

Peter Frick

List of Publications by Year in descending order

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110
papers

2,305
citations

185998

28
h-index

253896

43
g-index

110
all docs

110
docs citations

110
times ranked

1394
citing authors

#	ARTICLE	IF	CITATIONS
1	Limits of strong magneto-convective fluctuations in liquid metal flow in a heated vertical pipe affected by a transverse magnetic field. <i>International Journal of Thermal Sciences</i> , 2021, 161, 106773.	2.6	10
2	Mixed Convection in Pipe and Duct Flows With Strong Magnetic Fields. <i>Applied Mechanics Reviews</i> , 2021, 73, .	4.5	40
3	Heat transport in a cell heated at the bottom and the side (a). <i>Europhysics Letters</i> , 2021, 134, 34001.	0.7	1
4	The influence of the cell inclination on the heat transport and large-scale circulation in liquid metal convection. <i>Journal of Fluid Mechanics</i> , 2020, 884, .	1.4	29
5	Generating a tide-like flow in a cylindrical vessel by electromagnetic forcing. <i>Physics of Fluids</i> , 2020, 32, .	1.6	7
6	Experimental Validation of an Inductive System for Magnesium Level Detection in a Titanium Reduction Reactor. <i>Sensors</i> , 2020, 20, 6798.	2.1	2
7	Experimental study of liquid metal heat transfer in a vertical duct affected by coplanar magnetic field: Upward flow. <i>International Journal of Heat and Mass Transfer</i> , 2020, 156, 119746.	2.5	6
8	Wavelet analysis of the long-term activity of V833 Tau. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 3788-3794.	1.6	10
9	Spectral characteristic of mid-term quasi-periodicities in sunspot data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 5572-5578.	1.6	15
10	Evolution of a strong electrovortex flow in a cylindrical cell. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	15
11	Experimental study of liquid metal heat transfer in a vertical duct affected by coplanar magnetic field: Downward flow. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118529.	2.5	11
12	Transient flows and reorientations of large-scale convection in a cubic cell. <i>International Communications in Heat and Mass Transfer</i> , 2019, 108, 104319.	2.9	20
13	The small-scale dynamo in a spectral representation. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2019, 113, 184-198.	0.4	3
14	Recovery of endothelial function in microvessels in patients with peripheral artery disease (PAD) after conservative and surgery treatment. , 2019, , .		1
15	Helical bottleneck effect in 3D homogeneous isotropic turbulence. <i>Fluid Dynamics Research</i> , 2018, 50, 011412.	0.6	3
16	Multi-frequency inductive system for magnesium level detection in a titanium reduction reactor. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 424, 012078.	0.3	0
17	Analysis of mean and fluctuating helicity measured by TomoPIV in swirling jet. <i>EPJ Web of Conferences</i> , 2018, 180, 02097.	0.1	2
18	Combining Faraday Tomography and Wavelet Analysis. <i>Galaxies</i> , 2018, 6, 121.	1.1	4

