

CONTENTS

General Problems

- A.O. Teut, N.A. Kulenova* The role of thermoelectricity in self-organization processes of polysulfide ores 5

Theory

- P.V. Gorsky, V.P. Mikhachenko* Reduction of thermoelectric material lattice thermal conductivity using shape-forming element optimization 18

Material Research

- E.M. Godzhayev, G.S. Dzhafarova, S.I. Safarova* Band structure of $TlInTe_2$ and thermoelectric figure of merit of solid solutions on its basis 26

Technology

- L.D. Ivanova, L.I. Petrova, Yu.V. Granatkina, V.G. Leontyev, A.S. Ivanov, S.A. Varlamov, Yu.P. Prilepo, A.M. Sychev, A.G. Chuiko, I.V. Bashkov* Melt spinning as a promising method for preparation of bismuth and antimony telluride solid solution materials 31

Design

- S. Yamaguchi, Y. Ivanov, A. Sagara, M. Emoto, Y. Okamoto, H. Nakatsugawa, H. Kitagawa, M. Hamabe, F. Watanabe, J. Sun, T. Kawahara* A proposal of thermoelectric divertor by using silicon carbide in nuclear fusion experiment 41

- L.I. Anatychuk, R.R. Kobylanskyi* Computer design of thermoelectric heat meter readings under real-service conditions 47

- Yu.M. Lobunets* Performance evaluation of OTEC with thermoelectric power converter 55

- V.R. Bilinsky-Slotylo, L.N. Vikhor, V.Ya. Mykhailovsky* Design of thermoelectric generator modules made of Mg and Mn silicide based materials 60

- L.I. Anatychuk, R.V. Kuz, A.V. Prybyla* The effect of heat exchange system on the efficiency of thermoelectric air conditioner 67

Thermoelectric products

- V.S. Gischuk* Electronic recorder with processing signals from heat flux thermoelectric sensor 74

News

- Uemura Kin-ichi* (Dedicated to the 90-th anniversary) 79

- G. Pastorino* (Dedicated to the 75-th anniversary) 80

- V.O. Semenyuk* (Dedicated to the 75-th anniversary) 81

- S.V. Melnychuk* (Dedicated to the 65-th anniversary) 82

- T. Huber* (Dedicated to the 65-th anniversary) 83

Discussion

- Kh.O. Khoshdurdyev* The Earth's thermoelectricity as the basis for power supplies of mankind 84