

# Iain Mcdonald

## List of Publications by Year in descending order

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100  
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4,076  
citations

94433

37  
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123424

61  
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all docs

100  
docs citations

100  
times ranked

3602  
citing authors

#	ARTICLE	IF	CITATIONS
1	ATOMIUM: ALMA tracing the origins of molecules in dust forming oxygen rich M-type stars. <i>Astronomy and Astrophysics</i> , 2022, 660, A94.	5.1	14
2	The Nearby Evolved Stars Survey II: Constructing a volume-limited sample and first results from the James Clerk Maxwell Telescope. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 1091-1110.	4.4	5
3	A Census of Thermally Pulsing AGB Stars in the Andromeda Galaxy and a First Estimate of Their Contribution to the Global Dust Budget. <i>Astrophysical Journal, Supplement Series</i> , 2022, 259, 41.	7.7	6
4	The Isaac Newton Telescope Monitoring Survey of Local Group Dwarf Galaxies. IV. The Star Formation History of Andromeda VII Derived from Long-period Variable Stars. <i>Astrophysical Journal</i> , 2021, 910, 127.	4.5	6
5	Infrared variable stars in the compact elliptical galaxy M32. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 565-575.	4.4	2
6	Determination of Rotation Periods for a Large Sample of Asteroids from the K2 Campaign 9. <i>Astrophysical Journal, Supplement Series</i> , 2021, 255, 4.	7.7	3
7	Improved Models of Coalescence Ages of Y-DNA Haplogroups. <i>Genes</i> , 2021, 12, 862.	2.4	2
8	Kepler K2 Campaign 9 I. Candidate short-duration events from the first space-based survey for planetary microlensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 5584-5602.	4.4	5
9	High-resolution H $\alpha$ imaging of the northern Galactic plane and the IGAPS image database. <i>Astronomy and Astrophysics</i> , 2021, 655, A49.	5.1	7
10	First deep images catalogue of extended IPHAS PNe. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 1599-1617.	4.4	4
11	ATOMIUM: halide molecules around the S-type AGB star W Aquilae. <i>Astronomy and Astrophysics</i> , 2021, 655, A80.	5.1	13
12	The detection of radio emission from known X-ray flaring star EXO 040830-7134.7. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 510, 1083-1092.	4.4	7
13	Optimizing exoplanet atmosphere retrieval using unsupervised machine-learning classification. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 4492-4508.	4.4	24
14	(Sub)stellar companions shape the winds of evolved stars. <i>Science</i> , 2020, 369, 1497-1500.	12.6	57
15	Classification of Planetary Nebulae through Deep Transfer Learning. <i>Galaxies</i> , 2020, 8, 88.	3.0	10
16	The Isaac Newton Telescope Monitoring Survey of Local Group Dwarf Galaxies. I. Survey Overview and First Results for Andromeda I. <i>Astrophysical Journal</i> , 2020, 894, 135.	4.5	9
17	Circumstellar CO J = 3 $\pm$ 2 detected around the evolving metal-poor ([Fe/H] $\sim$ -1.15 dex) AGB star RU Vulpeculae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 1174-1189.	4.4	4
18	Betelgeuse Fainter in the Submillimeter Too: An Analysis of JCMT and APEX Monitoring during the Recent Optical Minimum. <i>Astrophysical Journal Letters</i> , 2020, 897, L9.	8.3	31

