

International Scientific Conference “High-Rise Construction 2017” (HRC 2017)

E3S Web of Conferences Volume 33 (2018)

Samara, Russia
4 – 8 September 2017

Part 1 of 2

Editors:

**D. Safarik
Y. Tabunschikov
V. Murgul**

ISBN: 978-1-5108-5945-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution license:
<http://creativecommons.org/licenses/by/2.0/>

You are free to:

Share – copy and redistribute the material in any medium or format.

Adapt – remix, transform, and build upon the material for any purpose, even commercial.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2018)

For additional information, please contact EDP Sciences – Web of Conferences
at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75

Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

MEGACITIES AND TALL BUILDINGS: SYMBIOSIS	1
<i>Safarik Daniel, Ursini Shawn, Wood Antony</i>	
SPATIALLY ORGANIZED «VERTICAL CITY» AS A SYNTHESIS OF TALL BUILDINGS AND AIRSHIPS	16
<i>Gagulina Olga, Matovnikov Sergei</i>	
THREE CENTURIES OF MULTI-STORIED ST. PETERSBURG	26
<i>Lavrov Leonid, Perov Fedor, Eremeeva Aleksandra, Temnov Vladimir</i>	
GREEN INFRASTRUCTURE IN HIGH-RISE RESIDENTIAL DEVELOPMENT ON STEEP SLOPES IN CITY OF VLADIVOSTOK	38
<i>Kopeva Alla, Ivanova Olga, Khrapko Olga</i>	
CONCEPTIONS OF HEIGHT AND VERTICALITY IN THE HISTORY OF SKYSCRAPERS AND SKYLINES	48
<i>Maslovskaya Oksana, Ignatov Grigoriy</i>	
THE PROBLEMS OF DESIGNING A MULTIFUNCTIONAL COURTYARD SPACE OF HIGH-RISE BUILDINGS BY THE EXAMPLE OF RESIDENTIAL DEVELOPMENT IN VOLGOGRAD	55
<i>Matovnikov Sergei, Matovnikova Natalia, Samoylenko Polina</i>	
HIGH-RISE ARCHITECTURE IN UFA, RUSSIA, BASED ON CRYSTALLOGRAPHY CANONS	64
<i>Sabitov Ildar Narimanovich, Kudasheva Dilara Radikovna, Vdovin Denis Yaroslavovich</i>	
HIGH-RISE CONSTRUCTION IN THE SAINT PETERSBURG AGGLOMERATION IN 1703–1950S	74
<i>Sementsov Sergey, Akulova Nadezhda, Kurakina Severina</i>	
ARCHITECTURE OF HIGH-RISE BUILDINGS AS A BRAND OF THE MODERN KAZAKHSTAN	85
<i>Abdrassilova Gulnara, Kozbagarova Nina, Tuyakayeva Ainagul</i>	
GARDENING AS VECTOR OF A HUMANIZATION OF HIGH-RISE BUILDING	96
<i>Lekareva Nina, Zaslavskaya Anna</i>	
HIGH-RISE BUILDINGS IN THE STRUCTURE OF AN URBANIZED LANDSCAPE AND THEIR INFLUENCE ON THE SPATIAL COMPOSITION AND IMAGE OF THE CITY	103
<i>Moor Valery K., Erysheva Elena A.</i>	
TALL TRENDS: QUANTIFYING THE SKYSCRAPER PHENOMENON	112
<i>Gabel Jason</i>	
URBAN FOREST REVOLUTION	122
<i>Kucherova Anastasia, Narvaez Hana</i>	
THE PROBLEMS AND PERSPECTIVES FOR THE INTRODUCTION OF HIGH-RISE CONSTRUCTION IN RUSSIAN CITIES	133
<i>Pershina Anna, Radzhabov Mehman, Dormidontova Tatyana</i>	
THE NOTION OF “HIGH” AND COMMITMENT TO EXCELLENCE IN CONTEMPORARY RUSSIAN ARCHITECTURE. HISTORY AND PROJECT: LOOKING INTO FUTURE	141
<i>Volchok Yuri</i>	
ORGANIZING VERTICAL LAYOUT ENVIRONMENTS: A FORWARD-LOOKING DEVELOPMENT STRATEGY FOR HIGH-RISE BUILDING PROJECTS	150
<i>Magay A. A., Bulgakova E. A., Zabelina S. A.</i>	
THE GLOBAL EXPERIENCE OF DEPLOYMENT OF ENERGY-EFFICIENT TECHNOLOGIES IN HIGH-RISE CONSTRUCTION	158
<i>Potienko Natalia D., Kuznetsova Anna A., Solyakova Darya N., Klyueva Yulia E.</i>	
THE DEVELOPMENT OF THE ARCHITECTURAL FORM OF A TOWER DERIVED FROM A TRADITIONAL AND PHILOSOPHICAL SYMBOL, REALIZED BY SOLUTIONS OF HIGH-CLASS TECHNOLOGIES. THE CASE OF THE BITEXCO FINANCIAL TOWER	167
<i>Van Khai Tran</i>	
COLLECTIVE SPACE OF HIGH-RISE HOUSING COMPLEX	177
<i>Bakaeva Tatyana</i>	
TYOPOLOGICAL DIVERSITY OF TALL BUILDINGS AND COMPLEXES IN RELATION TO THEIR FUNCTIONAL STRUCTURE	185
<i>Generalov Viktor P., Generalova Elena M., Kalinkina Nadezhda A., Zhdanova Irina V.</i>	
MIXED-USE DEVELOPMENT IN A HIGH-RISE CONTEXT	193
<i>Generalova Elena M., Generalov Viktor P., Kuznetsova Anna A., Bobkova Oksana N.</i>	

