

CONTENTS

<i>Agaveva R. M., Mammadov Sh. H., Azhdarova D. S., Ragimova V. M., Aliyev O. M.</i> Synthesis and study of the properties of synthetic analogues of the mineral naffildite with the participation of rare earth elements	3	<i>Maslov V. A., Kravtsov S. B., Novikov I. A., Usachev V. A., Fedorov P. P., Tsvetkov V. B., Yarotskaya E. G.</i> Specifics of the formation of regular opal structures from spherical silica particles in various colloidal solutions	69
<i>Alakbarova T. M., Meyer H.-J., Orujlu E. N., Babanly M. B.</i> A refined phase diagram of the GeTe-Bi ₂ Te ₃ system	11	<i>Menshchikov V. S., Belenov S. V., Nikulin A. Yu.</i> Effect of the morphology and composition of trimetallic PtCuAu/C catalysts on the activity and stability of the methanol oxidation reaction	76
<i>Haiduk Yu. S., Korobko E. V., Kotsikau D. A., Svito I. A., Usenka A. E., Pankov V. V.</i> Preparation and characterisation of cobalt and cobalt-zinc ferrites for magnetorheological materials	19	<i>Tretyakova V. V., Panteleeva V. V., Shein A. B.</i> The kinetics of cathodic hydrogen evolution on titanium disilicide in a sulphuric acid solution	88
<i>Zlomanov V. P., Eshmakov R. S., Prolubshchikov I. V.</i> Formation of a solvate of manganese(III) acetylacetonate with chloroform	29	<i>Tutov E. A., Alekseeva E. V., Samoylov A. M., Berezina O. Ya., Boriskov P. P.</i> Effect of ethanol vapour sorption on the semiconductor-metal phase transition in powdered vanadium dioxide	95
<i>Kovaleva A. S., Sladkopevtsev B. V., Samsonov A. A., Alferova S. I., Kovalev D. G., Titov S. A., Pryakhin N. D., Mittova I. Ya.</i> The influence of the physicochemical nature of the components of the V ₂ O ₅ /GaAs, MnO ₂ /GaAs, V ₂ O ₅ /InP, MnO ₂ /InP, TiO ₂ /InP, and SnO ₂ /InP heterostructures and the oxidation conditions on the surface morphology of the synthesised films	33	<i>Fedoseev V. B., Fedoseeva E. N.</i> Polycondensation in a spray of aqueous-alcoholic solution of lactic acid	101
<i>Kozlov G. V., Dolbin I. V.</i> The interconnection of efficiency and the degree of aggregation of nanofiller in polymer nanocomposites	45	<i>Hoang Bao Khanh, Mittova V. O., Nguyen Anh Tien, Pham Thi Hong Duyen</i> Structural and magnetic properties of Ho-doped CuFe ₂ O ₄ nanoparticles prepared by a simple coprecipitation method	109
<i>Lenshin A. S., Seredin P. V., Zolotukhin D. S., Belyukov A. N., Mizerov A. M., Kasatkin I. A., Radam A. O., Domashevskaya E. P.</i> Characteristics of the formation and composition of Al _x Ga _{1-x} N/AlN/por-Si/Si(111) heterostructures grown using a porous silicon buffer layer	51	<i>Shvedova M. A., Artamonova O. V., Slavcheva G. S.</i> Investigation of the effect of a multicomponent additive on the structure formation and hardening of cement composites	116
<i>Lyapun D. V., Kruzhilin A. A., Shevtsov D. S., Aseeva Yu. V., Shikhaliev Kh. S.</i> Corrosion inhibition of steel by selected homologues of the class 3-alkyl-5-amino-1H-1,2,4-triazoles in acidic media	59	<i>Afonin N. N., Logachova V. A.</i> A model of interdiffusion occurring during the formation of thin metal films on single-crystal silicon under conditions of limited solubility of the components	129
		Professor Mahammad B. Babanly's anniversary	136
		Guide for Authors – 2022	139