

Frank Stefani

List of Publications by Year in descending order

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190
papers

3,954
citations

117625

34
h-index

161849

54
g-index

193
all docs

193
docs citations

193
times ranked

1030
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic transitions of the magnetized spherical Couette flow between its base state and the return flow instability. IOP Conference Series: Materials Science and Engineering, 2022, 1223, 012004.	0.6	2
2	Laboratory Investigation of Tomography-Controlled Continuous Steel Casting. Sensors, 2022, 22, 2195.	3.8	6
3	Contactless Inductive Flow Tomography for Real-Time Control of Electromagnetic Actuators in Metal Casting. Sensors, 2022, 22, 4155.	3.8	4
4	From helical to standard magnetorotational instability: Predictions for upcoming liquid sodium experiments. Physical Review Fluids, 2022, 7, .	2.5	6
5	Ekman boundary layers in a fluid filled precessing cylinder. AIP Advances, 2021, 11, 035023.	1.3	6
6	Modulated rotating waves and triadic resonances in spherical fluid systems: The case of magnetized spherical Couette flow. Physics of Fluids, 2021, 33, 044105.	4.0	8
7	Long term time dependent frequency analysis of chaotic waves in the weakly magnetized spherical Couette system. Physica D: Nonlinear Phenomena, 2021, 418, 132836.	2.8	5
8	Shaken and Stirred: When Bond Meets Suessâ€de Vries and Gnevyshevâ€Ohl. Solar Physics, 2021, 296, 1.	2.5	21
9	Convective, absolute and global azimuthal magnetorotational instabilities. Journal of Fluid Mechanics, 2021, 922, .	3.4	4
10	Solar and Anthropogenic Influences on Climate: Regression Analysis and Tentative Predictions. Climate, 2021, 9, 163.	2.8	11
11	Intermittent chaotic flows in the weakly magnetised spherical Couette system. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	1
12	Mode Conversion and Period Doubling in a Liquid Rubidium AlfvÃ©n-Wave Experiment with Coinciding Sound and AlfvÃ©n Speeds. Physical Review Letters, 2021, 127, 275001.	7.8	2
13	Weak branch and multimodal convection in rapidly rotating spheres at low Prandtl number. Physical Review Fluids, 2021, 6, .	2.5	0
14	Phase coherence and phase jumps in the Schwabe cycle. Astronomische Nachrichten, 2020, 341, 600-615.	1.2	16
15	Generating a tide-like flow in a cylindrical vessel by electromagnetic forcing. Physics of Fluids, 2020, 32, .	4.0	7
16	Experimental Validation of an Inductive System for Magnesium Level Detection in a Titanium Reduction Reactor. Sensors, 2020, 20, 6798.	3.8	2
17	Chaotic wave dynamics in weakly magnetized spherical Couette flows. Chaos, 2020, 30, 043116.	2.5	14
18	Experimental investigation of the return flow instability in magnetized spherical Couette flows. Physics of Fluids, 2020, 32, .	4.0	11

