

P J Bushby

List of Publications by Year in descending order

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28
papers

610
citations

567281
15
h-index

580821
25
g-index

28
all docs

28
docs citations

28
times ranked

714
citing authors

#	ARTICLE	IF	CITATIONS
1	On Predicting the Solar Cycle Using Mean-Field Models. <i>Astrophysical Journal</i> , 2007, 661, 1289-1296.	4.5	86
2	Zonal flows and grand minima in a solar dynamo model. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 371, 772-780.	4.4	59
3	Global diffusion of cosmic rays in random magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 3975-3987.	4.4	45
4	Cosmic Rays in Intermittent Magnetic Fields. <i>Astrophysical Journal Letters</i> , 2017, 839, L16.	8.3	36
5	Saturation mechanism of the fluctuation dynamo at $\Pr \propto M^{\frac{2}{3}}$. <i>Physical Review Fluids</i> , 2020, 5, 054801.	4.4	34
6	Shallow-water Magnetohydrodynamics for Westward Hotspots on Hot Jupiters. <i>Astrophysical Journal Letters</i> , 2019, 872, L27.	8.3	31
7	THE PARKER INSTABILITY IN DISK GALAXIES. <i>Astrophysical Journal</i> , 2016, 816, 2.	4.5	30
8	Relative distribution of cosmic rays and magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 4544-4557.	4.4	28
9	Convective intensification of magnetic fields in the quiet Sun. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 387, 698-706.	4.4	26
10	The distribution of mean and fluctuating magnetic fields in the multiphase interstellar medium. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 464, L105-L109.	3.3	23
11	On the problem of large-scale magnetic field generation in rotating compressible convection. <i>Journal of Fluid Mechanics</i> , 2013, 723, 529-555.	3.4	22
12	A physical approach to modelling large-scale galactic magnetic fields. <i>Astronomy and Astrophysics</i> , 2019, 623, A113.	5.1	21
13	Spatially intermittent fields in photospheric magnetoconvection. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 362, 313-320.	4.4	20
14	Small-scale dynamo action in rotating compressible convection. <i>Journal of Fluid Mechanics</i> , 2012, 690, 262-287.	3.4	19
15	Large-scale dynamos in rapidly rotating plane layer convection. <i>Astronomy and Astrophysics</i> , 2018, 612, A97.	5.1	16
16	Modelling dynamos in rapidly rotating late-type stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 342, L15-L19.	4.4	15
17	Topological signatures of interstellar magnetic fields I. Betti numbers and persistence diagrams. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 1843-1858.	4.4	15
18	The Magnetic Mechanism for Hotspot Reversals in Hot Jupiter Atmospheres. <i>Astrophysical Journal</i> , 2021, 922, 176.	4.5	15

#	ARTICLE	IF	CITATIONS
19	Mesogranulation and small-scale dynamo action in the quiet Sun. <i>Astronomy and Astrophysics</i> , 2014, 562, A72.	5.1	14
20	Oscillatory convection and limitations of the Boussinesq approximation. <i>Journal of Fluid Mechanics</i> , 2016, 803, 502-515.	3.4	10
21	Observational Consequences of Shallow-water Magnetohydrodynamics on Hot Jupiters. <i>Astrophysical Journal Letters</i> , 2021, 916, L8.	8.3	10
22	Estimating the Rate of Field Line Braiding in the Solar Corona by Photospheric Flows. <i>Astrophysical Journal</i> , 2018, 864, 157.	4.5	9
23	Magnetic fields in the solar photosphere. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 4465-4476.	3.4	5
24	Asymptotic solutions for mean-field slab dynamos. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2014, 108, 568-583.	1.2	5
25	Topological data analysis and diagnostics of compressible magnetohydrodynamic turbulence. <i>Journal of Plasma Physics</i> , 2018, 84, .	2.1	5
26	Statistical Topology and the Random Interstellar Medium. <i>Journal of the American Statistical Association</i> , 2020, 115, 625-635.	3.1	5
27	Subcritical dynamos in rapidly rotating planar convection. <i>Physical Review Fluids</i> , 2020, 5, .	2.5	4
28	The influence of stratification upon small-scale convectively-driven dynamos. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 197-204.	0.0	2