THE DESIGN OF AKHMAT TOWER	202
<i>Beardsley Sara, Stochetti Alejandro, Cerone Marc</i>	
REGIONAL APPROACHES IN HIGH-RISE CONSTRUCTION	214
<i>Iconopisceva O. G., Proskurin G. A.</i>	
USE OF HIGH-RISE STRUCTURES FOR SUSTAINABLE TOURISM	224
<i>Vavilova Tatiana Ya., Vyshkin Efim G.</i>	
HIGH-RISE HOUSING IN THE CITY OF SAMARA: THE FIRST STEPS ON THE PATH TO SUSTAINABLE DEVELOPMENT	233
<i>Vavilova Tatiana Ya., Makeeva Elena Yu.</i>	
DESIGN OF HIGH-RISE DWELLING HOUSES FOR HO CHI MINH CITY WITHIN THE FRAMEWORK OF THE “SMART CITY” CONCEPT	244
<i>Hong Loan Nguyen, Van Tin Nguyen</i>	
A SECOND LEVEL OF THE SAINT PETERSBURG SKYLINE	256
<i>Krasnopolsky Andrey, Bolotin Sergey</i>	
HIGH-RISE CONSTRUCTION IN HISTORICAL CITIES THROUGH THE EXAMPLE OF SAINT PETERSBURG	269
<i>Granstrem Maria, Zolotareva Milena, Slavina Tatyana</i>	
STRUCTURAL AND COMPOSITIONAL FEATURES OF HIGH-RISE BUILDINGS: EXPERIMENTAL DESIGN IN YEKATERINBURG	278
<i>Yankovskaya Yulia, Lobanov Yuriy, Temnov Vladimir</i>	
EVOLUTION OF HIGH-RISE CONSTRUCTION IN LENINGRAD – SAINT PETERSBURG IN THE MIDDLE OF THE 20TH – EARLY 21ST CENTURIES: PROJECTS AND IMPLEMENTATION	291
<i>Vaytens Andrey, Rusanov Gennadiy, Skryabin Pavel</i>	
THE IMPORTANCE OF VERTICAL BUILDINGS IN PERCEPTION AND MEMORISING THE CITY	303
<i>Alihodzic Rifat, Zupancic Domen</i>	
THE ARCHITECTURE AND ARTISTIC FEATURES OF HIGH-RISE BUILDINGS IN USSR AND THE UNITED STATES OF AMERICA DURING THE FIRST HALF OF THE TWENTIETH CENTURY	314
<i>Golovina Svetlana, Oblasov Yuri</i>	
ARCHITECTURAL AND TOWN-PLANNING RECONSTRUCTION PROBLEMS OF THE CITY OF VORONEZH	332
<i>Mikhaylova Tatyana, Parshin Dmitriy, Shoshinov Vitaly, Trebukhin Anatoliy</i>	
FORMATION AND MAINTENANCE OF THE TERRITORIAL BALANCE IN THE CONDITIONS OF HIGH-RISE CONSTRUCTION IN THE CITY	339
<i>Kisel Tatiana</i>	
FREE SPACE-PLANNING SOLUTIONS IN THE ARCHITECTURE OF MULTI-STOREY BUILDINGS	348
<i>Ibragimov Alexander, Danilov Alexander</i>	
HIGH-RISE CONSTRUCTION AS A METHOD FOR ARCHITECTURAL DEVELOPMENT OF MEGAPOLISES	354
<i>Kankhva Vadim</i>	
THE ADVISABILITY OF HIGH-RISE CONSTRUCTION IN THE CITY	360
<i>Sergievskaya Natalia, Pokrovskaya Tatyana, Vorontsova Natalya</i>	
HIGH-RISE HOUSING AS A FACTOR OF THE INCREASE IN INVESTMENT ATTRACTIVENESS OF THE CITY	370
<i>Mottaeva Angela, Zheltenkov Alexander</i>	
NATIONAL ORIGINALITY OF THE ARCHITECTURE OF KHRESHCHATYK AS A UNIQUE ENSEMBLE OF THE PERIOD OF TOTALITARIANISM	378
<i>Oliylyk Olena</i>	
SPECIFIC FEATURES OF MODERN MULTIFUNCTIONAL HIGH-RISE BUILDING CONSTRUCTION	391
<i>Manukhina Lyubov, Samosudova Natal\Ja</i>	
VERTICAL CITIES - THE NEW FORM OF HIGH-RISE CONSTRUCTION EVOLUTION	397
<i>Akrstiniiy Vera A., Boriskina Yulia I.</i>	
TREND ANALYSIS OF MODERN HIGH-RISE CONSTRUCTION	408
<i>Radushinsky Dmitry, Gubankov Andrey, Mottaeva Asiiat</i>	
CONSTRUCTIVE SYSTEMS, LOAD-BEARING AND ENCLOSING STRUCTURES OF HIGH-RISE BUILDINGS	417
<i>Korol' Elena Anatol'Evna, Kustikova Yuliya Olegovna</i>	

