**Ключевые публикации по результатам, полученным в ЦКП ИОХ РАН за 2020-2024 гг.**

**Статьи в научных журналах**

**2020 год**

|  |
| --- |
| 1. M. A. Novikov, A. Y. Bobrova, I. A. Mezentsev, M. G. Medvedev, Y. V. Tomilov. (2-Fluoroallyl)boration of Ketones with (2-Fluoroallyl)boronates. Journal of Organic Chemistry. 2020, 85, 10, 6295-6308.  10.1021/acs.joc.9b03445 |
| 2. B. Tsyrenova, V. Khrustalev, V. Nenajdenko. 2H-Bis-1,2,3-triazolo-isoquinoline: Design, Synthesis, and Photophysical Study. Journal of Organic Chemistry. 2020, 85, 11, 7024-7035.  10.1021/acs.joc.0c00263 |
| 3. E. A. Saverina, R. R. Kapaev, P. V. Stishenko, A. S. Galushko, V. A. Balycheva, V. P. Ananikov, M. P. Egorov, V. V. Jouikov, P. A. Troshin and M. A. Syroeshkin. 2-Carboxyethylgermanium Sesquioxide as A Promising Anode Material for Li-Ion Batteries. Chemsuschem. 2020, 13, 12, 3137-3146.  10.1002/cssc.202000852 |
| 4. M. A. Prezent, S. V. Baranin and Y. N. Bubnov. A convenient synthesis of new (1,2,4-triazolylamino)pyrimidines from cyanamide precursor. Mendeleev Communications. 2020, 30, 4, 500-501.  10.1016/j.mencom.2020.07.032 |
| 5. V. A. Kokorekin, S. V. Neverov, V. N. Kuzina and V. A. Petrosyan. A New Method for the Synthesis of 3-Thiocyanatopyrazolo 1,5-a pyrimidines. Molecules. 2020, 25, 18.  10.3390/molecules25184169 |
| 6. B. V. Lichitsky, V. G. Melekhina, A. N. Komogortsev and M. E. Minyaev. A new multicomponent approach to the synthesis of substituted furan-2(5H)-ones containing 4H-chromen-4-one fragment. Tetrahedron Letters. 2020, 61, 49.  10.1016/j.tetlet.2020.152602 |
| 7. V. A. Motornov, A. A. Tabolin, Y. V. Nelyubina, V. G. Nenajdenko, S. L. Ioffe. Acid‐Mediated Three Component Assembly of 4‐Fluoropyrazoles from α‐Fluoronitroalkenes, Hydrazines, and Aldehydes. European Journal of Organic Chemistry. 2020, 2020, 32, 5211-5219.  10.1002/ejoc.202000841 |
| 8. K. I. Galkin, B. Y. Karlinskii, A. Y. Kostyukovich, E. G. Gordeev, V. P. Ananikov. Ambident Reactivity of Imidazolium Cations as Evidence of the Dynamic Nature of N-Heterocyclic Carbene-Mediated Organocatalysis. Chemistry-a European Journal. 2020, 26, 39, 8567-8571.  10.1002/chem.201905704 |
| 9. M. A. Nadirova, Y. O. V. Laba, V. P. Zaytsev, J. S. Sokolova, K. M. Pokazeev, V. A. Anokhina, V. N. Khrustalev, Y. I. Horak, R. Z. Lytvyn, M. Siczek, V. Kinzhybalo, Y. V. Zubavichus, M. L. Kuznetsov, M. D. Obushak and F. I. Zubkov. Application of the Intramolecular Diels-Alder Vinylarene (IMDAV) Approach for the Synthesis of Thieno 2,3-f isoindoles. Synthesis-Stuttgart. 2020, 52, 15, 2196-2223.  10.1055/s-0039-1690833 |
| 10. K. S. Egorova, A. V. Posvyatenko, A. N. Fakhrutdinov, A. S. Kashin and V. P. Ananikov. Assessing possible influence of structuring effects in solution on cytotoxicity of ionic liquid systems. Journal of Molecular Liquids. 2020, 297.  10.1016/j.molliq.2019.111751 |
| 11. V. S. Dorokhov, Y. V. Nelyubina, S. L. Ioffe and A. Y. Sukhorukov. Asymmetric Synthesis of Merck's Potent hNK(1) Antagonist and Its Stereoisomers via Tandem Acylation/ 3,3 -Rearrangement of 1,2-Oxazine N-Oxides. Journal of Organic Chemistry. 2020, 85, 17, 11060-11071.  10.1021/acs.joc.0c01322 |
| 12. E. D. Kazakova, D. V. Yashunsky, V. B. Kryloy, J. P. Bouchara, M. Cornet, I. Valsecchi, T. Fontaine, J. P. Latge and N. E. Nifantiev. Biotinylated Oligo-alpha-(1 -> 4)-D-galactosamines and Their N-Acetylated Derivatives: alpha-Stereoselective Synthesis and Immunology Application. Journal of The American Chemical Societ. 2020, 142, 3, 1175-1179.  10.1021/jacs.9b11703 |
| 13. K. S. Rodygin, K. A. Lotsman, V. P. Ananikov. Calcium Carbide Looping System for Acetaldehyde Manufacturing from Virtually any Carbon Source. Chemsuschem. 2020, 13, 14, 3679-3685.  10.1002/cssc.202000760 |
| 14. P. I. Abronina, N. N. Malysheva, A. I. Zinin, N. G. Kolotyrkina, E. V. Stepanova, L. O. Kononov. Catalyst-free regioselective acetylation of primary hydroxy groups in partially protected and unprotected thioglycosides with acetic acid. Rsc Advances. 2020, 10, 60, 36836-36842.  10.1039/d0ra07360a |
| 15. F. V. Ryzhkov, Y. E. Ryzhkova, M. N. Elinson, S. V. Vorobyev, A. N. Fakhrutdinov, A. N. Vereshchagin, M. P. Egorov. Catalyst-Solvent System for PASE Approach to Hydroxyquinolinone-Substituted Chromeno 2,3-b pyridines Its Quantum Chemical Study and Investigation of Reaction Mechanism. Molecules. 2020, 25, 11.  10.3390/molecules25112573 |
| 16. B. Y. Karlinskii and V. P. Ananikov. Catalytic C-H Functionalization of Unreactive Furan Cores in Bio-Derived Platform Chemicals. ChemSusChem. 2020, 14, 2, 558-568.  10.1002/cssc.202002397 |
| 17. A. A. Fadeeva, S. L. Ioffe and A. A. Tabolin. Chlorination of Conjugated Nitroalkenes with PhICl2 and SO2Cl2 for the Synthesis of alpha-Chloronitroalkenes . Synthesis-Stuttgart. 2020, 52, 18, 2679-2688.  10.1055/s-0040-1707396 |
| 18. I. V. Dyachenko, V. D. Dyachenko, P. V. Dorovatovsky, V. N. Khrustalev and V. G. Nenaidenko. Chromeno[3″,4″:5′,6′]pyrido[2′,3′:4,5]thieno[3,2-e]pyridine—A New Heterocyclic System. Synthesis and Molecular and Crystal Structures. Russian Journal of Organic Chemistry. 2020, 56, 9, 1669-1672.  10.1134/S1070428020090262 |
| 19. Mozhaitsev E. S., Ponomarev K. Y., Patrusheva O.S., Medvedko A.V., Dalinger A. I., Rogachev A.D., Komarova N.I., Korchagina D.V., Suslov E.V., Volcho K.P., Salakhutdinov N. F., Vatsadze S. Z. Conjugates of Bispidine and Monoterpenoids as Ligands of Metal Complex Catalysts for the Henry Reaction. Russian Journal of Organic Chemistry. 2020, 56, 11, 1969-1981.  10.1134/S1070428020110123 |
| 20. P. G. Sergeev, V. N. Khrustalev, V. G. Nenajdenko. Construction of 6-Aminopyridazine Derivatives by the Reaction of Malononitrile with Dichloro-Substituted Diazadienes. European Journal of Organic Chemistry. 2020, 2020, 31, 4964-4971.  10.1002/ejoc.202000807 |
| 21. A. T. Zdvizhkov, P. S. Radulov, R. A. Novikov, V. A. Tafeenko, V. V. Chernyshev, A. I. Ilovaisky, A. O. Terent'ev, G. I. Nikishin. Convenient synthesis of furo 2,3-c 1,2 dioxoles from 1-aryl-2-allylalkane-1,3-diones. Mendeleev Communications. 2020, 30, 5, 607-609.  10.1016/j.mencom.2020.09.018 |
| 22. V. A. Motornov, A. A. Tabolin, Y. V. Nelyubina, V. G. Nenajdenko and S. L. Ioffe. Copper-mediated oxidative 3+2 -annulation of nitroalkenes and pyridinium imines: efficient synthesis of 3-fluoro- and 3-nitro-pyrazolo 1,5-a pyridines. Organic & Biomolecular Chemistry. 2020, 18, 7, 1436-1448.  10.1039/c9ob02668a |
| 23. A. E. Kalugin, M. E. Minyaev, L. N. Puntus, I. V. Taydakov, E. A. Varaksina, K. A. Lyssenko, I. E. Nifant'ev, D. M. Roitershtein. Diarylphosphate as a New Route for Design of Highly Luminescent Ln Complexes. Molecules. 2020, 25, 17.  10.3390/molecules25173934 |
| 24. M. A. Belaya, D. A. Knyazev, R. A. Novikov and Y. V. Tomilov. "Diels-Alder reaction" in the ionic version: GaCl3-promoted formation of substituted cyclohexenes from donor-acceptor cyclopropanes and dienes. Tetrahedron Letters. 2020, 61, 25.  10.1016/j.tetlet.2020.151990 |
| 25. R. V. Larkovich, S. A. Ponomarev, A. S. Aldoshin, A. A. Tabolin, S. L. Ioffe and V. G. Nenajdenko. Diels-Alder Reaction of beta-Fluoro-beta-nitrostyrenes. Synthesis of Mono-fluorinated Six-Membered Derivatives. European Journal of Organic Chemistry. 2020, 2020, 17, 2479-2492.  10.1002/ejoc.202000054 |
| 26. D. M. Bystrov, I. V. Ananyev, L. L. Fershtat, N. N. Makhova. Direct Synthesis of N-(1,2,5-Oxadiazolyl)hydrazones through a Diazotization/Reduction/Condensation Cascade. Journal of Organic Chemistry. 2020, 85, 23, 15466-15475.  10.1021/acs.joc.0c02243 |
| 27. B. Y. Karlinskii, A. Y. Kostyukovich, F. A. Kucherov, K. I. Galkin, K. S. Kozlov, V. P. Ananikov. Directing-Group-Free, Carbonyl Group-Promoted Catalytic C-H Arylation of Bio-Based Furans. Acs Catalysis. 2020, 10, 19, 11466–11480.  10.1021/acscatal.0c02143 |
| 28. D. A. Chaplygin, I. V. Ananyev, L. L. Fershtat, N. N. Makhova. Divergent Synthesis of Five-Membered Nitrogen Heterocycles via Cascade Reactions of 4-Arylfuroxans . Synthesis-Stuttgart. 2020, 52, 18, 2667-2678.  10.1055/s-0040-1707393 |
| 29. Potapov K.V., Denisov D.A., Glushkova V.V., Novikov R.A., Yu.V. Tomilov. Donor−acceptor bicyclopropyls as 1,6-zwitterionic intermediates: Synthesis and reactions with 4‑phenyl-1,2,4-triazoline-3,5-dione and terminal acetylenes. Journal of Organic Chemistry. 2020, 85, 23, 15562-15576.  10.1021/acs.joc.0c02293 |
| 30. M. N. Elinson, A. N. Vereshchagin, Y. E. Anisina and M. P. Egorov. Efficient Multicomponent Approach to the Medicinally Relevant 5-aryl-chromeno 2,3-b pyridine Scaffold. Polycyclic Aromatic Compounds. 2020, 40, 1, 108-115.  10.1080/10406638.2017.1363062 |
| 31. M. N. Elinson, A. N. Vereshchagin, Y. E. Ryzhkova, S. K. Krymov, N. A. Leonova, A. S. Goloveshkin, M. P. Egorov. Electrocatalytic one-pot multicomponent assembly of aldehydes, 2,4-dihydro-3H-pyrazol-3-ones and kojic acid. Mendeleev Communications. 2020, 30, 2, 223-225.  10.1016/j.mencom.2020.03.031 |
| 32. R. S. Begunov, V. O. Sakulina M. A. Syroeshkin, E. A. Saverina, A. A. Sokolov and M. E. Minyaev. Electroreductive heterocyclization of ortho-piperidino substituted nitro(het)arenes. Mendeleev Communications. 2020, 30, 5, 633-635.  10.1016/j.mencom.2020.09.027 |
| 33. O. I. Naumenko, H. Zheng, A. S. Shashkov, Y. Sun, S. N. Senchenkova, L. Bai, J. P. Wang, H. Wang, Q. Li, Y. A. Knirel and Y. W. Xiong. Escherichia albertii EA046 (O9) harbors two polysaccharide gene clusters for synthesis of the O-antigen by the Wzx/Wzy-dependent pathway and a mannan shared by Escherichia coli O8 by the Wzm/Wzt-dependent pathway. International Journal of Biological Macromolecules. 2020, 142, 609-614.  10.1016/j.ijbiomac.2019.09.135 |
| 34. I. P. Smirnov, N. A. Kolganova, S. A. Surzhikov, I. V. Grechishnikova, R. A. Novikov, E. N. Timofeev. Folding topology, structural polymorphism, and dimerization of intramolecular DNA G-quadruplexes with inverted polarity strands and non-natural loops. International Journal of Biological Macromolecules. 2020, 162, 1972-1981.  10.1016/j.ijbiomac.2020.08.097 |
| 35. E. A. Silyanova, A. V. Samet, L. K. Salamandra, V. N. Khrustalev, V. V. Semenov. Formation of 3,4-Diarylpyrrole- and Pyrrolocoumarin Core of Natural Marine Products via Barton-Zard Reaction and Selective O-Demethylation. European Journal of Organic Chemistry. 2020, 2020, 14, 2093-2100.  10.1002/ejoc.202000099 |
| 36. N. E. Ustyuzhanina, M. I. Bilan, A. S. Dmitrenok, A. S. Shashkov, N. M. A. Ponce, C. A. Stortz, N. E. Nifantiev and A. I. Usov. Fucosylated chondroitin sulfate from the sea cucumber Hemioedema spectabilis: Structure and influence on cell adhesion and tubulogenesis. Carbohydrate Polymers. 2020, 234.  10.1016/j.carbpol.2020.115895 |
| 37. N. E. Ustyuzhanina, M. I. Bilan, A. S. Dmitrenok, A. S. Silchenko, B. B. Grebnev, V. A. Stonik, N. E. Nifantiev and A. I. Usov. Fucosylated chondroitin sulfates from the sea cucumbers paracaudina chilensis and holothuria hilla: structures and anticoagulant activity. Marine Drugs. 2020, 18, 11, 540.  10.3390/md18110540 |
| 38. V. G. Nenajdenko, N. G. Shikhaliyev, A. M. Maharramov, K. N. Bagirova, G. T. Suleymanova, A. S. Novikov, V. N. Khrustalev, A. G. Tskhovrebov. Halogenated Diazabutadiene Dyes: Synthesis, Structures, Supramolecular Features, and Theoretical Studies. Molecules. 2020, 25, 21, 5013.  10.3390/molecules25215013 |
| 39. B. D. Tsyrenova, B. N. Tarasevich, V. N. Khrustalev, I. P. Gloriozov and V. G. Nenajdenko. Hydrogen bonding in acetylene containing dichlorodiazaalkadienes. Mendeleev Communications. 2020, 30, 5, 615-617.  10.1016/j.mencom.2020.09.021 |
