

CONTENTS

Theory

- P.V. Gorsky, V.P. Mikhachenko* Method for kinetic coefficients averaging over the size of particles and its impact on predicted figure of merit of nanostructured thermoelectric material 5

- C. de Tomás, A. Cantarero, A.F. Lopeandia, F.X. Alvarez* Lattice thermal conductivity of silicon nanowires 11

Material Research

- A.V. Budnik, E.I. Rogacheva, A.Yu. Sipatov* Effect of fabrication technique on the structure and thermoelectric properties of Bi_2Te_3 films 19

- N.V. Morozova, V.V. Shchennikov* Thermoelectric power of rare-earth metal row over a wide range of pressures 27

- M. Culebras, C.M. Gomez, A. Cantarero* Thermoelectric materials based on poly (3, 4-ethylendioxythiophene) 36

- L.D. Ivanova, V.V. Molokanov, A.V. Krutilin, P.P. Umnov, N.V. Umnova, O.N. Uryupin, A.A. Shabaldin* Use of the Taylor-Ullitovsky method to prepare thermoelectric materials of bismuth and antimony telluride solid solution 43

- D.M. Freik, B.S. Dzundza, Ya.S. Yavorsky, O.B. Kostyuk, T.S. Lyuba* Thermoelectric properties of $PbTe-Bi_2Te_3$ solid solutions thin films 48

- K.Sh. Kakhramanov, F.K. Aleskerov, S.Sh. Kakhramanov, S.A. Nasibova* Self-organization of low-dimensional nanostructures in layered crystals of $A_2^{V}B_3^{VI}$ type 54

Design

- L.I. Anatychuk, Yu.N. Mochenyuk, A.V. Prybyla* Solar thermoelectric energy converters 67

Thermoelectric products

- L.I. Anatychuk, V.Ya. Mykhailovsky, A.F. Semizorov, L.T. Strutynska, A.F. Kashtelyan, N.V. Maksimuk* Catalytic heat source with a thermoelectric generator 73

- T.A. Ismailov, O.V. Yevdulov, M.A. Khazanova, D.A. Gidurimova* Experimental investigations of thermoelectric device for the therapy of whitlow 78

News

- V.M. Hodovanyuk (Dedicated to 60-th birthday) 87