Radostin D Simitev

List of Publications by Year
in descending order

47	799	567144 15	526166 27
papers	citations	h-index	g-index

51	51	51	488
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Conventional rigid 2D substrates cause complex contractile signals in monolayers of human induced pluripotent stem cellâ€derived cardiomyocytes. Journal of Physiology, 2022, 600, 483-507.	1.3	8
2	Electrophysiological heterogeneity in large populations of rabbit ventricular cardiomyocytes. Cardiovascular Research, 2022, 118, 3112-3125.	1.8	13
3	Regimes of thermo-compositional convection and related dynamos in rotating spherical shells. Geophysical and Astrophysical Fluid Dynamics, 2021, 115, 61-84.	0.4	6
4	Action potential propagation and block in a model of atrial tissue with myocyteâ€“fibroblast coupling. Mathematical Medicine and Biology, 2021, 38, 106-131.	0.8	3
5	Onset of Inertial Magnetoconvection in Rotating Fluid Spheres. Fluids, 2021, 6, 41.	0.8	3
6	Addendum: Action potential propagation and block in a model of atrial tissue with myocyteâ€“fibroblast coupling. Mathematical Medicine and Biology, 2021, 38, 292-298.	0.8	1
7	Electrophysiology of hiPSC-Cardiomyocytes Co-Cultured with HEK Cells Expressing the Inward Rectifier Channel. International Journal of Molecular Sciences, 2021, 22, 6621.	1.8	3
8	Kelvin-Helmholtz instability and collapse of a twisted magnetic null point with anisotropic viscosity. Astronomy and Astrophysics, 2021, 650, A143.	2.1	3
9	On self and mutual winding helicity. Communications in Nonlinear Science and Numerical Simulation, 2021, 103, 106015.	1.7	3
10	The effect of anisotropic viscosity on the nonlinear MHD kink instability. Communications in Nonlinear Science and Numerical Simulation, 2020, 83, 105131.	1.7	3
11	Effects of Shell Thickness on Cross-Helicity Generation in Convection-Driven Spherical Dynamos. Fluids, 2020, 5, 245.	0.8	2
12	The onset of thermo-compositional convection in rotating spherical shells. Geophysical and Astrophysical Fluid Dynamics, 2019, 113, 377-404.	0.4	5
13	Flows and dynamos in a model of stellar radiative zones. Journal of Plasma Physics, 2018, 84, .	0.7	1
14	Baroclinically-driven flows and dynamo action in rotating spherical fluid shells. Geophysical and Astrophysical Fluid Dynamics, 2017, 111, 369-379.	0.4	6
15	Performance benchmarks for a next generation numerical dynamo model. Geochemistry, Geophysics, Geosystems, 2016, 17, 1586-1607.	1.0	66
16	Semianalytical approach to criteria for ignition of excitation waves. Physical Review E, 2015, 92, 042917.	0.8	8
17	DYNAMO EFFECTS NEAR THE TRANSITION FROM SOLAR TO ANTI-SOLAR DIFFERENTIAL ROTATION. Astrophysical Journal, 2015, 810, 80.	1.6	26
18	Planetary Dynamos. , 2015, , 239-254.		6

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19	The magnetic structure of surges in small-scale emerging flux regions. Astronomy and Astrophysics, 2015, 576, A4.	2.1	21
20	A spherical shell numerical dynamo benchmark with pseudo-vacuum magnetic boundary conditions. Geophysical Journal International, 2014, 196, 712-723.	1.0	25
21	Full sphere hydrodynamic and dynamo benchmarks. Geophysical Journal International, 2014, 197, 119-134.	1.0	41
22	Quasi-geostrophic approximation of anelastic convection. Journal of Fluid Mechanics, 2014, 751, 216-227.	1.4	6
23	Solar cycle properties described by simple convection-driven dynamos. Physica Scripta, 2012, 86, 018407.	1.2	1
24	Bistable attractors in a model of convection-driven spherical dynamos. Physica Scripta, 2012, 86, 018409.	1.2	9
25	HOW FAR CAN MINIMAL MODELS EXPLAIN THE SOLAR CYCLE?. Astrophysical Journal, 2012, 749, 9.	1.6	13
26	Double-diffusive convection in a rotating cylindrical annulus with conical caps. Physics of the Earth and Planetary Interiors, 2011, 186, 183-190.	0.7	9
27	Asymptotics of Conduction Velocity Restitution in Models ofÂElectrical Excitation in the Heart. Bulletin of Mathematical Biology, 2011, 73, 72-115.	0.9	14
28	Remarks on some typical assumptions in dynamo theory. Geophysical and Astrophysical Fluid Dynamics, 2011, 105, 234-247.	0.4	17
29	Bistability and hysteresis of dipolar dynamos generated by turbulent convection in rotating spherical shells. Europhysics Letters, 2009, 85, 19001.	0.7	97
30	Asymptotic Analysis and Analytical Solutions of a Model of Cardiac Excitation. Bulletin of Mathematical Biology, 2008, 70, 517-554.	0.9	12
31	Toroidal flux oscillation as possible cause of geomagnetic excursions and reversals. Physics of the Earth and Planetary Interiors, 2008, 168, 237-243.	0.7	26
32	Reynolds stresses and mean fields generated by pure waves: applications to shear flows and convection in a rotating shell. Journal of Fluid Mechanics, 2008, 602, 303-326.	1.4	18
33	Planetary Dynamos. , 2007, , 281-298.		3
34	Can cellular convection in a rotating spherical shell maintain both global and local magnetic fields?. International Journal of Geomagnetism and Aeronomy, 2007, 7, .	0.2	1
35	Parameter dependences of convection-driven dynamos in rotating spherical fluid shells. Geophysical and Astrophysical Fluid Dynamics, 2006, 100, 341-361.	0.4	77
36	Conditions for Propagation and Block of Excitation in an Asymptotic Model of Atrial Tissue. Biophysical Journal, 2006, 90, 2258-2269.	0.2	24

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37	Generation of coupled global and local magnetic fields by a cellular MHD dynamo. Proceedings of the International Astronomical Union, 2006, 2, 482-487.	0.0	0
38	Dynamos of giant planets. Proceedings of the International Astronomical Union, 2006, 2, 467-474.	0.0	0
39	Asymptotic properties of mathematical models of excitability. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1283-1298.	1.6	20
40	Prandtl-number dependence of convection-driven dynamos in rotating spherical fluid shells. Journal of Fluid Mechanics, 2005, 532, 365-388.	1.4	89
41	Convection in rotating spherical fluid shells and its dynamo states. The Fluid Mechanics of Astrophysics and Geophysics, 2005, , .	0.2	11
42	Inertial convection in rotating fluid spheres. Journal of Fluid Mechanics, 2004, 498, 23-30.	1.4	37
43	Patterns of convection in rotating spherical shells. New Journal of Physics, 2003, 5, 97-97.	1.2	50
44	Parameter Dependences of Convection Driven Spherical Dynamos. , 2003, , 15-35.		1
45	Convection in rotating spherical shells and its dynamo action. The Fluid Mechanics of Astrophysics and Geophysics, 2003, , 130-152.	0.2	5
46	Buoyancy Driven Convection in Rotating Spherical Shells and Its Dynamo Action. , 2002, , 12-34.		1
47	Flute and kink instabilities in a dynamically twisted flux tube with anisotropic plasma viscosity. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	0