	2.1	12
92	The HSC-SSP Transient Survey: Implications from Early Photometry and Rise Time of Normal Type Ia Supernovae. Astrophysical Journal, 2020, 892, 25.	1.6	12
93	A Long-duration Luminous Type IIn Supernova KISS15s: Strong Recombination Lines from the Inhomogeneous Ejectaâ€"CSM Interaction Region and Hot Dust Emission from Newly Formed Dust*. Astrophysical Journal, 2019, 872, 135.	1.6	11
94	iPTF14hls as a variable hyper-wind from a very massive star. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	11
95	Observational properties of a general relativistic instability supernova from a primordial supermassive star. Monthly Notices of the Royal Astronomical Society, 2021, 503, 1206-1213.	1.6	11
96	Discovery of a Wind-blown Bubble Associated with the Supernova Remnant G346.6-0.2: A Hint for the Origin of Recombining Plasma. Astrophysical Journal, 2021, 923, 15.	1.6	11
97	Detection of Cytochrome P450 Substrates by Using a Smallâ€Molecule Droplet Array on an NADHâ€Immobilized Solid Surface. ChemBioChem, 2011, 12, 2748-2752.	1.3	10
98	Episodic modulations in supernova radio light curves from luminous blue variable supernova progenitor models. Astronomy and Astrophysics, 2013, 557, L2.	2.1	10
99	Systematic investigation of the effect of 56Ni mixing in the early photospheric velocity evolution of stripped-envelope supernovae. Monthly Notices of the Royal Astronomical Society, 2020, 497, 1619-1626.	1.6	10
100	OBSERVATIONS OF THE OPTICAL TRANSIENT IN NGC 300 WITH AKARI/IRC: POSSIBILITIES OF ASYMMETRIC DUST FORMATION. Astrophysical Journal, 2010, 718, 1456-1459.	1.6	9
101	Circumstellar properties of TypeÂIa supernovae from the helium star donor channel. Monthly Notices of the Royal Astronomical Society, 2019, 488, 3949-3956.	1.6	9
102	Extended supernova shock breakout signals from inflated stellar envelopes. Astronomy and Astrophysics, 2015, 575, L10.	2.1	9
103	Systematic study of magnetar-powered hydrogen-rich supernovae. Astronomy and Astrophysics, 2018, 619, A145.	2.1	8
104	Search for thermal X-ray features from the Crab nebula with the Hitomi soft X-ray spectrometer. Publication of the Astronomical Society of Japan, 2018, 70, .	1.0	8
105	SN 2017czd: A Rapidly Evolving Supernova from a Weak Explosion of a Type IIb Supernova Progenitor. Astrophysical Journal, 2019, 875, 76.	1.6	8
106	Extremely Energetic Supernova Explosions Embedded in a Massive Circumstellar Medium: The Case of SN 2016aps. Astrophysical Journal, 2021, 908, 99.	1.6	8
107	Searches for Population III pair-instability supernovae: Impact of gravitational lensing magnification. Publication of the Astronomical Society of Japan, 2019, 71, .	1.0	7
108	The Carnegie Supernova Project II. Astronomy and Astrophysics, 2020, 641, A148.	2.1	7

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109	HSC16aayt: A Slowly Evolving Interacting Transient Rising for More than 100 Days. Astrophysical Journal, 2019, 882, 70.	1.6	7
110	Discovering Supernovae at the Epoch of Reionization with the Nancy Grace Roman Space Telescope. Astrophysical Journal, 2022, 925, 211.	1.6	7
111	MUSSES2020J: The Earliest Discovery of a Fast Blue Ultraluminous Transient at Redshift 1.063. Astrophysical Journal Letters, 2022, 933, L36.	3.0	7
112	VTC J095517.5Â+Â690813: A radio transient from the accretion-induced collapse of a white dwarf?. Monthly Notices of the Royal Astronomical Society, 2019, 490, 1166-1170.	1.6	6
113	Synthetic spectra of energetic core-collapse supernovae and the early spectra of SN 2007bi and SN 1999as. Monthly Notices of the Royal Astronomical Society, 2019, 484, 3443-3450.	1.6	6
114	PTF11rka: an interacting supernova at the crossroads of stripped-envelope and H-poor superluminous stellar core collapses. Monthly Notices of the Royal Astronomical Society, 2020, 497, 3542-3556.	1.6	6
115	Multiple main sequence of globular clusters as a result of inhomogeneous big bang nucleosynthesis. Physical Review D, 2010, 81, .	1.6	4
116	A Rapidly Declining Transient Discovered with the Subaru/Hyper Suprime-Cam. Astrophysical Journal, 2019, 885, 13.	1.6	4
117	Constraints on the Rate of Supernovae Lasting for More Than a Year from Subaru/Hyper Suprime-Cam. Astrophysical Journal, 2021, 908, 249.	1.6	4
118	Luminous supernovae associated with ultra-long gamma-ray bursts from hydrogen-free progenitors extended by pulsational pair-instability. Astronomy and Astrophysics, 2020, 641, L10.	2.1	4
119	Interaction-Powered Supernovae as Probes of the High-Redshift Universe. , 2010, , .		3
120	Constraints on the Explosion Timescale of Core-collapse Supernovae Based on Systematic Analysis of Light Curves. Astrophysical Journal, 2022, 931, 153.	1.6	3
121	Synthesis of an allergy inducing tetrasaccharide â€œ4P-Xâ€. Carbohydrate Research, 2017, 439, 44-49.	1.1	2
122	Constraining red supergiant mass-loss prescriptions through supernova radio properties. Monthly Notices of the Royal Astronomical Society: Letters, 2021, 503, L28-L32.	1.2	2
123	Properties of Thorneâ€"Å»ytkow object explosions. Monthly Notices of the Royal Astronomical Society, 2021, 508, 74-78.	1.6	2
124	Ultraviolet-Bright Type IIP Supernovae from Massive Red Supergiants. Proceedings of the International Astronomical Union, 2011, 7, 54-57.	0.0	1
125	Superluminous Supernovae. Space Sciences Series of ISSI, 2019, , 109-145.	0.0	1
126	Mass loss of massive helium star supernova progenitors shortly before explosion constrained by supernova radio properties. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	1

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127	Long-term Evolution of a Supernova Remnant Hosting a Double Neutron Star Binary. Astrophysical Journal, 2022, 930, 143.	1.6	1
128	Nucleosynthesis of the Elements in Faint Supernovae and Hypernovae. Proceedings of the International Astronomical Union, 2009, 5, 34-41.	0.0	0
129	Unusual Supernovae and Their Connections to First Stars and Gamma-Ray Bursts. , 2010, , .		0
130	Explosive Nucleosynthesis in Luminous Hypernovae and Faint Supernovae. , 2010, , .		0
131	Faint Core-Collapse Supernovae with Fallback. , 2010, , .		0
132	Explosive Nucleosynthesis in Supernovae and Hypernovae. , 2010, , .		0
133	Supernova Optical Observations and Theory. Proceedings of the International Astronomical Union, 2013, 9, 77-85.	0.0	0
134	Light Curve Modeling of Superluminous Supernovae. Proceedings of the International Astronomical Union, 2013, 9, 86-89.	0.0	0
135	Light-curve and spectral properties of ultra-stripped core-collapse supernovae. Proceedings of the International Astronomical Union, 2016, 12, 426-426.	0.0	0
136	SupernovÃ¦. Proceedings of the International Astronomical Union, 2017, 14, 245-250.	0.0	0
137	The interaction of core-collapse supernova ejecta with a stellar companion. Proceedings of the International Astronomical Union, 2018, 14, 55-58.	0.0	0