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19	Magnetic arms of NGC 6946 traced in Faraday cubes at low radio frequencies. <i>Astronomische Nachrichten</i> , 2018, 339, 440-446.	0.6	3
20	Inductive System for Reliable Magnesium Level Detection in a Titanium Reduction Reactor. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2089-2096.	1.0	11
21	Temperature fluctuations in a nonisothermal mercury pipe flow affected by a strong transverse magnetic field. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 566-572.	2.5	14
22	Analysis of mean and fluctuating helicity measured by TomoPIV in swirling jet. <i>EPJ Web of Conferences</i> , 2018, 180, 02097.	0.1	1
23	Thermal convection of liquid sodium in inclined cylinders. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	30
24	Beat-to-beat cardiovascular hemodynamic parameters based on wavelet spectrogram of impedance data. <i>Biomedical Signal Processing and Control</i> , 2017, 36, 50-56.	3.5	9
25	Local Heating Test for Detection of Microcirculation Abnormalities in Patients with Diabetes-Related Foot Complications. <i>Advances in Skin and Wound Care</i> , 2017, 30, 158-166.	0.5	9
26	Early differential diagnosis of the severity of acute pancreatitis. <i>Journal of Clinical Monitoring and Computing</i> , 2017, 31, 1289-1297.	0.7	6
27	Thermal convection of liquid metal in the titanium reduction reactor. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 208, 012041.	0.3	13
28	On boundary conditions in liquid sodium convective experiments. <i>Journal of Physics: Conference Series</i> , 2017, 891, 012075.	0.3	3
29	Numerical simulations of convection in the titanium reduction reactor. <i>Journal of Physics: Conference Series</i> , 2017, 891, 012076.	0.3	8
30	Natural convection in a liquid metal locally heated from above. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 208, 012044.	0.3	9
31	On Cascade Energy Transfer in Convective Turbulence. <i>Journal of Applied Mechanics and Technical Physics</i> , 2017, 58, 1171-1180.	0.1	2
32	Thermal convection of liquid metal in a long inclined cylinder. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	21
33	Inverse cascades in helically magnetized turbulence. <i>Magnetohydrodynamics</i> , 2017, 53, 89-96.	0.5	0
34	Magnetic and gaseous spiral arms in M83. <i>Astronomy and Astrophysics</i> , 2016, 585, A21.	2.1	31
35	Turbulent convective flows in a cubic cavity at high Prandtl number. <i>Journal of Physics: Conference Series</i> , 2016, 754, 022010.	0.3	1
36	Detection of Endothelial Dysfunction Using Skin Temperature Oscillations Analysis During Local Heating in Patients With Peripheral Arterial Disease. <i>Microcirculation</i> , 2016, 23, 406-415.	1.0	12

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37	Numerical study of molten magnesium convection in a titanium reduction apparatus. Journal of Applied Mechanics and Technical Physics, 2016, 57, 1264-1275.	0.1	8
38	Relationship of oscillating and average components of laser Doppler flowmetry signal. Journal of Biomedical Optics, 2016, 21, 085002.	1.4	11
39	High Rayleigh number convection in a cubic cell with adiabatic sidewalls. International Journal of Heat and Mass Transfer, 2016, 102, 201-212.	2.5	41
40	ICMM's two-loop liquid sodium facility. Magnetohydrodynamics, 2016, 52, 87-94.	0.5	1
41	Hindered Energy Cascade in Highly Helical Isotropic Turbulence. Physical Review Letters, 2015, 115, 234501.	2.9	64
42	Skin temperature variations as a tracer of microvessel tone. Biomedical Signal Processing and Control, 2015, 21, 1-7.	3.5	39
43	JOINT INVERSE CASCADE OF MAGNETIC ENERGY AND MAGNETIC HELICITY IN MHD TURBULENCE. Astrophysical Journal Letters, 2015, 798, L35.	3.0	11
44	Turbulent convective heat transfer in a long cylinder with liquid sodium. Europhysics Letters, 2015, 109, 14002.	0.7	44
45	The study of turbulence in MHD flow generated by rotating and traveling magnetic fields. Experiments in Fluids, 2015, 56, 1.	1.1	12
46	Quantifying the correlation between photoplethysmography and laser Doppler flowmetry microvascular low-frequency oscillations. Journal of Biomedical Optics, 2015, 20, 037007.	1.4	43
47	Turbulent convective heat transfer in an inclined tube filled with sodium. Technical Physics, 2015, 60, 1305-1309.	0.2	25
48	Skin blood flow and temperature oscillations during cold pressor test. , 2015, 2015, 7382-5.		7
49	Magnetic field in a decaying spin-down flow of liquid sodium. Magnetohydrodynamics, 2015, 51, 267-274.	0.5	3
50	Turbulent convective heat transfer in an inclined tube with liquid sodium. Magnetohydrodynamics, 2015, 51, 329-336.	0.5	10
51	Advantage of wavelet technique to highlight the observed geomagnetic perturbations linked to the Chilean tsunami (2010). Journal of Geophysical Research: Space Physics, 2014, 119, 3077-3093.	0.8	27
52	Dynamos: from an astrophysical model to laboratory experiments. Physics-Uspexhi, 2014, 57, 292-311.	0.8	36
53	Characteristics of solar diurnal variations: A case study based on records from the ground magnetic station at Vassouras, Brazil. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 92, 124-136.	0.6	25
54	Shell models of magnetohydrodynamic turbulence. Physics Reports, 2013, 523, 1-60.	10.3	111

