

Richard H D Townsend

List of Publications by Year in descending order

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52
papers

9,074
citations

186265

28
h-index

265206

42
g-index

52
all docs

52
docs citations

52
times ranked

3824
citing authors

#	ARTICLE	IF	CITATIONS
1	Stability and pulsation of the first dark stars. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3677-3691.	4.4	3
2	WOCS 5379: Detailed Analysis of the Evolution of a Post-mass-transfer Blue Straggler. Astrophysical Journal, 2021, 908, 7.	4.5	9
3	On the Impact of ^{22}Ne on the Pulsation Periods of Carbon-Oxygen White Dwarfs with Helium-dominated Atmospheres. Astrophysical Journal, 2021, 910, 24.	4.5	14
4	TESS Asteroseismology of $\hat{\iota}$ Mensae: Benchmark Ages for a G7 Dwarf and Its M Dwarf Companion. Astrophysical Journal, 2021, 922, 229.	4.5	14
5	Improved asymptotic expressions for the eigenvalues of Laplace's tidal equations. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2670-2679.	4.4	6
6	How the breakout-limited mass in B-star centrifugal magnetospheres controls their circumstellar $\text{H}\alpha$ emission. Monthly Notices of the Royal Astronomical Society, 2020, 499, 5366-5378.	4.4	28
7	The effects of surface fossil magnetic fields on massive star evolution – II. Implementation of magnetic braking in mesa and implications for the evolution of surface rotation in OB stars. Monthly Notices of the Royal Astronomical Society, 2020, 493, 518-535.	4.4	40
8	The Contour Method: a New Approach to Finding Modes of Nonadiabatic Stellar Pulsations. Astrophysical Journal, 2020, 899, 116.	4.5	38
9	Modules for Experiments in Stellar Astrophysics (MESA): Pulsating Variable Stars, Rotation, Convective Boundaries, and Energy Conservation. Astrophysical Journal, Supplement Series, 2019, 243, 10.	7.7	860
10	The Tayler Instability in the Anelastic Approximation. Astrophysical Journal, 2019, 881, 66.	4.5	11
11	Modules for Experiments in Stellar Astrophysics (MESA): Convective Boundaries, Element Diffusion, and Massive Star Explosions. Astrophysical Journal, Supplement Series, 2018, 234, 34.	7.7	1,182
12	Nonradial Pulsations in Post-outburst Novae. Astrophysical Journal, 2018, 855, 127.	4.5	13
13	Sensitivity of gravito-inertial modes to differential rotation in intermediate-mass main-sequence stars. Astronomy and Astrophysics, 2018, 618, A24.	5.1	82
14	The Impact of White Dwarf Luminosity Profiles on Oscillation Frequencies. Astrophysical Journal Letters, 2018, 867, L30.	8.3	22
15	Angular momentum transport by heat-driven g-modes in slowly pulsating B stars. Monthly Notices of the Royal Astronomical Society, 2018, 475, 879-893.	4.4	128
16	Magnetic massive stars as progenitors of $\sim 10^6 M_{\odot}$ stellar-mass black holes. Monthly Notices of the Royal Astronomical Society, 2017, 466, 1052-1060.	4.4	72
17	Super-Eddington stellar winds: unifying radiative-enthalpy versus flux-driven models. Monthly Notices of the Royal Astronomical Society, 2017, 472, 3749-3760.	4.4	19
18	Effect of a Dipole Magnetic Field on Stellar Mass-Loss. Proceedings of the International Astronomical Union, 2016, 12, 242-245.	0.0	0

