Mark Gieles

List of Publications by Citations

134 papers	7,809 citations	48 h-index	86 g-index
139 ext. papers	8,700 ext. citations	5.2 avg, IF	6.31 L-index

#	Paper	IF	Citations
134	Binary interaction dominates the evolution of massive stars. *Science*, **2012**, 337, 444-6	33.3	1058
133	Young Massive Star Clusters. *Annual Review of Astronomy and Astrophysics*, **2010**, 48, 431-493	31.7	711
132	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2013**, 550, A107	5.1	293
131	An analytical description of the disruption of star clusters in tidal fields with an application to Galactic open clusters. *Astronomy and Astrophysics*, **2005**, 441, 117-129	5.1	214
130	Early disc accretion as the origin of abundance anomalies in globular clusters. *Monthly Notices of the Royal Astronomical Society*, **2013**, 436, 2398-2411	4.3	205
129	Star cluster disruption by giant molecular clouds. *Monthly Notices of the Royal Astronomical Society*, **2006**, 371, 793-804	4.3	190
128	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2011**, 530, A108	5.1	180
127	The star cluster population of M 51. *Astronomy and Astrophysics*, **2005**, 431, 905-924	5.1	160
126	Precession of the Sagittarius stream. *Monthly Notices of the Royal Astronomical Society*, **2014**, 437, 116-131	4.3	140
125	The life cycle of star clusters in a tidal field. *Monthly Notices of the Royal Astronomical Society*, **2011**, 413, 2509-2524	4.3	130
124	An excess of massive stars in the local 30 Doradus starburst. *Science*, **2018**, 359, 69-71	33.3	122
123	Disruption time scales of star clusters in different galaxies. *Astronomy and Astrophysics*, **2005**, 429, 173-179	5.1	118
122	THE SAGITTARIUS STREAMS IN THE SOUTHERN GALACTIC HEMISPHERE. *Astrophysical Journal*, **2012**, 750, 80	4.7	117
121	Stellar clusters in M83: formation, evolution, disruption and the influence of the environment. *Monthly Notices of the Royal Astronomical Society*, **2012**, 419, 2606-2622	4.3	114
120	Hierarchical star formation in M 51: star/cluster complexes. *Astronomy and Astrophysics*, **2005**, 443, 79-90	5.1	109
119	The luminosity function of young star clusters: implications for the maximum mass and luminosity of clusters. *Astronomy and Astrophysics*, **2006**, 450, 129-145	5.1	106
118	Lifetimes of tidally limited star clusters with different radii. *Monthly Notices of the Royal Astronomical Society: Letters*, **2008**, 389, L28-L32	4.3	105

117	The distinction between star clusters and associations. *Monthly Notices of the Royal Astronomical Society: Letters*, **2011**, 410, L6-L7	4.3	99
116	Concurrent formation of supermassive stars and globular clusters: implications for early self-enrichment. *Monthly Notices of the Royal Astronomical Society*, **2018**, 478, 2461-2479	4.3	94
115	Clusters in the solar neighbourhood: how are they destroyed?. *Astronomy and Astrophysics*, **2006**, 455, L17-L20	5.1	93
114	The spatial evolution of stellar structures in the Large Magellanic Cloud. *Monthly Notices of the Royal Astronomical Society*, **2009**, 392, 868-878	4.3	90
113	Black hole growth through hierarchical black hole mergers in dense star clusters: implications for gravitational wave detections. *Monthly Notices of the Royal Astronomical Society*, **2019**, 486, 5008-5021	4.3	88
112	ACSimaging of star clusters in M 51. *Astronomy and Astrophysics*, **2007**, 469, 925-940	5.1	84
111	Mass-loss rates and the mass evolution of star clusters. *Monthly Notices of the Royal Astronomical Society*, **2010**, 409, 305-328	4.3	82
110	Hierarchical star formation in M33: fundamental properties of the star-forming regions. *Monthly Notices of the Royal Astronomical Society*, **2007**, 379, 1302-1312	4.3	81
109	The early evolution of the star cluster mass function. *Monthly Notices of the Royal Astronomical Society*, **2009**, 394, 2113-2126	4.3	80
108	Evolution of star clusters in arbitrary tidal fields. *Monthly Notices of the Royal Astronomical Society*, **2011**, 418, 759-769	4.3	78
107	Globular cluster formation and evolution in the context of cosmological galaxy assembly: open questions. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2018**, 474, 20170616	2.4	78
106	On the mass□adius relation of hot stellar systems. *Monthly Notices of the Royal Astronomical Society: Letters*, **2010**, 408, L16-L20	4.3	75
105	The star cluster population of M 51. *Astronomy and Astrophysics*, **2005**, 441, 949-960	5.1	73
104	Observational evidence for a truncation of the star cluster initial mass function at the high mass end. *Astronomy and Astrophysics*, **2006**, 446, L9-L12	5.1	72
103	The origin of the Milky Way globular clusters. *Monthly Notices of the Royal Astronomical Society*, **2017**, 465, 3622-3636	4.3	71
102	Evidence for two populations of Galactic globular clusters from the ratio of their half-mass to Jacobi radii. *Monthly Notices of the Royal Astronomical Society*, **2010**, 401, 1832-1838	4.3	70
101	The effect of spiral arm passages on the evolution of stellar clusters. *Monthly Notices of the Royal Astronomical Society*, **2007**, 376, 809-819	4.3	69
100	The Tarantula Massive Binary Monitoring. *Astronomy and Astrophysics*, **2017**, 598, A84	5.1	68