THE VISUAL-LANDSCAPE ANALYSIS DURING THE INTEGRATION OF HIGH-RISE BUILDINGS WITHIN THE HISTORIC URBAN ENVIRONMENT	426
<i>Akristiniy Vera A., Dikova Elena A.</i>	
THE IMPACT OF HIGH-RISE BUILDINGS ON THE LIVING ENVIRONMENT	436
<i>Giyasov Botir, Giyasova Irina</i>	
ARCHITECTURE OF STALINGRAD: THE IMAGE OF THE HERO CITY BY THE LANGUAGE OF “STALINIST EMPIRE STYLE”	443
<i>Ptichnikova Galina, Antyufeev Alexey</i>	
HYBRID PROCESSING OF LASER SCANNING DATA	455
<i>Badenko Vladimir, Zotov Dmitry, Fedotov Alexander</i>	
COMPREHENSIVE ASSESSMENT OF THE EFFICIENCY OF HIGH-RISE CONSTRUCTION PROJECTS IN THE FORM OF URBAN BLOCKS	461
<i>Orlov Alexandr, Chubarkina Irina</i>	
SHEAR-LAG EFFECT AND ITS EFFECT ON THE DESIGN OF HIGH-RISE BUILDINGS	469
<i>Dat Bui Thanh, Traykov Alexander, Traykova Marina</i>	
EFFECT OF AERATED CONCRETE BLOCKWORK JOINTS ON THE HEAT TRANSFER PERFORMANCE UNIFORMITY	482
<i>Pukhkal Viktor, Murgul Vera</i>	
ENERGY EFFICIENCY OF HIGH-RISE BUILDINGS	489
<i>Zhigulina Anna Yu., Ponomarenko Alla M.</i>	
MULTI-CRITERIA THERMAL EVALUATION OF WALL ENCLOSURES OF HIGH-RISE BUILDINGS INSULATED PRODUCTS BASED ON MODIFIED FIBERS	495
<i>Pavlov Alexey, Pavlova Larisa, Pavlova Lyudmila</i>	
COMPLEX ANALYSIS OF ENERGY EFFICIENCY IN OPERATED HIGH-RISE RESIDENTIAL BUILDING: CASE STUDY	504
<i>Korniyenko Sergey</i>	
INVESTIGATION THE EFFECT OF OUTDOOR AIR INFILTRATION ON THE HEAT-SHIELDING CHARACTERISTICS THE OUTER WALLS OF HIGH-RISE BUILDINGS	514
<i>Vytchikov Yu. S., Kostuganov A. B., Saparev M. E., Belyakov I. G.</i>	
EVALUATION OF PUNCHING SHEAR STRENGTH OF FLAT SLABS SUPPORTED ON RECTANGULAR COLUMNS	521
<i>Filatov Valery</i>	
CONSTRUCTION OF HIGH-RISE BUILDINGS IN THE FAR EAST OF RUSSIA	528
<i>Kudryavtsev Sergey, Bugunov Semen, Pogulyaeva Evgeniya, Peters Anastasiya, Kotenko Zhanna, Grigor\Yev Danil</i>	
FAILURE OF STRUCTURAL ELEMENTS MADE OF POLYMER SUPPORTED COMPOSITE MATERIALS DURING THE MULTIYEAR NATURAL AGING	535
<i>Blinkov Pavel, Ogorodov Leonid, Grabovyy Peter</i>	
DETERMINATION OF THE NEUTRALIZATION DEPTH OF CONCRETE UNDER THE AGGRESSIVE ENVIRONMENT INFLUENCE	545
<i>Morzhukhina Anastasia, Nikitin Stanislav, Akimova Elena</i>	
DETERMINATION OF POLLUTANTS IN FOUNDRY DURING THE MANUFACTURE OF METAL CONSTRUCTIONS FOR HIGH BUILDINGS	550
<i>Ivanova Irina, Sushko Elena, Lyshnikova Anna, Prykina Larisa</i>	
THE ANALYSIS OF DISPERSE AND ELEMENTAL COMPOSITION OF DUST FROM DROBESTRY INSTALLATIONS OF FOUNDRY AT THE PRODUCTION OF CONSTRUCTION STRUCTURES FOR ALTITUDE BUILDINGS	558
<i>Ivanova Irina, Golovina Elena, Kulakov Kirill, Sorokin Andrey</i>	
INVESTIGATION OF THE MOTION PROCESSES OF WASTEWATER IN SEWERAGE OF HIGH-RISE BUILDINGS	565
<i>Pomogaeva Valentina, Metechko Lyudmila, Prokofiev Dmitry, Narezhnaya Tamara</i>	
DESIGN AUTOMATION OF LOAD-BEARING ARCHED STRUCTURES OF ROOFS OF TALL BUILDINGS	574
<i>Kulikov Vladimir</i>	
DESIGN, CONSTRUCTION AND OPERATION FEATURES OF HIGH-RISE STRUCTURES	581
<i>Mylnik Alexey, Mylnik Vladimir, Zubeeva Elena, Mukhamedzhanova Olga</i>	
APPLICATION OF TUNED MASS DAMPERS IN HIGH-RISE CONSTRUCTION	587
<i>Teplyshev Vyacheslav, Mylnik Alexey, Pushkareva Maria, Agakhanov Murad, Burova Olga</i>	
PROBLEMS OF NATURAL LIGHTING FOR DEEPEDED BUILDINGS AND UNDERGROUND PREMISES UNDER SCREEN EFFECT OF HIGH-RISE CONSTRUCTION	593
<i>Larionova Kira, Stetsky Sergey</i>	

METHODS OF MATHEMATICAL MODELING USING POLYNOMIALS OF ALGEBRA OF SETS	598
<i>Kazanskiy Alexandr, Kochetkov Ivan</i>	
A COMPOSITION FOR PROTECTION THE STYLOBATE IN HIGH-RISE CONSTRUCTION FROM THE HARMFUL EFFECTS OF CAR EXHAUST GASES	605
<i>Sokolova Irina</i>	
BEHAVIOR OF SANDWICH PANELS IN A FIRE.....	609
<i>Chelekova Eugenia</i>	
OPERATIONAL FEATURES OF DECORATIVE CONCRETE.....	615
<i>Bazhenova Olga, Kotelnikov Maxim</i>	
FEASIBILITY STUDY TOOL FOR SEMI-RIGID JOINTS DESIGN OF HIGH-RISE BUILDINGS STEEL STRUCTURES.....	621
<i>Bagautdinov Ruslan, Monastireva Daria, Bodak Irina, Potapova Irina</i>	
CALIBRATION OF THE RUTTING MODEL IN HDM 4 ON THE HIGHWAY NETWORK IN MACEDONIA.....	631
<i>Ognjenovic Slobodan, Okrepilov Vladimir, Ristov Riste, Papic Jovan</i>	
CHOOSING THE FUNCTION OF MECHANICAL PROPERTIES OF GROUNDS AND ROCK FORMATIONS DUE TO THEIR HETEROGENEITY.....	640
<i>Frolova Irina, Agakhanov Murad</i>	
CALCULATION OF PVC WINDOWS FOR WIND LOADS IN HIGH-RISE BUILDINGS	645
<i>Konstantinov Aleksandr, Lambias Ratnayake Maya</i>	
APPROXIMATE METHOD FOR CALCULATING A THICKWALLED CYLINDER WITH RIGIDLY CLAMPED ENDS	651
<i>Andreev Vladimir</i>	
CALCULATION OF PRESTRESSED PRESSURE VESSEL TAKING INTO ACCOUNT THE CONCRETE TEMPERATURE INHOMOGENEITY	658
<i>Andreev Vladimir</i>	
CURVILINEAR STEEL ELEMENTS IN LOAD-BEARING STRUCTURES OF HIGH-RISE BUILDING SPATIAL FRAMES	664
<i>Ibragimov Alexander, Danilov Alexander</i>	
EFFECT OF RICE HUSK ASH AND FLY ASH ON THE WORKABILITY OF CONCRETE MIXTURE IN THE HIGH-RISE CONSTRUCTION.....	671
<i>Van Tang Lam, Bulgakov Boris, Bazhenova Sofia, Aleksandrova Olga, Ngoc Pham Anh, Dinh Vu Tho</i>	
EFFECT OF RICE HUSK ASH AND FLY ASH ON THE COMPRESSIVE STRENGTH OF HIGH PERFORMANCE CONCRETE	684
<i>Van Lam Tang, Bulgakov Boris, Aleksandrova Olga, Larsen Oksana, Ngoc Anh Pham</i>	
EXPERIMENTAL RESEARCH AND METHOD FOR CALCULATION OF 'UPSETTING-WITH-BUCKLING' LOAD AT THE IMPRESSION-FREE (DIELESS) PREFORMING OF WORKPIECE.....	697
<i>Kukhar Volodymir, Artiukh Victor, Prysiaznyi Andrii, Pustovgar Andrey</i>	
QUALITY ASSESSMENT OF URBAN AREAS BASED ON NEURAL NETWORK MODELING AND GIS	708
<i>Popova Olga, Glebova Julia, Pustovgar Andrey</i>	
ANALYSIS OF HIGH-RISE CONSTRUCTIONS WITH THE USING OF THREE-DIMENSIONAL MODELS OF RODS IN THE FINITE ELEMENT PROGRAM PRINS.....	716
<i>Agapov Vladimir</i>	
DETERMINING THE MARKET VALUE OF HIGH-RISE RESIDENTIAL BUILDINGS BASED ON EVALUATION OF CONSUMER PROPERTIES	722
<i>Kolobova Svetlana</i>	
AGGREGATIVE STABILITY OF FUNGICIDAL NANOMODIFIER BASED ON ZINC HYDROSILICATES	734
<i>Grishina Anna, Korolev Evgeniy</i>	
NEW TECHNOLOGY OF UNDERGROUND STRUCTURES THE FRAMEWORK OF RESTRAINED URBAN CONDITIONS.....	740
<i>Pleshko Mikhail, Pankratenko Alexander, Revyakin Alexey, Shchekina Ekaterina, Kholodova Svetlana</i>	
CALCULATION OF CRITICAL HEAT TRANSFER IN HORIZONTAL EVAPORATOR PIPES IN COOLING SYSTEMS OF HIGH-RISE BUILDINGS	746
<i>Aksenov Andrey, Malysheva Anna</i>	
TEMPERATURE AND VELOCITY CONDITIONS OF AIR FLOW IN VERTICAL CHANNEL OF HINGED VENTILATED FACADE OF A MULTISTORY BUILDING.....	756
<i>Statsenko Elena, Ostrovaia Anastasia, Pigurin Andrey</i>	