#	ARTICLE	IF	CITATIONS
19	Effect of a magnetic field on massive-star winds â€œ I. Mass-loss and velocity for a dipole field. Monthly Notices of the Royal Astronomical Society, 2016, 462, 3672-3688.	4.4	14
20	An â€˜analytic dynamical magnetosphereâ€™ formalism for X-ray and optical emission from slowly rotating magnetic massive stars. Monthly Notices of the Royal Astronomical Society, 2016, 462, 3830-3844.	4.4	44
21	The MiMeS survey of magnetism in massive stars: introduction and overview. Monthly Notices of the Royal Astronomical Society, 2016, 456, 2-22.	4.4	174
22	Revisiting the rigidly rotating magnetosphere model for ÎŸ Ori â€œ II. Magnetic Doppler imaging, arbitrary field RRM, and light variabilityâ€™.... Monthly Notices of the Royal Astronomical Society, 2015, 451, 2015-2029.	4.4	57
23	MODULES FOR EXPERIMENTS IN STELLAR ASTROPHYSICS (MESA): BINARIES, PULSATIONS, AND EXPLOSIONS. Astrophysical Journal, Supplement Series, 2015, 220, 15.	7.7	1,990
24	MODULES FOR EXPERIMENTS IN STELLAR ASTROPHYSICS (MESA): PLANETS, OSCILLATIONS, ROTATION, AND MASSIVE STARS. Astrophysical Journal, Supplement Series, 2013, 208, 4.	7.7	2,251
25	GYRE: an open-source stellar oscillation code based on a new Magnus Multiple Shooting scheme. Monthly Notices of the Royal Astronomical Society, 2013, 435, 3406-3418.	4.4	325
26	POLARIMETRIC OBSERVATIONS OF ÎŸ ORIONIS E. Astrophysical Journal Letters, 2013, 766, L9.	8.3	18
27	<i>MOST</i> OBSERVATIONS OF ÎŸ Ori E: CHALLENGING THE CENTRIFUGAL BREAKOUT NARRATIVE. Astrophysical Journal, 2013, 769, 33.	4.5	39
28	A magnetic confinement versus rotation classification of massive-star magnetospheres. Monthly Notices of the Royal Astronomical Society, 2013, 429, 398-422.	4.4	208
29	First 3DMHD simulation of a massive-star magnetosphere with application to HÎ± emission from Â¹ Ori C. Monthly Notices of the Royal Astronomical Society, 2013, 428, 2723-2730.	4.4	56
30	X-rays from magnetic massive OB stars. Proceedings of the International Astronomical Union, 2013, 9, 330-333.	0.0	0
31	Wind channeling, magnetospheres, and spindown of magnetic massive stars. Proceedings of the International Astronomical Union, 2013, 9, 320-329.	0.0	0
32	Revisiting the Rigidly Rotating Magnetosphere model for Ori E - I. Observations and data analysisâ€™.... Monthly Notices of the Royal Astronomical Society, 2012, 419, 959-970.	4.4	64
33	A dynamical magnetosphere model for periodic HÎ± emission from the slowly rotating magnetic O star HD 191612. Monthly Notices of the Royal Astronomical Society: Letters, 2012, 423, L21-L25.	3.3	68
34	Rigid Field Hydrodynamic simulations of the magnetosphere of ÎŸ Orionis E. Proceedings of the International Astronomical Union, 2010, 6, 194-195.	0.0	0
35	Discussion â€œ Circumstellar environment of active OB stars. Proceedings of the International Astronomical Union, 2010, 6, 378-379.	0.0	0
36	Modeling the winds and magnetospheres of active OB stars. Proceedings of the International Astronomical Union, 2010, 6, 148-159.	0.0	0

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37	Discovery of a strong magnetic field in the rapidly rotating B2Vn star HR 7355. Proceedings of the International Astronomical Union, 2010, 6, 204-205.	0.0	0
38	Monte-Carlo simulations of linear polarization in clumpy OB-star winds. Proceedings of the International Astronomical Union, 2010, 6, 216-217.	0.0	0
39	DISCOVERY OF ROTATIONAL BRAKING IN THE MAGNETIC HELIUM-STRONG STAR SIGMA ORIONIS E. Astrophysical Journal Letters, 2010, 714, L318-L322.	8.3	78
40	Magnetic field detection in the B2 Vn star HR 7355. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 405, L46-L50.	3.3	35
41	Discovery of a strong magnetic field in the rapidly rotating B2 Vn star HR 7355. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 405, L51-L55.	3.3	45
42	Dynamical simulations of magnetically channelled line-driven stellar winds - III. Angular momentum loss and rotational spin-down. Monthly Notices of the Royal Astronomical Society, 2009, 392, 1022-1033.	4.4	199
43	Exploring the photometric signatures of magnetospheres around helium-strong stars. Monthly Notices of the Royal Astronomical Society, 2008, 389, 559-566.	4.4	37
44	A Rigid-Field Hydrodynamics approach to modelling the magnetospheres of massive stars. Monthly Notices of the Royal Astronomical Society, 2007, 382, 139-157.	4.4	69
45	Centrifugal Breakout of Magnetically Confined Line-driven Stellar Winds. Astrophysical Journal, 2006, 640, L191-L194.	4.5	72
46	Influence of the Coriolis force on the instability of slowly pulsating B stars. Monthly Notices of the Royal Astronomical Society, 2005, 360, 465-476.	4.4	67
47	Asymptotic expressions for the angular dependence of low-frequency pulsation modes in rotating stars. Monthly Notices of the Royal Astronomical Society, 2003, 340, 1020-1030.	4.4	119
48	A semi-analytical formula for the light variations due to low-frequency g modes in rotating stars. Monthly Notices of the Royal Astronomical Society, 2003, 343, 125-136.	4.4	83
49	Surface trapping and leakage of low-frequency g modes in rotating early-type stars - II. Global analysis. Monthly Notices of the Royal Astronomical Society, 2002, 319, 289-304.	4.4	14
50	Surface trapping and leakage of low-frequency g modes in rotating early-type stars-I. Qualitative analysis. Monthly Notices of the Royal Astronomical Society, 2000, 318, 1-8.	4.4	21
51	A rigidly rotating magnetosphere model for circumstellar emission from magnetic OB stars. Monthly Notices of the Royal Astronomical Society, 0, 357, 251-264.	4.4	190
52	Dynamical simulations of magnetically channelled line-driven stellar winds - II. The effects of field-aligned rotation. Monthly Notices of the Royal Astronomical Society, 0, 385, 97-108.	4.4	196