

	Speaker	Authors	Title
1	D. Sokoloff	D. Sokoloff, L. Kitchatinov, D. Moss. D. Shulyak	Towards understanding of dynamo action in M-dwarfs
2	V. Pavlov	V. Pavlov	Model of the Early Paleozoic Geomagnetic polarity time scale (GPTS)
3	V. Pavlov*	V. Pavlov, Y. Gallet	Geomagnetic reversal frequency in Precambrian and the evolution of the reversal process through the Earth history.
4	K.Kuzanyan	Kuzanyan K.M., Gao Yu Zhang Hongqi, Sokoloff, D.D.	Evidence of non-Parker mechanism of solar active regions formation from observational study of dynamics of the mean magnetic field in 22-year cycle
5	E. Mikhailov	E.A. Mikhailov, O.K. Sil'chenko, D.D. Sokoloff.	Magnetic fields in the outer rings of galaxies
6	S. Khripchenko	Denisov S.A., Dolgikh V.M., Kolesnichenko I.V., Khripchenko S.Yu., Adamov A.A.	Experimental exploration of incorporation of reinforcing boron nitride particles into molten aluminum in the presence of MHD-stirring during directional solidification
7	A. Mamykin	A.Mamykin, P.Frick, A.Vasiliev, R.Khalilov, I.Kolesnichenko, V.Pakholkov, A.Pavlinov, S.Rogozhkin	Turbulent convective heat transfer in cylindrical enclosures with liquid sodium
8	A.F. Abu-Bakr	Zubarev A.Yu. and Abu-Bakr A.F.	Effect of interaction between ferroparticles on produced magnetic hyperthermia
9	A. Radionov	A. Radionov, A. Vinogradov	Magnetic fluid sealing complexes of VAO electric engines
10	I. Yachikov	Yachikov I.M.	Simulation of electric vortex flows and heatmass exchange in DC arc furnace bath

11	V. Portnova	Yachikov I.M., Portnova I.V.	Simulation of magnet spaces behaviour in DC arc furnace bath with different design of busbar to hearth electrode
12	D. Chirikov	A. Zubarev, D. Chirikov	Magnetorheological suspensions under shear rate oscillations
13	B. Kashevsky	B.E. Kashevsky, A.M. Zholud, S.B. Kashevsky	Granular Rayleigh-Taylor instability in magnetic separation of red blood cells
14	P. Akhmetiev	Akhmetiev P.M.	A second-order winding for magnetic tubes
15	G. Vodinchar	G.M. Vodinchar, L.K. Feshchenko	Model of the geodynamo driven by 6-cells convection in the Earth's core
16	P. Sedykh	P.A. Sedykh	MHD modeling of processes in near-Earth space plasma: from the processes at the bow shock region to the magnetosphere-ionosphere coupling processes
17	I. Mizeva	I.Mizeva, R.Stepanov, P.Frick	Magnetic energy and magnetic helicity cascades in MHD turbulence
18	R. Stepanov	R. Stepanov	MHD turbulence in space, laboratory and computer
19	I. Kolesnichenko	R.Khalilov, I.Kolesnichenko, A.Shestakov, A.Krylov, V.Pakholkov, A.Pavlinov, S.Rogozhkin, A.Mamykin, A.Vasiliev, P.Frick	Experimental study of mixing of liquid sodium flows having different temperatures
20	M. Reshetnyak	Reshetnyak M.Yu.	Dynamo modeling in 2D Parker's model
21	F. Stefani	F. Stefani	Liquid metal experiments on dynamo action, magnetorotational instability and current-driven instabilities

22	Yu. Nekhoroshkova	Nekhoroshkova Yu.E., Elfimova E.A.	The structural properties of a bidispers magnetic ferrofluid in the absence of a magnetic field
23	A. Pshenichnikov	Pshenichnikov A.F., Lakhtina E.V.	Cluster analysis of magnetic fluids
24	H. Popova	H. Popova, E. Illarionov, I.	Roth 1D and 2D feedback dynamo equations with the alpha-effect, differential rotation and meridional flows
25	A. Zibold	A.F. Zibold	Instability of the Taylor vortices: transition to the wavy-vortex flow
26	V. Dolgikh	V. Dolgikh, I. Kolesnichenko	Study of a winding free MHD-pump having a flat curved channel
27	A. Giesecke	A. Giesecke, F. Stefani	Kinematic dynamos resulting from the interaction of high permeability material and flows of liquid sodium
28	D. Obukhov	Obukhov D.M. and RF TBM team	Results of ITER test blanket module development in RF
29	E. Vtulkina	Vtulkina E.D., Elfimova E.A.	Thermodynamic properties of ferrofluids without external magnetic field
30	I. Nikulin*	Nikulin I.L., Tsaplin A.I., Nechaev V.N.	The influence of electromagnetic steering at the magnesium melt dynamics in industrial reactor of sponge titanium production
31	G. Preslitsky	I.V. Vitkovsky, M.M. Golovanov, I.R. Kirillov, K.A. Komov, S.A. Krizhanovsky, D.M. Obukhov, G.V. Preslitsky, V.S. Federyaeva, V.T. Berikbosinov, D.V.Gusev, V.G. Zotov, V.V. Lemekhov., T.S. Mamedov, N. V. Romanova, I.S. Tomshina, I.T. Tretyakov, V.N. Leonov	MHD-pumps for new generation of fast neutron reactors