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19	Four-Frequency Solution in a Magnetohydrodynamic Couette Flow as a Consequence of Azimuthal Symmetry Breaking. <i>Physical Review Letters</i> , 2020, 125, 264501.	7.8	10
20	Numerical and experimental investigation of electro-vortex flow in a cylindrical container. <i>Magnetohydrodynamics</i> , 2020, 56, 27-42.	0.3	10
21	Convection-caused symmetry breaking of azimuthal magnetorotational instability in a liquid metal Taylor–Couette flow. <i>Magnetohydrodynamics</i> , 2020, 56, 225-236.	0.3	1
22	Conductivity influence on interfacial waves in liquid metal batteries and related two-layer systems. <i>Magnetohydrodynamics</i> , 2020, 56, 237-246.	0.3	2
23	Schwabe, Gleissberg, Suess-de Vries: Towards a consistent model of planetary synchronization of solar cycles. <i>Magnetohydrodynamics</i> , 2020, 56, 269-280.	0.3	9
24	Zero Net Flux MRI Turbulence in Disks: Sustainance Scheme and Magnetic Prandtl Number Dependence. <i>Astrophysical Journal</i> , 2020, 904, 47.	4.5	11
25	Contactless inductive flow tomography for a Rayleigh-Bénard setup with aspect ratio 0.5. <i>Magnetohydrodynamics</i> , 2020, 56, 195-202.	0.3	2
26	Evolution of a strong electrovortex flow in a cylindrical cell. <i>Physical Review Fluids</i> , 2020, 5, .	2.5	15
27	Flow monitoring for continuous steel casting using Contactless Inductive Flow Tomography (CIFT). <i>IFAC-PapersOnLine</i> , 2020, 53, 11477-11482.	0.9	2
28	Kinematic dynamo action of a precession-driven flow based on the results of water experiments and hydrodynamic simulations.. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2019, 113, 235-255.	1.2	9
29	The DRESHDYN project: liquid metal experiments on dynamo action and magnetorotational instability. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2019, 113, 51-70.	1.2	15
30	Modulated Rotating Waves in the Magnetised Spherical Couette System. <i>Journal of Nonlinear Science</i> , 2019, 29, 2735-2759.	2.1	15
31	A Model of a Tidally Synchronized Solar Dynamo. <i>Solar Physics</i> , 2019, 294, 1.	2.5	43
32	Optimal sensor arrangement for Contactless Inductive Flow Tomography in the case of Rayleigh-Bénard convection. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2019, 59, 1291-1296.	0.6	1
33	Flow Control in the Model of a Continuous Caster by Using Contactless Inductive Flow Tomography. <i>Minerals, Metals and Materials Series</i> , 2019, , 49-58.	0.4	0
34	Measurement techniques for liquid metal based nuclear coolants. , 2019, , 147-155.		1
35	Instability of precession driven Kelvin modes: Evidence of a detuning effect. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	6
36	Two types of axisymmetric helical magnetorotational instability in rotating flows with positive shear. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	10

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37	Azimuthal magnetorotational instability with super-rotation. Journal of Plasma Physics, 2018, 84, .	2.1	6
38	Nonlinear Large Scale Flow in a Precessing Cylinder and Its Ability To Drive Dynamo Action. Physical Review Letters, 2018, 120, 024502.	7.8	22
39	Laboratory Experiments and Numerical Simulations on Magnetic Instabilities. Astrophysics and Space Science Library, 2018, , 125-152.	2.7	0
40	On the Synchronizability of Taylerâ€“Spruit and Babcockâ€“Leighton Type Dynamos. Solar Physics, 2018, 293, 1.	2.5	17
41	Stability and instability of hydromagnetic Taylorâ€“Couette flows. Physics Reports, 2018, 741, 1-89.	25.6	38
42	Visualization of the global flow structure in a modified Rayleigh-BÃ©nard setup using contactless inductive flow tomography. Flow Measurement and Instrumentation, 2018, 62, 269-280.	2.0	17
43	Multi-frequency inductive system for magnesium level detection in a titanium reduction reactor. IOP Conference Series: Materials Science and Engineering, 2018, 424, 012078.	0.6	0
44	Continuation and stability of rotating waves in the magnetized spherical Couette system: secondary transitions and multistability. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180281.	2.1	13
45	Visualisation of the large scale circulation in Rayleigh-BÃ©nard convection using contactless inductive flow tomography. IOP Conference Series: Materials Science and Engineering, 2018, 424, 012007.	0.6	0
46	Singularity consideration in the integral equations for contactless inductive flow tomography. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2018, 37, 1366-1375.	0.9	6
47	On a spectral problem in magnetohydrodynamics and itsÃrelevance for the geodynamo. GAMM Mitteilungen, 2018, 41, e201800012.	5.5	2
48	Quasi-two-dimensional nonlinear evolution of helical magnetorotational instability in a magnetized Taylorâ€“Couette flow. New Journal of Physics, 2018, 20, 013012.	2.9	5
49	Inductive System for Reliable Magnesium Level Detection in a Titanium Reduction Reactor. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 2089-2096.	2.1	11
50	Self-excitation in a helical liquid metal flow: the Riga dynamo experiments. Journal of Plasma Physics, 2018, 84, .	2.1	7
51	Magnetorotational instability in Taylor-Couette flows between cylinders with finite electrical conductivity. Geophysical and Astrophysical Fluid Dynamics, 2018, 112, 301-320.	1.2	8
52	Recent developments in the application of contactless inductive flow tomography. , 2018, , .		0
53	Recent developments in the application of contactless inductive flow tomography. , 2018, , .		0
54	Sloshing instability and electrolyte layer rupture in liquid metal batteries. Physics of Fluids, 2017, 29, .	4.0	55