| 40. A. E. Varakutin, E. A. Muravsky, I. Y. Shinkarev, V. N. Khrustalev, V. V. Semenov. Hydrogenation of plant polyalkoxybenzene derivatives: convenient access to coenzyme Q(0) analogues. Mendeleev Communications. 2020, 30, 5, 599-601.  10.1016/j.mencom.2020.09.015 |
| 41. J. J. Kenyon, S. N. Senchenkova, A. S. Shashkov, M. M. Shneider, A. V. Popova, Y. A. Knirel and R. M. Hall. K17 capsular polysaccharide produced by Acinetobacter baumannii isolate G7 contains an amide of 2-acetamido-2-deoxy-D-galacturonic acid with D-alanine. International Journal of Biological Macromolecules. 2020, 144, 857-862.  10.1016/j.ijbiomac.2019.09.163 |
| 42. E. L. Zdorovenko, A. A. Kadykova, A. S. Shashkov, L. D. Varbanets, T. V. Bulyhina, Y. A. Knirel. Lipopolysaccharide of Pantoea agglomerans 7460: O-specific polysaccharide and lipid A structures and biological activity. Carbohydrate Research. 2020, 496.  10.1016/j.carres.2020.108132 |
| 43. S. M. Ivanov, L. M. Mironovich, E. D. Daeva, M. E. Minyaev. Lithiation and silylation of 7-amino-3-tert-butyl-4-oxopyrazolo 5,1-c 1,2,4 triazines. Russian Chemical Bulletin. 2020, 69, 5, 1009-1021.  10.1007/s11172-020-2862-z |
| 44. D. B. Eremin, D. A. Boiko, A. Y. Kostyukovich, J. V. Burykina, E. A. Denisova, M. Anania, J. Martens, G. Berden, J. Oomens, J. Roithova, V. P. Ananikov. Mechanistic Study of Pd/NHC-Catalyzed Sonogashira Reaction: Discovery of NHC-Ethynyl Coupling Process. Chemistry-a European Journal. 2020, 26, 67, 15672-15681.  10.1002/chem.202003533 |
| 45. I. B. Krylov, E. R. Lopat'eva, A. S. Budnikov, G. I. Nikishin, A. O. Terent'ev. Metal-Free Cross-Dehydrogenative C-O Coupling of Carbonyl Compounds with N-Hydroxyimides: Unexpected Selective Behavior of Highly Reactive Free Radicals at an Elevated Temperature. Journal of Organic Chemistry. 2020, 85, 4, 1935-1947.  10.1021/acs.joc.9b02656 |
| 46. V. V. Baranov, Y. A. Barsegyan, Y. A. Strelenko, V. A. Karnoukhova, A. N. Kravchenko. New cage-fused polyaza polycyclic systems based on thioglycolurils and alkanediamines. Mendeleev Communications. 2020, 30, 4, 479-481.  10.1016/j.mencom.2020.07.024 |
| 47. A. N. Kulakova, A. N. Bilyachenko, M. M. Levitsky, V. N. Khrustalev, E. S. Shubina, G. Felix, E. Mamontova, J. M. Long, Y. Guari, J. Larionova. New Luminescent Tetranuclear Lanthanide-Based Silsesquioxane Cage-Like Architectures. Chemistry-a European Journal. 2020, 26, 70, 16594-16598.  10.1002/chem.202003351 |
| 48. A. A. Larin, D. M. Bystrov, L. L. Fershtat, A. A. Konnov, N. N. Makhova, K. A. Monogarov, D. B. Meerov, I. N. Melnikov, A. N. Pivkina, V. G. Kiselev, N. V. Muravyev. Nitro-, Cyano-, and Methylfuroxans, and Their Bis-Derivatives: From Green Primary to Melt-Cast Explosives. Molecules. 2020, 25, 24.  10.3390/molecules25245836 |
| 49. Y. E. Tsvetkov, M. L. Gening, N. E. Nifantiev. Noncatalytic selective 6-O-acetylation of methyl 2,3-di-O-benzoyl-alpha-D-glucopyranoside with acetic acid and acetic anhydride. Russian Chemical Bulletin. 2020, 69, 11, 2228-2230.  10.1007/s11172-020-3026-x |
| 50. S. K. Vorontsova, A. V. Yadykov, A. M. Scherbakov, M. E. Minyaev, I. V. Zavarzin, E. I. Mikhaevich, Y. A. Volkova, V. Z. Shirinian. Novel d-Annulated Pentacyclic Steroids: Regioselective Synthesis and Biological Evaluation in Breast Cancer Cells. Molecules. 2020, 25, 15.  10.3390/molecules25153499 |
| 51. A. N. Komogortsev, V. G. Melekhina, B. V. Lichitsky, M. E. Minyaev. Novel one-pot approach to 2-aminofuran derivatives via multicomponent reaction of 3-hydroxy-4H-pyran-4-ones, alpha-ketoaldehydes and methylene active nitriles. Tetrahedron Letters. 2020, 61, 41.  10.1016/j.tetlet.2020.152384 |
| 52. E. L. Zdorovenko, A. A. Kadykova, A. S. Shashkov, E. P. Kiseleva, V. V. Savich, G. I. Novik. O-specific polysaccharides structures of Pseudomonas strains isolated from the strawberry leaves. Carbohydrate Research. 2020, 489.  10.1016/j.carres.2020.107932 |
| 53. M. N. Elinson, A. N. Vereshchagin, Y. E. Anisina, N. A. Leonova, M. P. Egorov. On water noncatalytic tandem Knoevenagel-Michael reaction of aldehydes, N,N'-dimethylbarbituric acid and cyclohexane-1,3-diones. Mendeleev Communications. 2020, 30, 1, 15–17.  10.1016/j.mencom.2020.01.005 |
| 54. I. V. Dyachenko, V. D. Dyachenko, P. V. Dorovatovsky, V. N. Khrustalev, V. G. Nenajdenko. One-Pot Synthesis of Thieno 2,3-b pyridine and Pyrido 3 ',2 ':4,5 thieno 3,2-d pyrimidine Derivatives. Russian Journal of Organic Chemistry. 2020, 56, 6, 974-982.  10.1134/S1070428020060020 |
| 55. E. V. Shulishov, O. A. Pantyukh, L. G. Menchikov and Y. V. Tomilov. Pathways of Pd-catalyzed cyclopropanation of tetrahydroindene with diazomethane. Mendeleev Communications. 2020, 30, 5, 612-614.  10.1016/j.mencom.2020.09.020 |
| 56. D. E. Tsvetkov, A. S. Dmitrenok, Y. E. Tsvetkov, A. O. Chizhov, N. E. Nifantiev. Polyphenol components of the knotwood extracts of Salix capreal. Russian Chemical Bulletin. 2020, 69, 12, 2390-2395.  10.1007/s11172-020-3050-x |
| 57. M. S. Ledovskaya, V. V. Voronin, M. V. Polynski, A. N. Lebedev, V. P. Ananikov. Primary Vinyl Ethers as Acetylene Surrogate: A Flexible Tool for Deuterium-Labeled Pyrazole Synthesis. European Journal of Organic Chemistry. 2020, 2020, 29, 4571-4580.  10.1002/ejoc.202000674 |
| 58. A. V. Kletskov, A. D. Zatykina, M. V. Grudova, A. A. Sinelshchikova, M. S. Grigoriev, V. P. Zaytsev, D. M. Gil, R. A. Novikov, F. I. Zubkov, A. Frontera. Raise the anchor! Synthesis, X-ray and NMR characterization of 1,3,5-triazinanes with an axial tert-butyl group. Organic & Biomolecular Chemistry. 2020, 18, 41, 8386-8394.  10.1039/d0ob01201g |
| 59. A. I. Ilovaisky, V. M. Merkulova, V. A. Vil, E. I. Chernoburova, M. A. Shchetinina, S. D. Loguzov, A. S. Dmitrenok, I. V. Zavarzin, A. O. Terent'ev. Regioselective Baeyer-Villiger Oxidation of Steroidal Ketones to Lactones Using BF3/H2O2. European Journal of Organic Chemistry. 2020, 2020, 3, 402-405.  10.1002/ejoc.201901701 |
| 60. A. S. Shashkov, E. M. Tul'skaya, G. M. Streshinskaya, A. S. Dmitrenok, N. V. Potekhina, S. N. Senchenkova, N. F. Piskunkova, L. V. Dorofeeva, L. I. Evtushenko. Rhamnomannans and Teichuronic Acid from the Cell Wall of Rathayibacter tritici VKM Ac-1603(T) . Biochemistry-Moscow. 2020, 85, 3, 369-377.  10.1134/S0006297920030128 |
| 61. F. E. Teslenko, A. I. Churakov, A. A. Larin, I. V. Ananyev, L. L. Fershtat, N. N. Makhova. Route to 1,2,4-and 1,2,5-oxadiazole ring assemblies via a one-pot condensation/oxidation protocol. Tetrahedron Letters. 2020, 61, 13.  10.1016/j.tetlet.2020.151678 |
| 62. J. V. Burykina, N. S. Shlapakov, E. G. Gordeev, B. Konig, V. P. Ananikov. Selectivity control in thiol-yne click reactions via visible light induced associative electron upconversion . Chemical Science. 2020, 11, 37, 10061-10070.  10.1039/d0sc01939a |
| 63. A. S. Kashin, A. S. Galushko, E. S. Degtyareva, V. P. Ananikov. Solid-State C-S Coupling in Nickel Organochalcogenide Frameworks as a Route to Hierarchical Structure Transfer to Binary Nanomaterials. Inorganic Chemistry. 2020, 59, 15, 10835-10844.  10.1021/acs.inorgchem.0c01352 |
| 64. E. O. Pentsak, A. S. Galushko, R. R. Shaydullin, V. P. Ananikov. Stabilization of phosphorus in (1,2,3,4,5-pentaphenylphosphole)palladium. Russian Chemical Bulletin. 2020, 69, 6, 1185-1188.  10.1007/s11172-020-2887-3 |
| 65. E. G. Shakhmatov, P. V. Toukach, E. N. Makarova. Structural studies of the pectic polysaccharide from fruits of Punica granatum. Carbohydrate Polymers. 2020, 235.  10.1016/j.carbpol.2020.115978 |
| 66. A. V. Perepelov, Y. J. Song, Y. M. Zhu, A. S. Shashkov, A. V. Filatov, B. Hu. Structure and gene cluster of the O-antigen of Escherichia coli strain SDLZB008. Carbohydrate Research. 2020, 498.  10.1016/j.carres.2020.108154 |
| 67. A. V. Safonov, A. V. Perepelov, T. L. Babich, N. M. Popova, D. S. Grouzdev, A. V. Filatov, A. S. Shashkov, L. I. Demina, T. N. Nazina. Structure and gene cluster of the O-polysaccharide from Pseudomonas veronii A-6-5 and its uranium bonding. International Journal of Biological Macromolecules. 2020, 165, 2197-2204.  10.1016/j.ijbiomac.2020.10.038 |
| 68. E. N. Sigida, A. S. Shashkov, E. L. Zdorovenko, S. A. Konnova, Y. P. Fedonenko. Structure of the O-specific polysaccharide from Azospirillum formosense CC-Nfb-7(T). Carbohydrate Research. 2020, 494.  10.1016/j.carres.2020.108060 |
| 69. A. V. Perepelov, E. M. Semenova, A. S. Shashkov, A. V. Filatov, T. N. Nazina. Structure of the O-antigen of a halophilic bacterium Salinicola salarius HO-14. Carbohydrate Research. 2020, 497.  10.1016/j.carres.2020.108149 |
| 70. E. N. Sigida, K. Y. Kargapolova, A. S. Shashkov, E. L. Zdorovenko, T. S. Ponomaryova, A. A. Meshcheryakova, O. V. Tkachenko, G. L. Burygin, Y. A. Knirel. Structure, gene cluster of the O antigen and biological activity of the lipopolysaccharide from the rhizospheric bacterium Ochrobactrum cytisi IPA7.2. International Journal of Biological Macromolecules. 2020, 154, 1375-1381.  10.1016/j.ijbiomac.2019.11.017 |
| 71. T. A. Tikhonova, N. V. Ilment, K. A. Lyssenko, I. V. Zavarzin, Y. A. Volkova. Sulfur-mediated synthesis of unsymmetrically substituted N-aryl oxalamides by the cascade thioamidation/cyclocondensation and hydrolysis reaction. Organic & Biomolecular Chemistry. 2020, 18, 26, 5050-5060.  10.1039/d0ob00811g |
| 72. L. M. Nguyen, H. H. Truong, V. N. Khrustalev, S. T. Truong, D. T. Nguyen, V. T. T. Tran, S. T. Mai, V. T. Tran, A. T. Le. Synthesis and biological evaluation of novel phane-structured diazacrowns containing γ-piperidone and pyridine rings. Mendeleev Communications. 2020, 30, 6, 753-755.  10.1016/j.mencom.2020.11.021 |
| 73. G. Z. Kaziev, A. F. Stepnova, B. V. Nguyen, P. V. Dorovatovskii, V. N. Khrustalev, S. H. Quenones. Synthesis and characterization of the acid hexamolybdocobaltate(III) complex with amino acid glycine of composition (H3O)(3) CoMo6O18(OH)(6) center dot(H3NCH2COO)(2)(H2O)(5). Russian Chemical Bulletin. 2020, 69, 5, 1030-1034.  10.1007/s11172-020-2864-x |
| 74. A. A. Konnov, M. S. Klenov, A. M. Churakov, Y. A. Strelenko, K. A. Lyssenko, V. A. Tartakovsky. Synthesis and crystal structure of the first amino-1,3a,4,6a-tetraazapentalenes. Mendeleev Communications. 2020, 30, 2, 139-141.  10.1016/j.mencom.2020.03.002 |
| 75. M. A. Bastrakov, A. K. Fedorenko, A. M. Starosotnikov, I. V. Fedyanin, V. A. Kokorekin. Synthesis and Facile Dearomatization of Highly Electrophilic Nitroisoxazolo 4,3-b pyridines. Molecules. 2020, 25, 9.  10.3390/molecules25092194 |
| 76. I. V. Dyachenko, V. D. Dyachenko, P. V. Dorovatovsky, V. N. Khrustalev, V. G. Nenaidenko. Synthesis and Properties of 3-Substituted 2H-Chromen-2-ones. Russian Journal of Organic Chemistry. 2020, 56, 7, 1123-1131.  10.1134/S1070428020070015 |
| 77. N. G. Shikhaliyev, U. F. Askerova, S. H. Mukhtarova, A. A. Niyazova, A. M. Magerramov, P. V. Dorovatovskii, V. N. Khrustalev, V. G. Nenajdenko. Synthesis and Structural Study of Dichlorodiazadienes Derived from 4-Methoxybenzaldehyde. Russian Journal of Organic Chemistry. 2020, 56, 2, 185-192.  10.1134/S1070428020020013 |
| 78. V. V. Baranov, A. A. Galochkin, Y. V. Nelyubina, A. N. Kravchenko, N. N. Makhova. Synthesis and Structure of 1-Substituted Semithioglycolurils. Synthesis-Stuttgart. 2020, 52, 17, 2563-2571.  10.1055/s-0040-1707391 |
| 79. Khomutov M. A, M. T. Hyvönen, A. I. Salikhov, A. O. Chizhov, I. M. Ryzhov, S. N. Kochetkov, J. Vepsäläinen, T. A. Keinänen, A. R. Khomutov. Synthesis of (3R,10R)- and (3S,10S)-Diastereomers of 3,10-Dimethylspermine. Russian Journal of Bioorganic Chemistry. 2020, 46, 6, 1061-1066.  10.1134/S1068162020060126 |
| 80. A. A. Fadeev, A. O. Chagarovskiy, A. S. Makarov, I. I. Levina, O. A. Ivanova, M. G. Uchuskin, I. V. Trushkov. Synthesis of (Het)aryl 2-(2-Hydroxyaryl)Cyclopropyl Ketones. Molecules. 2020, 25, 23.  10.3390/molecules25235748 |
