Underground mining

Eremenko V.A. Gypsum–borehole observation plant to monitor stresses and strains in damaged and rockburst-hazardous rock mass of the Abakan deposit

Agafonov V.V. Sushchev R.A. Validation of rational combinations of coal mining technologies for complex geometry excavation blocks

Ermakov E.A., Senkus V.V. Analysis of estimates of efficiency of technological schemes of coal mines

Ermakov E.A., Senkus V.V. Methodology of estimation of efficiency of flowsheets of mines on economic criterion and terms of industrial safety

Karkashadze G.G., Vysotsin N.G. Analysis of the influence of the friction coefficient between the solid alloy and rock to a depth of penetration of the indenter elliptical shape with a single blow

Klimov V.V., Remezov A.V. Analysis of the effect of abutment due to production heading on neighbor excavations in ascending and descending medium-thick coal cutting in suek-kuzbass mines in terms of Polysaevskaya mine

Tretyak A.Ya., Litkevich Yu., Grossu A.N. The technology of hydraulic ore mining on Kursk magnetic anomaly field

Chernyshov A.V. Protection of underground excavations by engineering structures

Open-cast

Zhigulskaia A.I., Zyuzin B.F., Tandelov A.V., Shikhamagomedov M.K. Ecological aspects in the choice of constructive and circuit decisions of the equipment for torfodrevesnogo's processing of raw materials

Isaev V.A., Demkina A.A. Substantiation of use of tails of enrichment Olenegorsky GOK for reception of silicate materials autoclave hardening

Kaimonov M.V., Panishev S.V. Forecast temperature regime stripping rock quarries cryolithozone

Kislyakov V.E., Kazakova O.Yu. Analysis of natural moisture content reduction in clayey placer mining

Yanitsky E.B., Dunaev V.A. Rationale for technique of operational sampling apatite-staffelite ores of kovdorsky deposit

Enrichment of minerals

Alikulov Sh.Sh., Nazhimov F.F. Analysis of in-situ uranium leaching reference model customization to natural environment of a deposit

Lomonosov G.G., Turtagina N.A. Influence of coarse-grained copper-nickel ore raw materials class and its changeability upon the benefication indication

Kharlamova T.A., Alafev A.F., Bakhir V.M. Enrichment of gold-containing ore by method of hydrochlorination

Physics of rocks and processes

Golynets O.S. Sergeeva A.S. Nikonova N.A. Epshtein S.A. Prospects of application of infrared thermogravimetric moisture meters to determine total moisture of solid mineral fuel
Zhuravleva N.V., Potokina R.R., Ismagilov Z.R. The study of the gas content of coals from the Usinsk deposit in the Pechora coal basin by direct and indirect methods ..... 130
Zaletov S.V. Axisymmetric problem of bearing pressure on deformable coal seam .............. 135
Khapilova N.S., Zaletov V.V., Zaletov S.V. The influence of deformability of coal seam at spatial stressed-strained state of rock mass near of cavity ......................... 140
Antonov V.A., Kharisov T.F. Study of the deformation of rocks in the process of vertical shaft sinking ........................................................ 146
Epshtein S.A. Meidel I.M. Kharahan M.L. Determination of macroelements in coal...... 151

Measuring, control, diagnostics
Aksenov V.N., Afanasyev L.V., Cherepetskaya E.B. Visualization of the internal structure of the carbon composites by laser ultrasonic spectroscopy ....................... 161
Galavetdinov V.Z. Davydenko B.Y. Eremin V.V. Effectiveness of discharge – pulse technology in complex geological conditions ................................................. 177
Zhuravleva N.V. Ivanya kina O.V. Ismagilov Z.R., Potokina R.R. The content of toxic elements in overburden and enclosing rocks of coal deposits of the Kemerovo region ......................................................................... 187
Nabatov V.V. GPR surveys of subsoil near damaged underground utilities involving CMP methodic ........................................................................................................ 197
Orlov A.O., Smirnov Yu.G. Complex control system for parameters of a shotcrete support at the deep levels .............................................................................. 207
Sizin P.E., Shkurat nik V.L. Theoretical estimation of microcracks influence on rocks conductivity with Maxwell approximation ...................................................... 212
Shcherbinina G.P., Prostolupov G.V. High-precision gravimetry for fail-safe mining of Verkhnekamskoe Potassium Deposit ..................................................... 219

Building of underground constructions and mines
Fedorova E.V., Davydenko B.Y., Dedura A.E. Efficiency of application of steel-fibreconcrete when building underground-governmental structures in sustainable soil ....... 227
Bibikov P.Ya., Bardovskii A.D., Mitusov P.E., Kalakutskii A.V. Design in addition shredder classifier for processing weak rocks ....................................................... 233
Voloshinovskiy K.I. Hardware & circuit decisions for implementing spark & explosion safety, general argument objections ......................................................... 238
Erofeeva N.V., Chebotova I.N., Solodyankin S.S. Thermal wear of conveyor belts ....... 248
Osnovina O.N., Boe va L.M. Organizational and technical aspects of the improve operational characteristics of mining and metallurgical equipment by implementing the service strategy according to the actual state .................................... 251

