P J Bushby

List of Publications by Year
in descending order

28	610	567281 15	580821 25
papers	citations	h-index	g-index

28	28	28	714
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observational Consequences of Shallow-water Magnetohydrodynamics on Hot Jupiters. Astrophysical Journal Letters, 2021, 916, L8.	8.3	10
2	The Magnetic Mechanism for Hotspot Reversals in Hot Jupiter Atmospheres. Astrophysical Journal, 2021, 922, 176.	4.5	15
3	Statistical Topology and the Random Interstellar Medium. Journal of the American Statistical Association, 2020, 115, 625-635.	3.1	5
4	Saturation mechanism of the fluctuation dynamo at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Pr</mml:mi><mml:mi>M</mml:mi></mml:msub><mml:mo>Â</mml:mo><mml:mo>â‰¥</mml:mo><mml:mo>Â Physical Review Fluids, 2020, 5, .	2.5	34
5	Subcritical dynamos in rapidly rotating planar convection. Physical Review Fluids, 2020, 5, .	2.5	4
6	A physical approach to modelling large-scale galactic magnetic fields. Astronomy and Astrophysics, 2019, 623, A113.	5.1	21
7	Shallow-water Magnetohydrodynamics for Westward Hotspots on Hot Jupiters. Astrophysical Journal Letters, 2019, 872, L27.	8.3	31
8	Relative distribution of cosmic rays and magnetic fields. Monthly Notices of the Royal Astronomical Society, 2018, 473, 4544-4557.	4.4	28
9	Large-scale dynamos in rapidly rotating plane layer convection. Astronomy and Astrophysics, 2018, 612, A97.	5.1	16
10	Estimating the Rate of Field Line Braiding in the Solar Corona by Photospheric Flows. Astrophysical Journal, 2018, 864, 157.	4.5	9
11	Topological signatures of interstellar magnetic fields â€“ I. Betti numbers and persistence diagrams. Monthly Notices of the Royal Astronomical Society, 2018, 475, 1843-1858.	4.4	15
12	Topological data analysis and diagnostics of compressible magnetohydrodynamic turbulence. Journal of Plasma Physics, 2018, 84, .	2.1	5
13	Cosmic Rays in Intermittent Magnetic Fields. Astrophysical Journal Letters, 2017, 839, L16.	8.3	36
14	The distribution of mean and fluctuating magnetic fields in the multiphase interstellar medium. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 464, L105-L109.	3.3	23
15	THE PARKER INSTABILITY IN DISK GALAXIES. Astrophysical Journal, 2016, 816, 2.	4.5	30
16	Oscillatory convection and limitations of the Boussinesq approximation. Journal of Fluid Mechanics, 2016, 803, 502-515.	3.4	10
17	Global diffusion of cosmic rays in random magnetic fields. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3975-3987.	4.4	45
18	Asymptotic solutions for mean-field slab dynamos. Geophysical and Astrophysical Fluid Dynamics, 2014, 108, 568-583.	1.2	5

#	Article	IF	Citations
19	Mesogranulation and small-scale dynamo action in the quiet Sun. Astronomy and Astrophysics, 2014, 562, A72.	5.1	14
20	On the problem of large-scale magnetic field generation in rotating compressible convection. Journal of Fluid Mechanics, 2013, 723, 529-555.	3.4	22
21	Small-scale dynamo action in rotating compressible convection. Journal of Fluid Mechanics, 2012, 690, 262-287.	3.4	19
22	The influence of stratification upon small-scale convectively-driven dynamos. Proceedings of the International Astronomical Union, 2010, 6, 197-204.	0.0	2
23	Convective intensification of magnetic fields in the quiet Sun. Monthly Notices of the Royal Astronomical Society, 2008, 387, 698-706.	4.4	26
24	Magnetic fields in the solar photosphere. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 4465-4476.	3.4	5
25	On Predicting the Solar Cycle Using Mean-Field Models. Astrophysical Journal, 2007, 661, 1289-1296.	4.5	86
26	Zonal flows and grand minima in a solar dynamo model. Monthly Notices of the Royal Astronomical Society, 2006, 371, 772-780.	4.4	59
27	Spatially intermittent fields in photospheric magnetoconvection. Monthly Notices of the Royal Astronomical Society, 2005, 362, 313-320.	4.4	20
28	Modelling dynamos in rapidly rotating late-type stars. Monthly Notices of the Royal Astronomical Society, 2003, 342, L15-L19.	4.4	15