

## CONTENTS

### CHEMISTRY

(inorganic, organic, analytical, physical, colloid  
and high-molecular compounds)

<b>Yemelyanova T.Yu., Kashkina L.V., Kulagin V.A., Stebeleva O.P., Petrakovskaya E.A., Nemtsev I.V., Red'kin V.E.</b>	
Effect of globular carbon addition on rheological properties of coal-water suspension .....	5
<b>Karaeva A.R., Zhukova E.A., Urvanov S.A., Senatulin B.R., Skryleva E.A., Mordkovich V.Z.</b>	
Modification of surface of double wall carbon nano tubes by fullerene C <sub>60</sub> .....	12
<b>Sadovoy V.Yu., Blank V.D., Terentiev S.A., Teteruk D.V., Troshchiev S.Yu.</b>	
Crystallographic orientation influence on secondary electron emission coefficient of a single crystal of synthetic diamond .....	21
<b>Shavelkina M.B., Amirov R.Kh., Borodina T.I., Kiselev V.I., Shatalova T.B., Rabadanov K.S.</b>	
Formation of nano structures in result of homogenous nucleation of carbon obtained in thermal plasma under atmospheric pressure .....	27
<b>Khabibullina I.A., Sitnikov N.N., Kazakov V.A., Sigalov S.K.</b>	
Simultaneous thermal analysis and raman spectroscopy as complementary methods of diagnostics of carbon allotropic forms .....	34
<b>Shevchenko N.V., Gorbachev V.A., Chobanyan V.A., Sigalov S.K., Rizakhanov R.N., Golubev A.A., Kirichenko A.N., Efremov V.P.</b>	
Properties and phase composition of detonation nanodiamonds surface .....	40

### CHEMICAL TECHNOLOGY

(inorganic and organic substances.  
Theoretical fundamentals)

<b>Rakhmetulina L.A., Yakovlev A.V., Finayenov A.I., Nevernaya O.G., Zakirova S.M.</b>	
Palladium free activation of dielectrics surfaces and carbon materials with salts of monovalent copper .....	45
<b>Sedlovets D.M., Knyazev M.A.</b>	
Selective growth of thin carbon films on dielectrics substrates.....	51
<b>Sokolov E.G., Artemyev V.P., Ozolin A.V.</b>	
Obtaining diamond-metal composites by means of brazes containing refractory fillers.....	56
<b>Senyut V.T., Zhornik V.I., Parnitsky A.M., Val'kovich I.V.</b>	
Studying of polycrystals structure based on diamond micropowders after modifying by carbide-forming elements.....	60
<b>Teteruk D.V., Bormashov V.S., Tarelkin S.A., Kornilov N.V., Luparev N.V., Kirichenko A.N.</b>	
Suppression of cvd diamond growth on side face of substrate in process of gas-phase precipitation.....	64
<b>Shul'zhenko A.A., Jaworska L., Sokolov A.N., Gargin V.G., Romanko L.A.</b>	
Electrically conductive polycrystalline super hard material based on diamond and n-layer graphenes.....	69

**Yafarov R.K.**

Receiving and properties of new nano composite carbon materials.....75

**Lobanov S.V., Fedorov I.A., Sheshin E.P.**

Developing manufacturing technology of composite cathodes with method of pressing pyrolytic graphite with triple carbonate .....81

**Vokhmyanin D.S.**

Influence of copper sublayer on nucleation of diamond crystals on surface of tungsten carbide .....85

**Terekhova E.N., Lavrenov A.V., Krivonos O.I.**

Effect of chemical treatment on properties of carbon-mineral materials from sapropel .....90

**Gorbachev V.A., Ubeiy-Volk E.Yu., Shevchenko N.V., Golubev A.A.**

Detonation nanodiamond as prospective component of composite solid propellants .....96