

CONTENTS

Review

- Abramova E. N., Kozlov R. Yu., Syrov Yu. V., Khokholov A. I., Parkhomenko*
 Modern scientific and practical approaches to the production of substrates from semiconductor compounds A³B⁵. Review
Biryukov A. I., Kozaderov O. A., Batmanova
 Features of the corrosion of coatings based on zinc alloys: oxidation products and the selective dissolution of zinc. Review
Shaposhnik V. A.
 Prospects of membrane catalysis in hydrogen energetics. Mini review

Original articles

- Grevtseva I. G., Smirnov M. S., Chirkov K. S., Latyshev A. N., Ovchinnikov O. V.*
 Synthesis and luminescent properties of PbS/SiO₂ core-shell quantum dots
Zartsyn I. D., Vvedenskii A. V., Bobrinskaya E. V., Kozaderov O. A.
 Isolation of partial coupled processes of anodic oxidation of OH⁻ ion on gold using a combination of a graph-kinetic analysis method and linear voltammetry data
Quynh Nhu Le Thi, Thi Quynh Trang Ly, Anh Tien Nguyen, Quoc Thiet Nguyen, De-Hao Tsai, and Tien Khoa Le
 Simple synthesis of floating Fe₂O₃/Luffa catalysts for the photo-Fenton degradation of methyl orange at near neutral pH
Lenshin A. S., Frolova V. E., Ivkov S. A., Domashevskaya E. P.
 Microstructural and hydrophilic properties of polyethylene terephthalate glycol polymer samples with different 3D printing patterns

	<i>Mamand D. M., Aziz D. M., Qadr H. M.</i>	
	An investigation of the electronic structure and optoelectronic properties of 4-((2-hydroxy-3-methoxybenzylidene)amino)-N-(thiazol-2-yl) benzene sulfonamide	88
3	<i>Myasoedova T. N., Nedoeckova O. V., Yalovega G. E.</i> Electrophysical properties of composite materials based on graphene oxide and polyaniline	104
25	<i>Parchinskiy P. B., Gazizulina A. S., Nusretov R. A.</i> Spontaneous photomagnetoelectric effect in ferromagnetic GaMnAs epitaxial layers	111
37	<i>Petukhov I. V., Kichigin V. I.</i> Electrochemical activity of electroless Ni-P coatings in the hydrogen evolution reaction	117
45	<i>Popov P. A., Zentsova A. A., Voronov V. V., Novikov I. A., Chernova E. V., Fedorov P. P.</i> Study of the thermal conductivity of natural carbonates	127
	<i>Syugaev A. V., Porsev V. E.</i> Electrochemical impedance of porous tantalum solids: modeling of frequency response	135
55	<i>Timushkov P. V., Burmistrov V. A., Ulyanov M. N., Semenov V. N.</i> Composition and structure of tungsten antimony acid	146
68	<i>Chuvenkova O. A., Boikov N. I., Ryabtsev S. V., Parinova E. V., Chumakov R. G., Lebedev A. M., Smirnov D., Makarova A., Titova S. S., Fateev K. A., Turishchev S. Yu.</i> Electronic structure and composition of tin oxide thin epitaxial and magnetron layers according to synchrotron XANES studies	153
78	<i>Shatskaia M. G., Nazarovskaya D. A., Gonchar K. A., Lomovskaya Ya. V., Tsiniaikin I. I., Shalygina O. A., Kudryavtsev A. A., Osminkina L. A.</i> Photoluminescent porous silicon nanowires as contrast agents for bioimaging	161
	In memory of Professor V. A. Shaposhnik	168
	Guide for Authors – 2024	169