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55	Immersed transient eddy current flow metering: a calibration-free velocity measurement technique for liquid metals. <i>Measurement Science and Technology</i> , 2017, 28, 105301.	2.6	8
56	Thermal convection of liquid metal in the titanium reduction reactor. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 208, 012041.	0.6	13
57	Liquid metal batteries - materials selection and fluid dynamics. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 228, 012013.	0.6	26
58	The DRESDYN project: planned experiments and present status. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2017, 17, 123-126.	0.2	1
59	Numerical simulations of convection in the titanium reduction reactor. <i>Journal of Physics: Conference Series</i> , 2017, 891, 012076.	0.4	8
60	Magnetic field dynamos and magnetically triggered flow instabilities. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 228, 012002.	0.6	3
61	Parametric instability in periodically perturbed dynamos. <i>Physical Review Fluids</i> , 2017, 2, .	2.5	2
62	Nonmodel analysis of helical and azimuthal magnetorotational instabilities. <i>Magnetohydrodynamics</i> , 2017, 53, 107-118.	0.3	4
63	Metal pad roll instability in liquid metal batteries. <i>Magnetohydrodynamics</i> , 2017, 53, 129-140.	0.3	14
64	The Tayler instability at low magnetic Prandtl numbers: chiral symmetry breaking and synchronizable helicity oscillations. <i>Magnetohydrodynamics</i> , 2017, 53, 169-178.	0.3	8
65	Transitions in a magnetized quasi-laminar spherical Couette flow. <i>Magnetohydrodynamics</i> , 2017, 53, 393-402.	0.3	12
66	Contactless inductive flow tomography: basic principles and first applications in the experimental modelling of continuous casting. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 143, 012023.	0.6	3
67	Magnetohydrodynamic effects in liquid metal batteries. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 143, 012024.	0.6	13
68	A gradiometric version of contactless inductive flow tomography: theory and first applications. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150330.	3.4	19
69	Synchronized Helicity Oscillations: A Link Between Planetary Tides and the Solar Cycle?. <i>Solar Physics</i> , 2016, 291, 2197-2212.	2.5	44
70	Linking dissipation-induced instabilities with nonmodal growth: The case of helical magnetorotational instability. <i>Physical Review E</i> , 2016, 94, 051203.	2.1	7
71	Noise reduction of ultrasonic Doppler velocimetry in liquid metal experiments with high magnetic fields. <i>Flow Measurement and Instrumentation</i> , 2016, 48, 74-80.	2.0	4
72	Subcritical excitation of the current-driven Tayler instability by super-rotation. <i>Physics of Fluids</i> , 2016, 28, .	4.0	13

