

COMBUSTION AND EXPLOSION [GORENIE I VZRYV (MOSKVA)]

Vol. 14 No. 3 Year 2021

Editor-in-Chief S. M. Frolov

In this issue:

Development of chain models of the dynamics of the COVID-19 pandemic spread V. M. Goldberg	3
Formation of NO during the low-temperature combustion of H ₂ O/CH ₄ /air mixtures containing H ₂ O ₂ or O ₃ G. A. Poskrebyshv and A. A. Poskrebyshv	11
Thermochemistry of reactions of C ₆ H ₅ CH ₂ C ₆ H ₄ O• and C ₆ H ₅ CH•C ₆ H ₄ with O ₂ as well as of reactions of their unimolecular decomposition G. A. Poskrebyshv and A. A. Poskrebyshv	17
Study of the infrared gas heaters characteristics under forced surface combustion modes N. Ya. Vasilik and S. V. Finyakov	27
Effect of the design of gas supply system on the performance of cylindrical radiant burners A. S. Maznoy, I. A. Yakovlev, N. S. Pichugin, S. D. Zambalov, and K. A. Tcoi	35
Measurement of flow rate characteristics of flow-through gas generator at gasification of low-melting solid material by ambient temperature airflow D. A. Vnuchkov, V. I. Zvegintsev, D. G. Nalivaichenko, and S. M. Frolov	43
Measurement of flow rate characteristics during low-melting material gasification in a flow-through gas generator D. A. Vnuchkov, V. I. Zvegintsev, D. G. Nalivaichenko, and S. M. Frolov	61
Gasification of organic waste with ultrasuperheated steam and carbon dioxide S. M. Frolov	74
Clarification of the parameters of the installation for determining the explosion characteristics of dust–air mixtures E. V. Manzhos, A. A. Korzhavin, Ya. V. Kozlov, and I. G. Namyatov	98
Thermal structure of the gunpowder burning wave at elevated pressures S. V. Finyakov, V. G. Krupkin, and V. N. Marshakov	109
Initiation of explosion by high voltage discharge of pressed mixtures of sevilene with ammonium perchlorate and nitrate with addition of powdered aluminum A. G. Rebeko and B. S. Ermolaev	122
Theoretical analysis of the method of tests of solid explosives for sensitivity to mechanical impact — destructive shell A. V. Dubovik	130