32	D. Petrov	Petrov D.A., Zakhlevnykh A.N.	Influence of flexoelectric effect on orientational structures of ferronematic liquid crystals
33	V. Federyaeva	I.V. Vitkovsky, M.M. Golovanov, I.R. Kirillov, K.A. Komov, S.A. Krizhanovsky, D.M. Obukhov, G.V. Preslitsky, V.S. Federyaeva, V.G. Zotov	On possibility and practicality of MHD machines application in nuclear power plants and plasma facilities
34	I. Nikulin	Nikulin I.L., Perminov A.V.	Mathematical model of heat and mass transfer in conductive fluid under high frequency magnetic field action
36	A. Boychuk	A.N. Boychuk, A.N. Zakhlevnykh, D.V. Makarov	Behavior of ferronematic liquid crystal in elliptically polarized rotating magnetic field
37	I. Kalashnikov	I. Kalashnikov, D. Sokoloff, V. Chechetkin.	Statistics of geomagnetic dipole reversal according to paleomagnetic data and to simple geodynamo models
38	O. Zikanov	X. Zhang, D. Ognerubov, Ya. Listratov, O. Zikanov, V. Sviridov	Numerical analysis of the effect of thermal convection in MHD duct and pipe flows
39	I. Subbotin	I. Subbotin, M. Sega, S. Kantorovich, A. Ivanov.	Deformation of ferrofluid droplets under the influence of an external field. Comparison between theory and computer simulation
40	A. Chupin	A. Chupin	MHD dynamo in unconstrained flows inside a torus
41	D. Ryashchikov	D.S. Ryashchikov, N.E. Molevich, D.I. Zavershinskii	Influence of thermal conduction on properties of MHD waves in thermally unstable plasma
42	M. Mindubaev	Khachay Yu., Mindubaev M.	Convection into the rotating cylinder with a growing dimension located into the magnetic field
43	R. Khalilov	R.Khalilov, I.Kolesnichenko, A.Pavlinov, A.Mamykyn	Measurement of liquid sodium flow rate

44	P. Ryapolov	V.M. Polunin, P.A. Ryapolov, A.E. Kuzko, K.S. Ryabtsev, V.B. Platonov	Magnetic flux at the boundary of the sound beam and the pulsating surface of the magnetic fluid
45	A. Teimurazov	A. Teimurazov, P. Frick	Numerical study of the convective flow of liquid metal in a vertical cylinder
46	A. Solovyova	Solovyova A.Yu., Elfimova E.A., Ivanov A.O.	The influence of polydispersity on the magnetic susceptibility of concentrated ferrofluids
48	A. Proskurin	A. Proskurin, A. Sagalakov	A method for modelling MHD flows in pipes
50	Yu. Khachay	Khachay Yu.	Modes of convection and the possibility of mhd process in the Earth's core at the stage of the planetary accumulation
51	A. Golubiatnikov	Golubiatnikov A.N., Kovalevskaya S.D.	Shock wave acceleration in a non-homogeneous magnetic field
52	D. Zavershinskii	D.I. Zavershinskii, N.E. Molevich, D.S. Ryashchikov	Investigation of the wave dynamics in optically thin thermally unstable plasma
53	I. Melnikov	I.A. Belyaev, I.A. Melnikov, V.G. Sviridov, E.V. Sviridov	Probe simulation in MHD flow
54	V. Korovin	V.A. Kazhan, V.M. Korovin	Calculation of eddy currents in induction plasmas
56	E. Elfimova	E. Elfimova	Gradient diffusion: the role of polydispersity
58	P. Oborin	Oborin P., Khripchenko S.	Simulation study on the applicability of travelling magnetic fields in metallurgical furnaces for reducing temperature difference in the molten metal
59	A. Kuznetsov	Kuznetsov A.A., Pshenichnikov A.F.	Equilibrium structure of a flexible dipolar chain