99	A family of lowered isothermal models. *Monthly Notices of the Royal Astronomical Society*, **2015**, 454, 576-592	4.3	68
98	The early expansion of cluster cores. *Monthly Notices of the Royal Astronomical Society*, **2008**, 389, 223-230	4.3	68
97	On the Interpretation of the Age Distribution of Star Clusters in the Small Magellanic Cloud. *Astrophysical Journal*, **2007**, 668, 268-274	4.7	65
96	A DOUBLE CLUSTER AT THE CORE OF 30 DORADUS. *Astrophysical Journal Letters*, **2012**, 754, L37	7.9	62
95	An alternative method to study star cluster disruption. *Astronomy and Astrophysics*, **2008**, 482, 165-171	5.1	61
94	Outer density profiles of 19 Galactic globular clusters from deep and wide-field imaging. *Monthly Notices of the Royal Astronomical Society*, **2012**, 419, 14-28	4.3	59
93	Extending the globular cluster system–halo mass relation to the lowest galaxy masses. *Monthly Notices of the Royal Astronomical Society*, **2018**, 481, 5592-5605	4.3	59
92	Search for associations containing young stars: chemical tagging IC 2391 and the Argus association. *Monthly Notices of the Royal Astronomical Society*, **2013**, 431, 1005-1018	4.3	57
91	A stellar-mass black hole population in the globular cluster NGC 6101?. *Monthly Notices of the Royal Astronomical Society*, **2016**, 462, 2333-2342	4.3	53
90	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2012**, 542, A49	5.1	52
89	On the velocity dispersion of young star clusters: super-virial or binaries?. *Monthly Notices of the Royal Astronomical Society*, **2010**, 402, 1750-1757	4.3	51
88	Multiple populations in globular clusters: the distinct kinematic imprints of different formation scenarios. *Monthly Notices of the Royal Astronomical Society*, **2015**, 450, 1164-1198	4.3	50
87	The devil is in the tails: the role of globular cluster mass evolution on stream properties. *Monthly Notices of the Royal Astronomical Society*, **2018**, 474, 2479-2492	4.3	49
86	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2012**, 546, A73	5.1	48
85	A MAD view of Trumpler 14. *Astronomy and Astrophysics*, **2010**, 515, A26	5.1	47
84	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2012**, 545, L1	5.1	44
83	A prescription and fast code for the long-term evolution of star clusters. *Monthly Notices of the Royal Astronomical Society*, **2012**, 422, 3415-3432	4.3	43
82	GLIMPSE-CO1: the most massive intermediate-age stellar cluster in the Galaxy. *Monthly Notices of the Royal Astronomical Society*, **2011**, 411, 1386-1394	4.3	43

