

f



Volume 18, Number 1, 2021
Quarterly

ISSN 1733-7178

Central European Journal of Energetic Materials



Contents

Ke Wang, Hai-tao Huang, Hui-xiang Xu, Huan Li, Jun-qiang Li, Xue-zhong Fan, Wei-qiang Pang Theoretical Simulations on Physicochemical Performance of Novel High-energy BHDBT-based Propellants.....	5
Mohammad Hossein Keshavarz, Seyyed Hesamodin Hosseini, Mehran Karimi Assessment of the Shelf Life of Composite Solid Propellants in Air and Nitrogen Atmospheres through Thermal Ageing	25
Shepherd M. Tichapondwa, Shasha Guo, Willem E. Roux Performance of Mn/Bi ₂ O ₃ Pyrotechnic Time Delay Compositions	46
Mohamed Gaber Zaky, Ahmed Elbeih, Tamer Elshenawy Review of Nano-thermites: a Pathway to Enhanced Energetic Materials	63
Rui Li, Weibing Li, Xiaode Guo, Li Liang, Yajun Wang, Weibin Li Preparation and Performance of CL-20-based Ultraviolet-curable High-explosive Ink and Its Application in Rigid Explosive Networks by Direct Ink Writing	86
Karol Zalewski, Zbigniew Chylek, Waldemar A. Trzeciński Studies on the Properties of a Putty-like Explosive with a Silicone Binder.....	112
Victor Banishevsky, Roman Zakusylo, Daryna Zakusylo Shear Flow of Guncotton Pulp	124
Sherif Elbasuney, Eslam Elsaka, Ahmed Elbeih, Hosam E. Mostafa Novel Composite Solid Propellant with High Resistance to Thermo-oxidative Degradation Reactions, Extended Shelf Life, and Superior Combustion Characteristics	143

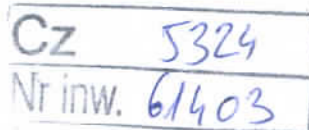


Volume 18, Number 2, 2021
Quarterly

ISSN 1733-7178

Central European Journal of Energetic Materials





Contents

Zongkai Wu, Wei Zheng, Jiangfeng Pei, Zhiquan Chen, Jun Zhang, Xiuduo Song, Jiangning Wang, Dongxiang Zhang, Fengqi Zhao
Study of the Effect of DINA on the Polymorphic Transition of ϵ -CL-20 in Composite Modified Double Base Propellants 165

Zhimeng Lu, Xiaoting Ren, Jinxuan He
Preparation and Characterization of a Novel Coordination Compound $[K(18\text{-crown-6})][N(NO_2)_2]$ 183

Yingbin Liu, Chaoxia Zhang, Xiaoyan Hu, Li Yang, Miao Sun, Zeng Zhang, Lei Yuan
Comparative Study of the Penetration Characteristics of Ni-Al and Pure Cu Shaped Charge Liners 199

Xiaoting Hou, Ming Zhang, Fengqi Zhao, Yanjing Yang, Ting An, Hui Li, Qing Pan, Xiaohong Wang, Kun Zhang
Experimental Insight into the Catalytic Mechanism of MFe_2O_4 ($M = Ni, Zn$ and Co) on the Thermal Decomposition of TKX-50 223

Linghui Zeng, Huimin Liang, Qi Zhang
Detonation Characteristics of Gaseous Isopropyl Nitrate at High Concentrations 245

Khalid Naeem, Arshad Hussain, Abdul Qadeer Malik, Shakeel Abbas, Iftikhar Ahmad, Sarah Farrukh
A Comparative Numerical and Experimental Study of Light Weight Materials for Neutralizing Explosive Reactive Armour 271



Volume 18, Number 4, 2021
Quarterly

ISSN 1733-7178

Central European Journal of Energetic Materials





Contents

Bartłomiej Kramarczyk, Piotr Mertuszka

Study of the Influence of Sensitizer Content on the Density of a Bulk Emulsion Explosive Used in Underground Operations 429

Yanhua Liu, Ziqiang Shao, Jingjing Yuan, Shuai Jia, Feijun Wang, Yonghong Li, Bingyi Guo, Zhonglin Yang, Yingying Zuo

Structure and Properties of Chain Branched Nitrocellulose 448

Józef Paszula, Andrzej Maranda, Karolina Nikoleczuk, Agnieszka Giercuskiewicz

Modification of the Detonation Parameters of Mining Explosives Containing Hydrogen Peroxide and Aluminium Powder 477

Sudhir Singh, Sidharth Raveendran, Dharendra R. Kshirsagar, Manoj Gupta, Chetan Bhongale

Studies on the High Performance Characteristics of an Aluminized Ammonium Perchlorate Composite Solid Propellant Based on Nitrile Butadiene Rubber 492

Tomasz Gołofit, Bartosz Zakościelny, Paweł Maksimowski, Michał Chmielarek, Katarzyna Cieślak, Tomasz Salaciński

Review of Methods for Testing the Compatibility of High Energy Mixed Components 512

Andrzej Orzechowski, Marcin Nita, Dorota Powała, Mariusz Pietraszak, Tomasz Klemba, Andrzej Maranda

Investigation of the Ignition of MTV Decoy Flares 529

Dorota Powała, Marcin Nita, Andrzej Orzechowski, Andrzej Maranda

A New Testing Method for the Mechanical Properties of Elastic Explosive Compositions 545

2021 DCz. 240