Contents

Vol. 25, No. 3, 2022

Estimation of Thermal Conductivity of Thermal Barrier Coatings through Measured Electronic and Structural Characteristics
V. I. Kolesnikov, O. V. Kudryakov, V. N. Varavka, A. G. Sukiyazov, L. P. Aref'eva, I. Yu. Zabiyaka, E. S. Novikov, and A. I. Voropaev 195

Interface Instability of Integrated Circuit Layers under Electric Current and Mechanical Stress
T. M. Makhviladze and M. E. Sarychev 214

Modeling the Nonmonotonic Behavior Flow Curves under Dynamic Loads
S. Zhao, Yu. V. Petrov, and G. A. Volkov 221

Crack Model with Plastic Strain Gradients
E. E. Deryugin 227

Effect of Ultrasonic Impact Treatment on Structural Phase Transformations in Ti-6Al-4V Titanium Alloy
O. B. Perevalova, A. V. Panin, M. S. Kazachenok, and E. A. Sinyakova 248

Structural Features of Plastic Deformation Zones Formed in Quenched and Tempered Structural Steel during Dynamic Testing
M. Yu. Simonov, O. B. Naimark, Yu. N. Simonov, G. S. Shaimanov, and D. R. Ledon 259

Core–Shell Fe-Fe_3O_4 Nanoparticles for Synthesizing PLA Composites with Low Toxicity and High Radiopacity
O. V. Bakina, L. Yu. Ivanova, N. E. Toropkov, E. I. Senkina, M. I. Lerner, E. A. Glazkova, and M. G. Krinitsyn 270