INTUMESCENT COATINGS WITH IMPROVED PROPERTIES FOR HIGH-RISE CONSTRUCTION	763
<i>Ustinov Andrey, Zybina Olga, Tanklevsky Leonid, Lebedev Vasily, Andreev Andrey</i>	
THE RELIABILITY OF MULTISTORY BUILDINGS WITH THE EFFECT OF NON-UNIFORM SETTLEMENTS OF FOUNDATION	770
<i>Al' Malul Rafik, Gadzhuntsev Michail</i>	
COMPLEX ASSESSMENT OF URBAN HOUSING ENERGY SUSTAINABILITY	777
<i>Popova Olga, Glebova Julia, Karakozova Irina</i>	
RESISTANCE TO THE DESTRUCTION OF CONCRETE IN CONSTRUCTIONS OF HEIGHT BUILDINGS AT DYNAMIC LOADS	785
<i>Berlinov Mikhail, Berlinova Marina, Tvorogov Alexandr</i>	
PARTITIONS FOR HIGH-RISE CONSTRUCTION USING PHOSPHOGYPSUM	792
<i>Zolotukhin Sergey, Kukina Olga, Abramenko Anatoly</i>	
RESEARCH ON CHINESE INTELLIGENT GUANGLIANDA IN HIGH-RISE CONSTRUCTION	803
<i>Romanovich Marina, Shi Peiyu, Wang Ziyue, Zhao Liang, Gerasimova Vera</i>	
HUMIDITY DISTRIBUTIONS IN MULTILAYERED WALLS OF HIGH-RISE BUILDINGS	815
<i>Gamayunova Olga, Musorina Tatiana, Ishkov Alexander</i>	
SMART GLASS AS THE METHOD OF IMPROVING THE ENERGY EFFICIENCY OF HIGH-RISE BUILDINGS	821
<i>Gamayunova Olga, Gumerova Eliza, Miloradova Nadezda</i>	

PART 2

MODERN ENERGY EFFICIENT TECHNOLOGIES OF HIGH-RISE CONSTRUCTION	827
<i>Lukmanova Inessa, Golov Roman</i>	
COMPARISON OF THERMAL STABILITY OF DRY HIGH-STRENGTH CONCRETE AND WET HIGH-STRENGTH CONCRETE	832
<i>Musorina Tatiana, Katcay Aleksandr, Selezneva Anna, Kamskov Victor</i>	
STRENGTH RESISTANCE OF REINFORCED CONCRETE ELEMENTS OF HIGH-RISE BUILDINGS UNDER DYNAMIC LOADS	839
<i>Berlinov Mikhail</i>	
ESTIMATION OF EROSION-ACCUMULATIVE PROCESSES AT THE INIA RIVER'S MOUTH NEAR HIGH-RISE CONSTRUCTION ZONES	847
<i>Sineeva Natalya</i>	
THE ASSESSMENT OF WATERS ECOLOGICAL STATE OF THE CRIMEA COASTAL NEAR HIGH-RISE CONSTRUCTION ZONES	856
<i>Vetrova Natalya, Ivanenko Tatyana, Mannanov Emran</i>	
TECHNOLOGY OF SURFACE WASTEWATER PURIFICATION, INCLUDING HIGH-RISE CONSTRUCTION AREAS	862
<i>Tsyba Anna, Skolubovich Yury</i>	
ECOLOGICALLY SAFE GEOTHERMAL ENERGY RESOURCES IN WESTERN SIBERIA NEAR HIGH-RISE CONSTRUCTION ZONES	868
<i>Shevchenko Alexandr, Shiganova Olga</i>	
SCANNING THE WELDED JOINTS OF ALUMINIUM ALLOYS USING SUBMINIATURE EDDY-CURRENT TRANSDUCERS	873
<i>Dmitriev Sergey, Ishkov Alexey, Malikov Vladimir, Sagalakov Anatoly</i>	
DESIGN OF SOLAR SYSTEMS IN HIGH-RISE BUILDINGS	883
<i>Kolosov Alexander, Chudinov Dmitry, Yaremenko Sergey</i>	
POSSIBILITIES OF USING ALUMINATE CEMENTS IN HIGH-RISE CONSTRUCTION	889
<i>Kaddo Maria</i>	
CONSTRUCTION OF HIGH-RISE BUILDING WITH UNDERGROUND PARKING IN MOSCOW	895
<i>Ilyichev Vyacheslav, Nikiforova Nadezhda, Konnov Artem</i>	
IMPROVING OF THE MONOLITHIC FOAMCONCRETE QUALITY FOR USED IN THE HIGH-RISE CONSTRUCTIONS	904
<i>Sychova Anastasia, Solomahin Andrey, Kotovich Vitaliy, Svatovskaya Larisa, Kamenev Yuriy</i>	
THE METHOD OF ABSTRACTION IN THE DESIGN OF DATABASES AND THE INTEROPERABILITY	913
<i>Yakovlev Nikolay</i>	
THE STRENGTH OF COMPRESSED STRUCTURES WITH CFRP MATERIALS REINFORCEMENT WHEN EXCEEDING THE CROSS-SECTION SIZE	920
<i>Polskoy Petr, Mailyan Dmitry, Georgiev Sergey, Muradyan Viktor</i>	