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19	MKTÅJ170456.2â€“482100: the first transient discovered by MeerKAT. Monthly Notices of the Royal Astronomical Society, 2020, 491, 560-575.	4.4	20
20	ATOMIUM: A high-resolution view on the highly asymmetric wind of the AGB star <i>Î€</i><sup>1</sup>Gruis. Astronomy and Astrophysics, 2020, 644, A61.	5.1	17
21	The nearby evolved stars survey â€“ I. JCMT/SCUBA-2 submillimetre detection of the detached shell of U Antliae. Monthly Notices of the Royal Astronomical Society, 2019, 489, 3218-3231.	4.4	4
22	Asymptotic Giant Branch Stars in the Nearby Dwarf Galaxy Leo P*. Astrophysical Journal, 2019, 884, 152.	4.5	4
23	An Infrared Census of DUST in Nearby Galaxies with Spitzer (DUSTINGS). V. The Periodâ€“Luminosity Relation for Dusty Metal-poor AGB Stars. Astrophysical Journal, 2019, 877, 49.	4.5	23
24	The onset of the AGB wind tied to a transition between sequences in the periodâ€“luminosity diagram. Monthly Notices of the Royal Astronomical Society, 2019, 484, 4678-4682.	4.4	25
25	Circumstellar CO in metal-poor stellar winds: the highly irradiated globular cluster star 47 Tucanae V3. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 484, L85-L89.	3.3	7
26	Reduction of the maximum mass-loss rate of OH/IR stars due to unnoticed binary interaction. Nature Astronomy, 2019, 3, 408-415.	10.1	24
27	Interplay between pulsation, mass loss, and third dredge-up: More about Miras with and without technetium. Astronomy and Astrophysics, 2019, 622, A120.	5.1	10
28	Stellar Pulsation and the Production of Dust and Molecules in Galactic Carbon Stars. Astrophysical Journal, 2019, 887, 82.	4.5	5
29	Near-infrared Stellar Populations in the Metal-poor, Dwarf Irregular Galaxies Sextans A and Leo A. Astrophysical Journal, 2018, 854, 117.	4.5	14
30	Pre-discovery transits of the exoplanets WASP-18b and WASP-33b from <i>Hipparcos</i>. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 477, L21-L24.	3.3	28
31	Pulsation-triggered dust production by asymptotic giant branch stars. Monthly Notices of the Royal Astronomical Society, 2018, 481, 4984-4999.	4.4	31
32	The onset of mass loss in AGB stars. Proceedings of the International Astronomical Union, 2018, 14, 464-465.	0.0	0
33	The End: Witnessing the Death of Extreme Carbon Stars. Proceedings of the International Astronomical Union, 2018, 14, 305-308.	0.0	0
34	Near-Infrared Stellar Populations in the metal-poor, Dwarf irregular Galaxies Sextans A and Leo A. Proceedings of the International Astronomical Union, 2018, 14, 429-430.	0.0	0
35	Does 3rd dredge-up reduce AGB mass-loss?. Proceedings of the International Astronomical Union, 2018, 14, 529-530.	0.0	0
36	The close circumstellar environment of Betelgeuse. Astronomy and Astrophysics, 2018, 609, A67.	5.1	54

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37	The curious case of $\kappa$ Lup: a complex morphology revealed with SAM/NACO and ALMA. Monthly Notices of the Royal Astronomical Society, 2018, 480, 1006-1021.	4.4	9
38	The mysterious age invariance of the planetary nebula luminosity function bright cut-off. Nature Astronomy, 2018, 2, 580-584.	10.1	25
39	Flickering in AGB stars: probing the nature of accreting companions. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4200-4212.	4.4	4
40	ALMA observations of the nearby AGB star L <sub>2</sub> Puppis. Astronomy and Astrophysics, 2017, 601, A5.	5.1	26
41	The SAGE-Spec Spitzer Legacy program: the life-cycle of dust and gas in the Large Magellanic Cloud. Point source classification â€” III. Monthly Notices of the Royal Astronomical Society, 2017, 470, 3250-3282.	4.4	47
42	An Infrared Census of DUST in Nearby Galaxies with Spitzer (DUSTINGS). IV. Discovery of High-redshift AGB Analogs <sup>*</sup> . Astrophysical Journal, 2017, 851, 152.	4.5	29
43	Fundamental parameters and infrared excesses of Tychoâ€™Gaia stars. Monthly Notices of the Royal Astronomical Society, 2017, 471, 770-791.	4.4	84
44	The inhomogeneous submillimeter atmosphere of Betelgeuse. Astronomy and Astrophysics, 2017, 602, L10.	5.1	30
45	DUSTINGS. III. DISTRIBUTION OF INTERMEDIATE-AGE AND OLD STELLAR POPULATIONS IN DISKS AND OUTER EXTREMITIES OF DWARF GALAXIES. Astrophysical Journal, 2017, 834, 78.	4.5	31
46	ALMA observations of the nearby AGB star L <sub>2</sub> â€™Puppis. Astronomy and Astrophysics, 2016, 596, A92.	5.1	54
47	THE CATALOG OF EARTH-LIKE EXOPLANET SURVEY TARGETS (CELESTA): A DATABASE OF HABITABLE ZONES AROUND NEARBY STARS. Astronomical Journal, 2016, 151, 59.	4.7	49
48	EU Del: exploring the onset of pulsation-driven winds in giant stars. Monthly Notices of the Royal Astronomical Society, 2016, 456, 4542-4550.	4.4	10
49	IDENTIFICATION OF A CLASS OF LOW-MASS ASYMPTOTIC GIANT BRANCH STARS STRUGGLING TO BECOME CARBON STARS IN THE MAGELLANIC CLOUDS. Astrophysical Journal, 2015, 810, 116.	4.5	31
50	<i>Spitzer</i> infrared spectrograph point source classification in the Small Magellanic Cloud. Monthly Notices of the Royal Astronomical Society, 2015, 451, 3504-3536.	4.4	41
51	Comparative Studies of the Dust around Red Supergiant and Oxygen-Rich Asymptotic Giant Branch Stars in the Local Universe. Proceedings of the International Astronomical Union, 2015, 11, 470-471.	0.0	0
52	AGB SODIUM ABUNDANCES IN THE GLOBULAR CLUSTER 47 TUCANAE (NGC 104). Astronomical Journal, 2015, 149, 71.	4.7	46
53	AN INFRARED CENSUS OF DUST IN NEARBY GALAXIES WITH <i>SPITZER</i> (DUSTINGS). II. DISCOVERY OF METAL-POOR DUSTY AGB STARS. Astrophysical Journal, 2015, 800, 51.	4.5	55
54	Globular cluster interstellar media: ionized and ejected by white dwarfs. Monthly Notices of the Royal Astronomical Society, 2015, 446, 2226-2242.	4.4	27