| 81. C. V. Milyutin, B. V. Lichitsky, V. G. Melekhina, A. N. Komogortsev, A. N. Fakhrutdinov, M. E. Minyaev, M. M. Krayushkin. Synthesis of 1H-pyrano 4,3-b benzofuran-1-one derivatives via photochemical cyclization of substituted 4H-furo 3,2-c pyran-4-ones. Tetrahedron Letters. 2020, 61, 44.  10.1016/j.tetlet.2020.152469 |
| 82. I. V. Baranovsky, L. S. Konstantinova, M. A. Tolmachev, V. V. Popov, K. A. Lyssenko, O. A. Rakitin. Synthesis of 2-((2-(Benzo d oxazol-2-yl)-2H-imidazol-4-yl)amino)-phenols from 2-((5H-1,2,3-Dithiazol-5-ylidene)amino)phenols through Unprecedented Formation of Imidazole Ring from Two Methanimino Groups. Molecules. 2020, 25, 17.  10.3390/molecules25173768 |
| 83. A. O. Shvets, A. A. Konnov, M. S. Klenov, A. M. Churakov, Y. A. Strelenko, V. A. Tartakovsky. Synthesis of 2-(6-nitrobenzofuroxan-4-yl)-2H- 1,2,3 triazolo- 4,5-e 1,2,3,4 tetrazin e 4,6-dioxide. Russian Chemical Bulletin. 2020, 69, 4, 739-741.  10.1007/s11172-020-2826-3 |
| 84. L. M. Mironovich, S. M. Ivanov, N. G. Kolotyrkina. Synthesis of 3-tert-Butyl-4-hydroxy-1,4-dihydropyrazolo 5,1-c 1,2,4 triazines. Russian Journal of Organic Chemistry. 2020, 56, 4, 596-603.  10.1134/S1070428020040065 |
| 85. S. S. Arabadzhi, M. N. Zharkov, I. V. Kuchurov, S. G. Zlotin. Synthesis of Chiral N-Nitro-oxazolidin-2-ones and O-(beta-Nitraminoalkyl) Carbamates in Liquefied 1,1,1,2-Tetrafluoroethane Medium. Synthesis-Stuttgart. 2020, 52, 22, 3485-3491.  10.1055/s-0040-1706762 |
| 86. A. N. Komogortsev, V. G. Melekhina, B. V. Lichitsky, A. A. Dudinov, A. N. Fakhrutdinov, M. M. Krayushkin. Synthesis of hydroxy-containing terarylenes with pyrazole and allomaltol fragments. Russian Chemical Bulletin. 2020, 69, 4, 758-762.  10.1007/s11172-020-2829-0 |
| 87. P. G. Sergeev, V. N. Khrustalev, V. G. Nenajdenko. Synthesis of Pyridazin-3(2H)-one Derivatives by the Reaction of CH-Acids with Dichlorodiazadienes. European Journal of Organic Chemistry. 2020, 2020, 38, 6085-6093.  10.1002/ejoc.202000941 |
| 88. B. V. Lichitskii, V. G. Melekhina, A. N. Komogortsev, C. V. Milyutin, A. N. Fakhrutdinov, Y. O. Gorbunov and M. M. Krayushkin. Synthesis of substituted naphtho 1,2-b benzofuran-7(8H)-ones via photoinduced rearrangement of 4H-chromen-4-one derivatives. Organic & Biomolecular Chemistry. 2020, 18, 13, 2501-2509.  10.1039/d0ob00149j |
| 89. I. V. Krylova, E. A. Saverina, S. S. Rynin, A. V. Lalov, M. E. Minyaev, E. N. Nikolaevskaya, M. A. Syroeshkin, M. P. Egorov. Synthesis, characterization and redox properties of Ar–C=N→Ge←N=C–Ar containing system. Mendeleev Communications. 2020, 30, 5, 563–566.  10.1016/j.mencom.2020.09.003 |
| 90. A. O. Chizhov, M. L. Gening, Y. E. Tsvetkov, N.E. Nifantiev. Tandem Electrospray Mass Spectrometry of Cyclic N-substituted Oligo-ß-(1→6)-D-glucosamines. International Journal of Molecular Sciences. 2020, 21, 21.  10.3390/ijms21218284 |
| 91. V. M. Chernyshev, E. A. Denisova, D. B. Eremin, V. P. Ananikov. The key role of R-NHC coupling (R = C, H, heteroatom) and M-NHC bond cleavage in the evolution of M/NHC complexes and formation of catalytically active species. Chemical Science. 2020, 11, 27, 6957-6977.  10.1039/d0sc02629h |
| 92. M. Siwińska, A. Zabłotni, E. A. Levina, A. S. Shashkov, O. G. Ovchinnikova, A. Różalski, Yu. A. Knirel. The unique structure of bacterial polysaccharides - Immunochemical studies on the O-antigen of Proteus penneri 4034-85 clinical strain classified into a new O83 Proteus serogroup. International Journal of Biological Macromolecules. 2020, 163, 1168-1174.  10.1016/j.ijbiomac.2020.07.012 |
| 93. E. A. Kvyatkovskaya, E. V. Nikitina, V. N. Khrustalev, B. Galmes, F. I. Zubkov, A. Frontera. Through-Space "alpha-Effect" between the Bridging Oxygen Atoms in Diepoxybenzo de isothiochromene Derivatives. European Journal of Organic Chemistry. 2020, 2020, 2, 156-161.  10.1002/ejoc.201901169 |
| 94. A. S. Shashkov, E. M. Tul'skaya, L. V. Dorofeeva, L. I. Evtushenko, N. V. Potekhina. Two Glycosyl 1-Phosphate Polymers and Teichulosonic Acid from Glutamicibacter protophormiae VKM Ac-2104(T) Cell Wall. Biochemistry-Moscow. 2020, 85, 5, 629-635.  10.1134/S0006297920050120 |
| 95. P. I. Abronina, A. I. Zinin, A. O. Chizhov, L. O. Kononov. Unusual Outcome of Glycosylation: Hydrogen-Bond Mediated Control of Stereoselectivity byN-Trifluoroacetyl Group?. European Journal of Organic Chemistry. 2020, 2020, 27, 4146-4160.  10.1002/ejoc.202000520 |
| 96. D. Y. Demin, A. N. Fakhrutdinov, I. R. Ilyasov, T. K. Baryshnikova, M. M. Krayushkin, V. N. Yarovenko. Unusual transformations of 3-thiocarbamoylchromones. Tetrahedron Letters. 2020, 61, 32.  10.1016/j.tetlet.2020.152202 |
| 97. A. M. Starosotnikov, M. A. Bastrakov, V. V. Kachala, I. V. Fedyanin, S. A. Sheveleva. Vicarious nucleophilic amination of five-membered 4,6-dinitrobenzoheterocycles. Russian Chemical Bulletin. 2020, 69, 2, 390-393.  10.1007/s11172-020-2773-z |

**2021 год**

|  |
| --- |
| 1. I. A. Borisova, D. M. V. Ratova, K. V. Potapov, A. V. Tarasova, R. A. Novikov and Y. V. Tomilov. "Cyclopropanation of Cyclopropanes": GaCl3-Mediated Ionic Cyclopropanation of Donor-Acceptor Cyclopropanes with Diazo Esters as a Route to Tetrasubstituted Activated Cyclopropanes. Journal of Organic Chemistry. 2021, 86, 6, 4567-4579.  10.1021/acs.joc.0c02983 |
| 2. Chmovzh T. N., K. S. Gaisin, O. A. Rakitin. 4,7-Bis(1,2,3,4,4a,9a-hexahydro-9H-carbazol-9-yl)-[1,2,5]oxadiazolo[3,4-d]pyridazine. Molbank. 20212021, 4.  10.3390/M1295 |
| 3. Chmovzh T. N., T. A. Kudryashev, O. A. Rakitin. 4,7-Bis(dodecylthio)-[1,2,5]thiadiazolo[3,4-c]pyridine. Molbank. 20212021, 4.  10.3390/M1291 |
| 4. T. N. Chmovzh, O. A. Rakitin. 7-Bromo- 1,2,5 selenadiazolo 3,4-d pyridazin-4(5H)-on. Molbank. 20212021, 2.  10.3390/m1229 |
| 5. D. A. Bardonov, P. D. Komarov, V. I. Ovchinnikova, L. N. Puntus, M. E. Minyaev, I. E. Nifant'ev, K. A. Lyssenko, V. M. Korshunov, I. V. Taidakov, D. M. Roitershtein. Accessing Mononuclear Triphenylcyclopentadienyl Lanthanide Complexes by Using Tridentate Nitrogen Ligands: Synthesis, Structure, Luminescence, and Catalysis. Organometallics. 202140, 9, 1235-1243.  10.1021/acs.organomet.1c00022 |
| 6. A. A. Kasimova, N. P. Arbatsky, J. Tickner, J. J. Kenyon, R. M. Hall, M. M. Shneider, A. A. Dzhaparova, A. S. Shashkov, A. O. Chizhov, A. V. Popova, Y. A. Knirel. Acinetobacter baumannii K106 and K112: Two Structurally and Genetically Related 6-Deoxy-l-talose-Containing Capsular Polysaccharides. International Journal of Molecular Sciences. 202122, 11.  10.3390/ijms22115641 |
| 7. V. V. Levin and A. D. Dilman. Alkene homologation via visible light promoted hydrophosphination using triphenylphosphonium triflate. Chemical Communications. 202157, 6, 749-752.  10.1039/d0cc07025d |
| 8. A. S. Aldoshin, A. A. Tabolin, S. L. Ioffe, V. G. Nenajdenko. An Easy Synthesis of Monofluorinated Derivatives of Pyrroles from beta-Fluoro-beta-Nitrostyrenes. Molecules. 202126, 12.  10.3390/molecules26123515 |
| 9. E. Bartashevich, A. Stash, I. Yushina, M. Minyaev, O. Bol'shakov, O. Rakitin, V. Tsirelson. Bonding features in Appel's salt from the orbital-free quantum crystallographic perspective. Acta Crystallographica Section B-Structural Science Crystal Engineering and Materials. 202177, 478-487.  10.1107/s2052520621005928 |
| 10. R. Linko, M. Ryabov, P. Strashnov, P. Dorovatovskii, V. Khrustalev, V. Davydov. Charge Transfer Complexes of 1,3,6-Trinitro-9,10-phenanthrenequinone with Polycyclic Aromatic Compounds. Molecules. 202126, 21.  10.3390/molecules26216391 |
| 11. J. J. Kenyon, A. A. Kasimova, A. N. Sviridova, A. M. Shpirt, M. M. Shneider, Y. V. Mikhaylova, A. A. Shelenkov, A. V. Popova, A. V. Perepelov, A. S. Shashkov, A. S. Dmitrenok, A. O. Chizov, Y. A. Knirel. Correlation of Acinetobacter baumannii K144 and K86 capsular polysaccharide structures with genes at the K locus reveals the involvement of a novel multifunctional rhamnosyltransferase for structural synthesis. International Journal of Biological Macromolecules. 2021193, 1294-1300.  10.1016/j.ijbiomac.2021.10.178 |
| 12. D. D. Borisov, G. R. Chermashentsev, R. A. Novikov, Y. V. Tomilov. Coupling of Styrylmalonates with Furan and Benzofuran Carbaldehydes: Synthesis and Chemistry of Substituted (4-Oxocyclopent-2-enyl)malonates. Journal of Organic Chemistry. 202186, 12, 8489-8499.  10.1021/acs.joc.1c00536 |
| 13. G. S. Astakhov, M. M. Levitsky, Y. V. Zubavichus, V. N. Khrustalev, A. A. Titov, P. V. Dorovatovskii, A. F. Smol'yakov, E. S. Shubina, M. V. Kirillova, A. M. Kirillov, A. N. Bilyachenko. Cu-6- and Cu-8-Cage Sil- and Germsesquioxanes: Synthetic and Structural Features, Oxidative Rearrangements, and Catalytic Activity. Inorganic Chemistry. 202160, 11, 8062-8074.  10.1021/acs.inorgchem.1c00586 |
| 14. D. A. Boiko, E. O. Pentsak, V. A. Cherepanova, E. G. Gordeev, V. P. Ananikov. Deep neural network analysis of nanoparticle ordering to identify defects in layered carbon materials. Chemical Science. 202112, 21, 7428-7441.  10.1039/d0sc05696k |
| 15. A. A. Larin, A. V. Shaferov, A. S. Kulikov, A. N. Pivkina, K. A. Monogarov, A. O. Dmitrienko, I. V. Ananyev, D. V. Khakimov, L. L. Fershtat, N. N. Makhova. Design and Synthesis of Nitrogen-Rich Azo-Bridged Furoxanylazoles as High-Performance Energetic Materials. Chemistry – A European Journal. 202127, 59, 14628-14637.  10.1002/chem.202101987 |
| 16. E. S. Degtyareva, J. V. Burykina, V. P. Ananikov. ESI-MS Analysis of Thiol-yne Click Reaction in Petroleum Medium. Molecules. 202126, 10.  10.3390/molecules26102896 |
| 17. A. V. Churakov, A. V. Medved'ko, P. V. Prikhodchenko, D. P. Krut'ko, S. Z. Vatsadze. First example of peroxosolvate of iodine-containing organic molecule. Mendeleev Communications. 202131, 3, 352-355.  10.1016/j.mencom.2021.05.023 |
| 18. A. V. Medved'ko, D. P. Krut'ko, S. V. Gaisen, A. V. Churakov, M. E. Minyaev, A. A. Moiseeva, D. A. Lemenovsky, H. Yu, L. Wang, S. Z. Vatsadze.First examples of bispidine-ferrocene cyclophanes. Journal of Organometallic Chemistry. 2021949.  10.1016/j.jorganchem.2021.121945 |
| 19. B. V. Lichitsky, T. T. Karibov, V. G. Melekhina, A. N. Komogortsev, A. N. Fakhrutdinov, M. E. Minyaev, M. M. Krayushkin. General approach to substituted naphtho 1,2-b benzofurans via photochemical 6 pi-electrocyclization of benzofuranyl containing cinnamonitriles. Tetrahedron. 202190.  10.1016/j.tet.2021.132207 |
| 20. A. G. Martynov, M. A. Polovkova, G. S. Berezhnoy, A. A. Sinelshchikova, V. N. Khrustalev, K. P. Birin, G. A. Kirakosyan, Y. G. Gorbunova, A. Y. Tsivadze. Heteroleptic Crown-Substituted Tris(phthalocyaninates) as Dynamic Supramolecular Scaffolds with Switchable Rotational States and Tunable Magnetic Properties. Inorganic Chemistry. 202160, 12, 9110-9121.  10.1021/acs.inorgchem.1c01100 |
| 21. J. J. Kenyon, N. P. Arbatsky, E. L. Sweeney, Y. Zhang, S. N. Senchenkova, A. V. Popova, M. M. Shneider, A. S. Shashkov, B. Liu, R. M. Hall and Y. A. KnirelInvolvement of a multifunctional rhamnosyltransferase in the synthesis of three related Acinetobacter baumannii capsular polysaccharides, K55, K74 and K85. International Journal of Biological Macromolecules. 2021166, 1230-1237.  10.1016/j.ijbiomac.2020.11.005 |
| 22. Marochkin I.I., V. V. Kuznetsov, Z. D. Li, A. N. Rykov, N. N. Makhova, I. F. Shishkov.Molecular structure of 1,2-diethyldiaziridine studied by gas electron diffraction supported by quantum chemistry calculations. Journal of Molecular Structure. 20211225.  10.1016/j.molstruc.2020.129066 |
| 23. Chmovzh T. N., O. A. Rakitin. N,N-Bis(4'-(hexyloxy)-[1,1'-biphenyl]-4-yl)thiophen-2-amine. Molbank. 20212021, 4.  10.3390/M1290 |
