

CONTENTS (2025, Volume 48, Issue 1)

In memory of Elena Aleksandrovna Filimonova	5
REVIEWS	
<i>Astrov M.S., Bondarchuk E.N., Voronova A.A., Zapretilina E.R., Kavin A.A., Kovalchuk O.A., Mednikov A.A., Rodin I.Yu.</i> HTS conductors in electromagnetic systems of future fusion facilities	7
ITER	
<i>Danilov V.B., Nikulin B.I., Poddubnyi I.I., Sviridenko M.N., Putrik A.B.</i> Computational investigation of workability of flexible Cartridge assembly of the ITER blanket during emergency operation	23
<i>Sviridenko M.N., Vlasov D.A., Kozlov S.A., Leshukov A.Yu., Mogilevskii P.E., Strebkov Yu.S., Parshutin E.V., Poddubnyi I.I., Khomyakov S.E., Tomilov S.N., Trifonova E.V., Solovyov O.V., Cheburova A.V., Putrik A.B.</i> Manufacturing and tests of the supplied components of the ITER blanket system	30
<i>Poddubnyi I.I., Kozlov S.A., Sviridenko M.N., Danilov I.V., Parshutin Ye.V., Timofeev S.V., Apalkov A.A., Usov S.M., Putrik A.B.</i> Experimental study into the self-locking properties of the ITER blanket threaded pairs	41
<i>Khairutdinov E.N., Kavin A.A., Mineev A.B., Lukash V.E., Andrianova R.R.</i> Software for interaction of plasma discharge calculation codes via IMAS data model	48
T-15MD	
<i>Scopintsev D.A., Dokuka V.N., Khairutdinov R.R., Andrianova R.R.</i> Reconstruction of plasma shape parameters using neural networks for tokamak T-15MD	58
TRT	
<i>Portnov D.V., Vysokikh Yu.G., Afanasenko E.S., Artemev K.K., Kashchuk Yu.A.</i> Analysis of radiation conditions operation on the tokamak with reactor technologies	68
<i>Nagornyi N.V., Portnov D.V., Afanasenko E.S., Larionov A.S., Semenov O.I., Portone S.S., Vysokikh Yu.G.</i> AIP IKP computing cluster testing with calculation of the nuclear-physical model of TRT using the OPENMC code	79
T-10	
<i>Savrukhin P.V., Shestakov E.A.</i> Effect of the resonant magnetic fields on quasi-stationary MHD perturbations in T-10 tokamak	87
HTSC for CTF	
<i>Krivykh A.V., Guryev V.V., Moseev K.V.</i> Changing the current-carrying capacity of composite HTSC-2G tapes under the action of perpendicular pressure	103
<i>Krasnoperov E.P., Kuroedov Yu.D., Romanovskii V.R.</i> Voltage-current characteristics of HTS tapes at pulse current charging	112
Plasma—wall and materials for CTF	
<i>Atlukhanov M.G., Burdakov A.V., Kurkuchekov V.V., Popov S.S., Skovorodin D.I., Tanygina D.S., Trunev Yu.A.</i> Resistance of mirrors of a non-resonant photon neutralizer of powerful beam negative ions to bombardment by high-energy particles	119
<i>Tyumentsev A.N., Ditenberg I.A., Smirnov I.V., Pinzhin Yu.P., Grinyaev K.V., Chernov V.M., Potapenko M.M., Moroz K.A., Degtyarev N.A.</i> Features of dispersion hardening of V—CR—W—ZR—(C, O, N) alloy by nano-sized ZrC particles under conditions of phase instability of the crystal lattice	131
<i>Ryzhkov G.A., Vyacheslavov L.N., Kasatov A.A., Popov V.A., Cherepanov D.E.</i> Pyrometry accuracy of a tungsten surface heated by sub-millisecond laser radiation	137