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55	Mass-loss on the red giant branch: the value and metallicity dependence of Reimersâ€™ $\dot{M}$ in globular clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 448, 502-521.	4.4	82
56	Dissecting the AGB star L2Puppis: a torus in the making. <i>Astronomy and Astrophysics</i> , 2015, 576, A46.	5.1	22
57	ALMA sub-mm maser and dust distribution of VY Canis Majoris. <i>Astronomy and Astrophysics</i> , 2014, 572, L9.	5.1	35
58	The VST Photometric H $\alpha$ Survey of the Southern Galactic Plane and Bulge (VPHAS+). <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 2036-3058.	4.4	197
59	The second data release of the INT Photometric H $\alpha$ Survey of the Northern Galactic Plane (IPHAS DR2). <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 3230-3257.	4.4	131
60	VISTA variables in the Sagittarius dwarf spheroidal galaxy: pulsation-versus dust-driven winds on the giant branches. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 439, 2618-2637.	4.4	16
61	Modelling the alumina abundance of oxygen-rich evolved stars in the Large Magellanic Cloud. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 631-651.	4.4	30
62	ExELS: an exoplanet legacy science proposal for the ESA Euclid missionâ€™ I. Cold exoplanets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 2-22.	4.4	107
63	e-MERLIN resolves Betelgeuse at $\approx 5 \times 10^6$ cm: hotspots at $5 \times 10^6$ cm. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2013, 432, L61-L65.	3.3	34
64	VISTA's view of the Sagittarius dwarf spheroidal galaxy and southern Galactic Bulge. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 436, 413-429.	4.4	13
65	THE DUST BUDGET OF THE SMALL MAGELLANIC CLOUD: ARE ASYMPTOTIC GIANT BRANCH STARS THE PRIMARY DUST SOURCE AT LOW METALLICITY?. <i>Astrophysical Journal</i> , 2012, 748, 40.	4.5	112
66	CARBON-RICH DUST PRODUCTION IN METAL-POOR GALAXIES IN THE LOCAL GROUP. <i>Astrophysical Journal</i> , 2012, 752, 140.	4.5	39
67	Sir Bernard Lovell (1913â€“2012). <i>Science</i> , 2012, 337, 1307-1307.	12.6	0
68	Carbon enrichment of the evolved stars in the Sagittarius dwarf spheroidal. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 427, 2647-2659.	4.4	21
69	The Spitzer spectroscopic survey of S-type stars. <i>Astronomy and Astrophysics</i> , 2012, 540, A72.	5.1	24
70	The SAGE-Spec Spitzer Legacy programme: the life-cycle of dust and gas in the Large Magellanic Cloud - Point source classification I. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 411, 1597-1627.	4.4	93
71	Carbon chemistry in Galactic bulge planetary nebulae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 1667-1678.	4.4	48
72	Spitzer spectra of evolved stars in $\omega$ Centauri and their low-metallicity dust production. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 20-31.	4.4	36

