

# **Magnetohydrodynamics 54, 4 (2018)**

## **GENERAL AND THEORETICAL PROBLEMS**

L. Goldsteins, L. Buligins and Y. Fautrelle. Stalling instability of annular linear induction pumps	333
V. B. Oshurko, A. M. Mandel, K. G. Solomakho and V. N. Lednev. Induced crystallization principle for rapid 3D printing of steel melts	343
V. M. Polunin, P. A. Ryapolov, A. I. Zhakin, A. M. Ivanov and E. V. Shel'deshova. Magnetoviscous effect in case of magnetic fluid oscillations in strong magnetic field	353
A. V. Proskurin and A. M. Sagalakov. Spectral/hp element MHD solver	361

## **APPLIED PROBLEMS**

S. Yu. Khripchenko, R. R. Siraev, S. A. Denisov, V. M. Dolgikh and I. V. Kolesnichenko. Liquid metal flow exposed to modulated travelling and rotating magnetic fields in a cylindrical crucible	373
S. Yu. Khripchenko, R. R. Siraev, S. A. Denisov, V. M. Dolgikh and I. V. Kolesnichenko. Influence of the position of the MHD stirrer relative to the crucible on the driven liquid metal flow	383
A. Simonovskii and I. Chuenkova. Phase transformations in steels under controlled quenching in magnetic fluid	391
I. Teplyakov, D. Vinogradov, Yu. Ivochkin, A. Kharicha and P. Serbin. Applicability of different MHD approximations in electrovortex flow simulation	403
V. N. Zaichenko, I. A. Slobodyanyuk and I. A. Rusetskii. MHD effect under the interaction of external magnetic field with electrolytic hydrogen and oxygen bubbles	417