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73	Thermohydraulic safety issues for liquid metal cooled systems. Kerntechnik, 2016, 81, 188-191.	0.2	0
74	Destabilization of rotating flows with positive shear by azimuthal magnetic fields. Physical Review E, 2015, 92, 051001.	2.1	16
75	DIFFUSIVE MAGNETOHYDRODYNAMIC INSTABILITIES BEYOND THE CHANDRASEKHAR THEOREM. Astrophysical Journal, 2015, 811, 84.	4.5	11
76	Subcritical transition to turbulence of a precessing flow in a cylindrical vessel. Physics of Fluids, 2015, 27, .	4.0	23
77	Transient eddy current flow metering. Measurement Science and Technology, 2015, 26, 105303.	2.6	16
78	Triadic resonances in nonlinear simulations of a fluid flow in a precessing cylinder. New Journal of Physics, 2015, 17, 113044.	2.9	19
79	The Tayler instability at low magnetic Prandtl numbers: between chiral symmetry breaking and helicity oscillations. New Journal of Physics, 2015, 17, 113013.	2.9	32
80	Enhancing robustness and applicability of contactless inductive flow tomography. , 2015, , .		3
81	Simulation of Instabilities in Liquid Metal Batteries. ERCOFTAC Series, 2015, , 585-591.	0.1	1
82	Flow Visualization by Means of Contactless Inductive Flow Tomography in the Presence of a Magnetic Brake. Journal for Manufacturing Science and Production, 2015, 15, 41-48.	0.1	6
83	The influence of current collectors on Tayler instability and electro-vortex flows in liquid metal batteries. Physics of Fluids, 2015, 27, .	4.0	41
84	Increasing electromagnetic compatibility of Contactless Inductive Flow Tomography. , 2015, , .		3
85	Towards a precession driven dynamo experiment. Magnetohydrodynamics, 2015, 51, 275-284.	0.3	22
86	Numerical simulations for the DRESHDYN precession dynamo. Magnetohydrodynamics, 2015, 51, 293-302.	0.3	5
87	Ultrasound Doppler flow measurements in a liquid column under the influence of a strong axial current. Magnetohydrodynamics, 2015, 51, 249-256.	0.3	6
88	Numerical and experimental investigation of the contactless inductive flow tomography in the presence of strong static magnetic fields. Magnetohydrodynamics, 2015, 51, 461-472.	0.3	9
89	Contactless Inductive Flow Tomography: Brief History and Recent Developments in Its Application to Continuous Casting. Journal of Sensors, 2014, 2014, 1-9.	1.1	13
90	Magnetic material in mean-field dynamos driven by small scale helical flows. New Journal of Physics, 2014, 16, 073034.	2.9	4

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91	Astrophysical and experimental implications from the magnetorotational instability of toroidal fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 438, 271-277.	4.4	25
92	Visualization of the Flow in a Mold of Continuous Casting by Contactless Inductive Flow Tomography and Mutual Inductance Tomography. <i>Steel Research International</i> , 2014, 85, 1266-1273.	1.8	11
93	Local instabilities in magnetized rotational flows: a short-wavelength approach. <i>Journal of Fluid Mechanics</i> , 2014, 760, 591-633.	3.4	43
94	Use of Cold Liquid Metal Models for Investigations of the Fluid Flow in the Continuous Casting Process. <i>Steel Research International</i> , 2014, 85, 1283-1290.	1.8	8
95	Experimental Evidence for Nonaxisymmetric Magnetorotational Instability in a Rotating Liquid Metal Exposed to an Azimuthal Magnetic Field. <i>Physical Review Letters</i> , 2014, 113, 024505.	7.8	63
96	Current-driven flow instabilities in large-scale liquid metal batteries, and how to tame them. <i>Journal of Power Sources</i> , 2014, 265, 166-173.	7.8	57
97	Instabilities of rotational flows in azimuthal magnetic fields of arbitrary radial dependence. <i>Fluid Dynamics Research</i> , 2014, 46, 031403.	1.3	4
98	Experimental and numerical modelling of the fluid flow in the continuous casting of steel. <i>European Physical Journal: Special Topics</i> , 2013, 220, 151-166.	2.6	9
99	Forward and inverse problems in fundamental and applied magnetohydrodynamics. <i>European Physical Journal: Special Topics</i> , 2013, 220, 9-23.	2.6	1
100	Integral equations in MHD: theory and application. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2013, 107, 58-72.	1.2	2
101	Numerical simulation of the Tayler instability in liquid metals. <i>New Journal of Physics</i> , 2013, 15, 043034.	2.9	44
102	Extending the Range of the Inductionless Magnetorotational Instability. <i>Physical Review Letters</i> , 2013, 111, 061103.	7.8	26
103	Spectral properties of oscillatory and non-oscillatory $\hat{\pm}2$ -dynamos. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2013, 107, 45-57.	1.2	2
104	Influence of high-permeability discs in an axisymmetric model of the Cadarache dynamo experiment. <i>New Journal of Physics</i> , 2012, 14, 053005.	2.9	34
105	Impact of time-dependent nonaxisymmetric velocity perturbations on dynamo action of von Kármán-like flows. <i>Physical Review E</i> , 2012, 86, 066303.	2.1	12
106	A UNIFYING PICTURE OF HELICAL AND AZIMUTHAL MAGNETOROTATIONAL INSTABILITY, AND THE UNIVERSAL SIGNIFICANCE OF THE LIU LIMIT. <i>Astrophysical Journal</i> , 2012, 756, 83.	4.5	25
107	WKB thresholds of standard, helical, and azimuthal magnetorotational instability. <i>Proceedings of the International Astronomical Union</i> , 2012, 8, 233-234.	0.0	5
108	Experimental realization of dynamo action: present status and prospects. <i>Proceedings of the International Astronomical Union</i> , 2012, 8, 411-416.	0.0	0