| 24. A. S. Kashin, D. A. Boiko, V. P. Ananikov. Neural Network Analysis of Electron Microscopy Video Data Reveals the Temperature-Driven Microphase Dynamics in the Ions/Water System. Small. 202117, 24.  10.1002/smll.202007726 |
| 25. A. G. Malykh, A. R. Pavlov, A. V. Komkov, Y. A. Volkova, L. G. Menchikov, I. V. Zavarzin. New synthetic corticosteroids inhibit Epstein-Barr virus release. Mendeleev Communications. 202131, 5, 667-669.  10.1016/j.mencom.2021.09.025 |
| 26. D. A. Chaplygin, A. A. Larin, N. V. Muravyev, D. B. Meerov, E. K. Kosareva, V. G. Kiselev, A. N. Pivkina, I. V. Ananyev, L. L. Fershtat. Nitrogen-rich metal-free salts: a new look at the 5-(trinitromethyl)tetrazolate anion as an energetic moiety. Dalton Transactions. 202150, 39, 13778-13785.  10.1039/d1dt02688g |
| 27. N.E. Leonov, S.E. Semenov, M.S. Klenov, A.M. Churakov, Yu.A. Strelenko, A.N. Pivkina, I.V. Fedyanin, D.B. Lempert, T.S. Kon’kova, Yu.N. Matyushin, Evgeny A. Miroshnichenko, V.A. Tartakovsky. Novel energetic aminofurazans with a nitro-NNO-azoxy group. Mendeleev Communications. 202131, 6, 789–791.  10.1016/j.mencom.2021.11.006 |
| 28. D. Kim, A. S. Shashkov, A. S. Dmitrenok, N. V. Potekhina, S. N. Senchenkova, L. V. Dorofeeva, L. I. Evtushenko, E. M. Tul'skaya. Novel galactofuranan and pyruvylated galactomannan in the cell wall of Clavibacter michiganensis subsp. michiganensis VKM Ac-1403(T). Carbohydrate Research. 2021500.  10.1016/j.carres.2021.108247 |
| 29. M. S. Ledovskaya, M. V. Polynski, V. P. Ananikov. One-Pot and Two-Chamber Methodologies for Using Acetylene Surrogates in the Synthesis of Pyridazines and Their D-Labeled Derivatives. Chemistry-an Asian Journal. 202116, 16, 2286-2297.  10.1002/asia.202100562 |
| 30. V. V. Levin, A. D. Dilman. One-pot synthesis of alpha-trifluoromethylstyrenes from aryl ketones and the Ruppert-Prakash reagent. Mendeleev Communications. 202131, 5, 684-685.  10.1016/j.mencom.2021.09.030 |
| 31. A. A. Merkushev, A. S. Makarov, P. M. Shpuntov, V. T. Abaev, I. V. Trushkov, M. G. Uchuskin. Oxidative Rearrangement of 2-(2-Aminobenzyl)furans: Synthesis of Functionalized Indoles and Carbazoles. European Journal of Organic Chemistry. 20212021, 8, 1274-1285.  10.1002/ejoc.202001608 |
| 32. B. V. Lichitsky, C. V. Milyutin, V. G. Melekhina, A. N. Fakhrutdinov, A. N. Komogortsev, M. M. Krayushkin. Photochemical synthesis of novel naphtho 1,2-b benzofuran derivatives from 2,3-disubstituted benzofurans. Chemistry of Heterocyclic Compounds. 202157, 1, 13-19.  10.1007/s10593-021-02861-2 |
| 33. D. L. Lipilin, A. E. Frumkin, A. Y. Tyurin, V. V. Levin, A. D. Dilman. Photoredox Catalyzed Dealkylative Aromatic Halogen Substitution with Tertiary Amines. Molecules. 202126, 11.  10.3390/molecules26113323 |
| 34. E. V. Liyaskina, N. A. Rakova, A. A. Kitykina, V. V. Rusyaeva, P. V. Toukach, A. Fomenkov, S. Vainauskas, R. J. Roberts, V. V. Revin. Production and characterization of the exopolysaccharide from strain Paenibacillus polymyxa 2020. Plos One. 202116, 7.  10.1371/journal.pone.0253482 |
| 35. I. A. Andreev, N. K. Ratmanova, A. U. Augustin, O. A. Ivanova, I. I. Levina, V. N. Khrustalev, D. B. Werz, I. V. Trushkov. Protic Ionic Liquid as Reagent, Catalyst, and Solvent: 1-Methylimidazolium Thiocyanate. Angewandte Chemie-International Edition. 202160, 14, 7927-7934.  10.1002/anie.202016593 |
| 36. K. Maryunina, G. Letyagin, A. Bogomyakov, V. Morozov, S. Tumanov, S. Veber, M. Fedin, E. Saverina, M. Syroeshkin, M. Egorov, G. Romanenko, V. Ovcharenko. Re(I)-nitroxide complexes. RSC Advances. 202111, 32, 19902-19907.  10.1039/d1ra02159a |
| 37. D. D. Borisov, R. A. Novikov, Y. V. Tomilov. Reactions of Styrylmalonates with Aromatic Aldehydes: Detailed Synthetic and Mechanistic Studies. The Journal of Organic Chemistry. 202186, 6, 4457-4471.  10.1021/acs.joc.0c02891 |
| 38. D. A. Chaplygin, Y. K. Gorbunov, L. L. Fershtat. Ring Distortion Diversity-Oriented Approach to Fully Substituted Furoxans and Isoxazoles. Asian Journal of Organic Chemistry. 202110, 10, 2644-2653.  10.1002/ajoc.202100475 |
| 39. I. S. Levina, Y. V. Kuznetsov, T. A. Shchelkunova, I. V. Zavarzin. Selective ligands of membrane progesterone receptors as a key to studying their biological functions in vitro and in vivo. Journal of Steroid Biochemistry and Molecular Biology. 2021207.  10.1016/j.jsbmb.2021.105827 |
| 40. Y. A. Antonova, S. L. Ioffe, A. Y. Sukhorukov, A. A. Tabolin. Sequential Acylation/Silylation/Hetero-Claisen Rearrangement of Nitroalkanes for the Synthesis of Protected Hydroxyoxime Derivatives. European Journal of Organic Chemistry. 20212021, 22, 3197-3213.  10.1002/ejoc.202100469 |
| 41. P. S. Lemport, M. V. Evsiunina, Y. V. Nelyubina, K. L. Isakovskaya, V. N. Khrustalev, V. S. Petrov, A. S. Pozdeev, P. I. Matveev, Y. A. Ustynyuk, V. G. Nenajdenko. Significant impact of lanthanide contraction on the structure of the phenanthroline complexes. Mendeleev Communications. 202131, 6, 853-855.  10.1016/j.mencom.2021.11.028 |
| 42. A. Y. Chernenko, A. V. Astakhov, V. V. Kutyrev, E. G. Gordeev, J. V. Burykina, M. E. Minyaev, V. N. Khrustalev, V. M. Chernyshev, V. P. Ananikov. Stabilization of the Pd-NHC framework with 1,2,4-triazol-5-ylidene ligands toward decomposition in alkaline media. Inorganic Chemistry Frontiers. 20218, 13, 3382-3401.  10.1039/d1qi00453k |
| 43. S. Budnikov, I. B. Krylov, A. V. Lastovko, S. A. Paveliev, A. R. Romanenko, G. I. Nikishin, A. O. Terent'ev. Stable and reactive diacetyliminoxyl radical in oxidative C-O coupling with beta-dicarbonyl compounds and their complexes. Organic & Biomolecular Chemistry. 202119, 35, 7581-7586.  10.1039/d1ob01269j |
| 44. N. P. Arbatsky, A. V. Popova, M. M. Shneider, A. S. Shashkov, R. M. Hall, J. J. Kenyon, Y. A. Knirel. Structure of the K87 capsular polysaccharide and KL87 gene cluster of Acinetobacter baumannii LUH5547 reveals a heptasaccharide repeating unit. Carbohydrate Research. 2021509.  10.1016/j.carres.2021.108439 |
| 45. V. S. Dorokhova, A. G. Gerbst, B. S. Komarova, J. O. Previato, L. M. Previato, A. S. Dmitrenok, A. S. Shashkov, V. B. Krylov, N. E. Nifantiev. Synthesis and conformational analysis of vicinally branched trisaccharide beta-d-Galf-(1 -> 2)- beta-d-Galf-(1 -> 3)- -alpha-Galp from Cryptococcus neoformans galactoxylomannan. Organic & Biomolecular Chemistry. 202119, 13, 2923-2931.  10.1039/d0ob02071k |
| 46. N.E. Leonov, F.M. Sidorov, M.S. Klenov, A.M. Churakov, Yu.A. Strelenko, A.N. Pivkina, I.V. Fedyanin, D.B. Lempert, T.S. Kon’kova, Yu.N. Matyushin, V.A. Tartakovsky. Synthesis and properties of novel energetic (cyano-NNO-azoxy)furazans. Mendeleev Communications. 202131, 6, 792–794.  10.1016/j.mencom.2021.11.007 |
| 47. B. V. Lichitsky, V. G. Melekhina, A. N. Komogortsev, V. A. Migulin, Y. V. Nelyubina, A. N. Fakhrutdinov, E. D. Daeva, A. A. Dudinov. Synthesis of novel substituted (4H-furo 2,3-h chromen-9-yl)-acetic acids via multicomponent reaction of flavones, arylglyoxals and Meldrum's acid. Tetrahedron. 202183.  10.1016/j.tet.2021.131980 |
| 48. D. D. Borisov, G. R. Chermashentsev, R. A. Novikov, Y. V. Tomilov. Synthesis of Substituted beta-Styrylmalonates by Sequential Isomerization of 2-Arylcyclopropane-1,1-dicarboxylates and (2-Arylethylidene)malonates. Synthesis-Stuttgart. 202153, 13, 2253-2259.  10.1055/a-1348-4311 |
| 49. A. S. Burlov, V. G. Vlasenko, Y. V. Koshchienko, M. S. Milutka, E. I. Mal'tsev, A. V. Dmitriev, D. A. Lypenko, N. V. Nekrasova, A. A. Kolodina, N. I. Makarova, A. V. Metelitsa, V. A. Lazarenko, Y. V. Zubavichus, V. N. Khrustalev, D. A. Garnovskii. Synthesis, structure, and photoluminescent and electroluminescent properties of zinc(II) complexes with bidentate azomethine ligands. Applied Organometallic Chemistry. 202135, 2.  10.1002/aoc.6107 |
| 50. G. M. Averochkin, E. G. Gordeev, M. K. Skorobogatko, F. A. Kucherov, V. P. Ananikov. Systematic Study of Aromatic-Ring-Targeted Cycloadditions of 5-Hydroxymethylfurfural Platform Chemicals. ChemSusChem. 202114, 15, 3110-3123.  10.1002/cssc.202100818 |
| 51. T. N. Chmovzh, O. A. Rakitin. tert-Butyl Bis(4 '-(Hexyloxy)- 1,1 '-biphenyl -4-yl)carbamate. Molbank. 20212021, 3.  10.3390/m1247 |
| 52. V. P. AnanikovThe dawn of cross-coupling. Nature Catalysis. 20214, 9, 732-733.  10.1038/s41929-021-00675-1 |
| 53. P. I. Abronina, A. I. Zinin, N. N. Malysheva, M. Y. Karpenko, N. G. Kolotyrkina, L. O. Kononov. The Influence of Anomeric Configuration and Aglycone Structure on the Outcome of Acid-Promoted Ring Contraction in 2,3-Di-O-Silylated S-Galactopyranosides. ChemistrySelect. 20216, 24, 6223-6229.  10.1002/slct.202101441 |
| 54. A. A. Kasimova, S. M. Cahill, A. M. Shpirt, A. G. Dudnik, M. M. Shneider, A. V. Popova, A. A. Shelenkov, Y. V. Mikhailova, A. O. Chizhov, J. J. Kenyon, Y. A. Knirel. The K139 capsular polysaccharide produced by Acinetobacter baumannii MAR17-1041 belongs to a group of related structures including K14, K37 and K116. International Journal of Biological Macromolecules. 2021193, 2297-2303.  10.1016/j.ijbiomac.2021.11.062 |
| 55. A. A. Kasimova, N. P. Arbatsky, O. Y. Timoshina, M. M. Shneider, A. S. Shashkov, A. O. Chizhov, A. V. Popova, R. M. Hall, J. J. Kenyon, Y. A. Knire. The K26 capsular polysaccharide from Acinetobacter baumannii KZ-1098: Structure and cleavage by a specific phage depolymerase. International Journal of Biological Macromolecules. 2021191, , 182-191.  10.1016/j.ijbiomac.2021.09.073 |
| 56. D. M. Arkhipova, V. V. Ermolaev, V. A. Miluykov, F. G. Valeeva, G. A. Gaynanova, L. Y. Zakharova, M. E. Minyaev, V. P. Ananikov. Tri-tert-butyl(n-alkyl)phosphonium Ionic Liquids: Structure, Properties and Application as Hybrid Catalyst Nanomaterials. Sustainability. 202113, 17.  10.3390/su13179862 |
| 57. V. V. Chernyshov, O. I. Yarovaya, S. Z. Vatsadze, S. S. Borisevich, S. N. Trukhan, Y. V. Gatilov, R. Y. Peshkov, I. V. Eltsov, O. N. Martyanov, N. F. Salakhutdinov. Unexpected Ring Opening During the Imination of Camphor-Type Bicyclic Ketones. European Journal of Organic Chemistry. 20212021, 3, 452-463.  10.1002/ejoc.202001397 |
| 58. A. A. Astafiev, O. V. Repina, B. S. Tupertsev, A. A. Nazarov, M. R. Gonchar, A. V. Vologzhanina, V. G. Nenajdenko, A. S. Kritchenkov, V. N. Khrustalev, V. N. Nadtochenko, A. G. Tskhovrebov. Unprecedented Coordination-Induced Bright Red Emission from Group 12 Metal-Bound Triarylazoimidazoles. Molecules. 202126, 6.  10.3390/molecules26061739 |
| 59. E. A. Merkulova, A. V. Kolobov, K. L. Ovchinnikov, V. N. Khrustalev, V. G. Nenajdenko. Unsaturated carboxylic acids in the one-pot synthesis of novel derivatives of 3,4-dihydro-2H-thiopyran. Chemistry of Heterocyclic Compounds. 202157, 3, 245-252.  10.1007/s10593-021-02900-y |
| 60. A. S. Kashin, E. S. Degtyareva, V. P. Ananikov. Visualization of the Mechanical Wave Effect on Liquid Microphases and Its Application for the Tuning of Dissipative Soft Microreactors. Journal of the American Chemical Society Au. 20211, 1, 87-97.  10.1021/jacsau.0c00024 |

**2022 год**

|  |
| --- |
| 1. A. S. Budnikov, E. R. Lopat'eva, I. B. Krylov, O. O. Segida, A. V. Lastovko, A. I. Ilovaisky, G. I. Nikishin, A. P. Glinushkin and A. O. Terent'ev4-Nitropyrazolin-5-ones as Readily Available Fungicides of the Novel Structural Type for Crop Protection: Atom-Efficient Scalable Synthesis and Key Structural Features Responsible for Activity. Journal of Agricultural and Food Chemistry. 2022, 70, 15, 4572-4581.  10.1021/acs.jafc.1c07413 |
| 2. I. A. Andreev, M. A. Boichenko, N. K. Ratmanova, O. A. Ivanova, I. I. Levina, V. N. Khrustalev, I. A. Sedov, I. V. Trushkov. 4-(Dimethylamino)Pyridinium Azide in Protic Ionic Liquid Media as a Stable Equivalent of Hydrazoic Acid. Advanced Synthesis and Catalysis. 2022, 364, 14, 2403-2415.  10.1002/adsc.202200486 |