ON THE DESIGN OF HIGH-RISE BUILDINGS WITH A SPECIFIED LEVEL OF RELIABILITY	929
<i>Dolganov Andrey, Kagan Pavel</i>	
INDUSTRIAL WASTE UTILIZATION IN THE PANELS PRODUCTION FOR HIGH BUILDINGS FACADE AND SOCLE FACING	936
<i>Vitkalova Irina, Torlova Anastasiya, Pikalov Evgeniy, Selivanov Oleg</i>	
VARIATION PRINCIPLE IN CALCULATING THE FLOW OF A TWO-PHASE MIXTURE IN THE PIPES OF THE COOLING SYSTEMS IN HIGH-RISE BUILDINGS	942
<i>Aksenov Andrey, Malysheva Anna</i>	
THE METHOD OF SELECTING AN INTEGRATED DEVELOPMENT TERRITORY FOR THE HIGH-RISE UNIQUE CONSTRUCTIONS	954
<i>Sheina Svetlana, Shevtsova Elina, Sukhinin Alexander, Priss Elena</i>	
THE USE OF NANOMODIFIED CONCRETE IN CONSTRUCTION OF HIGH-RISE BUILDINGS	966
<i>Prokhorov Sergei</i>	
PROSPECTS FOR DEVELOPMENT OF HEAT SUPPLY SYSTEMS IN HIGH-RISE DISTRICTS	972
<i>Zhila Viktor, Solovyeva Elena</i>	
CONDUCTING EXPERIMENTAL INVESTIGATIONS OF WIND INFLUENCE ON HIGH-RISE CONSTRUCTIONS	980
<i>Poddaeva Olga I., Fedosova Anastasia N., Churin Pavel S., Gribach Julia S.</i>	
TECHNOLOGICAL ASPECTS OF LIFT-SLAB METHOD IN HIGH-RISE-BUILDING CONSTRUCTION.....	986
<i>Gaidukov Pavel V., Pugach Evgeny M.</i>	
EFFECT OF CHANGING OF THE PARAMETERS OF THE CABLE NETWORK OF MONITORING SYSTEMS OF HIGH-RISE BUILDINGS ON THE BASIS OF STRING CONVERTERS ON THEIR OPERABILITY	993
<i>Gusev Nikolay, Svatovskaya Larisa, Kucherenko Alexandr</i>	
USE SULFOFERRITIC CEMENTS IN CONSTRUCTION.....	1001
<i>Samchenko Svetlana V., Zorin Dmitriy A.</i>	
ON CERTAIN DEVELOPMENT ASPECTS OF AN IPSAS-BASED SYSTEM-TARGET APPROACH TO EVALUATION OF NET ASSET SUSTAINABILITY LEVEL PROJECTS IN HIGH-RISE CONSTRUCTION	1010
<i>Kazaryan Ruben</i>	
ON THE OF NEURAL MODELING OF SOME DYNAMIC PARAMETERS OF EARTHQUAKES AND FIRE SAFETY IN HIGH-RISE CONSTRUCTION	1021
<i>Haritonova Larisa</i>	
THE IMPROVEMENT OF THERMAL CHARACTERISTICS OF AUTOCLAVE AERATED CONCRETE FOR ENERGY EFFICIENT HIGH-RISE BUILDINGS APPLICATION.....	1027
<i>Khavanov Pavel, Fomina Ekaterina, Kozhukhova Natalia</i>	
BENDING OF AN INFINITE BEAM ON A BASE WITH TWO PARAMETERS IN THE ABSENCE OF A PART OF THE BASE.....	1033
<i>Aleksandrovskiy Maxim, Zaharova Lidiya</i>	
PREPARATION AND PROPERTIES OF HYBRID MATERIALS FOR HIGH-RISE CONSTRUCTIONS	1043
<i>Matseevich Tatyana</i>	
MODELLING OF ENERGY CONSUMPTION AT CONSTRUCTION OF HIGH-RISE BUILDINGS.....	1050
<i>Korol Elena, Korol Oleg</i>	
NUMERICAL VERIFICATION OF COMPOSITE RODS THEORY ON MULTI-STORY BUILDINGS ANALYSIS.....	1059
<i>El-Din Mansour Alaa, Filatov Vladimir, Gandzhuntsev Michael, Ryasny Nikita</i>	
PROPOSED STRATEGIES FOR DESIGNING SUSTAINABLE HIGH-RISE APARTMENT BUILDINGS IN HO CHI MINH CITY RESPONDING TO CRITICAL URBAN ISSUES	1065
<i>Hoang Long Truong Nguyen, Huan Giang Ngoc, Binh Duong Trong</i>	
ENSURING LIVING CONDITION FOR AGEING POPULATION BY PUBLIC-PRIVATE PARTNERSHIP (PPP).....	1079
<i>Konjar Miha, Nikšić Matej, Peter Grom Janez, Mujkic Sabina, Fikfak Alenka</i>	
MODEL AND ALGORITHM FOR SUBSTANTIATING SOLUTIONS FOR ORGANIZATION OF HIGH-RISE CONSTRUCTION PROJECT	1092
<i>Anisimov Vladimir, Anisimov Evgeniy, Chernysh Anatoliy</i>	
TWO-STAGE COMMERCIAL EVALUATION OF ENGINEERING SYSTEMS PRODUCTION PROJECTS FOR HIGH-RISE BUILDINGS	1102
<i>Bril Aleksander, Kalinina Olga, Levina Anastasia</i>	