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55	Multi-scale radio-infrared correlations in M 31 and M 33: The role of magnetic fields and star formation. <i>Astronomy and Astrophysics</i> , 2013, 557, A129.	2.1	58
56	Turbulent viscosity and turbulent magnetic diffusivity in a decaying spin-down flow of liquid sodium. <i>Physical Review E</i> , 2012, 85, 016303.	0.8	13
57	Transition from hydrodynamic turbulence to magnetohydrodynamic turbulence in von Kármán flows. <i>Journal of Fluid Mechanics</i> , 2012, 693, 243-260.	1.4	4
58	Recognizing magnetic structures by present and future radio telescopes with Faraday rotation measure synthesis. <i>Astronomy and Astrophysics</i> , 2012, 543, A113.	2.1	40
59	Secondary convective flows in the rectangular tank with non-uniform heating. <i>Journal of Physics: Conference Series</i> , 2011, 318, 082011.	0.3	0
60	Reversals of large-scale circulation at turbulent convection in rectangular boxes. <i>Journal of Physics: Conference Series</i> , 2011, 318, 082013.	0.3	1
61	Faraday rotation measure synthesis for magnetic fields of galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 2540-2549.	1.6	43
62	Reversals of large-scale circulation in turbulent convection in rectangular cavities. <i>JETP Letters</i> , 2011, 93, 330-334.	0.4	21
63	The screw dynamo in a thick torus. <i>Astronomische Nachrichten</i> , 2011, 332, 11-16.	0.6	4
64	Long-time magnetic and cross helicities evolution in the free decaying MHD turbulence. <i>Journal of Physics: Conference Series</i> , 2011, 318, 072038.	0.3	0
65	Wavelet analysis of bioimpedancometric data. <i>Journal of Physics: Conference Series</i> , 2010, 224, 012108.	0.3	1
66	Wavelet-based Faraday rotation measure synthesis. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2010, 401, L24-L28.	1.2	37
67	Direct Measurement of Effective Magnetic Diffusivity in Turbulent Flow of Liquid Sodium. <i>Physical Review Letters</i> , 2010, 105, 184502.	2.9	28
68	Laboratory study of differential rotation in a convective rotating layer. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2010, 104, 349-368.	0.4	21
69	Long-term free decay of MHD turbulence. <i>Europhysics Letters</i> , 2010, 92, 34007.	0.7	10
70	Wavelet-based correlations of impedance cardiography signals and heart rate variability. <i>Journal of Physics: Conference Series</i> , 2010, 224, 012107.	0.3	1
71	Spectral properties of helical turbulence. <i>Fluid Dynamics</i> , 2009, 44, 658-666.	0.2	13
72	The cross-helicity effect on cascade processes in MHD turbulence. <i>Doklady Physics</i> , 2009, 54, 93-97.	0.2	15

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73	Dynamics of a turbulent spin-down flow inside a torus. <i>Physics of Fluids</i> , 2009, 21, 045108.	1.6	16
74	Direct measurement of turbulent magnetic diffusivity in liquid metal flow. <i>Springer Proceedings in Physics</i> , 2009, , 809-812.	0.1	0
75	Wavelet-based Correlations of Skin Temperature and Blood Flow Oscillations. <i>Cardiovascular Engineering (Dordrecht, Netherlands)</i> , 2008, 8, 185-189.	1.0	57
76	Direct measurement of effective electro conductivity of turbulent liquid metal. <i>Astronomische Nachrichten</i> , 2008, 329, 706-708.	0.6	4
77	Measurements of turbulent magnetic diffusivity in a liquid-gallium flow. <i>JETP Letters</i> , 2008, 88, 167-171.	0.4	17
78	Magnetic field structures of galaxies derived from analysis of Faraday rotation measures, and perspectives for the SKA. <i>Astronomy and Astrophysics</i> , 2008, 480, 45-59.	2.1	45
79	Shell models for Hall effect induced magnetic turbulence. <i>New Journal of Physics</i> , 2007, 9, 293-293.	1.2	3
80	Statistical properties of polarized radio continuum emission and effects of data processing. <i>Astronomische Nachrichten</i> , 2007, 328, 80-91.	0.6	2
81	Analysis of spiral arms using anisotropic wavelets: gas, dust and magnetic fields in M51. <i>Astronomy and Astrophysics</i> , 2006, 458, 441-452.	2.1	62
82	Anharmonic and standing dynamo waves: theory and observation of stellar magnetic activity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 365, 181-190.	1.6	21
83	A multi-scale disk dynamo model. <i>Astronomische Nachrichten</i> , 2006, 327, 481-482.	0.6	6
84	Large- and small-scale interactions and quenching in α^2 -dynamo. <i>Physical Review E</i> , 2006, 74, 066310.	0.8	26
85	Induction, helicity, and alpha effect in a toroidal screw flow of liquid gallium. <i>Physical Review E</i> , 2006, 73, 046310.	0.8	43
86	Magnetic field rotation in the screw gallium flow. <i>European Physical Journal B</i> , 2004, 41, 561-568.	0.6	14
87	Anharmonicity of Stellar Cycles: A Wavelet Quantification. <i>Solar Physics</i> , 2004, 224, 179-185.	1.0	2
88	Time-spectra of chromospheric activity of old solar-type stars: detection of rotational signals from double wavelet analysis. <i>New Astronomy</i> , 2004, 9, 599-609.	0.8	19
89	Screw dynamo in a time-dependent pipe flow. <i>Physical Review E</i> , 2003, 67, 056309.	0.8	27
90	Combined grid-shell approach for convection in a rotating spherical layer. <i>Europhysics Letters</i> , 2002, 59, 212-217.	0.7	8