| 3. A. N. Izmest'ev, A. A. Streltsov, V. A. Karnoukhova, N. G. Kolotyrkina, Y. A. Strelenko, A. N. Kravchenko, G. A. Gazieva. 5-Indolylidene-2-iminothiazolidin-4-ones – Convenient Starting Compounds for Stereoselective Synthesis of Novel Dispirooxindole Derivatives. ChemistrySelect. 2022, 7, 2.  10.1002/slct.202104128 |
| 4. A. Yu. Kostyukovich, E. G. Gordeev and V. P. AnanikovA computational mapping of the R–NHC coupling pathway – the key process in the evolution of Pd/NHC catalytic systems. Mendeleev Communications. 2022, 32, 5, 571-575.  10.1016/j.mencom.2022.09.001 |
| 5. N. S. Kulikovskaya, E. A. Denisova, V. P. Ananikov. A novel approach to study catalytic reactions via electrophoretic NMR on the example of Pd/NHC-catalyzed Mizoroki–Heck cross-coupling reaction. Magnetic Resonance in Chemistry. 2022, 60, 10, 954-962.  10.1002/mrc.5295 |
| 6. A. N. Bilyachenko, V. N. Khrustalev, A. Y. Zueva, E. M. Titova, G. S. Astakhov, Y. V. Zubavichus, P. V. Dorovatovskii, A. A. Korlyukov, L. S. Shul’pina, E. S. Shubina, Y. N. Kozlov, N. S. Ikonnikov, D. Gelman, G. B. Shul’pin. A Novel Family of Cage-like (CuLi, CuNa, CuK)-phenylsilsesquioxane Complexes with 8-Hydroxyquinoline Ligands: Synthesis, Structure, and Catalytic Activity. Molecules. 2022, 27, 19.  10.3390/molecules27196205 |
| 7. D. Y. Uvarov, S. A. Gorbatov, M. K. Kolokolova, M. A. Kozlov, N. G. Kolotirkina, I. V. Zavarzin, C. Goze, F. Denat, Y. A. Volkova. A Straightforward Strategy for the Preparation of Diverse BODIPY Functionalized with Polyamines and Polyoxyethylenes\*\*. ChemistrySelect. 2022, 7, 6.  10.1002/slct.202104210 |
| 8. A. N. Bilyachenko, E. I. Gutsul, V. N. Khrustalev, G. S. Astakhov, A. Y. Zueva, Y. V. Zubavichus, M. V. Kirillova, L. S. Shul'Pina, N. S. Ikonnikov, P. V. Dorovatovskii, E. S. Shubina, A. M. Kirillov, G. B. Shul'Pin. Acetone Factor in the Design of Cu4-, Cu6-, and Cu9-Based Cage Coppersilsesquioxanes: Synthesis, Structural Features, and Catalytic Functionalization of Alkanes. Inorganic Chemistry. 2022, 61, 37, 14800 – 14814.  10.1021/acs.inorgchem.2c02217 |
| 9. M. R. Agliullin, Y. G. Kolyagin, D. V. Serebrennikov, N. G. Grigor'eva, A. S. Dmitrenok, V. N. Maistrenko, E. Dib, S. Mintova, B. I. Kutepov. Acid properties and morphology of SAPO-11 molecular sieve controled by silica source. Microporous and Mesoporous Materials. 2022, 338.  10.1016/j.micromeso.2022.111962 |
| 10. A. E. Vartanova, I. I. Levina, N. K. Ratmanova, I. A. Andreev, O. A. Ivanova, I. V. Trushkov. Ambident reactivity of 5-aminopyrazoles towards donor-acceptor cyclopropanes. Organic and Biomolecular Chemistry. 2022, 20, 39, 7795-7802.  10.1039/d2ob01490d |
| 11. A. A. Voronin, S. P. Balabanova, I. V. Fedyanin, A. M. Churakov, A. N. Pivkina, Y. A. Strelenko, M. S. Klenov, V. A. Tartakovsky. Anions Containing Tripoid Conjugated N4− System: Salts of 5-(Substituted Amino)-[1,2,3]triazolo[4,5-c][1,2,5]oxadiazol-5-ium-4-ides, as well as Their Synthesis, Structure, and Thermal Stability. Molecules. 2022, 27, 19.  10.3390/molecules27196287 |
| 12. D. A. Boiko, V. V. Sulimova, M. Y. Kurbakov, A. V. Kopylov, O. S. Seredin, V. A. Cherepanova, E. O. Pentsak, V. P. Ananikov. Automated Recognition of Nanoparticles in Electron Microscopy Images of Nanoscale Palladium Catalysts. Nanomaterials. 2022, 12, 21.  10.3390/nano12213914 |
| 13. K. S. Egorova, M. M. Seitkalieva, A. S. Kashin, E. G. Gordeev, A. V. Vavina, A. V. Posvyatenko, V. P. Ananikov. Biological activity, solvation properties and microstructuring of protic imidazolium ionic liquids. Journal of Molecular Liquids. 2022, 367.  10.1016/j.molliq.2022.120450 |
| 14. P. A. Fedyushin, A. A. Serykh, A. S. Vinogradov, T. V. Mezhenkova, V. E. Platonov, D. I. Nasyrova, A. I. Samigullina, M. V. Fedin, I. A. Zayakin, E. V. Tretyakov. Biradical with a polyfluorinated terphenylene backbone. Russian Chemical Bulletin. 2022, 71, 8, 1670-1678.  10.1007/s11172-022-3577-0 |
| 15. M. E. Minyaev, K. A. Lyssenko, D. M. Roitershtein, I. E. Nifant'ev. Bis(η5-cyclo­penta­dien­yl)(2-{[(2-meth­­oxy­phen­yl)imino]­meth­yl}phenolato-κ3O,N,O′)terbium. Acta Crystallographica Section E: Crystallographic Communications. 2022, 78, 1, 44-46.  10.1107/S2056989021013025 |
| 16. I. V. Myachin, Z. Z. Mamirgova, E. V. Stepanova, A. I. Zinin, A. O. Chizhov, L. O. Kononov. Black Swan in Phase Transfer Catalysis: Influence of Mixing Mode on the Stereoselectivity of Glycosylation. European Journal of Organic Chemistry. 2022, 2022, 14.  10.1002/ejoc.202101377 |
| 17. G. S. Astakhov, V. N. Khrustalev, M. S. Dronova, E. I. Gutsul, A. A. Korlyukov, D. Gelman, Y. V. Zubavichus, D. A. Novichkov, A. L. Trigub, E. S. Shubina, A. N. Bilyachenko. Cage-like manganesesilsesquioxanes: features of their synthesis, unique structure, and catalytic activity in oxidative amidations. Inorganic Chemistry Frontiers. 2022, 9, 17, 4525-4537.  10.1039/d2qi01054b |
| 18. A. Y. Drobiazko, А. A. Kasimova, P. V. Evseev, M. M. Shneider, E. I. Klimuk, A. S. Shashkov, A. S. Dmitrenok, A. O. Chizhov, P. V. Slukin, Y. P. Skryabin, N. V. Volozhantsev, K. A. Miroshnikov, Y. A. Knirel, A. V. Popova. Capsule‐Targeting Depolymerases Derived from Acinetobacter baumannii Prophage Regions. International Journal of Molecular Sciences. 2022, 23, 9.  10.3390/ijms23094971 |
| 19. E. O. Pentsak, L. U. Dzhemileva, V. A. D'Yakonov, R. R. Shaydullin, A. S. Galushko, K. S. Egorov, V. P. Ananikov. Comparative assessment of heterogeneous and homogeneous Suzuki-Miyaura catalytic reactions using bio-Profiles and bio-Factors. Journal of Organometallic Chemistry. 2022, 965-966.  10.1016/j.jorganchem.2022.122319 |
| 20. N. V. Volozhantsev, A. I. Borzilov, A. M. Shpirt, V. M. Krasilnikova, V. V. Verevkin, E. A. Denisenko, T. I. Kombarova, A. S. Shashkov, Y. A. Knirel, I. A. Dyatlov. Comparison of the therapeutic potential of bacteriophage KpV74 and phage-derived depolymerase (β-glucosidase) against Klebsiella pneumoniae capsular type K2. Virus Research. 2022, 322.  10.1016/j.virusres.2022.198951 |
| 21. R. K. Askerov, Y. El Bakri, V. K. Osmanov, S. Ahmad, K. Saravanan, G. N. Borisova, R. H. O. Nazarov, E. V. Baranov, G. K. Fukin, D. G. Fukina, V. N. Khrustalev, A. V. Borisov. Complexes of 1-(2-R(F, CH3, Cl)-phenyl)-1,4-dihydro-5H-tetrazole-5-thiones with cadmium chloride: Synthesis, molecular, crystal structures and computational investigation approach. Journal of Inorganic Biochemistry. 2022, 231.  10.1016/j.jinorgbio.2022.111791 |
| 22. P.D. Komarov, K.P. Birin, A.A. Vinogradov, E.A. Varaksina, L.N. Puntus, K.A. Lyssenko, A.V. Churakov, I.E. Nifant’ev, M. E. Minyaev, D.M. Roitershtein. Coordination Polymers of Polyphenyl-Substituted Potassium Cyclopentadienides. Molecules. 2022, 27, 22.  10.3390/molecules27227725 |
| 23. M. Akkurt, S. O. Yildirim, N. Q. Shikhaliyev, N. A. Mammadova, A. A. Niyazova, V. N. Khrustalev, A. Bhattarai. Crystal structure and Hirshfeld surface analysis of (E)-2-(4-bromophenyl)-1-[2,2-dibromo-1-(4-nitrophenyl)ethenyl]diazene. Acta Crystallographica Section E: Crystallographic Communications.. 2022, 78, 7, 732-736.  10.1107/S205698902200620X |
| 24. K. A. Asadov, V. N. Khrustalev, E. V. Dobrokhotova, M. Akkurt, A. T. Huseynova, A. A. Akobirshoeva, E. Z. Huseynov. Crystal structure and Hirshfeld surface analysis of 2-amino-4-(4-methoxyphenyl)-6-oxo-1-phenyl-1,4,5,6-tetrahydropyridine-3-carbonitrile. Acta Crystallographica Section E: Crystallographic Communications. 2022, 78, 3, 330-335.  10.1107/S205698902200175X |
| 25. I. G. Mamedov, V. N. Khrustalev, M. Akkurt, A. P. Novikov, A. R. Asgarova, K. N. Aliyeva, A. A. Akobirshoeva. Crystal structure and Hirshfeld surface analysis of 5-acetyl-2-amino-4-(4-bromophenyl)-6-oxo-1-phenyl-1,4,5,6-tetrahydropyridine-3-carbonitrile. Acta Crystallographica Section E: Crystallographic Communications. 2022, 78, 3, 291-296.  10.1107/S2056989022001232 |
| 26. S. A. Fateev, E. I. Marchenko, A. S. Shatilova, V. N. Khrustalev, E. A. Goodilin and A. B. TarasovCrystallization Pathways of FABr-PbBr2-DMF and FABr-PbBr2-DMSO Systems: The Comprehensive Picture of Formamidinium-Based Low-Dimensional Perovskite-Related Phases and Intermediate Solvates. International Journal of Molecular Sciences. 2022, 23, 23.  10.3390/ijms232315344 |
| 27. D. A. Bardonov, P. D. Komarov, G. I. Sadrtdinova, V. K. Besprozvannyh, K. A. Lyssenko, A. O. Gudovannyy, I. E. Nifant'ev, M. E. Minyaev, D. M. Roitershtein. Cyclopentadienyl lanthanide borohydrides derived from the unsubstituted cyclopentadienyl ligand. Unprecedented structural diversity and ε-caprolactone polymerization. Inorganica Chimica Acta. 2022, 529.  10.1016/j.ica.2021.120638 |
| 28. L. M. Likhosherstov, N. G. Kolotirkina, V. E. Piskarev. Daunorubicin glycoconjugates with natural galectin ligands. Russian Chemical Bulletin. 2022, 71, 3, 572-576.  10.1007/s11172-022-3450-1 |
| 29. N. E. Ustyuzhanina, M. I. Bilan, N. Y. Anisimova, A. S. Dmitrenok, E. A. Tsvetkova, M. V. Kiselevskiy, N. E. Nifantiev, A. I. Usov. Depolymerization of a fucosylated chondroitin sulfate from Cucumaria japonica: Structure and activity of the product. Carbohydrate Polymers. 2022, 281, , .  10.1016/j.carbpol.2021.119072 |
| 30. A. N. Izmest’ev, L. V. Anikina, I. E. Zanin, N. G. Kolotyrkina, E. S. Izmalkova, A. N. Kravchenko, G. A. Gazieva. Design, synthesis and in vitro evaluation of the hybrids of oxindolylidene and imidazothiazolotriazine as efficient antiproliferative agents. New Journal of Chemistry. 2022, 46, 24, 11632-11647.  10.1039/d2nj01454h |
| 31. F. A. Kucherov, L. V. Romashov, V. P. Ananikov. Development of 3D+G printing for the design of customizable flow reactors. Chemical Engineering Journal. 2022, 430.  10.1016/j.cej.2021.132670 |
| 32. V. M. Chernyshev, O. V. Khazipov, M. A. Shevchenko, D. V. Pasyukov, J. V. Burykina, M. E. Minyaev, D. B. Eremin, V. P. Ananikov. Discovery of the N-NHC Coupling Process under the Conditions of Pd/NHC- and Ni/NHC-Catalyzed Buchwald-Hartwig Amination. Organometallics. 2022, 41, 12, 1519-1531.  10.1021/acs.organomet.2c00166 |
| 33. O. V. Bityukov, A. S. Kirillov, P. Y. Serdyuchenko, M. A. Kuznetsova, V. N. Demidova, V. A. Vil’, A. O. Terent'ev. Electrochemical thiocyanation of barbituric acids. Organic and Biomolecular Chemistry. 2022, 20, 17, 3629-3636.  10.1039/d2ob00343k |
| 34. A. V. Gannesen, R. H. Ziganshin, E. L. Zdorovenko, A. I. Klimko, E. A. Ianutsevich, O. A. Danilova, V. M. Tereshina, M. V. Gorbachevskii, M. A. Ovcharova, E. D. Nevolina, S. V. Martyanov, A. S. Shashkov, A. S. Dmitrenok, A. A. Novikov, M. V. Zhurina, E. A. Botchkova, P. V. Toukach, V. K. Plakunov.  Epinephrine extensively changes the biofilm matrix composition in Micrococcus luteus C01 isolated from human skin. Frontiers in Microbiology. 2022, 13.  10.3389/fmicb.2022.1003942 |
| 35. E. E. Ondar, J. V. Burykina, V. P. Ananikov. Evidence for the “cocktail” nature of platinum-catalyzed alkyne and alkene hydrosilylation reactions. Catalysis Science and Technology. 2022, 12, 4, 1173-1186.  10.1039/d1cy02006d |
| 36. E. G. Gordeev, K. S. Erokhin, A. D. Kobelev, J. V. Burykina, P. V. Novikov, V. P. Ananikov. Exploring metallic and plastic 3D printed photochemical reactors for customizing chemical synthesis. Scientific Reports. 2022, 12, 1.  10.1038/s41598-022-07583-9 |
| 37. V. K. Osmanov, E. V. Chipinsky, V. N. Khrustalev, A. S. Novikov, R. K. Askerov, A. O. Chizhov, G. N. Borisova, A. V. Borisov, M. M. Grishina, M. N. Kurasova, A. A. Kirichuk, A. S. Peregudov, A. S. Kritchenkov, A. G. Tskhovrebov. Facile Access to 2-Selenoxo-1,2,3,4-tetrahydro-4-quinazolinone Scaffolds and Corresponding Diselenides via Cyclization between Methyl Anthranilate and Isoselenocyanates: Synthesis and Structural Features. Molecules. 2022, 27, 18.  10.3390/molecules27185799 |
