

Content of the issues for 2023

Nº 1/2023

PUBLISHER INFORMATION	2
TO THE AUTHORS AND READERS	
The journal "Nanotechnology in Construction" (ISSN 2075-8545) is included	
in the global information project CNKI (China)	5
The ground the frequency project of the (crima) infinitely infinit	
APPLICATION OF NANOTECHNOLOGIES AND NANOMATERIALS IN CONSTRUCTION	
Boev E.V., Islamutdinova A.A., Aminova E.K.	
Development of technology for obtaining anticorrosive nanostructured polyalkenylamide-succinimide	
coatings in construction	6
Chayka T.V., Gavrish V.M., Pavlenko V.I., Cherkashina N.I.	
Influence of high-dispersive powder mixture of WC and TiC on the composite materials properties	1.4
initidence of high-dispersive powder mixture of we and the off the composite materials properties	14
TECHNOLOGY OF PRODUCTION OF BUILDING MATERIALS AND PRODUCTS	
Massalimov I.A., Chuikin A.E., Massalimov B.I., Mustafin A.G.	
New Protective Coatings Based on Sulfur Nanoparticles Produced from Potassium PolysulfidePolysulfide	27
REVIEW OF NANOTECHNOLOGICAL INVENTIONS	
Ivanov L.A., Xu L.D., Pisarenko Zh.V., Muminova S.R., Miloradova N.G.	
Inventions in the area of nanotechnologies and nanomaterials. Part I	37
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION	
Wuhan University of Technology	48
TECHNOLOGY OF PRODUCTION OF BUILDING MATERIALS AND PRODUCTS	
Nazarov V.G., Dedov A.V., Bokova E.S.	
Compressibility of the composite material with fiber filler and nanodimensional polyurethane matrix	
for road and hydro engineering construction	53
101 Toda dita fiyato efigineering construction	33
APPLICATION OF NANOTECHNOLOGIES AND NANOMATERIALS IN CONSTRUCTION	
Zheldakov D. Yu., Tursukov S.A., Sinitsin D.A., Pudovkin A.N., Parfenova A.A.	
Evaluation of the nanostructure durability for mineral wool fibers using the theory of chemical corrosion	59
THE RESULTS OF THE SPECIALISTS' AND SCIENTISTS' RESEARCHES	
Gorbatova V. N., Gordeeva I. V., Dudareva T. V., Krasotkina I. A., Nikol'skii V. G., Egorov V. M.	
Effect of the active powder of discretely devulcanized rubber on bitumen properties at low temperatures.	72
PUBLISHING ETHICS	84
AUTHOR GUIDELINES	88

http://nanobuild.ru 602 info@nanobuild.ru



Nº 2/2023

PUBLISHER INFORMATION	94
CONSTRUCTION MATERIAL SCIENCE Samchenko S.V., Kozlova I.V, Zemskova O.V, Dudareva M.O.	
Methodological substantiation of the choice of a stabilizer for bismuth titanate fine particles suspensions	s 97
THE STUDY OF THE PROPERTIES OF NANOMATERIALS Khantimirov A.G., Abdrakhmanova L.A., Nizamov R.K., Khozin V.G. Investigation of properties in nanomodified polyethylene-based wood-polymer composites	110
TECHNOLOGY OF PRODUCTION OF BUILDING MATERIALS AND PRODUCTS Nazarov V.G., Ivanov L.A., Dedov A.V., Bokova E.S., Statnik E.S. Gradient non-woven fabrics with a modified surface nanolayer for water filtration in the construction industry	117
DEVELOPMENT OF NEW MATERIALS Slavcheva G.S., Artamonova O.V., Kotova K.S., Shvedova M.A., Yurov P.Yu. Study of the strength regulation factors for the adhesive bonding "cement matrix – reinforcing fiber" in composites for 3d-printing in the building process	124
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION Wuhan University of Technology	134
APPLICATION OF NANOMATERIALS AND NANOTECHNOLOGIES IN CONSTRUCTION Yudaev P.A., Tamboura B., Chistyakov E.M. Antistatic polymeric materials	139
Cherkashina N.I., Pavlenko V.I., Gorodov A.I., Ryzhikh D.A., Forova E.V. Effect of laser processing on composite films with nanodispersed SiO ₂	152
Mazitova A.K., Sukhareva I.A., Sidorov G.M., Talipov R.A., Aminova A.F. Research of the wastewater treatment method for the production of wood-chip building materials in the presence of a nanostructured heterogeneous catalys	164
THE RESULTS OF THE SPECIALISTS' AND SCIENTISTS' RESEARCHES Balykov A.S., Kaledina E.A., Volodin S.V.	
Compressive strength prediction and composition design of structural lightweight concretes using machine learning methods	171
PUBLISHING ETHICS	187
AUTHOR GUIDELINES	191