Automation and information systems
Kupriyanov V.V., Lebedev P.D. Analysis of fault tolerance control system of a vehicle information ........................................................................................................ 256
Shvedov K.I. System of unification data types between different dbms in projects of innovative technologies .................................................................................. 263

Economics and management
Arutyunov T.V., Arutyunov A.A., Savenok O.V., Mollaev Z.H. Methodology of the estimation resource shale deposits ................................................................. 266

428
Petrova T.V., Bobko K.I. Mechanisms of land reclamation implementation and control in the world experience ................................................................. 271

Busyrev V.M., Churkin O.E. Balance of economic interests in subsoil use as a prerequisite to sustainable deposit development ...................................... 281

Molev M.D., Zanina I.A., Stuzhenko N.I. Methodology of formation of the system of environmental-economic monitoring at the level of the constituent entities of the Russian Federation .............................................................. 285

Oganesyan A.S., Agafonov V.V. The influence of deformability of coal seam at spatial stressed-strained state of rock mass near of cavity ........................................ 290

Tibilov D.P., Frankevich Zh.A. Features of economic planning in the preparation of the feasibility study of development of coal deposits........................................ 295

Ecology and safety exploration of mineral resources

Potapenko V.A., Voskanyan A.M. Geoinformation support of ecological monitoring in Moscow coal basin................................................................. 303

Explosive works

Mishedchenko O.A., Romanov V.N., Palankoev I.M. Explosion-generated pulse control in shaft sinking ................................................................. 307

Chefranov I.V., Lyubomishchenko E.I. Evaluation of occupational risk in drilling and blasting method of the workings ......................................................... 313

Geology

Barabasheva E.E. Prediction of ore deposits-dispersed organometallic form of gold........ 317

Mathematical modeling

Khalkechev K.V. Stages of development of knowledge about the earth’s natural resources and mining sciences ................................................................. 323

History of mining

Romanov V.N. The first Russian miners ........................................................................ 327

Tkach S.M., Batugin S.A. Stages of development of knowledge about the earth’s natural resources and mining sciences ................................................................. 333

Works of young scientists

Vakulenko I.S., Nikolaev P.V. Analysis and outlook for development of artificial freezing of rocks in underground construction ......................................................... 338

Ermakov E.A. Justification of optimum ratios of volumes of production, coal reserves, opened, prepared and ready to dredging ......................................................... 347

Journal in journal

Borzyh D.M., Nikitina A.M., Rib S.V., Friianov V.N., Ziganshin A.G., Petrov A.S. The use of innovative technical means to adjust the existing methods of selection parameters anchor mine timbering ......................................................... 353

Zayatdinov D.F., Grechishkin P.V., Pozolotin A.S., Rout G.N. Tests data for different rock bolts installed with two-barrel mineral compositions capsule AMK DK ...... 360

Rib S.V., Friianov V.N. Develop a set of problem-oriented programs for the numerical modeling of the stress-strain state of heterogeneous coal pillars ........................................ 367
Koryaga M.G., Voloshin V.A., Sychev I.I. Coal bed methane as an alternative to shale gas ...............................................................372
Koryaga M.G., Sychev I.I. A search technique for detection of methane accumu-
lation and identification of potential sites for industrial methane mining in Southern Kuzbass .................................................................380
Nikolaev E.D., Chaplygin V.V. Anthology of cleaning adhering rock material from
surface of conveyor belts ..................................................................386
Oparin V.N., Kiryaeva T.A. Genetic causes of outburst hazard and fire risk in coal
beds in Kuzbass ..................................................................................400
Rib S.V., Voloshin V.A., Frianov V.N., Maksimov A.A., Borzyh D.M., Niki-
tina A.M. Numerical modeling by finite element method of stress-strain state
of coal rock mass at the transition longwall advanced working ...............414

Preprints
Saksin B.G., Mirzehanov G.S., Rasskazov M.I. and other Engineering-geologi-
cal and geomechanical support mining work ...........................................66
Solovih D.A. Mathematical model of belt conveyor pulley tension considering varying
coefficient of friction ..........................................................................129
Kharakhan M.I. Science education students technical wu-calling in the process
of study of their physics course ................................................................150
Tailakov O.V. Evaluation method of methane resources in coal beds .............211
Dudarets M.A. Topical issues of combating smuggling crude oil and oil products as a
strategic resource: the criminal-legal aspect ...........................................302
Shurygin D.N. Study of the automation process of the forecasting of mining and geo-
logical conditions in geographic information systems of a mining company man-
agement ..............................................................................................306
Savina N.V. Modern methodological problems of financial control ..................332

The deposited manuscripts
Boyarsky G.A. Probabilistic evaluation of wear resistance vibroprokatnyh drill bits ....86
Boyarsky G.A. The method of modeling the stress-strain-standing (VAT) of tungsten
carbide products of alloy band WC-CO before reinforcement percussion drilling tool ....103