60	V. Pipin*	V.V. Pipin	Waldmeier's rules in the solar and stellar dynamo cycles
61	V. Pipin	V.V. Pipin	Generation, rotation and helicity of the large-scale nonaxisymmetric magnetic field in solar dynamo
62	E. Turysheva	E. Turysheva, E. Elfimova.	Thermodynamics of dipolar square-well fluids in the external magnetic field
63	C. Stan	C. Stan, M. Balasoiu, C.P. Cristescu, Yu.L. Raikher	2D Fractional Brownian Motion-simulation approach for SAS nanoparticle dispersion data
64	A-M. Balasoiu-Gaina	M. Balasoiu, A-M. Balasoiu-Gaina, D. Soloviov, S. Lysenko, A.I. Kuklin	Concentration effects on particle size distribution variation in CoFe ₂ O ₄ /DDS-Na/LA/water ferrofluid
65	M. Balasoiu	M. Balasoiu, A.V. Rogachev, A. Zhigounov, D.V. Soloviov, A.I. Kuklin, Yu.L. Raikher	Structure factor investigation of Fe ₃ O ₄ /polydimethylsiloxane magnetic elastomers by means of SAXS
66	O. Goldina	O. Goldina, E. Elfimova	Temperature dependence of initial magnetic susceptibility of polydisperse ferrofluids
67	G. Losev	Arefev I.M., Bozhko A.A., Losev G.L., Putin G.F., Sidorov A.S.	Oscillatory instability of primary convection flow in vertical and inclined layers of stratified magnetic fluids
68	A. Ispiryan	A.G. Ispiryan, Kunikin S.A., Dikanskiy Y.I.	Special aspects of magnetization of the magnetic colloids with different size of dispersed particles
69	M. Korobov	Yu.I. Dikansky, O.V. Borisenko, M.A. Bedzhanyan, M.I. Korobov	Peculiarities of motion of a magnetic fluid drop with magnetized aggregates in rotating magnetic field
70	E. Novak	E. Novak, S. Kantorovich	Metastable states in systems of colloidal particles with a magnetic coating

71	E. Minina	E. Novak, E. Pyanzina, E. Minina, M. Avdeev, S.Kantorovich	Polydisperse magnetic fluids: choosing bidisperse approximation using the experimental structure factors
72	E. Burkova	E. Burkova, A. Pshenichnikov	Segregation of particles in the square cavity under the joint action of magnetic and gravitational fields
73	E. Pyanzina	E.S. Pyanzina, A.B. Muratova, S.S. Kantorovich	Macroscopic properties of the ferrofluids with nonspherical particles
74	I. Klementyeva	I.B. Klementyeva and M.E. Pinchuk	Parameters of electrical discharges under free surface of liquid metal
75	Yu. Dikansky	Dikansky Yu.I., Gladkikh D.V., Kolesnikova A.A.	Structure formation in system aggregates with uncompensated magnetic moment under the action of rotating and constant magnetic fields
76	A. Pavlinov	Sokolov I.A., Noskov V.I., Pavlinov A.M. Kolesnikov Y.B.	Lorentz force velocimetry at high speed liquid sodium flow
77	N. Razuvanov*	I.A. Belyaev, N.G. Razuvanov, V.S. Zagorsky	Research of the local velocity components via microthermocouple sensor in a MHD flow of liquid metal.
79	P. Frick	Frick P., Stepanov R., Beck R., Sokoloff D., Shukurov A.	Patern analysis of extragalactic magnetic field: magnetic and gaseous arms in M83
80	A. Zakinyan	A.R. Zakinyan, E.S. Tkacheva, Yu.I. Dikansky	Behavior of magnetic fluid microdrops in uniform DC and rotating magnetic fields
81	A. Vinogradova	Vinogradova A.S., Pelevina D.A., Naletova V.A.	Static shape of the magnetic fluid covered by an impermeable film in the field of a line conductor
82	N. Kolchanov	Kolchanov N.V., Putin G.F.	Wavelike temperature perturbations propagating along stationery convective rolls in a horizontal layer of magnetic fluid
83	A. Ivanov	Ivanov A.O., Kantorovich S.S., Rovigatti L., Tavares J.M., Sciortino F.	Temperature-induced structural transitions in self-assembling magnetic nanocolloids