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109	Liquid metal experiments with swirling flow submerged entry nozzle. <i>Ironmaking and Steelmaking</i> , 2012, 39, 1-9.	2.1	23
110	Experimental Evidence for a Transient Tayler Instability in a Cylindrical Liquid-Metal Column. <i>Physical Review Letters</i> , 2012, 108, 244501.	7.8	76
111	CRITICAL FIELDS AND GROWTH RATES OF THE TAYLER INSTABILITY AS PROBED BY A COLUMNAR GALLIUM EXPERIMENT. <i>Astrophysical Journal</i> , 2012, 755, 181.	4.5	9
112	Standard and Helical Magnetorotational Instability. <i>Acta Applicandae Mathematicae</i> , 2012, 120, 177-198.	1.0	9
113	DRESDYN – a new facility for MHD experiments with liquid sodium. <i>Magnetohydrodynamics</i> , 2012, 48, 103-114.	0.3	21
114	Use of electromagnetic induction tomography for monitoring liquid metal/gas flow regimes on a model of an industrial steel caster. <i>Measurement Science and Technology</i> , 2011, 22, 015501.	2.6	33
115	Paradoxes of magnetorotational instability and their geometrical resolution. <i>Physical Review E</i> , 2011, 84, 036304.	2.1	13
116	Combined Electromagnetic Tomography for Determining Two-phase Flow Characteristics in the Submerged Entry Nozzle and in the Mold of a Continuous Casting Model. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011, 42, 1201-1210.	2.1	59
117	Singularities on the boundaries of magnetorotational instabilities and scaling laws. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011, 11, 655-656.	0.2	0
118	Energy oscillations and a possible route to chaos in a modified Riga dynamo. <i>Astronomische Nachrichten</i> , 2011, 332, 4-10.	1.2	6
119	How to circumvent the size limitation of liquid metal batteries due to the Tayler instability. <i>Energy Conversion and Management</i> , 2011, 52, 2982-2986.	9.2	39
120	Electromagnetic inspection of a two-phase flow of GaInSn and argon. <i>Flow Measurement and Instrumentation</i> , 2011, 22, 10-16.	2.0	42
121	Some Recent Developments in the Field of Measuring Techniques and Instrumentation for Liquid Metal Flows. <i>Journal of Nuclear Science and Technology</i> , 2011, 48, 490-498.	1.3	13
122	Some Recent Developments in the Field of Measuring Techniques and Instrumentation for Liquid Metal Flows. <i>Journal of Nuclear Science and Technology</i> , 2011, 48, 490-498.	1.3	2
123	Experimental Modeling of the Continuous Casting Process of Steel Using Low Melting Point Metal Alloys – the LIMMCAST Program. <i>ISIJ International</i> , 2010, 50, 1134-1141.	1.4	97
124	ON THE RELATION OF STANDARD AND HELICAL MAGNETOROTATIONAL INSTABILITY. <i>Astrophysical Journal</i> , 2010, 712, 52-68.	4.5	33
125	Contactless inductive flow tomography for a model of continuous steel casting. <i>Measurement Science and Technology</i> , 2010, 21, 045402.	2.6	51
126	Role of Soft-Iron Impellers on the Mode Selection in the von Kármán – Sodium Dynamo Experiment. <i>Physical Review Letters</i> , 2010, 104, 044503.	7.8	37