| 38. A. D. Zinoveva, T. N. Borisova, A. A. Titov, V. V. Ilyushenkova, V. B. Rybakov, E. A. Sorokina, A. V. Varlamov, L. G. Voskressensky. Facile synthesis of indolizino[8,7-b]indole and pyrido[1,2-a:3,4-b’]diindole derivatives based on domino reactions of 1-aroyl-3,4-dihydro-β-carbolines. Synthetic Communications. 2022, 54, 24, 2311-2321.  10.1080/00397911.2022.2145903 |
| 39. P. I. Abronina, N. N. Malysheva, E. V. Stepanova, J. S. Shvyrkina, A. I. Zinin, L. O. Kononov. Five Triisopropylsilyl Substituents in Ara-β-(1→2)-Ara Disaccharide Glycosyl Donor Make Unselective Glycosylation Reaction Stereoselective. European Journal of Organic Chemistry. 2022, 2022, 46.  10.1002/ejoc.202201110 |
| 40. A. I. Usov, M. I. Bilan, N. E. Ustyuzhanina, N. E. Nifantiev. Fucoidans of Brown Algae: Comparison of Sulfated Polysaccharides from Fucus vesiculosus and Ascophyllum nodosum. Marine Drugs. 2022, 20, 10.  10.3390/md20100638 |
| 41. N. E. Ustyuzhanina, M. I. Bilan, A. S. Dmitrenok, E. A. Tsvetkova, S. P. Nikogosova, C. T. T. Hang, P. D. Thinh, D. T. Trung, T. T. T. Van, A. S. Shashkov, A. I. Usov, N. E. Nifantiev. Fucose-Rich Sulfated Polysaccharides from Two Vietnamese Sea Cucumbers Bohadschia argus and Holothuria (Theelothuria) spinifera: Structures and Anticoagulant Activity. Marine Drugs. 2022, 20, 6.  10.3390/md20060380 |
| 42. D. A. Boiko, K. S. Kozlov, J. V. Burykina, V. V. Ilyushenkova, V. P. Ananikov. Fully Automated Unconstrained Analysis of High-Resolution Mass Spectrometry Data with Machine Learning. Journal of the American Chemical Society. 2022, 144, 32, 14590-14606.  10.1021/jacs.2c03631 |
| 43. D. D. Borisov, R. A. Novikov, Y. V. Tomilov. Gallium(iii)-mediated dimerization routes for (5-phenyl-2-thienyl)cyclopropane-1,1-dicarboxylate. Mendeleev Communications. 2022, 32, 2, 170-172.  10.1016/j.mencom.2022.03.005 |
| 44. A. Yu. Bobrova, M. A. Novikov, R. A. Novikov, P. V. Dorovatovskii, A. D. Volodin, A. A. Korlyukov, Y. V. Tomilov. Highly enantioselective amination of η3-(2-fluorocycloheptenyl)palladium complexes bearing chiral P,P- and P,N-ligands. Mendeleev Communications. 2022, 32, 5, 619-621.  10.1016/j.mencom.2022.09.016 |
| 45. A. N. Bilyachenko, V. N. Khrustalev, E. I. Gutsul, A. Y. Zueva, A. A. Korlyukov, L. S. Shul’pina, N. S. Ikonnikov, P. V. Dorovatovskii, D. Gelman, E. S. Shubina, G. B. Shul’pin. Hybrid Silsesquioxane/Benzoate Cu7-Complexes: Synthesis, Unique Cage Structure, and Catalytic Activity. Molecules. 2022, 27, 23.  10.3390/molecules27238505 |
| 46. N. Rudenko, A. Karatovskaya, A. Zamyatina, A. Shepelyakovskaya, S. Semushina, F. Brovko, A. Shpirt, V. Torgov, N. Kolotyrkina, A. Zinin, A. Kasimova, A. Perepelov, M. Shneider, Y. Knirel. Immune Response to Conjugates of Fragments of the Type K9 Capsular Polysaccharide of Acinetobacter baumannii with Carrier Proteins. Microbiology spectrum. 2022, 10, 5.  10.1128/spectrum.01674-22 |
| 47. E. M. Savelieva, A. A. Zenchenko, M. S. Drenichev, A. A. Kozlova, N. N. Kurochkin, D. V. Arkhipov, A. O. Chizhov, V. E. Oslovsky, G. A. Romanov. In Planta, In Vitro and In Silico Studies of Chiral N6-Benzyladenine Derivatives: Discovery of Receptor-Specific S-Enantiomers with Cytokinin or Anticytokinin Activities. International Journal of Molecular Sciences. 2022, 23, 19.  10.3390/ijms231911334 |
| 48. D. A. Boiko, V. A. Korabelnikova, E. G. Gordeev, V. P. Ananikov. Integration of thermal imaging and neural networks for mechanical strength analysis and fracture prediction in 3D-printed plastic parts. Scientific Reports. 2022, 12, 1.  10.1038/s41598-022-12503-y |
| 49. J. V. Burykina, A. D. Kobelev, N. S. Shlapakov, A. Y. Kostyukovich, A. N. Fakhrutdinov, B. König, V. P. Ananikov. Intermolecular Photocatalytic Chemo-, Stereo- and Regioselective Thiol–Yne–Ene Coupling Reaction. Angewandte Chemie - International Edition. 2022, 61, 17.  10.1002/anie.202116888 |
| 50. N. P. Arbatsky, A. A. Kasimova, A. S. Shashkov, M. M. Shneider, A. V. Popova, D. A. Shagin, A. A. Shelenkov, Y. V. Mikhailova, Y. G. Yanushevich, R. M. Hall, Y. A. Knirel, J. J. Kenyon. Involvement of a Phage-Encoded Wzy Protein in the Polymerization of K127 Units To Form the Capsular Polysaccharide of Acinetobacter baumannii Isolate 36-1454. Microbiology Spectrum. 2022, 10, 3.  10.1128/spectrum.01503-21 |
| 51. V. P. AnanikovLiquid Chemistry Dynamics with Electron Microscopy (EM): Nano-Catalysis Mechanisms by Processing EM Images and Videos with Machine Intelligence. Microscopy and Microanalysis. 2022, 28, 1, 1804-1805.  10.1017/S1431927622007139 |
| 52. Y. V. Torubaev, A. S. Samigullina. Long-Range Supramolecular Synthon Isomerism: Insight from a Case Study of Vinylic Tellurium Trihalides Cl(Ph)C=C(Ph)TeX3 (X = Cl, I). Chemistry (Switzerland). 2022, 4, 1, 196-205.  10.3390/chemistry4010017 |
| 53. A. V. Vavina, M. M. Seitkalieva, A. V. Posvyatenko, E. G. Gordeev, E. N. Strukova, K. S. Egorova, V. P. Ananikov. Merging structural frameworks of imidazolium, pyridinium, and cholinium ionic liquids with cinnamic acid to tune solution state behavior and properties. Journal of Molecular Liquids. 2022, 352.  10.1016/j.molliq.2022.118673 |
| 54. A. N. Lebedev, K. S. Rodygin, R. M. Mironenko, E. R. Saybulina, V. P. Ananikov. Metal-catalyzed chemical activation of calcium carbide: New way to hierarchical metal/alloy-on-carbon catalysts. Journal of Catalysis. 2022, 407, 281-289.  10.1016/j.jcat.2022.01.034 |
| 55. E. N. Khodot, G. V. Golovina, E. N. Timokhina, A. I. Samigullina, I. I. Levina, V. A. Kuzmin, T. D. Nekipelova. New azo dyes based on 8-methoxy-2,2,4-trimethyl-1,2-dihydroquinoline and N-substituted tetrazoles. Russian Chemical Bulletin. 2022, 71, 10, 2207-2217.  10.1007/s11172-022-3647-3 |
| 56. S. S. Pertel, S. A. Seryi, E. S. Kakayan, A. I. Zinin, L. O. Kononov. New methods for the synthesis of 2-(2,2,2-trichloroethoxy)-(3,4,6-tri-O-acetyl-1,2-dideoxy-α-D-glucopyrano)-[2,1-d]-2-oxazoline and its use for stereo-, chemo- and regioselective glycosylation. Carbohydrate Research. 2022, 520.  10.1016/j.carres.2022.108633 |
| 57. D. A. Migulin, J. V. Rozanova, V. A. Migulin, G. V. Cherkaev, I. B. Meshkov, A. A. Zezin, A. M. Muzafarov. New types of hyperbranched 1,2,3-triazole-alkoxysiloxane functional polymers for metal embedded nanocomposite surface coatings. Soft Matter. 2022, 18, 12, 2441-2451.  10.1039/d1sm01801a |
| 58. A. S. Shashkov, N. P. Arbatsky, S. N. Senchenkova, A. V. Perepelov, A. O. Chizhov, A. S. Dmitrenok, M. M. Shneider, Y. A. Knirel. NoteIdentification of 5,7-diacetamido-3,5,7,9-tetradeoxy-D-glycero-L-manno-non-2-ulosonic acid (di-N-acetyl-8-epipseudaminic acid) in the capsular polysaccharide of Acinetobacter baumannii Res546. Carbohydrate Research. 2022, 513.  10.1016/j.carres.2022.108531 |
| 59. N.E. Leonov, A.E. Emel’yanov, M.S. Klenov, A.M. Churakov, Yu.A. Strelenko, A.N. Pivkina, I.V. Fedyanin, T.S., D. B. Lempert, Kon'kova, Yu.N. Matyushin, V.A. Tartakovsky. Novel (1H-tetrazol-5-yl-NNO-azoxy)furazans and their energetic salts: synthesis, characterization and energetic properties. Mendeleev Communications. 2022, 32, 6, 714–716.  10.1016/j.mencom.2022.11.002 |
| 60. A. A. Larin, A. V. Shaferov, K. A. Monogarov, D. B. Meerov, A. N. Pivkina, L. L. Fershtat. Novel energetic oxadiazole assemblies. Mendeleev Communications. 2022, 32, 1, 111-113.  10.1016/j.mencom.2022.01.036 |
| 61. A. A. Larin, A. N. Pivkina, I. V. Ananyev, D. V. Khakimov, Fershtat. Novel family of nitrogen-rich energetic (1,2,4-triazolyl) furoxan salts with balanced performance. Frontiers in Chemistry. 2022, 10.  10.3389/fchem.2022.1012605 |
| 62. V. V. Nikol’skiy, M. E. Minyaev, M. A. Bastrakov, A. M. Starosotnikov. Nucleophilic Functionalization of 2-R-3-Nitropyridines as a Versatile Approach to Novel Fluorescent Molecules. Molecules. 2022, 27, 17.  10.3390/molecules27175692 |
| 63. E. N. Sigida, V. S. Grinev, E. L. Zdorovenko, A. S. Dmitrenok, G. L. Burygin, N. K. Kondurina, S. A. Konnova, Y. P. Fedonenko. O-Antigens of Azospirillum zeae N7(T), Azospirillum melinis TMCY 0552(T), and Azospirillum palustre B2(T): Structure Elucidation and Analysis of Biosynthesis Genes. Russian Journal of Bioorganic Chemistry. 2022, 48, 3, 519-528.  10.1134/S1068162022030177 |
| 64. D. V. Pasyukov, M. A. Shevchenko, K. E. Shepelenko, O. V. Khazipov, J. V. Burykina, E. G. Gordeev, M. E. Minyaev, V. M. Chernyshev, V. P. Ananikov. One-Step Access to Heteroatom-Functionalized Imidazol(in)ium Salts. Angewandte Chemie - International Edition. 2022, 61, 9.  10.1002/anie.202116131 |
| 65. Igor Zayakin, Evgeny Tretyakov, Anna Akyeva, Mikhail Syroeshkin, Julia Burykina, Andrey Dmitrenok, Alexander Korlyukov, Darina Nasyrova, Irina Bagryanskaya, Dmitri Stass, Valentine Ananikov. Overclocking Nitronyl Nitroxide Gold Derivatives in Cross-Coupling Reactions. Chemistry – A European Journal. 2022, 29, 6.  10.1002/chem.202203118 |
| 66. V. V. Golovchenko, V. A. Khlopin, O. A. Patova, L. S. Feltsinger, M. I. Bilan, A. S. Dmitrenok, A. S. Shashkov. Pectin from leaves of birch (Betula pendula Roth.): Results of NMR experiments and hypothesis of the RG-I structure. Carbohydrate Polymers. 2022, 284.  10.1016/j.carbpol.2022.119186 |
| 67. A. A. Lukianova, P. V. Evseev, M. M. Shneider, E. A. Dvoryakova, A. D. Tokmakova, A. M. Shpirt, M. R. Kabilov, E. A. Obraztsova, A. S. Shashkov, A. N. Ignatov, Y. A. Knirel, F. S. U. Dzhalilov, K. A. Miroshnikov. Pectobacterium versatile Bacteriophage Possum: A Complex Polysaccharide-Deacetylating Tail Fiber as a Tool for Host Recognition in Pectobacterial Schitoviridae. International Journal of Molecular. 2022, 23, 19.  10.3390/ijms231911043 |
| 68. D. E. Tsvetkov, A. S. Dmitrenok, Y. E. Tsvetkov, A. O. Chizhov, N. E. Nifantiev. Polyphenolic components of knotwood extracts from Populus tremula (quaking aspen). Russian Chemical Bulletin. 2022, 71, 8, 1777-1783.  10.1007/s11172-022-3589-9 |
| 69. V. Golovchenko, S. Popov, V. Smirnov, V. Khlopin, F. Vityazev, S. Naranmandakh, A. S. Dmitrenok, A. S. Shashkov. Polysaccharides of Salsola passerina: Extraction, Structural Characterization and Antioxidant Activity. International Journal of Molecular Sciences. 2022, 23, 21.  10.3390/ijms232113175 |
| 70. K. A. Zhilyaev, D. L. Lipilin, M. D. Kosobokov, A. I. Samigullina, A. D. Dilman. Preparation and Evaluation of Sterically Hindered Acridine Photocatalysts. Advanced Synthesis and Catalysis. 2022, 364, 18, 3295-3301.  10.1002/adsc.202200515 |
| 71. A. S. Maksimenko, P. A. Buikin, E. D. Daeva, V. P. Kislyi, V. V. Semenov. Preparation of Ring-Methoxylated Arylnitromethanes by the Victor Meyer Reaction. Synthesis (Germany). 2022, 54, 11, 2724-2730.  10.1055/s-0041-1737534 |
| 72. A. V. Lalov, M. P. Egorov, R.R. Aysin. Probing the aromaticity of bis(diazolo)pyrazine radical anions. Mendeleev Communications. 2022, 32, 6, 732-734.  10.1016/j.mencom.2022.11.008 |
| 73. N. M. Baraboshkin, V. P. Zelenov, M. E. Minyaev, T. S. Pivina. Quest: structure and properties of BTF-nitrobenzene cocrystals with different ratios of components. CrystEngComm. 2022, 24, 2, 235-250.  10.1039/d1ce00977j |
| 74. A. A. Galochkin, A. E. Pavlovskaya, V. V. Baranov, Y. A. Strelenko, A. N. Kravchenko. Regioselective synthesis of 1-alkyl-4-methylsemithioglycolurils. Chemistry of Heterocyclic Compounds. 2022, 58, 11, 615-620.  10.1007/s10593-022-03134-2 |
| 75. A. Y. Akyeva, A. V. Kansuzyan, K. S. Vukich, L. Kuhn, E. A. Saverina, M. E. Minyaev, V. M. Pechennikov, M. P. Egorov, I. V. Alabugin, S. V. Vorobyev, M. A. Syroeshkin. Remote Stereoelectronic Effects in Pyrrolidone- and Caprolactam-Substituted Phenols: Discrepancies in Antioxidant Properties Evaluated by Electrochemical Oxidation and H-Atom Transfer Reactivity. Journal of Organic Chemistry. 2022, 87, 8, 5371-5384.  10.1021/acs.joc.2c00207 |