84	V. Zverev	Zverev V.S., Ivanov A.O.	Combined Fokker-Planck-Brown and Yvon approach for describing the dynamic magnetic response of interacting ferroparticles in magnetic fluids
85	O. Mitrofanova	O.V. Mitrofanova, G.D. Podzorov, K.S. Zakaryan	Magneto-hydrodynamic effects in fast nuclear reactors
86	A. Likhachev	E.V. Gubanov, A.P. Likhachev, S.A. Medin	Pulse injection in separation zone at hypersonic MHD flow over rotation body
87	I. Teplyakov	Yu.P. Ivochkin, I.O. Teplyakov, D.A. Vinogradov	Experimental and numerical investigation of the electrovortex flow hydrodynamic structure under action of the external magnetic fields
88	S. Nesterov	Yu.B. Kazakov, N.A. Morozov, S.A. Nesterov	Numerical and analytical analysis of a magneto-rheological damper
89	A. Storozhenko	Storozhenko A.M., Stannarius R.	Experimental setup for measurement of the torque on ferrofluid samples in rotating magnetic fields
90	S. Denisov	Denisov S., Dolgikh V., Kolesnichenko I., Khripchenko S.	Electrovortex centrifugal pump
91	A. Gagarin	V.D. Sarychev, A.Yu. Gagarin, E.V. Cheremushkina, S.A. Nevskiy, S.G. Molotkov, A.Yu. Granovskii	The magnetohydrodynamic processes when forming nanostructures at magnetic pulse
93	D. Petrov*	Petrov D.A., Zakhlevnykh A.N.	Tricritical behavior of compensated ferromagnetic with negative magnetic anisotropy
95	N. Pyatnitskaya	N.Yu. Pyatnitskaya, E.V. Sviridov	Hydrodynamics and heat transfer for a downward liquid metal flow in the rectangular channel in the presence of a coplanar magnetic field
96	A. Lebedev	Lebedev A.V.	Influence of interparticle interaction on dynamic susceptibility of magnetic fluids

97	A. Smirnov	Semikoz V.B., Smirnov A.Yu., Sokoloff D.D.	Symmetric Phase of the Early Universe: Baryon Asymmetry and Hypermagnetic Helicity Evolution
98	B. Smorodin	Smorodin B.L., Taraut A.V.	Simulations of oscillatory electroconvection in a horizontal capacitor with large aspect ratio
99	N. Razuvanov	N.G. Razuvanov, I.A. Belyaev, L.G. Genin, Yu.P. Ivotchkin, E.V. Sviridov, V.G. Sviridov	Experimental investigations on MHD-heat transfer applied to TOKAMAK–fusion neutron source
100	R. Sibatov	R.T. Sibatov, V.V. Uchaikin	Cosmic magnetic turbulence in the random walk model
101	B. Mikhailovich	Kapusta A., Mikhailovich B.	Inertial waves in a rotating liquid metal and feasible metallurgical applications
102	M. Krivilyov	M. Krivilyov, S. Lomaev, J. Fransaer	Turbulent flow and eddy-current heating in experiments on containerless solidification of peritectic alloys: space experiments peritectica and maghephas
103	A. Shafarevich	A. Shafarevich	Magnetic field evolution in a conducting fluid with a jump of the velocity field
104	V. Stepanov	Stepanov V.I., Poperechny I.S., Raikher Yu.L.	Magnetic nanoparticle hyperthermia with allowance for the Neel and Brown relaxation mechanisms
105	V. Bashtovoi	V.G.Bashtovoi, A.G.Reks, Al-Jhaish Taha Malik Mansoor	Ultrasonic Fountain on the Surface of the Magnetic Fluid
106	L. Mkrtychyan	L.S. Mkrtychyan, A.R. Zakinyan, Yu.I. Dikansky, V.D. Grunencko	Peculiarities of the motion of magnetic fluids in porous media
107	A. Klyukin	A. Klyukin, O. Lielausis, E. Platacis.	Experiments on interaction of jets of liquid gallium with solid substrates in application to TOKAMAK
108	S. Ivanov	Ivanov S.	High temperature MHD-pumps designed and produced in IPUL.

109	A. Dobroserdova	A. Dobroserdova, S. Kantorovich	The study of self-diffusion in quasi-two-dimensional systems
110	O. Khlybov	O.A. Khlybov, T.P. Lyubimova	Effect of rotating magnetic field on heat and mass transfer and dopant segregation during directional solidification of semiconductors
111	C. Bushueva	Bushueva C.A., Minina A.S.	Deformation of ferrofluid droplet on a liquid substrate under the action of vertical magnetic field
112	B. Keadze	B.V. Keadze, V.P. Kornilov, A.A. Lagutin, V.A. Shurupov, P.F. Zhivny, E.V. Generalov, A.N. Fomin	Tests of the instrumentation and equipment for liquid metal coolants on the IRS-M calibration facility
113	N. Kleeorin	Ya. Kleeorin, N. Kleeorin, I. Rogachevskii, S.V. Porshnev, N.T. Safiullin, D. D. Sokoloff	Predictability of Solar Activity (Wolf numbers), Based on Nonlinear Dynamo.
114	A. Byalko	A. Byalko	Underwater gas tornado as a possible drive for dynamo experiments
115	S. Ivanov*	Ivanov S., Blumbergs E.	Ways to intensify the process of titanium production by magnesium thermal reduction of titanium tetrachloride
116	A. Ivanov	Ivanov A. S., Pshenichnikov A. F	On free solutal convection in ferrocolloids