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127	Electromagnetic induction in non-uniform domains. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2010, 104, 505-529.	1.2	25
128	Generation of axisymmetric modes in cylindrical kinematic mean-field dynamos of VKS type. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2010, 104, 249-271.	1.2	13
129	Some methodological improvements of the contactless inductive flow tomography. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2009, 30, 255-264.	0.6	14
130	Determining role of Krein signature for three-dimensional Arnold tongues of oscillatory dynamos. <i>Physical Review E</i> , 2009, 79, 016205.	2.1	14
131	Inferring basic parameters of the geodynamo from sequences of polarity reversals. <i>Inverse Problems</i> , 2009, 25, 065011.	2.0	5
132	Theoretical and numerical approaches to the forward problem and sensitivity calculation of a novel contactless inductive flow tomography (CIFT). <i>Measurement Science and Technology</i> , 2009, 20, 105503.	2.6	22
133	Numerical simulations of liquid metal experiments on cosmic magnetic fields. <i>Theoretical and Computational Fluid Dynamics</i> , 2009, 23, 405-429.	2.2	6
134	Recent progress on contactless inductive flow tomography. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 523-524.	0.2	1
135	Helical magnetorotational instability in a Taylor-Couette flow with strongly reduced Ekman pumping. <i>Physical Review E</i> , 2009, 80, 066303.	2.1	70
136	Liquid metal experiments on the magnetorotational instability. <i>Magnetohydrodynamics</i> , 2009, 45, 135-144.	0.3	2
137	History and results of the Riga dynamo experiments. <i>Comptes Rendus Physique</i> , 2008, 9, 721-728.	0.9	59
138	The integral equation approach to kinematic dynamo theory and its application to dynamo experiments in cylindrical geometry. <i>Journal of Computational Physics</i> , 2008, 227, 8130-8144.	3.8	19
139	Magnetohydrodynamic experiments on cosmic magnetic fields. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2008, 88, 930-954.	1.6	49
140	Results of a modified PROMISE experiment. <i>Astronomische Nachrichten</i> , 2008, 329, 652-658.	1.2	16
141	Coexisting stochastic and coherence resonance in a mean-field dynamo model for Earth's magnetic field reversals. <i>European Physical Journal B</i> , 2008, 65, 547-554.	1.5	6
142	Measurement of the spatio-temporal distribution of harmonic and transient eddy currents in a liquid metal. <i>Measurement Science and Technology</i> , 2008, 19, 045704.	2.6	2
143	Kinematic simulation of dynamo action by a hybrid boundary-element/finite-volume method. <i>Magnetohydrodynamics</i> , 2008, 44, 237-252.	0.3	16
144	Oscillation or rotation: a comparison of two simple reversal models. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2007, 101, 227-248.	1.2	21

