Andrew Jackson

List of Publications by Year
in descending order

39 papers	654 citations	567281 15 h-index	580821 25 g-index
39 all docs	39 docs citations	39 times ranked	449 citing authors

#	Article	IF	Citations
1	Low-cost Solutions for Velocimetry in Rotating and Opaque Fluid Experiments using Ultrasonic Time of Flight. Experimental Techniques, 2022, 46, 429-439.	1.5	0
2	Waves in the Earthâ€™s core. I. Mildly diffusive torsional oscillations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	2.1	4
3	Geophysical inversion and optimal transport. Geophysical Journal International, 2022, 231, 172-198.	2.4	14
4	Waves in the Earth's core. II. Magnetoâ€“Coriolis modes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	2.1	4
5	Large-scale vortices and zonal flows in spherical rotating convection. Journal of Fluid Mechanics, 2021, 912, .	3.4	10
6	Large-scale vortices and zonal flows in spherical rotating convection â€“ CORRIGENDUM. Journal of Fluid Mechanics, 2021, 916, .	3.4	1
7	Accurate and efficient Jones-Worland spectral transforms for planetary applications. , 2021, , .		2
8	Optimal kinematic dynamos in a sphere. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190675.	2.1	2
9	The Surface Expression of Deep Columnar Flows. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009039.	2.5	1
10	Plesio-geostrophy for Earthâ€™s core: I. Basic equations, inertial modes and induction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200513.	2.1	7
11	A trio of simple optimized axisymmetric kinematic dynamos in a sphere. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190308.	2.1	6
12	The optimal kinematic dynamo driven by steady flows in a sphere. Journal of Fluid Mechanics, 2018, 839, 1-32.	3.4	18
13	The inverse problem of unpolarized infrared spectroscopy of geological materials: Estimation from noisy random sampling of a quadratic form. American Mineralogist, 2018, 103, 1176-1184.	1.9	4
14	Scale separated low viscosity dynamos and dissipation within the Earthâ€™s core. Scientific Reports, 2018, 8, 12566.	3.3	16
15	Taylor state dynamos found by optimal control: axisymmetric examples. Journal of Fluid Mechanics, 2018, 853, 647-697.	3.4	37
16	Kinematic validation of a quasi-geostrophic model for the fast dynamics in the Earthâ€™s outer core. Geophysical Journal International, 2017, 210, 1772-1786.	2.4	5
17	Characterization of columnar inertial modes in rapidly rotating spheres and spheroids. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170181.	2.1	15
18	Precession-driven dynamos in a full sphere and the role of large scale cyclonic vortices. Physics of Fluids, 2016, 28, .	4.0	54

#	Article	IF	Citations
19	Magnetic reversals from planetary dynamo waves. Nature, 2016, 539, 551-554.	27.8	21
20	Performance benchmarks for a next generation numerical dynamo model. Geochemistry, Geophysics, Geosystems, 2016, 17, 1586-1607.	2.5	66
21	Propagation and reflection of diffusionless torsional waves in a sphere. Geophysical Journal International, 2016, 204, 1477-1489.	2.4	7
22	A fully spectral methodology for magnetohydrodynamic calculations in a whole sphere. Journal of Computational Physics, 2016, 305, 403-422.	3.8	11
23	Enumeration, orthogonality and completeness of the incompressible Coriolis modes in a sphere. Journal of Fluid Mechanics, 2015, 766, 468-498.	3.4	21
24	Optimal dynamo action by steady flows confined to a cube. Journal of Fluid Mechanics, 2015, 783, 23-45.	3.4	14
25	Experimental and numerical study of electrically driven magnetohydrodynamic flow in a modified cylindrical annulus. II. Instabilities. Physics of Fluids, 2015, 27, 084108.	4.0	10
26	Experimental and numerical study of electrically driven magnetohydrodynamic flow in a modified cylindrical annulus. I. Base flow. Physics of Fluids, 2015, 27, .	4.0	12
27	3-D analysis and interpretation of magnetotelluric data from the Aluto-Langano geothermal field, Ethiopia. Geophysical Journal International, 2015, 202, 1923-1948.	2.4	76
28	Full sphere hydrodynamic and dynamo benchmarks. Geophysical Journal International, 2014, 197, 119-134.	2.4	41
29	Variational data assimilation for a forced, inertia-free magnetohydrodynamic dynamo model. Geophysical Journal International, 2014, 199, 1662-1676.	2.4	15
30	Experimental study of fluid flows in a precessing cylindrical annulus. Physics of Fluids, 2014, 26, .	4.0	34
31	Electromagnetically driven zonal flows in a rapidly rotating spherical shell. Journal of Fluid Mechanics, 2013, 725, 428-445.	3.4	10
32	The evolution of a magnetic field subject to Taylorâ€™s constraint using a projection operator. Geophysical Journal International, 2011, 187, 690-704.	2.4	9
33	Variational data assimilation for the initial-value dynamo problem. Physical Review E, 2011, 84, 056321.	2.1	20
34	An optimal Galerkin scheme to solve the kinematic dynamo eigenvalue problem in a full sphere. Journal of Computational Physics, 2010, 229, 8666-8683.	3.8	27
35	The structure of Taylor's constraint in three dimensions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 3149-3174.	2.1	16
36	Can a 1D mantle electrical conductivity model generate geomagnetic jerk differential time delays?. , 2007, , .		0

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37	Transient magnetic energy growth in spherical stationary flows. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 2457-2479.	2.1	11
38	A comparison of numerical schemes to solve the magnetic induction eigenvalue problem in a spherical geometry. Geophysical and Astrophysical Fluid Dynamics, 2005, 99, 467-480.	1.2	12
39	On magnetic energy instability in spherical stationary flows. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2004, 460, 1453-1476.	2.1	21