Nº 3/2023

PUBLISHER INFORMATION	197
CONSTRUCTION MATERIALS SCIENCE Beregovoy V.A., Snadin E.V., Inozemtsev A.S., Pilipenko A.S. High-Performance Concretes for Machine Building with Nano- and Micro-Scale Raw Materials	200
Loganina V.I., Kislitsyna S.N., Tkach E.V., Stepina I.V. Anti-icing coating based on silicone resin SILRES® MSE100	211
Zhegera K.V., Ryzhov A.D., Sokolova J.A., Shestakov N.I. Patterns of structure formation in lime composites with additive based on amorphous aluminosilicates	220
THE STUDY OF THE PROPERTIES OF NANOMATERIALS Ilyina V.N., Ilyin S.V., Gafarova V.A., Kuzeev I.R. How Nanocarbon Fillers Influence Properties of the Composite Materials	228
MANUFACTURING TECHNOLOGY FOR BUILDING MATERIALS AND PRODUCTS Morozova M.V.	
Reactivity as one of the criteria for the selection of raw materials for the production of active fine mineral powders	238
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION Wuhan University of Technology	246
DEVELOPMENT OF NEW MATERIALS Rakhmatullina R.G., Yarmukhametova G.U., Maskova A.R., Rusinov A.A. Study on the influence of the additives for the thermophysical properties of paraffin-containing dispersed systems	251
APPLICATION OF NANOMATERIALS AND NANOTECHNOLOGIES IN CONSTRUCTION Poluektova V.A., Shapovalov N.A., Cherkashina N.I., Kozhanova E.P., Starchenko S.A. Regulation of the aggregate stability for binary polymer-mineral dispersions	258
Ketov A.A., Krasnovskikh M.P., Kalinina E.V., Ofrikhter V.G., Tatiannikov D.A. Influence of nanostructural modifier from automobile tires on consumer properties of bitumen	267
RESEARCH RESULTS OF SCIENTISTS AND SPECIALISTS Denisova O.A.	
Acoustooptic shutter for glass units	274
PUBLISHING ETHICS	285
AUTHOR GUIDELINES	280

http://nanobuild.ru 604 info@nanobuild.ru



Nº 4/2023

PUBLISHER INFORMATION	295
CONSTRUCTION MATERIALS SCIENCE Kuzina V.V., Samchenko S.V., Kozlova I.V., Koshev A.N. Mathematical modeling of physical and chemical processes in porous media in solving the problems of nanocomposite materials and water-filling	298
Slavcheva G.S., Razov I.O., Solonina V.A., Panchenko Y.F. Justification of the criteria requirements for fillers in mixtures for 3D construction printing	310
Kurmangalieva A.I., Anikanova L.A., Kudyakov A.I., Steshenko A.B., Buryanov A.F., Lukyanova N.A., Inozemtsev A.S., Inozemtsev S.S. Formation of porous structures in production technology of construction materials based on building gypsum plaster	319
DEVELOPMENT OF NEW MATERIALS Ilyina V.N., Ilyin S.V., Khalikova G.R., Gafarova V.A., Kuzeev I.R. Research on the impact of nano carbon fillers on the morphology of epoxy binder	328
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION Wuhan University of Technology	337
APPLICATION OF NANOMATERIALS AND NANOTECHNOLOGIES IN CONSTRUCTION Boev E.V., Kasyanova L.Z., Islamutdinova A.A., Aminova E.K. Production method of nanostructured wood-polymer composition with microwave application	342
RESEARCH RESULTS OF SCIENTISTS AND SPECIALISTS Sokolova Y.V., Ayzenshtadt A.M., Frolova M.A., Shinkaruk A.A., Makhova T.A. Potentiometric method for assessing the pozzolatic activity of highly dispersed materials	349
Dorogaya E.S., Suleymanov R.R., Kuzina E.V., Yurkevich M.G., Bakhmet O.N. On the possibility of utilizing sodium lignosulfonate as a nano-organic foundation for creating soil-like bodies in the purposes of technogenic-degraded land rehabilitation	359
Rada A.O., Kuznetsov A.D., Zverev R.E., Timofeev A.E. Automation of monitoring construction works based on laser scanning from unmanned aerial vehicles	373
PUBLISHING ETHICS	383
AUTHOR GUIDELINES	387