PROJECT MANAGEMENT LIFE CYCLE MODELS TO IMPROVE MANAGEMENT IN HIGH-RISE CONSTRUCTION	1110
<i>Burmistrov Andrey, Siniavina Maria, Iliashenko Oksana</i>	
CALCULATION OF HIGH-RISE CONSTRUCTION LIMITATIONS FOR NON-RESIDENT HOUSING FUND IN MEGACITIES	1118
<i>Iliashenko Oksana, Krasnov Sergey, Sergeev Sergey</i>	
IT SOLUTION CONCEPT DEVELOPMENT FOR TRACKING AND ANALYZING THE LABOR EFFECTIVENESS OF EMPLOYEES	1128
<i>Ilin Igor, Shirokova Svetlana, Lepekhin Aleksandr</i>	
THE APPLICATION OF THE REAL OPTIONS METHOD FOR THE EVALUATION OF HIGH-RISE CONSTRUCTION PROJECTS.....	1136
<i>Izotov Aleksandr, Rostova Olga, Dubgorn Alissa</i>	
IT REQUIREMENTS INTEGRATION IN HIGH-RISE CONSTRUCTION DESIGN PROJECTS	1145
<i>Levina Anastasia, Ilin Igor, Esedulaev Rustam</i>	
ANALYSIS OF ADMINISTRATIVE BARRIERS IN THE INDUSTRY OF THE HIGH-RISE CONSTRUCTION IN RUSSIAN FEDERATION.....	1153
<i>Zaychenko Irina, Borremans Alexandra, Gutman Svetlana</i>	
NORMATIVE AND ECONOMIC FOUNDATIONS OF HIGH-RISE CONSTRUCTION IN THE CITY OF SAMARA	1163
<i>Didkovskaya Olga V., Bocharov Aleksey Y., Ilyina Marina V., Mamaeva Olga A.</i>	
SPECIFICITY OF HIGH-RISE CONSTRUCTION AND REAL ESTATE MARKETS IN THE REGIONAL ECONOMY: AN ANALYSIS OF RUSSIAN PRACTICE (EXAMPLE OF ST. PETERSBURG).....	1172
<i>Vilken Viktoriya, Kalinina Olga, Dubgorn Alissa</i>	
LIFE QUALITY AND LIVING STANDARDS IN BIG CITIES UNDER CONDITIONS OF HIGH-RISE CONSTRUCTION DEVELOPMENT	1179
<i>Avdeeva Elena, Averina Tatiana, Kochetova Larisa</i>	
MODEL OF INVESTMENT APPRAISAL OF HIGH-RISE CONSTRUCTION WITH ACCOUNT OF COST OF LAND RESOURCES.....	1186
<i>Okolelova Ella, Shibaeva Marina, Trukhina Natalya</i>	
DEVELOPMENT OF INNOVATIVE METHODS FOR RISK ASSESSMENT IN HIGH-RISE CONSTRUCTION BASED ON CLUSTERING OF RISK FACTORS	1195
<i>Okolelova Ella, Shibaeva Marina, Shalnev Oleg</i>	
METHODOLOGICAL BASES OF SELECTION AND EVALUATION OF THE EFFECTIVENESS OF THE PROJECTS OF THE URBAN TERRITORY RENOVATION.....	1204
<i>Sizova Evgeniya, Zhutaeva Evgeniya, Chugunov Andrei</i>	
TO THE ISSUE OF THE ENVIRONMENTAL DEVELOPMENT OF HOUSING CONSTRUCTION IN THE INTEGRATED LAND USE MANAGEMENT	1211
<i>Politi Violetta</i>	
HIGH-RISE CONSTRUCTION IN RUSSIA AS ONE OF THE OBJECTIVES OF IMPROVING THE MANAGEMENT MECHANISM FOR LIVING STANDARDS OF THE POPULATION	1218
<i>Sergeeva Svetlana, Komysheva Lyudmila, Nagibina Natalia</i>	
PROBLEMS OF INCREASED TRANSPORT LOAD AS A RESULT OF IMPLEMENTATION OF PROJECTS OF HIGH-RISE CONSTRUCTIONS	1225
<i>Provotorov Ivan, Gasilov Valentin, Anisimova Nadezhda</i>	
EVALUATION OF POSSIBILITY TO INCREASING SUSTAINABILITY OF HIGH-RISE BUILDINGS THROUGH USE UNIVERSITY INTELLECTUAL PROPERTY.....	1231
<i>Potekhin Igor, Mischenko Valeryi, Mottaeva Angela, Zheltenkov Alexander</i>	
METHODOLOGICAL FOUNDATIONS OF THE PREPARATION OF HIGHLY VALUED PERSONNEL FOR HIGH-RISE CONSTRUCTION	1242
<i>Belyaeva Svetlana, Belyantseva Oksana, Safonova Nataliya, Vasilyeva Olga</i>	
FORMATION OF THE PERSPECTIVE INNOVATION POLICY OF THE ENTERPRISE IN THE CONDITIONS OF ORGANIZATIONAL-ECONOMIC CHANGES	1251
<i>Uvarova Svetlana, Vlasenko Vyacheslav, Bukreev Anatoly, Myshovskaya Ludmila, Kuzina Olga</i>	
THE SUBSTANTIATION OF METHODOLOGICAL INSTRUMENTATION TO INCREASE THE TEMPO OF HIGH-RISE CONSTRUCTION IN REGION	1258
<i>Belyaeva Svetlana, Makeeva Tatyana, Chugunov Andrei, Andreeva Peraskovya</i>	
FORMATION OF THE PORTFOLIO OF HIGH-RISE CONSTRUCTION PROJECTS ON THE BASIS OF OPTIMIZATION OF «RISK-RETURN» RATE	1265
<i>Uvarova Svetlana, Kutsygina Olga, Smrodina Elena, Gumba Khuta</i>	
STRATEGIC ADVANTAGES OF HIGH-RISE CONSTRUCTION	1273
<i>Yaskova Natalya</i>	