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91	Wavelet tomography of the Galactic magnetic field. <i>Astronomy and Astrophysics</i> , 2002, 391, 361-368.	2.1	14
92	Title is missing!. <i>European Physical Journal B</i> , 2002, 25, 399-402.	0.6	5
93	Structures in the rotation measure sky. <i>Monthly Notices of the Royal Astronomical Society</i> , 2001, 325, 649-664.	1.6	84
94	Scaling and correlation analysis of galactic images. <i>Monthly Notices of the Royal Astronomical Society</i> , 2001, 327, 1145-1157.	1.6	72
95	A Nonstationary Dynamo Experiment in a Braked Torus. , 2001, , 1-8.		5
96	Magnetic and optical spiral arms in the galaxy NGC 6946. <i>Monthly Notices of the Royal Astronomical Society</i> , 2000, 318, 925-937.	1.6	42
97	Long-time behavior of MHD shell models. <i>Europhysics Letters</i> , 2000, 52, 539-544.	0.7	6
98	Lifetime of Surface Features and Stellar Rotation: A Wavelet Time-Frequency Approach. <i>Astrophysical Journal</i> , 1999, 510, L135-L138.	1.6	22
99	Lymphocyte Nucleus Reconstruction via Wavelet Tomography. <i>Journal of Biomedical Optics</i> , 1999, 4, 376.	1.4	3
100	Wavelet analysis of signals with gaps. <i>Journal of Mathematical Physics</i> , 1998, 39, 4091-4107.	0.5	52
101	Cascade and dynamo action in a shell model of magnetohydrodynamic turbulence. <i>Physical Review E</i> , 1998, 57, 4155-4164.	0.8	88
102	Binary tree models of high-Reynolds-number turbulence. <i>Physical Review E</i> , 1997, 56, 1692-1698.	0.8	11
103	Some properties of two-dimensional inverse energy cascade dynamics. <i>Physical Review E</i> , 1997, 55, 2693-2706.	0.8	21
104	Time scales and trends in the central England temperature data (1659-1990): A wavelet analysis. <i>Geophysical Research Letters</i> , 1997, 24, 1351-1354.	1.5	108
105	Wavelet Analysis of Stellar Chromospheric Activity Variations. <i>Astrophysical Journal</i> , 1997, 483, 426-434.	1.6	80
106	Scaling properties of a class of shell models. <i>Physical Review E</i> , 1995, 51, 5582-5593.	0.8	29
107	Scaling properties of numerical two-dimensional turbulence. <i>Physical Review E</i> , 1995, 52, 3719-3729.	0.8	39
108	Statistical mechanics of shell models for two-dimensional turbulence. <i>Physical Review E</i> , 1994, 50, 4705-4715.	0.8	36

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109	Hierarchical tree-model of 2D-turbulence. Physica D: Nonlinear Phenomena, 1994, 72, 95-109.	1.3	16
110	On Spectral Laws of 2D Turbulence in Shell Models. Europhysics Letters, 1993, 24, 725-730.	0.7	10