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145	Experiments on the magnetorotational instability in helical magnetic fields. <i>New Journal of Physics</i> , 2007, 9, 295-295.	2.9	72
146	A globally diagonalizable $\hat{L}\pm 2$ -dynamo operator, SUSY QM and the Dirac equation. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, F169-F176.	2.1	16
147	A statistical analysis of polarity reversals of the geomagnetic field. <i>Physics of the Earth and Planetary Interiors</i> , 2007, 164, 197-207.	1.9	28
148	Cylindrical anisotropic $\hat{L}\pm 2$ dynamos. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2007, 101, 389-404.	1.2	8
149	Forward and inverse problems in MHD: Numerical and experimental results. <i>GAMM Mitteilungen</i> , 2007, 30, 159-170.	5.5	0
150	Dynamo Experiments. <i>Fluid Mechanics and Its Applications</i> , 2007, , 37-54.	0.2	3
151	Liquid Metal Magnetohydrodynamics " Astrophysical Relevance and Engineering Applications. , 2007, , 690-693.		0
152	Why dynamos are prone to reversals. <i>Earth and Planetary Science Letters</i> , 2006, 243, 828-840.	4.4	27
153	The Traveling-Wave MRI in Cylindrical Taylor-Couette Flow: Comparing Wavelengths and Speeds in Theory and Experiment. <i>Astrophysical Journal</i> , 2006, 649, L145-L147.	4.5	42
154	Ambivalent effects of added layers on steady kinematic dynamos in cylindrical geometry: application to the VKS experiment. <i>European Journal of Mechanics, B/Fluids</i> , 2006, 25, 894-908.	2.5	48
155	Inverse problems in magnetohydrodynamics: theoretical and experimental aspects. <i>Inverse Problems in Science and Engineering</i> , 2006, 14, 411-422.	1.2	1
156	Experimental Evidence for Magnetorotational Instability in a Taylor-Couette Flow under the Influence of a Helical Magnetic Field. <i>Physical Review Letters</i> , 2006, 97, 184502.	7.8	151
157	Coupled fluid-flow and magnetic-field simulation of the Riga dynamo experiment. <i>Physics of Plasmas</i> , 2006, 13, 122308.	1.9	19
158	Third-order spectral branch points in Krein space related setups: $\mathcal{P}\mathcal{T}$ -symmetric matrix toy model, MHD $\hat{L}\pm 2$ -dynamo and extended Squire equation. <i>European Physical Journal D</i> , 2005, 55, 1099-1106.	0.4	19
159	MHD $\hat{L}\pm 2$ -dynamo, Squire equation and $\mathcal{P}\mathcal{T}$ -symmetric interpolation between square well and harmonic oscillator. <i>Journal of Mathematical Physics</i> , 2005, 46, 063504.	1.1	58
160	Asymmetric Polarity Reversals, Bimodal Field Distribution, and Coherence Resonance in a Spherically Symmetric Mean-Field Dynamo Model. <i>Physical Review Letters</i> , 2005, 94, 184506.	7.8	57
161	Velocity Measurements in Metallic Melts. , 2005, , 49.		1
162	Contactless inductive flow tomography. <i>Physical Review E</i> , 2004, 70, 056306.	2.1	95

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163	Laboratory astrophysics as exemplified by the Riga dynamo experiment. AIP Conference Proceedings, 2004, , .	0.4	1
164	MRI in Taylor-Dean flows. AIP Conference Proceedings, 2004, , .	0.4	4
165	The MHD $\hat{\Delta}^2$ -Dynamo, Z_2 -Graded Pseudo-Hermiticity, Level Crossings and Exceptional Points of Branching Type. European Physical Journal D, 2004, 54, 1075-1089.	0.4	13
166	The integral equation method for a steady kinematic dynamo problem. Journal of Computational Physics, 2004, 196, 102-125.	3.8	34
167	Integral equation approach to time-dependent kinematic dynamos in finite domains. Physical Review E, 2004, 70, 056305.	2.1	21
168	Riga dynamo experiment and its theoretical background. Physics of Plasmas, 2004, 11, 2838-2843.	1.9	51
169	A Contactless Inductive Velocity Reconstruction Method for Metallic and Semiconducting Melts. Materials and Manufacturing Processes, 2004, 19, 651-663.	4.7	4
170	A Contactless Inductive Velocity Reconstruction Method for Metallic and Semiconducting Melts. Materials and Manufacturing Processes, 2004, 19, 651-663.	4.7	0
171	The Riga Dynamo Experiment. Surveys in Geophysics, 2003, 24, 247-267.	4.6	45
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