USE OF FORMWORK SYSTEMS IN HIGH-RISE CONSTRUCTION	1279
<i>Kurakova Oksana</i>	
ECONOMIC EFFICIENCY OF HIGH-RISE CONSTRUCTION IN THE MOSCOW PROGRAM OF RENOVATION OF HOUSING STOCK	1286
<i>Misailovov Andrey</i>	
HIGH-RISE HOUSING CONSTRUCTION AS A WAY OF SOLVING THE PROBLEM OF PROVIDING PEOPLE WITH COMFORTABLE HABITATION	1293
<i>Misailovov Andrey</i>	
WORKING CAPITAL MANAGEMENT IN THE PROCESS OF FINANCIAL SUPPORT OF INVESTMENT AND CONSTRUCTION PROJECTS AND OF THE CONSTRUCTION MATERIAL INDUSTRY.....	1300
<i>Danilochkina Nadezhda, Lukmanova Inessa, Roshchina Olga, Voytolovskiy Nikolay</i>	
METHODOICAL APPROACHES TO VALUE ASSESSMENT AND DETERMINATION OF THE CAPITALIZATION LEVEL OF HIGH-RISE CONSTRUCTION.....	1307
<i>Smirnov Vitaly, Dashkov Leonid, Gorshkov Roman, Burova Olga, Romanova Alina</i>	
METHODOLOGY FOR DETERMINING THE INVESTMENT ATTRACTIVENESS OF CONSTRUCTION OF HIGH-RISE BUILDINGS.....	1313
<i>Nezhnikova Ekaterina, Kashirin Valentin, Davydova Yana, Kazakova Svetlana</i>	
MODELS OF RESOURCE PLANNING DURING FORMATION OF CALENDAR CONSTRUCTION PLANS FOR ERECTION OF HIGH-RISE BUILDINGS	1320
<i>Pocebneva Irina, Belousov Vadim, Fateeva Irina</i>	
ECONOMIC EFFICIENCY OF APPLICATION OF INNOVATIVE MATERIALS AND STRUCTURES IN HIGH-RISE CONSTRUCTION	1327
<i>Golov Roman, Dikareva Varvara, Gorshkov Roman, Agarkov Anatoly</i>	
ALGORITHM FOR EVALUATING THE EFFECTIVENESS OF A HIGH-RISE DEVELOPMENT PROJECT BASED ON CURRENT YIELD	1333
<i>Soboleva Elena</i>	
METHODOLOGY OF PROJECT MANAGEMENT AT IMPLEMENTATION OF PROJECTS OF HIGH-RISE CONSTRUCTION	1339
<i>Papelniuk Oksana</i>	
FORMATION OF COSTS OF HIGH-RISE OBJECTS OF HOUSING AND CIVIL PURPOSE BASED ON ENLARGED NORMS.....	1344
<i>Vorotyntseva Anna, Ovsianikov Andrei, Bolgov Vladimir</i>	
JUSTIFICATION OF DIRECTIONS OF TECHNOLOGICAL AND PRICE AUDIT SYSTEMS CHANGES FOR THE PURPOSE OF HIGH-RISE CONSTRUCTION INNOVATING	1350
<i>Rogacheva Yana, Panenkov Andrey, Petrikova Zinaida, Nezhnikova Ekaterina</i>	
TO THE PROBLEM OF ENSURING STABILITY OF ACTIVITIES OF CONSTRUCTION COMPANIES ENGAGED IN HIGH-RISE BUILDING CONSTRUCTION	1356
<i>Ivanov Nikolay, Safe Aldeen Ahmed</i>	
PROBLEMS AND SOLUTIONS IN THE FIELD OF IMPROVING CONTROL AND SUPERVISION ACTIVITIES IN THE CONSTRUCTION SECTOR	1364
<i>Dikareva Varvara, Mostovaya Anna</i>	
METHODS OF ERECTION OF HIGH-RISE BUILDINGS	1369
<i>Cherednichenko Nadezhda, Oleinik Pavel</i>	
INSTALLATION OF VENTILATED FACADES WITHOUT SCAFFOLDING IN HIGH-RISE BUILDINGS.....	1375
<i>Gnedina Lyubov, Muchkina Arina, Labutin Alexander</i>	
RISK MANAGEMENT AT THE STAGE OF DESIGN OF HIGH-RISE CONSTRUCTION FACILITIES	1380
<i>Politi Violetta</i>	
STUDENT SATISFACTION AS AN ELEMENT OF EDUCATION QUALITY MONITORING IN INNOVATIVE HIGHER EDUCATION INSTITUTION.....	1388
<i>Razinkina Elena, Pankova Ludmila, Trostinskaya Irina, Pozdeeva Elena, Evseeva Lidiya, Tanova Anna</i>	
4D MODELING IN HIGH-RISE CONSTRUCTION.....	1396
<i>Balakina Anastasiya, Simankina Tatyana, Lukinov Vitaly</i>	
ELABORATION OF TECHNOLOGY ORGANIZATIONAL MODELS OF CONSTRUCTING HIGH-RISE BUILDINGS IN PLANS OF CONSTRUCTION ORGANIZATION.....	1401
<i>Osipenkova Irina, Simankina Tatyana, Syrygina Taisiia, Lukinov Vitaliy</i>	
NON-PRICE COMPETITION IN THE REGIONAL HIGH-RISE CONSTRUCTION MARKET	1406
<i>Ganebnikh Elena, Burtseva Tatyana, Gurova Ekaterina, Polyakova Irina</i>	