81	Evidence for environmentally dependent cluster disruption in M83. *Monthly Notices of the Royal Astronomical Society: Letters*, **2011**, 417, L6-L10	4.3	42
80	Evolution of stellar structure in the Small Magellanic Cloud. *Monthly Notices of the Royal Astronomical Society: Letters*, **2008**, 391, L93-L97	4.3	42
79	The effect of stellar-mass black holes on the central kinematics of ωCen: a cautionary tale for IMBH interpretations. *Monthly Notices of the Royal Astronomical Society*, **2019**, 482, 4713-4725	4.3	41
78	Do all stars in the solar neighbourhood form in clusters? A cautionary note on the use of the distribution of surface densities. *Monthly Notices of the Royal Astronomical Society: Letters*, **2012**, 426, L11-L15	4.3	40
77	If it does not kill them, it makes them stronger: collisional evolution of star clusters with tidal shocks. *Monthly Notices of the Royal Astronomical Society: Letters*, **2016**, 463, L103-L107	4.3	40
76	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2018**, 618, A73	5.1	39
75	Globular cluster number density profiles using Gaia DR2. *Monthly Notices of the Royal Astronomical Society*, **2019**, 485, 4906-4935	4.3	38
74	Radial anisotropy in ωCen limiting the room for an intermediate-mass black hole. *Monthly Notices of the Royal Astronomical Society*, **2017**, 468, 4429-4440	4.3	38
73	Monte Carlo simulations of pinhole imaging accelerated by kernel-based forced detection. *Physics in Medicine and Biology*, **2002**, 47, 1853-67	3.8	38
72	Biases in the inferred mass-to-light ratio of globular clusters: no need for variations in the stellar mass function. *Monthly Notices of the Royal Astronomical Society: Letters*, **2015**, 448, L94-L98	4.3	36
71	Population synthesis of black hole binary mergers from star clusters. *Monthly Notices of the Royal Astronomical Society*, **2020**, 492, 2936-2954	4.3	34
70	The role of galaxy mergers on the evolution of star clusters. *Monthly Notices of the Royal Astronomical Society: Letters*, **2013**, 431, L83-L87	4.3	34
69	Star Clusters Near and Far. *Space Science Reviews*, **2020**, 216, 1	7.5	33
68	The tidal tails of the ultrafaint globular cluster Palomar 1. *Monthly Notices of the Royal Astronomical Society: Letters*, **2010**, 408, L66-L70	4.3	33
67	The properties of energetically unbound stars in stellar clusters. *Monthly Notices of the Royal Astronomical Society*, **2017**, 466, 3937-3950	4.3	32
66	Probing dark matter with star clusters: a dark matter core in the ultra-faint dwarf Eridanus II. *Monthly Notices of the Royal Astronomical Society*, **2018**, 476, 3124-3136	4.3	31
65	Biases in the determination of dynamical parameters of star clusters: today and in the Gaia era. *Monthly Notices of the Royal Astronomical Society*, **2015**, 451, 2185-2197	4.3	31
64	The evolution of stellar structures in dwarf galaxies. *Monthly Notices of the Royal Astronomical Society*, **2011**, 412, 1539-1551	4.3	31

63	The Young Cluster Population of M82 Region B. *Astrophysical Journal*, **2007**, 667, L145-L149	4.7	31
62	A prescription and fast code for the long-term evolution of star clusters III. Unequal masses and stellar evolution. *Monthly Notices of the Royal Astronomical Society*, **2014**, 442, 1265-1285	4.3	29
61	Mass models of NGC 6624 without an intermediate-mass black hole. *Monthly Notices of the Royal Astronomical Society*, **2018**, 473, 4832-4839	4.3	28
60	AHUBBLE SPACE TELESCOPESTUDY OF THE ENIGMATIC MILKY WAY HALO GLOBULAR CLUSTER CRATER. *Astrophysical Journal*, **2016**, 822, 32	4.7	27
59	Testing lowered isothermal models with direct N-body simulations of globular clusters. *Monthly Notices of the Royal Astronomical Society*, **2016**, 462, 696-714	4.3	26
58	Merger rate of black hole binaries from globular clusters: Theoretical error bars and comparison to gravitational wave data from GWTC-2. *Physical Review D*, **2020**, 102,	4.9	24
57	The Physics of Star Cluster Formation and Evolution. *Space Science Reviews*, **2020**, 216, 1	7.5	24
56	The inefficiency of satellite accretion in forming extended star clusters. *Monthly Notices of the Royal Astronomical Society: Letters*, **2015**, 447, L40-L44	4.3	22
55	The evolution of the global stellar mass function of star clusters: an analytic description. *Monthly Notices of the Royal Astronomical Society*, **2013**, 433, 1378-1388	4.3	22
54	ACS imaging of star clusters in M 51. *Astronomy and Astrophysics*, **2008**, 487, 937-949	5.1	22
53	A flexible method to evolve collisional systems and their tidal debris in external potentials. *Monthly Notices of the Royal Astronomical Society*, **2015**, 448, 3416-3422	4.3	20
52	Evolution of star clusters on eccentric orbits. *Monthly Notices of the Royal Astronomical Society*, **2016**, 455, 596-602	4.3	19
51	A closer look at the spur, blob, wiggle, and gaps in GD-1. *Monthly Notices of the Royal Astronomical Society*, **2020**, 494, 5315-5332	4.3	19
50	Mass modelling globular clusters in theGaiaera: a method comparison using mock data from anN-body simulation of M 4. *Monthly Notices of the Royal Astronomical Society*, **2019**, 483, 1400-1425	4.3	18
49	On the black hole content and initial mass function of 47 Tuc. *Monthly Notices of the Royal Astronomical Society*, **2020**, 491, 113-128	4.3	17
48	Constraining the initial conditions of globular clusters using their radius distribution. *Monthly Notices of the Royal Astronomical Society: Letters*, **2013**, 432, L1-L5	4.3	17
47	A prescription and fast code for the long-term evolution of star clusters II. Unbalanced and core evolution. *Monthly Notices of the Royal Astronomical Society*, **2014**, 437, 916-929	4.3	16
46	New insights into the origin and evolution of the old, metal-rich open cluster NGC 6791. *Monthly Notices of the Royal Astronomical Society*, **2018**, 474, 32-44	4.3	15