| 76. Y. A. Antonova, Y. V. Nelyubina, S. L. Ioffe, A. Y. Sukhorukov, A. A. Tabolin. Ring Closure of Nitroalkylmalonates for the Synthesis of Isoxazolines under the Acylation Conditions. Advanced Synthesis and Catalysis. 2022, 364, 15, 2606-2612.  10.1002/adsc.202200420 |
| 77. A. A. Larin, I. V. Ananyev, E. V. Dubasova, F. E. Teslenko, K. A. Monogarov, D. V. Khakimov, C. L. He, S. P. Pang, G. A. Gazieva, L. L. Fershtat. Simple and energetic: Novel combination of furoxan and 1,2,4-triazole rings in the synthesis of energetic materials. Energetic Materials Frontiers. 2022, 3, 3, 146-153.  10.1016/j.enmf.2022.08.002 |
| 78. V. M. Korshunov, T. N. Chmovzh, A. Y. Freidzon, M. E. Minyaev, A. D. Barkanov, I. S. Golovanov, L. V. Mikhalchenko, I. C. Avetisov, I. V. Taydakov, O. A. Rakitin. Small D-π-A-π-D organic dyes for near-infrared emitting OLEDs with excellent external quantum efficiency. Dyes and Pigments. 2022, 208.  10.1016/j.dyepig.2022.110860 |
| 79. P. I. Abronina, N. N. Malysheva, A. I. Zinin, N. G. Kolotyrkina, L. O. Kononov. Stereocontrolling Effect of a Single Triisopropylsilyl Group in 1,2-cis-Glucosylation. European Journal of Organic Chemistry. 2022, 2022, 39.  10.1002/ejoc.202200517 |
| 80. M. Wang, A. V. Filatov, A. S. Shashkov, J. Liu, A. V. Perepelov. Structure and gene cluster of the O-antigen of Enterobacter cloacae G2559. Carbohydrate Research. 2022, 519.  10.1016/j.carres.2022.108612 |
| 81. A. V. Perepelov, D. S. Sokolova, T. P. Tourova, A. S. Shashkov, A. A. Kasimova, T. N. Nazina. Structure elucidation and gene cluster annotation of the O-antigen of Halomonas titanicae TAT1 containing three residues of 2,3-diacetamido-2,3-dideoxy-D-glucuronic acid. Carbohydrate Research. 2022, 521.  10.1016/j.carres.2022.108650 |
| 82. A. A. Kasimova, M. M. Shneider, M. V. Edelstein, A. A. Dzhaparova, A. S. Shashkov, Y. A. Knirel, J. J. Kenyon. Structure of the K98 capsular polysaccharide from Acinetobacter baumannii REV-1184 containing a cyclic pyruvic acid acetal. International Journal of Biological Macromolecules. 2022, 218, 447-455.  10.1016/j.ijbiomac.2022.07.136 |
| 83. K. A. Karpenko, T. M. Iliyasov, A. N. Fakhrutdinov, A. S. Akulinin, M. N. Elinson, A. N. Vereshchagin. Study on formation mechanism of (4RS,6SR)-4,6-diaryl-5,5-dicyano-2-methyl-1,4,5,6-tetrahydropyridine-3-carboxylic esters. Russian Chemical Bulletin. 2022, 71, 6, 1278-1283.  10.1007/s11172-022-3531-1 |
| 84. D. O. Prima, R. O. Pankov, A. Y. Kostyukovich, M. E. Minyaev, J. V. Burykina, V. P. Ananikov. Synthesis and characterization of Pd/NHCF complexes with fluorinated aryl groups. Dalton Transactions. 2022, 51, 25, 9843-9856.  10.1039/d2dt00892k |
| 85. V. V. Baranov, T. N. Vol'khina, N. G. Kolotyrkina, A. N. Kravchenko. Synthesis and crystal structures of novel glycoluril carboxylic acids conglomerates. Mendeleev Communications. 2022, 32, 4, 537-539.  10.1016/j.mencom.2022.07.034 |
| 86. Y. A. Volkova, I. V. Rassokhina, E. A. Kondrakhin, A. V. Rossokhin, S. N. Kolbaev, T. B. Tihonova, M. Kh. Dzhafarov, M. A. Schetinina, E. I. Chernoburova, E. V. Vasileva, A. S. Dmitrenok, G. I. Kovalev, I. N. Sharonova, I. V. Zavarzin. Synthesis and evaluation of avermectin–imidazo[1,2-a]pyridine hybrids as potent GABAA receptor modulators. Bioorganic Chemistry. 2022, 127.  10.1016/j.bioorg.2022.105904 |
| 87. A. V. Komkov, S. V. Baranin, A. S. Dmitrenok, I. V. Zavarzin. Synthesis of 4-amino-6-hetarylthieno[2,3-d]pyrimidines from 5-acetyl-6-aminopyrimidine-4(3H)-thiones. Russian Chemical Bulletin. 2022, 71, 8, 1720-1728.  10.1007/s11172-022-3582-3 |
| 88. O. N. Yudina, M. L. Gening, P. Talukdar, A. G. Gerbst, Y. E. Tsvetkov, N. E. Nifantiev. Synthesis of a cyclic tetramer of 3-amino-3-deoxyallose with axially oriented amino groups. Carbohydrate Research. 2022, 511.  10.1016/j.carres.2021.108476 |
| 89. M. A. Kozlov, K. M. Bolshakov, N. G. Kolotyrkina, I. V. Zavarzin. Synthesis of Benzothiazole- and Benzoxazole-2-carboxamides by 2-Chloracetamides and 2-Amino(thio)phenols Cyclocondensation with Elemental Sulfur in Water. European Journal of Organic Chemistry. 2022, 2022, 30.  10.1002/ejoc.202200586 |
| 90. A. V. Komkov, M. A. Kozlov, D. I. Nasyrova, A. S. Dmitrenok, I. V. Zavarzin. Synthesis of new pyrido[2,3-d]pyrimidin-5-ones and pyrido[2,3-d]pyrimidin-7-ones functionalized at position 4 from 5-acetyl-6-amino-4-methylsulfanyl-2-phenylpyrimidine. Chemistry of Heterocyclic Compounds. 2022, 58, 1, 15-23.  10.1007/s10593-022-03051-4 |
| 91. A. V. Komkov, M. А. Kozlov, M. А. Prezent, A. S. Dmitrenok, N. G. Kolotyrkina, M. E. Minyaev, I. V. Zavarzin. Synthesis of novel pyrimido[4,5-d]pyrimidine derivatives from 5-acetyl-4-aminopyrimidines. Chemistry of Heterocyclic Compounds. 2022, 58, 45416, 243-250.  10.1007/s10593-022-03078-7 |
| 92. S. M. Medvedeva, A. V. Movchan, O. E. Sidorenko, A. S. Shestakov, I. V. Ledenyova, I. V. Zavarzin, K. S. Shikhaliev. Synthesis of substituted 1,3-oxazino[5,4,3-ij]quinolin-1,3-diones by the oxidation of various pyrrolo[3,2,1-ij]quinoline-1,2-diones with m-chloroperbenzoic acid. Arkivoc. 2022, 2022, 2.  10.24820/ark.5550190.p011.662 |
| 93. V. V. Kuznetsov, D. V. Khakimov, A. S. Dmitrenok, A. S. Goloveshkin. Synthesis, structure and peculiarity of conformational behavior of 1,5-diazabicyclo[3.1.0]hexanes. Journal of Molecular Structure. 2022, 1269.  10.1016/j.molstruc.2022.133856 |
| 94. A. N. Vereshchagin, M. E. Minyaev, T. M. Iliyasov, K. A. Karpenko, R. N. Akchurin. Tetrahydropyridines’ Stereoselective Formation, How Lockdown Assisted in the Identification of the Features of Its Mechanism. Molecules. 2022, 27, 14.  10.3390/molecules27144367 |
| 95. A. A. Kasimova, A. G. Dudnik, A. S. Shashkov, M. M. Shneider, A. Christofferson, A. A. Shelenkov, Y. V. Mikhailova, J. J. Kenyon, Y. A. Knirel. The K218 capsular polysaccharide produced by Acinetobacter baumannii isolate 52-249 includes 5,7-di-N-acetylpseudaminic acid linked by a KpsS3 glycosyltransferase. International Journal of Biological Macromolecules. 2022, 218, 310-316.  10.1016/j.ijbiomac.2022.07.135 |
| 96. N. P. Arbatsky, A. S. Shashkov, M. M. Shneider, A. V. Popova, A. A. Kasimova, K. A. Miroshnikov, Y. A. Knirel, R. M. Hall, J. J. Kenyon. The K89 capsular polysaccharide produced by Acinetobacter baumannii LUH5552 consists of a pentameric repeat-unit that includes a 3-acetamido-3,6-dideoxy-D-galactose residue. International Journal of Biological Macromolecules. 2022, 217, 515-521.  10.1016/j.ijbiomac.2022.07.085 |
| 97. A. A. Grinkova, E. V. Sukhova, N. E. Ustyuzhanina, N. E. Nifantiev. The synthesis of hyaluronic acid related oligosaccharides and elucidation of their antiangiogenic activity. Carbohydrate Research. 2022, 522.  10.1016/j.carres.2022.108701 |
| 98. A. R. Miftyakhova, M. B. Sidakov, T. N. Borisova, V. V. Ilyushenkova, A. N. Fakhrutdinov, E. A. Sorokina, A. V. Varlamov, L. G. Voskressensky. Three-component synthesis of 5,6-dihydropyrrolo[2,1-a]isoquinolines from 1-aroyl-3,4-dihydroisoquinolines, electron-deficient alkynes and NH-acids. Tetrahedron Letters. 2022, 103.  10.1016/j.tetlet.2022.153991 |
| 99. D. B. Eremin, A. S. Galushko, D. A. Boiko, E. O. Pentsak, I. V. Chistyakov, V. P. Ananikov. Toward Totally Defined Nanocatalysis: Deep Learning Reveals the Extraordinary Activity of Single Pd/C Particles . Journal of the American Chemical Society. 2022, 144, 13, 6071-6079.  10.1021/jacs.2c01283 |
| 100. A. A. Artemjev, A. P. Novikov, G. M. Burkin, A. A. Sapronov, A. S. Kubasov, V. G. Nenajdenko, V. N. Khrustalev, A. V. Borisov, A. A. Kirichuk, A. S. Kritchenkov, R. M. Gomila, A. Frontera, A. G. Tskhovrebov. Towards Anion Recognition and Precipitation with Water-Soluble 1,2,4-Selenodiazolium Salts: Combined Structural and Theoretical Study. International Journal of Molecular Sciences. 2022, 23, 12.  10.3390/ijms23126372 |
| 101. A. A. Bondarenko, Y. S. Vlasova, M. V. Polynski, V. V. Ilyushenkova, V. P. Ananikov. Towards determining molecular structure with ESI-MS backed by computational methods: structures of subnanoclusters of Pd and Cu chlorides, ion dynamics in vacuum, and challenges to the methodology. Inorganic Chemistry Frontiers. 2022, 9, 20, 5279-5295.  10.1039/d2qi01098d |
| 102. P. I. Abronina, N. N. Malysheva, A. I. Zinin, M. Y. Karpenko, N. G. Kolotyrkina, L. O. Kononov. Trifluoroacetic Acid Promoted Ring Contraction in 2,3-Di- O -silylated O -Galactopyranosides and Hemiacetals. Synlett. 2022, 33, 5, 473-477.  10.1055/a-1730-9458 |
| 103. R. R. Shaydullin, A. S. Galushko, E. O. Pentsak, V. M. Korshunov, I. V. Taydakov, E. G. Gordeev, M. E. Minyaev, D. I. Nasyrova, V. P. Ananikov. Yellow to blue switching of fluorescence by the tuning of the pentaphenylphosphole structure: phosphorus electronic state vs. ring conjugation. Physical Chemistry Chemical Physics. 2022, 24, 41, 25307-25315.  10.1039/d2cp03723h |
| 104. E. A. Denisova, A. Y. Kostyukovich, A. N. Fakhrutdinov, V. A. Korabelnikova, A. S. Galushko, V. P. Ananikov. "hidden" Nanoscale Catalysis in Alkyne Hydrogenation with Well-Defined Molecular Pd/NHC Complexes. ACS Catalysis. 2022, 12, 12, 6980-6996.  10.1021/acscatal.2c01749 |

**2023 год**

|  |
| --- |
| 1. Oleg V Bityukov and Ksenia V. Skokova and Vera A. Vil’ and Gennady I Nikishin and Alexander O. Terent'ev. Electrochemical Generation of Peroxy Radicals and Subsequent Peroxidation of 1,3-Dicarbonyls in an Undivided Cell.Org. Lett. 2023, 26, 1, 166-171.  10.1021/acs.orglett.3c03780 |
| 2. Andrey Yu. Plodukhin, Maksim A. Boichenko, Ivan A. Andreev, Elena A. Tarasenko, Kanstantsin V. Anisovich, Nina K. Ratmanova, Sergey S. Zhokhov, Igor V. Trushkov and Olga A. Ivanova. Concise approach to γ-(het)aryl- and γ-alkenyl-γ-aminobutyric acids. Synthesis of vigabatrin.Org. Biomol. Chem. 2023, 22, 5, 1027-1033.  10.1039/D3OB01769A |
| 3. Chernenko A., Baydikova V., Kutyrev V., Astakhov A., Minyaev M. E., Chernyshev V., Ananikov V. Base-Ionizable Anionic NHC Ligands in Pd-catalyzed Reactions of Aryl Chlorides.ChemCatChem. 2023, 16, 5.  10.1002/cctc.202301471 |
| 4. Svetlana Ch. Gagieva, Vladislav A. Tuskaev, Kasim F. Magomedov, Viktor N. Khrustalev, Maria D. Evseeva, Marina G. Ezernitskaya, Svetlana A. Aksenova, Mikhail I. Buzin, Evgenia P. Antoshkina, Daniele Saracheno, Evgenii K. Golubev, Boris M. Bulychev. Ionic homometallic and heterometallic Titanium/Transition and Non-Transition metals complexes stabilized with crown ether in the polymerization of ethylene. European Polymer Journal. 2023, 205.  10.1016/j.eurpolymj.2023.112720 |
| 5. Evgeniy G. Gordeev, Djamaladdin G. Musaev, and Valentine P. Ananikov. Comparative Study of Pd-Mediated Carbon–Carbon, Carbon–Heteroatom, and Heteroatom–Heteroatom Bond Formation/Breakage (C ═ Csp3, Csp2, Csp; X = B, N, O, Si, P, S, Se, Te). Organometallics. 2023, 43, 1, 1-13.  10.1021/acs.organomet.3c00367 |
| 6. Kolykhalov Denis A., Golysheva Anastasia N., Karlinskii Bogdan Ya. Efficient tunable approach for 5-(hydroxymethyl)furfural and 2,5-diformylfuran production from fructose in DMSO with bromide catalysis.Catalysis Communications. 2023, 186.  10.1016/j.catcom.2023.106831 |
| 7. Sherstyuk Varvara A., Ottenbacher Roman V., Talsi Evgenii P., Bryliakov Konstantin P. Asymmetric Epoxidation vs syn-Hydroxy-Acyloxylation of Olefins in the Presence of Sterically Demanding Nonheme Manganese Complexes.ACS Catal. 2023, 14, 1, 498-507.  10.1021/acscatal.3c04832 |
| 8. Gorbunov Yaroslav K., Fershtat Leonid L. Recent chemistry and applications of 1,3,4-oxadiazoles.Advances in Heterocyclic Chemistry. 2023, 143, 1-26.  10.1016/bs.aihch.2023.11.001 |