HIGH-RISE CONSTRUCTION IN THE RUSSIAN ECONOMY: MODELING OF MANAGEMENT DECISIONS	1418
<i>Miroshnikova Tatyana, Taskaeva Natalia</i>	
INSURANCE OF RISKS AS THE INSTRUMENT OF PROTECTION OF INVESTMENTS INTO HIGH-RISE CONSTRUCTION	1426
<i>Vasilyeva Elena, Okrepilov Vladimir</i>	
CONVERSION OF WASTELANDS INTO STATE OWNERSHIP FOR THE NEEDS OF HIGH-RISE CONSTRUCTION	1432
<i>Ganebnykh Elena</i>	
SIMULATION-BASED MODELING OF BUILDING COMPLEXES CONSTRUCTION MANAGEMENT	1442
<i>Shepelev Aleksandr, Severova Galina, Potashova Irina</i>	
CURRENT-DAY MATTERS OF ADMINISTRATION AND LAW IN THE FIELD OF HIGH-RISE CONSTRUCTION	1448
<i>Voskresenskaya Elena, Snetkov Vitaly, Tebryaev Alexander</i>	
DEVELOPMENT OF NATIONAL STANDARDS RELATED TO THE INTEGRATED SAFETY AND SECURITY OF HIGH-RISE BUILDINGS	1455
<i>Voskresenskaya Elena, Vorona-Slivinskaya Lubov</i>	
NORMATIVE REGULATION OF MATERIAL INCENTIVES FOR WORKERS IN THE SPHERE OF HIGH-RISE CONSTRUCTION	1461
<i>Kopytova Anna, Matys Elena, Zotkina Natalia, Reshetnikova Irina, Meller Natalia, Nekrasova Inna</i>	
STRATEGIC AND TACTICAL ASPECT OF THE RELATIONS BETWEEN THE PARTICIPANTS OF ICP IN HIGH-RISE CONSTRUCTION	1467
<i>Fedorov Maksim, Matys Elena, Kopytova Anna</i>	
DETERMINATION OF SUSTAINABLE VALUES FOR THE PARAMETERS OF THE CONSTRUCTION OF RESIDENTIAL BUILDINGS	1478
<i>Grigoreva Larisa, Grigoryev Vladimir</i>	
ECONOMICS OF HIGH-RISE CONSTRUCTION: THE FEASIBILITY OF SKYSCRAPERS BUILDING IN THE RUSSIAN CITIES	1487
<i>Petrov Artur, Petrova Daria</i>	
LEASING INSTRUMENTS OF HIGH-RISE CONSTRUCTION FINANCING	1494
<i>Aleksandrova Olga, Ivleva Elena, Sukhacheva Viktoria, Rumyantseva Anna</i>	
PROCEDURE OF THE PREPARATORY WORKS EXECUTION DURING THE REMEDIATION OF HIGH-RISE BUILDINGS DEBRIS DUE TO THE DISASTER	1502
<i>Sinitsyn Denis</i>	
ORGANIZATIONAL-ECONOMIC MODEL OF FORMATION OF SOCIO-COMMERCIAL MULTIFUNCTIONAL COMPLEX IN THE CONSTRUCTION OF HIGH-RISE BUILDINGS	1511
<i>Kirillova Ariadna, Prytkova Oksana O.</i>	
DETERMINING THE SUPPLY OF MATERIAL RESOURCES FOR HIGH-RISE CONSTRUCTION: SCENARIO APPROACH	1519
<i>Minnullina Anna, Vasiliev Vladimir</i>	
INCREASE IN POPULATION DENSITY AND AGGRAVATION OF SOCIAL AND PSYCHOLOGICAL PROBLEMS IN AREAS WITH HIGH-RISE CONSTRUCTION	1524
<i>Romanova Elena</i>	
MEASURES TO REDUCE CONSTRUCTION TIME OF HIGH-RISE BUILDINGS	1532
<i>Kolchedantsev Leonid, Adamtsevich Aleksey, Stupakova Olga, Drozdov Alexander</i>	
DEVELOPMENT OF HIGH-RISE BUILDINGS: DIGITALIZATION OF LIFE CYCLE MANAGEMENT	1540
<i>Gusakova Elena</i>	
ECONOMIC JUSTIFICATION OF COSTS AT INSPECTION OF INDUSTRIAL SAFETY OF HIGH-RISE MARINE STRUCTURES	1546
<i>Garibin Pavel, Ol'Khovik Evgeniy, Rastorguev Igor</i>	
SOCIOECOLOGICAL ASPECTS OF HIGH-RISE CONSTRUCTION	1552
<i>Eichner Michael, Ivanova Zinaida</i>	
FORMATION OF PRODUCTION STRUCTURAL UNITS WITHIN A CONSTRUCTION COMPANY USING THE SYSTEMIC INTEGRATED METHOD WHEN IMPLEMENTING HIGH-RISE DEVELOPMENT PROJECTS	1561
<i>Lapidus Azary, Abramov Ivan</i>	
MODELING WORK OF THE DISPATCHING SERVICE OF HIGH-RISE BUILDING AS QUEUING SYSTEM	1567
<i>Dement\^Eva Marina, Dement\^Eva Anastasiya</i>	

SCALE FACTOR MANAGEMENT IN THE STUDIES OF AFFINE MODELS OF SHOCKPROOF GARMENT ELEMENTS	1578
<i>Denisov Oleg, Pleshko Mikhail, Ponomareva Irina, Merenyashev Vitaliy</i>	
HIGH-RISE CONSTRUCTION IN DENSELY DWELLED CITIES: REQUIREMENTS FOR PREMISES INSULATION AND CONSEQUENCES OF THEIR VIOLATION IN RUSSIAN LAW AND JURISPRUDENCE	1586
<i>Gongalo Boris, Gudovicheva Lubov, Gubareva Anna, Dobrynina Larisa</i>	
PRINCIPLES AND METHODS FOR ENSURING SAFE OPERATION OF HIGH-RISE BUILDINGS	1593
<i>Korol Oleg, Kustikova Yuliya</i>	
ONE OF THE CRITERIA FOR SELECTING A CONTRACTOR FOR HIGH-RISE CONSTRUCTION.....	1603
<i>Tuskaeva Zalina, Tagirov Timur</i>	
PRINCIPLES FOR THE FORMATION OF AN EFFECTIVE CONCEPT OF MULTIFUNCTIONAL HIGH-RISE CONSTRUCTION INVESTMENT PROJECTS	1610
<i>Beliakov Sergei</i>	
IMPROVEMENT OF THE COST-BENEFIT ANALYSIS ALGORITHM FOR HIGH-RISE CONSTRUCTION PROJECTS	1616
<i>Gafurov Andrey, Skotarenko Oksana, Plotnikov Vladimir</i>	
PROJECT RISK MANAGEMENT IN THE CONSTRUCTION OF HIGH-RISE BUILDINGS	1624
<i>Titarenko Boris, Hasnaoui Amir, Titarenko Roman, Buzuk Liliya</i>	
FORMATION OF INTEGRATED STRUCTURAL UNITS USING THE SYSTEMATIC AND INTEGRATED METHOD WHEN IMPLEMENTING HIGH-RISE CONSTRUCTION PROJECTS	1633
<i>Abramov Ivan</i>	
PECULIARITIES OF SOLVING THE PROBLEMS OF MODERN LOGISTICS IN HIGH-RISE CONSTRUCTION AND INDUSTRIAL PRODUCTION	1640
<i>Rubtsov Anatoliy E., Ushakova Elena V., Chirkova Tamara V.</i>	
THE METHODIC OF CALCULATION FOR THE NEED OF BASIC CONSTRUCTION MACHINES ON CONSTRUCTION SITE WHEN DEVELOPING ORGANIZATIONAL AND TECHNOLOGICAL DOCUMENTATION	1647
<i>Zhadanovsky Boris, Sinenko Sergey</i>	
THE USE OF METHODS OF STRUCTURAL OPTIMIZATION AT THE STAGE OF DESIGNING HIGH-RISE BUILDINGS WITH STEEL CONSTRUCTION	1653
<i>Vasilkin Andrey</i>	
Author Index	