45	No evidence for younger stellar generations within the intermediate-age massive clusters NGC 1783, NGC 1806 and NGC 411. *Monthly Notices of the Royal Astronomical Society*, **2016**, 459, 4218-4223	4.3	15
44	Spherical models of star clusters with potential escapers. *Monthly Notices of the Royal Astronomical Society*, **2019**, 487, 147-160	4.3	13
43	Properties of the cluster population of NGC 1566 and their implications. *Monthly Notices of the Royal Astronomical Society*, **2016**, 460, 2087-2102	4.3	13
42	The effect of secular galactic growth on the evolution of star clusters. *Monthly Notices of the Royal Astronomical Society*, **2015**, 449, 2734-2740	4.3	13
41	Spectroscopic constraints on the form of the stellar cluster mass function. *Astronomy and Astrophysics*, **2012**, 541, A25	5.1	13
40	Mass segregation in young star clusters - can it be detected from the integrated photometric properties?. *Monthly Notices of the Royal Astronomical Society*, **2008**, 391, 190-196	4.3	13
39	Accurate photometry of extended spherically symmetric sources. *Astronomy and Astrophysics*, **2006** , 451, 375-375	5.1	13
38	The contribution of dissolving star clusters to the population of ultra faint objects in the outer halo of the Milky Way. *Monthly Notices of the Royal Astronomical Society*, **2017**, 466, 1741-1756	4.3	12
37	Weighing stars from birth to death: mass determination methods across the HRD. *Astronomy and Astrophysics Review*, **2021**, 29, 1	28.8	12
36	The VLT-FLAMES Tarantula Survey. *Astronomy and Astrophysics*, **2019**, 624, A129	5.1	12
35	Testing lowered isothermal models with direct N-body simulations of globular clusters II. Multimass models. *Monthly Notices of the Royal Astronomical Society*, **2017**, 470, 2736-2761	4.3	11
34	Linking the rotation of a cluster to the spins of its stars: the kinematics of NGC 6791 and NGC 6819 in 3D. *Monthly Notices of the Royal Astronomical Society*, **2019**, 483, 2197-2206	4.3	11
33	The effect of spatial resolution on optical and near-IR studies of stellar clusters: implications for the origin of the red excess. *Monthly Notices of the Royal Astronomical Society*, **2014**, 444, 3829-3836	4.3	10
32	The star cluster age function in the Galactic disc with Gaia DR2. *Astronomy and Astrophysics*, **2021**, 645, L2	5.1	10
31	The dynamics of the globular cluster NGC 3201 out to the Jacobi radius. *Monthly Notices of the Royal Astronomical Society*, **2021**, 502, 4513-4525	4.3	10
30	VLT-MAD observations of the core of 30 Doradus. *Monthly Notices of the Royal Astronomical Society* , **2010**,	4.3	9
29	The initial conditions of observed star clusters I. Method description and validation. *Monthly Notices of the Royal Astronomical Society*, **2015**, 453, 605-637	4.3	8
28	A supra-massive population of stellar-mass black holes in the globular cluster Palomar 5. *Nature Astronomy*, **2021**, 5, 957-966	12.1	8

