Contents

Original Papers

Derya Aksu Demirezen, Şeyda Yılmaz, Dilek Demirezen Yılmaz and Yalçın Şevki Yıldız
Green synthesis of iron oxide nanoparticles using Ceratonia siliqua L. aqueous extract: improvement of colloidal stability by optimizing synthesis parameters, and evaluation of antibacterial activity against Gram-positive and Gram-negative bacteria —— 849

Haribabu Krishnaswamy, Rajalingam Chelliah, Ramkumar Iyappalam Ramakrishnan, Sivapraakash Muthukrishnan, Bensam Raj Jesuretnam and Karuppasamy Ramar
Pyrolysis and kinetic behavior of neem seed biomass using thermogravimetric analysis for the production of renewable fuel —— 862

Iasmin A. Ribeiro, Jéssica A. S. Lemos, Marcelo J. B. Souza and Anne Michelle Garrido Pedrosa
Synthesis of the LaCoO$_3$, SrCoO$_3$ and La$_{0.7}$Sr$_{0.3}$CoO$_3$ materials by the modified proteic method and tests for use as adsorbent —— 871

Reena Dhyani, Ramesh Chandra Srivastava, Pankaj Singh Rawat and Gagan Dixit
Structural and elastic properties of tetragonal nano-structured copper ferrite —— 884

Zai Gao Huang
First-principles study of the mechanical and thermodynamic properties of ordered phase Mg$_3$Cd under high pressure —— 893

Hongjin Zhao, Wuyi Shen, Haixia Tian, Guozuan Xu and Yong Du
Investigation of ultrafine WC–Co–Fe–Ni–Cr$_3$C$_2$ cemented carbide microstructure and properties based on phase diagram thermodynamics —— 900

Wenqi Luo, Qin Zou, Yanguo Li, Xihui Ye, Xiaowei Yang, Jintao Song and Yongan Luo
Microstructure and mechanical properties of CoCrNiCuX high-entropy alloys fabricated by spark plasma sintering —— 911

Ozgur Erdem Yurt and Arif Uzun
Investigation of mechanical properties of SiC-reinforced seamless aluminium pipes fabricated using powder metallurgy followed by hot extrusion —— 920

News

DGM – Deutsche Gesellschaft für Materialkunde —— 932