

CONTENTS

Original articles

- Buz'ko V. Yu., Ivanin S. N., Shutkin I. Yu., Goryachko A. I., Udobov S. A., Ozolin A. V. Atomic composition, microstructure, and electromagnetic properties of schungite micropowder 3
- Buchinskaya I. I., Ivchenko A. V. Solubility of calcium and strontium fluorides in a sodium nitrate melt and choosing a crucible material for working with their solution melts 14
- Vasilkova E. I., Pirogov E. V., Sobolev M. S., Ubiyovk E. V., Mizerov A. M., Seredin P. V. Molecular beam epitaxy of metamorphic buffer for InGaAs/InP photodetectors with high photosensitivity in the range of 2.2–2.6 μm 20
- Danilaev M. P., Dorogov N. V., Drobushov S. V., Karandashov S. A., Klabukov M. A., Kuklin V. A. Dispersed copper (I) oxide particles encapsulated by polylactide 27
- Ivashenko D. V., Urbanovich D. A., Polyn I. Y., Bushinsky M. V., Trukhanov A. V., Pankov V. V. Synthesising dispersed powders of CoZn ferrites for microwave absorption 37
- Ismayilova E. N., Mashadiyeva L. F., Bakhtiyarly I. B., Babanly M. B. Phase equilibria in the Cu₂SnSe₃–Sb₂Se₃–Se system 47
- Krysanova T. A., Kotova D. L., Davydova E. G., Krysanov V. A. Thermochemical characteristics of the formation of aqueous solutions of imino acids 55
- Lisunova E. I., Perov N. S., Mittova V. O., Bui Xuan Vuong, Nguyen Anh Tien, Sladkopevtsev B. V., Alekhina Yu. A., Kostryukov V. F., Mittova I. Ya. Formation during glycine-nitrate combustion and magnetic properties of YFe_{1-x}Ni_xO₃ nanoparticles 61
- Mauer D. K., Belenov S. V., Nikulin A. Yu., Toporkov N. V. Activity and stability of PtCo/C electrocatalysts for alcohol oxidation 72

Morozova N. B., Dontsov A. I., Fedoseeva A. I., Vvedenskii A. V.
Hydrogen permeability of the Pd–Pb system foil of various composition 85

Polkovnikova Yu. A.
Simulation of the molecular dynamics of the passage of liposome with cinnarizine through the blood-brain barrier 95

Seredin P. V., Kurilo N. A., Ali O. Radam, Builov N. S., Goloshchapov D. L., Ivkov S. A., Lenshin A. S., Arsentyev I. N., Nashchekin A. V., Sharofidinov Sh. Sh., Mizerov A. M., Sobolev M. S., Pirogov E. V., Semeykin I. V.

Study of semi-polar gallium nitride grown on m-sapphire by chloride vapor-phase epitaxy 103

Slavcheva G. S., Artamonova O. V., Babenko D. S., Shvedova M. A.

Studying the effect of modifying additives on the hydration and hardening of cement composites for 3D printing 112

Sokurov A. A.
The equilibrium shape of rolled out meniscus 125

Titova S. S., Osminkina L. A., Kakulija I. S., Chuchenkova O. A., Parinova E. V., Ryabtsev S. V., Chumakov R. G., Lebedev A. M., Kudryavtsev A. A., Turishchev S. Yu.

X-ray photoelectron spectroscopy of hybrid 3T3 NIH cell structures with internalized porous silicon nanoparticles on substrates of various materials 132

Trofimova T. S., Ostanina T. N., Rusoi V. M., Mazurina E. A.

The effect of current density on the structure of nickel electrolytic foams and their catalytic properties during hydrogen production 139

Short communication

Department of General and Inorganic Chemistry of Voronezh State University celebrates its 90th anniversary 149

Professor Evgeny Goncharov celebrates his 90th anniversary 150

We remember Professor Valentin Z. Anokhin (1937–1991) 152

Guide for Authors – 2023 153