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73	SURVEYING THE AGENTS OF GALAXY EVOLUTION IN THE TIDALLY STRIPPED, LOW METALLICITY SMALL MAGELLANIC CLOUD (SAGE-SMC). II. COOL EVOLVED STARS. <i>Astronomical Journal</i> , 2011, 142, 103.	4.7	136
74	SURVEYING THE AGENTS OF GALAXY EVOLUTION IN THE TIDALLY STRIPPED, LOW METALLICITY SMALL MAGELLANIC CLOUD (SAGE-SMC). I. OVERVIEW. <i>Astronomical Journal</i> , 2011, 142, 102.	4.7	170
75	IS DUST FORMING ON THE RED GIANT BRANCH IN 47 Tuc?. <i>Astrophysical Journal Letters</i> , 2010, 711, L99-L103.	8.3	41
76	<i>Spitzer</i> SPECTROSCOPY OF MASS-LOSS AND DUST PRODUCTION BY EVOLVED STARS IN GLOBULAR CLUSTERS. <i>Astrophysical Journal</i> , 2010, 719, 1274-1292.	4.5	48
77	Discovery of long-period variable stars in the very metal-poor globular cluster M15. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, , no-no.	4.4	6
78	Line-profile tomography of exoplanet transits - II. A gas-giant planet transiting a rapidly rotating A5 star.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 407, 507-514.	4.4	242
79	DUST PRODUCTION AND MASS LOSS IN THE GALACTIC GLOBULAR CLUSTER NGC 362. <i>Astrophysical Journal</i> , 2009, 705, 746-757.	4.5	40
80	Dust Formation in a Galaxy with Primitive Abundances. <i>Science</i> , 2009, 323, 353-355.	12.6	61
81	Metallicity, pulsation and mass loss in globular cluster low-mass AGB stars. , 2009, , .		0
82	Giants in the globular cluster $\omega$ Centauri: dust production, mass-loss and distance. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 394, 831-856.	4.4	80
83	The global gas and dust budget of the Large Magellanic Cloud: AGB stars and supernovae, and the impact on the ISM evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 396, 918-934.	4.4	176
84	The Magellanic Zoo: Midâ€infrared <i>Spitzer</i> Spectroscopy of Evolved Stars and Circumstellar Dust in the Magellanic Clouds. <i>Astrophysical Journal</i> , 2008, 686, 1056-1081.	4.5	87
85	<i>Spitzer</i> Space Telescope Evidence in NGC 6791: No Super Mass Loss at Supersolar Metallicity to Explain Helium White Dwarfs?. <i>Astrophysical Journal</i> , 2008, 680, L49-L52.	4.5	31
86	<i>Spitzer</i> spectroscopy of carbon stars in the Small Magellanic Cloud. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 376, 1270-1284.	4.4	67
87	Dust, pulsation, chromospheres and their $r_{1e}$ in driving mass loss from red giants in Galactic globular clusters. <i>Astronomy and Astrophysics</i> , 2007, 476, 1261-1282.	5.1	48
88	Luminosities and mass-loss rates of carbon stars in the Magellanic Clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 376, 313-337.	4.4	94
89	<i>Spitzer</i> Space Telescope spectral observations of AGB stars in the Fornax dwarf spheroidal galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 382, 1889-1900.	4.4	41
90	<i>Spitzer</i> observations of acetylene bands in carbon-rich asymptotic giant branch stars in the Large Magellanic Cloud. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 371, 415-420.	4.4	60

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91	Very Large Telescope three micron spectra of dust-enshrouded red giants in the Large Magellanic Cloud. <i>Astronomy and Astrophysics</i> , 2006, 447, 971-989.	5.1	42
92	The first 8â€“13 $\mu$ m spectra of globular cluster red giants: circumstellar silicate dust grains in 47â€“Tucanae (NGCâ€“104). <i>Astronomy and Astrophysics</i> , 2006, 450, 339-343.	5.1	32
93	Dust-enshrouded giants in clusters in the Magellanic Clouds. <i>Astronomy and Astrophysics</i> , 2005, 442, 597-613.	5.1	73
94	Three-micron spectra of AGB stars and supergiants in nearby galaxies. <i>Astronomy and Astrophysics</i> , 2005, 434, 691-706.	5.1	56
95	Obscured asymptotic giant branch variables in the Large Magellanic Cloud and the period-luminosity relation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 342, 86-104.	4.4	131
96	The evolution of the Mira variable R Hydrae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2002, 334, 498-510.	4.4	45
97	Bipolar outflows in OH/IR stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2001, 322, 280-308.	4.4	110
98	The angular diameter of R Doradus: a nearby Mira-like star. <i>Monthly Notices of the Royal Astronomical Society</i> , 1997, 286, 957-962.	4.4	35
99	Exoplanetary atmosphere target selection in the era of comparative planetology. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	4.4	6
100	A 1D fluid model of the Centaurusâ€“jet. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	4.4	5