Nº 5/2023

PUBLISHER INFORMATION	393
TO THE AUTHORS AND READERS	
The SCIENCE INDEX performance indicators of the journal "Nanotechnology in Construction" have improved for the year 2022	396
CONSTRUCTION MATERIALS SCIENCE	
Samchenko S.V., Kozlova I.V., Zemskova O.V., Dudareva M.O. Exploring the Surface Chemistry for the Stabilization of Bismuth Titanate Fine Particle Suspensions in Cement Systems	397
Steshenko A.B., Kudyakov A.I., Inozemtcev A.S., Inozemtcev S.S. Controlling the structural formation of porized cement composites in the production of thermally efficient enclosure structures of enhanced quality	408
STUDY OF PROPERTIES OF NANOMATERIALS	
Vakhitova R.I., Saracheva D.A., Kiyamov I.K., Sabitov L.S., Oleinik V.Iv. Investigating the influence of carbon nanotube-based additives on the phase composition of cement mortar during well cementation	418
MANUFACTURING TECHNOLOGY FOR BUILDING MATERIALS AND PRODUCTS	
Bessonov I.V., Bulgakov B.I., Aleksandrova O.V., Gorbunova E.A. Performance evaluation of foamed materials based on cold-cured liquid glass	424
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION	
Wuhan University of Technology	438
APPLICATION OF NANOMATERIALS AND NANOTECHNOLOGIES IN CONSTRUCTION	
Kopanitsa N.O., Demyanenko O.V., Kulikova A.A., Buryanov A.F., Lukyanova N.A., Soloviev V.G. Composite building materials based on nanomodified cement systems	443
Glazachev A.O., Ivanova O.V., Sinitsin D.A., Akhmetshin R.M. Complementary improvement of technological characteristics of asphalt concrete road surfaces using macromolecular nanocomposites	453
Pavlenko V.I., Gorodov A.I., Yastrebinsky R.N., Lebedev M.S., Kashibadze V.V. Peculiarities of the formation of silicon oxide films modified with metal nanoparticles	465
RESEARCH RESULTS OF SCIENTISTS AND SPECIALISTS	
Kobelev A.A., Konstantinova N.I., Korolchenko O.N., Tsarichenko S.G., Bokova E.S. Study of ignition parameters and the thermooxidative degradation of wood in the presence of flame retardants with a bioprotective effect	474
Bashirov M.G., Bashirova E.M., Yusupova I.G., Akchurin D.Sh., Yulberdin R.T. Identification of the stress-strain state and damage of metal structures of building constructions with nanoparticle coatings using the electromagnetic-acoustic method	482
Ilina L.V., Samchenko S.V., Rakov M.A., Zorin D.A. Modeling the kinetics of cement composite processes modified with calcium-containing additives	494
PUBLISHING ETHICS	504
AUTHOR GUIDELINES	508



Nº6 /2023

HAPPY NEW YEAR 2024!	514
PUBLISHER INFORMATION	515
TO THE AUTHORS AND READERS	
The Index Copernicus Value (ICV) of the journal "Nanotechnologies in Construction" for 2022 has increased	518
CONSTRUCTION MATERIALS SCIENCE	
Kovalenko Y.F., Shulaeva E.A., Shulaev N.S. Application Of Polyvinyl Chloride for Nanocomposites (Analysis And Optimization of Quality Indicators)	519
APPLICATION OF NANOMATERIALS AND NANOTECHNOLOGIES IN CONSTRUCTION	
Aminova E.K., Kasyanova L.Z., Islamutdinova A.A., Asfandiyarova L.R. Iron Oxide Pigment as a Coloring Nanofill For Decorative Concrete Products	531
Khovansky V.E. Lyophobic sols «БЕТОПРЕСС»® as additives to chemical admixtures into concrete	538
Asfandiyarova L.R., Khakimova G.V., Ovsyannikova I.V., Matveeva A.Yu. Wood-Polymer Nano-Modified Composite Materials for Construction Purposes	543
Bashirov M.G., Vildanov R.G., Khafizov A.M., Khismatullin A.S., Akchurin D.Sh. Intelligent Eco-Monitoring System for Selecting a Residential Development Site with Nanofiber-Based Window Filter Screens	552
INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION	
Wuhan University of Technology	559
MANUFACTURING TECHNOLOGY FOR BUILDING MATERIALS AND PRODUCTS	
Kabdushev A.A., Agzamov F.A., Manapbayev B.Zh., Moldamuratov Zh.N. Microstructural Analysis of Strain-Resistant Cement Designed for Well Construction	564
THE RESULTS OF THE SPECIALISTS' AND SCIENTISTS' RESEARCHES	
Abdykalykov A., Aidaraliev Zh.K., Abdykalyk kyzy Zh., Kuduev A.Zh., Rashid kyzy B. Suitability Of Basalt Raw Materials Of The Kyrgyz Republic For The Production Of Superthin And Continuous Fibers	574
Rada A.O., Kuznetsov A.D., Akulov A.O., Kon'kov N.Yu. Managing The Accuracy and Speed of Processes For Automated Monitoring Of Construction Works In The Context Of New Technologies	583
Aidaraliev Z.K., Rysbaeva I.A., Bekbolot kyzy B., Chimchikova M.K., Rashid kyzy B. Production of Polycrystalline Silicon by Chlorination From Rice Husk And Purification Of Chlorine-Containing Gases By Adsorption Method	592
CONTENT OF THE ISSUES PUBLISHED IN 2023	602
PUBLISHING ETHICS	608
AUTHOR GUIDELINES	612
CALENDAR 2024	617