Binod Sreenivasan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6956389/publications.pdf

Version: 2024-02-01

24 papers

774 citations

759233 12 h-index 610901 24 g-index

24 all docs

24 docs citations

times ranked

24

435 citing authors

#	Article	IF	CITATIONS
1	Melting of the Earth's inner core. Nature, 2011, 473, 361-363.	27.8	125
2	Correlation of Earth's magnetic field with lower mantle thermal and seismic structure. Physics of the Earth and Planetary Interiors, 2007, 162, 256-260.	1.9	95
3	Thermal core–mantle interaction: Exploring regimes for â€~locked' dynamo action. Physics of the Earth and Planetary Interiors, 2007, 165, 83-92.	1.9	95
4	The role of inertia in the evolution of spherical dynamos. Geophysical Journal International, 2006, 164, 467-476.	2.4	87
5	Helicity generation and subcritical behaviour in rapidly rotating dynamos. Journal of Fluid Mechanics, 2011, 688, 5-30.	3.4	65
6	Azimuthal winds, convection and dynamo action in the polar regions of planetary cores. Geophysical and Astrophysical Fluid Dynamics, 2006, 100, 319-339.	1,2	54
7	Structure and dynamics of the polar vortex in the Earth's core. Geophysical Research Letters, 2005, 32,	4.0	48
8	Dynamos with weakly convecting outer layers: implications for core-mantle boundary interaction. Geophysical and Astrophysical Fluid Dynamics, 2008, 102, 395-407.	1.2	35
9	On dynamo action produced by boundary thermal coupling. Physics of the Earth and Planetary Interiors, 2009, 177, 130-138.	1.9	28
10	Experimental study of a vortex in a magnetic field. Journal of Fluid Mechanics, 2002, 464, 287-309.	3.4	25
11	The role of buoyancy in polarity reversals of the geodynamo. Geophysical Journal International, 2014, 199, 1698-1708.	2.4	21
12	Experimental study of the convection in a rotating tangent cylinder. Journal of Fluid Mechanics, 2018, 843, 355-381.	3.4	14
13	Confinement of rotating convection by a laterally varying magnetic field. Journal of Fluid Mechanics, 2017, 822, 590-616.	3.4	11
14	Onset of plane layer magnetoconvection at low Ekman number. Physics of Fluids, 2015, 27, 106602.	4.0	9
15	Damping of magnetohydrodynamic waves in aÂrotating fluid. Journal of Fluid Mechanics, 2017, 828, 867-905.	3.4	9
16	Little Earth Experiment: An instrument to model planetary cores. Review of Scientific Instruments, 2016, 87, 084502.	1.3	8
17	Dynamos driven by weak thermal convection and heterogeneous outer boundary heat flux. Physics of the Earth and Planetary Interiors, 2016, 250, 35-45.	1.9	7
18	On the effect of laterally varying boundary heat flux on rapidly rotating spherical shell convection. Physics of Fluids, 2017, 29, 086602.	4.0	7

#	Article	IF	CITATION
19	Scale dependence of kinetic helicity and selection of the axial dipole in rapidly rotating dynamos. Physical Review Fluids, 2018, 3, .	2.5	7
20	On the control of rapidly rotating convection by an axially varying magnetic field. Geophysical and Astrophysical Fluid Dynamics, 2015, 109, 567-586.	1.2	6
21	Response of Earth's magnetic field to large lower mantle heterogeneity. Earth and Planetary Science Letters, 2020, 549, 116507.	4.4	6
22	Evolution of forced magnetohydrodynamic waves in a stratified fluid. Journal of Fluid Mechanics, 2021, 922, .	3.4	6
23	Evolution of localized blobs of swirling or buoyant fluid with and without an ambient magnetic field. Physical Review E, 2007, 75, 026304.	2.1	4
24	Convection in a rapidly rotating cylindrical annulus with laterally varying boundary heat flux. Journal of Fluid Mechanics, 2020, 883, .	3.4	2