

**CONTENTS**

<b>E. Keskinilic, S. Pournaderi, A. Geveci, Y.A. Topkaya</b> Use of Colemanite in ferronickel smelting .....	1
<b>O. Lachkar-Zamouri, K. Brahim, F. Bennour, I. Khattech</b> Dissolution of Tunisian phosphate ore by a mixture of sulfuric and phosphoric acid: Kinetics study by means of differential reaction calorimetry .....	9
<b>T. Rojas Sánchez, A. Romero Serrano, A. Hernández Ramírez, J. López Rodríguez, I. Almaguer Guzmán, R. Benavides Pérez, M. Flores Favela</b> Thermodynamic modelling of the lead sintering roasting process .....	21
<b>M. Bernasowski, A. Klimczyk, R. Stachura</b> Support algorithm for blast furnace operation with optimal fuel consumption .....	31
<b>W. Kong, D.-G. Cang</b> Impact of addition of Ca on clogging of SEN and magnetic properties of non-oriented silicon steel .....	39
<b>F.R. Saucedo-Zendejo, E.O. Reséndiz-Flores</b> Transient heat transfer and solidification modelling in direct-chill casting using a Generalized Finite Differences Method .....	47
<b>S. Veskovič – Bukudur, J. Kovač, B. Karpe, P. Umek, A. Nagode, R. Cerc – Korošec, M. Bizjak</b> High temperature corrosion of commercial FeCrAl alloys (Kanthal AF) in nitrogen gas .....	55
<b>W. Gierlotka, G. Lothongkum, B. Lohwongwatana, C. Puncreoburt</b> Atomic mobility in Titanium grade 5 (Ti6Al4V) .....	65
<b>H. Zhang, J. Zhao, Z. Pu, Y. Li, B.Q. Xu, B. Yang</b> Ab Initio Molecular Dynamic Simulation of Zn-Al-Fe alloys .....	79
<b>M.M. Vasić, A.S. Kalezić-Glišović, R. Milinčić, Lj. Radović, D.M. Minić, A.M. Maričić, D.M. Minić</b> Influence of mechanical activation and heat treatment on magnetic properties of nanostructured mixture Ni <sub>85.8</sub> Fe <sub>10.6</sub> Cu <sub>2.2</sub> W <sub>1.4</sub> .....	85
<b>M. Najafi, H. Mirzadeh, M. Alibeyki</b> Tempering of deformed and as-quenched martensite in structural steel .....	95
<b>H. Mao, Y. Kong, X. Shuai, S. Tang, Y. Du</b> Three-dimensional phase field simulation for rafting of multiparticle precipitate in elastic inhomogeneous alloy under external stress .....	101
<b>S. Asgary, A.H. Ramezani, A. Mahmoodi</b> Physical properties of Nanostructured ZnO Thin Films deposited by DC magnetron Sputtering method with Different volume of O <sub>2</sub> in Carrier gas .....	111
<b>Z.Q. Liu, C.S. Huang, C.F. Gao, R.P. Liu, J. Chen, Z.Y. Xiao</b> Characterization of Ti6Al4V powders produced by different methods for selective electron beam melting .....	121
<b>P. Jozwik, M. Kopec, W. Polkowski, Z. Bojar</b> Dynamic deformations tests of Ni3Al based intermetallic alloy by using the split Hopkinson pressure bar technique .....	129
<b>Conference announcements</b>	
51 <sup>st</sup> International October Conference on Mining and Metallurgy (IOC2019) 16-19 October 2019, Bor Lake, Serbia .....	i
6 <sup>th</sup> International Student Conference on Technical Sciences (ISC2019) 25-27 September 2019, Technical faculty in Bor, Serbia .....	iii