27	Globular clusters as probes of dark matter cusp-core transformations. *Monthly Notices of the Royal Astronomical Society*, **2019**, 488, 2977-2988	4.3	6
26	A black hole detected in the young massive LMC cluster NGC 1850. *Monthly Notices of the Royal Astronomical Society*,	4.3	6
25	What determines the mass of the most massive star cluster in a galaxy: statistics, physics or disruption?. *Astrophysics and Space Science*, **2009**, 324, 299-304	1.6	5
24	A clustered origin for isolated massive stars. *Monthly Notices of the Royal Astronomical Society*, **2018**, 474, 3582-3592	4.3	5
23	Time-domain Study of the Young Massive Cluster Westerlund 2 with the Hubble Space Telescope. I. *Astrophysical Journal*, **2020**, 891, 182	4.7	4
22	Response to Comment on "An excess of massive stars in the local 30 Doradus starburst". *Science*, **2018**, 361,	33.3	4
21	MUSE narrow field mode observations of the central kinematics of M15. *Monthly Notices of the Royal Astronomical Society*, **2021**, 503, 1680-1687	4.3	4
20	Modelling the Effects of Dark Matter Substructure on Globular Cluster Evolution with the Tidal Approximation. *Monthly Notices of the Royal Astronomical Society*, **2019**,	4.3	3
19	Hierarchical star formation in M33: properties of the star-forming regions. *Astrophysics and Space Science*, **2009**, 324, 293-297	1.6	3
18	HAYDN. *Experimental Astronomy*,1	1.3	3
17	From Giant H ii regions and H ii galaxies to globular clusters and compact dwarf ellipticals. *Monthly Notices of the Royal Astronomical Society*, **2018**, 481, 268-276	4.3	3
16	Star Cluster Life-times: Dependence on Mass, Radius and Environment. *Proceedings of the International Astronomical Union*, **2007**, 3, 171-175	0.1	2
15	Supermassive stars as the origin of the multiple populations in globular clusters. *Proceedings of the International Astronomical Union*, **2019**, 14, 297-301	0.1	2
14	The VLT FLAMES Tarantula Survey. *Proceedings of the International Astronomical Union*, **2009**, 5, 35-40	0.1	1
13	The Radii of Thousands of Star Clusters in M51 with HST/ACS. *Globular Clusters - Guides To Galaxies*, **2009**, 103-106		1
12	The Effect of Giant Molecular Clouds on Star Clusters. *Globular Clusters - Guides To Galaxies*, **2009**, 375-376		1
11	New type of brightness variations of the colliding wind WO4 + O5((f)) binary WR 30a. *Astronomy and Astrophysics*, **2003**, 404, L29-L32	5.1	1
10	Massive stars in extremely metal-poor galaxies: a window into the past. *Experimental Astronomy*, **2021**, 51, 887	1.3	0

9	On the uniqueness of kinematical signatures of intermediate-mass black holes in globular clusters. *Proceedings of the International Astronomical Union*, **2014**, 10, 197-200	0.1
8	Inverting the dynamical evolution of globular clusters: clues to their origin. *Proceedings of the International Astronomical Union*, **2015**, 12, 214-221	0.1
7	Star cluster disruption. *Proceedings of the International Astronomical Union*, **2009**, 5, 69-80	0.1
6	Constraining star cluster disruption mechanisms. *Proceedings of the International Astronomical Union*, **2009**, 5, 433-437	0.1
5	The VLT-FLAMES Tarantula survey. *Proceedings of the International Astronomical Union*, **2010**, 6, 296-297	0.1
4	The spatial evolution of stellar structures in the LMC/SMC. *Proceedings of the International Astronomical Union*, **2008**, 4, 45-50	0.1
3	Integrated Properties of Mass Segregated Star Clusters. *Proceedings of the International Astronomical Union*, **2007**, 3, 193-194	0.1
2	The Maximum Mass of Star Clusters. *Globular Clusters - Guides To Galaxies*, **2009**, 63-67	
1	Dynamical Expansion of Star Clusters. *Thirty Years of Astronomical Discovery With UKIRT*, **2012**, 241-243	0.3