| 9. Rubanov Zakhar M., Levin Vitalij V., Dilman Alexander D. One-Pot Transformation of Aldehydes to Ketones via Minisci-Type Reaction of Imines.Org. Lett. 2023, 25, 48, 8751–8755.  10.1021/acs.orglett.3c03764 |
| 10. Potorochenko Anton N., Rodygin Konstantin S, Ananikov Valentine P. Assembly of (2×C2+C`2)×n Molecular Complexity Using a Sequence of Pt‑ and Pd-Catalyzed Transformations with Calcium Carbide.EurJOC. 2023, 27, 4.  10.1002/ejoc.202301012 |
| 11. Fukazawa Yasuaki, Vaganov Vladimir Yu., Burykina Julia V., Fakhrutdinov Artem N., Safiullin Ruslan I., Plasser Felix, Rubtsov Aleksandr E., Ananikov Valentine P., Malkov A. V. Mechanistic insight into Pd-catalyzed asymmetric alkylation of indoles with diazoesters employing bipyridine-N,N’-dioxides as chiral controllers.Advanced Synthesis & Catalysis. 2023, 366, 1, 121-133.  10.1002/adsc.202300845 |
| 12. Shorokhov Vitaly V., Zhokhov Sergey S., Rybakov Victor B., Boichenko Maksim A., Andreev Ivan A., Ratmanova Nina K., Trushkov Igor V., Ivanova Olga. Donor–Acceptor Cyclopropane Ring Expansion to 1,2-Dihydronaphthalenes. Access to Bridged Seven-Membered Lactones.Org. Lett. 2023, 25, 44, 7963–7967.  10.1021/acs.orglett.3c02846 |
| 13. Evgeniya Shutovskaya, Yulia Ustimenko, Alexey Tkachev, Julia Burykina, Alexander Agafontsev, Anastasiya Lastovka, Dmitriy Polovyanenko, Taisiya Sukhikh. Unusual Ring Opening of Bicyclic Terpenes during Pd-catalyzed Coupling with Aromatic Halides.Advanced Synthesis & Catalysis. 2023, 365, 23, 4256-4266.  10.1002/adsc.202300594 |
| 14. R. A. Kovalevsky, A. S. Kucherenko and S. G. Zlotin. Total synthesis of (S)-forphenicinol via asymmetric organocatalysis. New J. Chem. 2023, 47, 45, 20814-20817.  10.1039/D3NJ04527G |
| 15. Aleksei B. Sheremetev, Andrei S. Kozeev, Nadezhda V. Palysaeva and Kyrill Yu. Suponitsky. A mild and efficient synthesis of aminofurazans. New J. Chem. 2023, 47, 45, 21091-21097.  10.1039/D3NJ03371F |
| 16. Liu Jinyi, Zhang Yuxuan, Yu Haojie, Wang Li, Vatsadze Sergey Z., Chen Dingning, Ouyang Chenguang. Ferrocene-based pyrazole energetic compounds as burning rate catalysts for the thermal decomposition of ammonium perchlorate. Applied Organometallic Chemistry. 2023, 37, 12.  10.1002/aoc.7292 |
| 17. Komogortsev Andrey, Lichitsky Boris, Milyutin Constantine V., Melekhina Valeriya G. Straightforward method for the synthesis of 2H-furo[3,2-b]pyran-2-one derivatives starting from allomaltol.The Journal of Heterocyclic Chemistry. 2023, 61, 1, 86-92.  10.1002/jhet.4744 |
| 18. Kasimova Anastasiya A., Shashkov Aleksander S., Perepelov Andrei V., Babich Tamara L., Demina Ludmila, Popova Nadezhda, Krivonos Danil, Safonov Alexey. Structure elucidation and gene cluster of the O-antigen of Shewanella xiamenensis strain DCB-2-1 containing an amide of d-glucuronic acid with d-alanine and its bonding with U, Cr and V.International Journal of Biological Macromolecules. 2023, 253.  10.1016/j.ijbiomac.2023.127546 |
| 19. Ivan A. Yaremenko, Yulia Yu. Belyakova, Arina A. Demina, Peter Radulov, Igor Alabugin, Alexander Terent'ev. Bioinspired Fe(II)-mediated halogenative C-C bond activation of ozonides: Temporary installment of a peroxide bridge allows selective C-C scissions for replacement of a carbonyl group by a halogen. Advanced Synthesis & Catalysis. 2023, 365, 23, 4190-4197.  10.1002/adsc.202300881 |
| 20. Rinat R. Aysina and Konstantin I. Galkin. Adaptive carbonyl umpolung involving a carbanionic carbene Breslow intermediate: an alternative mechanism for NHC-mediated organocatalysis.Org. Biomol. Chem. 2023, 21, 43, 8702-8707.  10.1039/D3OB01195J |
| 21. Vinokurov Andrey D., Iliyasov Taygib M., Karpenko Kirill A., Derkach Yana V., Ryabov Alexander D., Gorbunov Sergey, Goloveshkin Alexander S., Vereshchagin Anatoly N. Highly diastereoselective multicomponent synthesis of 2-piperidone-substituted pyridinium salts with three and four stereogenic centers.Tetrahedron. 2023, 149.  10.1016/j.tet.2023.133685 |
| 22. Bilyachenko Alexey N., Gutsul Evgenii I., Khrustalev Victor N., Dorovatovskii Pavel, Shubina Elena S., Guari Yannick, Félix Gautier, Larionova Joulia, Mahmoud Abdallah G., Pombeiro Armando J.L. Cagelike Manganesesilsesquioxane Complexes: Synthesis via an Acetone Approach, Structure, and Catalytic Activity for Toluene Oxidation.Cryst. Growth Des. 2023, 23, 12, 8707–8717.  10.1021/acs.cgd.3c00863 |
| 23. Kamanina Olga A., Lantsova Elizaveta A., Rybochkin Pavel V., Arlyapov Vyacheslav A., Saverina Evgeniya A., Kulikovskaya Natalia S.,Perepukhov Alexander M., Vereshchagin Anatoly N., Ananikov Valentine P. “3-in-1” Hybrid Biocatalysts: Association of Yeast Cells Immobilized in a Sol–Gel Matrix for Determining Sewage Pollution.ACS Appl. Mater. Interfaces. 2023, 15, 40, 47779–47789.  10.1021/acsami.3c09897 |
| 24. Makhmudiyarova Natalia N., Ishmukhametova I. R., Dzhemileva Lilya U., D'yakonov Vladimir A., Terent'ev Alexander O., Dzhemilev Usein M. A New Catalytic Method for the Synthesis of Cyclic Azaperoxides with High Cytotoxic Activity.ChemistrySelect. 2023, 8, 37.  10.1002/slct.202302044 |
| 25. Stebletsova Irina A., Larin Alexander A., Ananyev Ivan V., Fershtat Leonid L. Regioselective Synthesis of NO-Donor (4-Nitro-1,2,3-triazolyl)furoxans via Eliminative Azide–Olefin Cycloaddition.Molecules. 2023, 28, 19.  10.3390/molecules28196969 |
| 26. Arsenii S. Solovev, Evgeniya M. Denisova, Ekaterina A. Kurbatova, Olga Y. Kutsevalova, Liubov G. Boronina, Vladimir A. Ageevets, Sergey V. Sidorenko, Vadim B. Krylov and Nikolay E. Nifantiev. Synthesis of methylphosphorylated oligomannosides structurally related to lipopolysaccharide O-antigens of Klebsiella pneumoniae serotype O3 and their application for detection of specific antibodies in rabbit and human sera.Org. Biomol. Chem. 2023, 21, 41, 8306-8319.  10.1039/D3OB01203D |
| 27. Askerov R.K., Osmanov V.K., Bakri Y.E., Chipinsky E.V., Ahmad Sajjad, Matsulevich Z.V., Borisova G.N., Kuzina O.V., Khrustalev V.N., Peregudov A.S., Chizhov Alexander, Magerramov A.M., Al-salahi Rashad, Borisov A.V. New 2,4-dihydro-1H-1,2,4-triazole-3-selones and 3,3′-di(4H-1,2,4-triazolyl)diselenides. Synthesis, biological evaluation, and in silico studies as antibacterial and fungicidal agents. Bioorganic Chemistry. 2023, 141.  10.1016/j.bioorg.2023.106896 |
| 28. Nikolai N Sluchanko, Anna A Kapitonova, Mikhail A Shulepko, Ilya D Kukushkin, Dmitrii S Kulbatskii, Kristina V Tugaeva, Larisa A Varfolomeeva, Mikhail E Minyaev, Konstantin M Boyko, Vladimir O Popov, Mikhail P Kirpichnikov, Ekaterina N Lyukmanova. Crystal structure reveals canonical recognition of the phosphorylated cytoplasmic loop of human alpha7 nicotinic acetylcholine receptor by 14-3-3 protein. Biochemical and Biophysical Research Communications. 2023, 682, 91-96.  10.1016/j.bbrc.2023.09.086 |
| 29. Ondar Evgeniia E., Kostyukovich Alexander Yu., Burykina Julia V., Galushko Alexey S., Ananikov Valentine P. Examination of Pt2dba3 as a “cocktail”-type catalytic system for alkene and alkyne hydrosilylation reactions.Catal. Sci. Technol. 2023, 13, 20, 6022-6040.  10.1039/D3CY00865G |
| 30. Yaremenko Ivan A., Belyakova Yulia Yu., Radulov Peter S., Medvedev Michael G., Krivoshchapov Nikolai V., Alabugin Igor V., Terent'ev Alexander O. Two-Component versus Three-Component Condensations in the Race between Hydrazide, Triketone, and Hydrogen Peroxide-How do All Six Reactive Centers Cooperate to Incorporate the Most Diverse Set of Heteroatomic Bridges in a Tricyclic Frame?.J. Org. Chem. 2023, 88, 19, 13782−13795.  10.1021/acs.joc.3c01415 |
| 31. Balakhonov R Yu., Mekeda I. S., Shirinian V. Z. DABCO-promoted Selective Photochemical C−N Coupling: Access to Unsymmetrical Azahelicenes.Advanced Synthesis & Catalysis. 2023, 365, 21, 3690 – 3703.  10.1002/adsc.202300833 |
| 32. Bilyachenko Alexey N., Gutsul Evgenii I., Khrustalev Victor N., Chusova Olga, Dorovatovskii Pavel, Aliyeva Vusala A., Paninho Ana B., Nunes Ana V. M., Mahmudov Kamran T., Shubina Elena S., Pombeiro Armando J.L. A Family of Cagelike Mn-Silsesquioxane/Bathophenanthroline Complexes: Synthesis, Structure, and Catalytic and Antifungal Activity.Inorg. Chem. 2023, 62, 38, 15537–15549.  10.1021/acs.inorgchem.3c02040 |
| 33. Budnikov Alexander S., Krylov Igor B., Lastovko Andrey V., Dolotov Roman A., Shevchenko Mikhail I., Terent'ev Alexander O. The diacetyliminoxyl radical in oxidative functionalization of alkenes.Org. Biomol. Chem. 2023, 21, 38, 7758-7766.  10.1039/D3OB00925D |
| 34. Ilovaisky Alexey I., Scherbakov Alexander M., Chernoburova Elena I., Povarov Andrey A., Shchetinina Marina A., Merkulova Valentina M., Salnikova Diana I., Sorokin Dmytro, Bozhenko Eugene I., Zavarzin Igor V.,Terent'ev Alexander O. Secosteroid Thiosemicarbazides and Secosteroid–1,2,4-triazoles as Antiproliferative Agents Targeting Breast Cancer Cells: Synthesis and Biological Evaluation.The Journal of Steroid Biochemistry and Molecular Biology. 2023, 234.  10.1016/j.jsbmb.2023.106386 |
| 35. Lopat’eva Elena R., Krylov Igor B., Paveliev Stanislav A., Emtsov Daniil A., Kostyagina Vera A., Korlyukov Alexander, Terent'ev Alexander O. Free Radicals in the Queue: Selective Successive Addition of Azide and N-Oxyl Radicals to Alkenes.J. Org. Chem. 2023, 88, 18, 13225−13235.  10.1021/acs.joc.3c01470 |
| 36. Komarova Bozhena S., Novikova Natalia S., Gerbst Alexey G., Sinitsyna Olga A., Rubtsova Ekaterina A., Kondratyeva Elena G., Sinitsyn Arkady P., Nifantiev Nikolay E. Combination of 3-O-Levulinoyl and 6-O-Trifluorobenzoyl Groups Ensures α-Selectivity in Glucosylations: Synthesis of the Oligosaccharides Related to Aspergillus fumigatus α-(1 → 3)-d-Glucan.J. Org. Chem. 2023, 88, 17, 12542–12564.  10.1021/acs.joc.3c01283 |
| 37. Mulina O.M., Bokova Evgeniya D., Doronin Mikhail M., Terent'ev Alexander O. Effective Electrochemical Synthesis of an Important Fungicide Tetramethylthiuram Disulfide and Its Bioactive Analogues.ACS Agric. Sci. Technol. 2023, 3, 9, 720–724.  10.1021/acsagscitech.3c00072 |
| 38. Kolesnikova I. N., Kolesnikov S. V., Lobanov N. V., Sharanov P. Y., A. A. Larin, Teslenko F. E., L. L. Fershtat, I.F. Shishkov. Molecular structure of 3,4-dicyanofuroxan studied by gas electron diffraction. Application of DFT theory and coupled cluster computations. Chemical Physics Letters. 2023, 829.  10.1016/j.cplett.2023.140770 |
| 39. Khodot Eugeny N., Lischiner Iosif I., Naudet Valerie, Frolov V. A., Kamnev А. А. Infrared spectroscopic and thermographic evidence for the interaction of ethylene and 1,3-butadiene with N2O4 at cryogenic temperatures.Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy. 2023, 304.  10.1016/j.saa.2023.123265 |
| 40. Bilyachenko Alexey N., Arteev Ivan S., Khrustalev Victor N., Shulpina Lidia S., Korlyukov Alexander, Ikonnikov Nikolay S., Shubina Elena S., Kozlov Yuriy N., Reis Conceição Nuno, Salgueiro da Silva M. A., Mahmudov Kamran T., Pombeiro Armando J.L. Cage-like Cu5Cs4-Phenylsilsesquioxanes: Synthesis, Supramolecular Structures, and Catalytic Activity.Inorg. Chem. 2023, 62, 33, 13573–13586.  10.1021/acs.inorgchem.3c01989 |
| 41. Korina Elena, Heintz Natalya, Grafov Oleg, Adawy Alaa, Abramyan Anton, Bol'shakov Oleg. Molten salt Cu(I) intercalation into the poly(triazine imide) for the electrochemical sensing of nitrite.Journal of Applied Polymer Science. 2023, 140, 41.  10.1002/app.54537 |
| 42. Alexey S Sokolov, Victoria A Korabelnikova, Valentine P Ananikov, Dmitrii A Michurov, Vladimir I Lozinsky, Dmitry S Perekalin. Photochemically induced formation of adhesive hydrogels from sodium alginate, acrylamide, and iron sandwich complexes. Chemical Communications. 2023, 59, 70, 10532-10535.  10.1039/D3CC03129B |
| 43. Erokhin Kirill S., Pentsak Evgeniy O., Sorokin Vyacheslav R., Agaev Yury V., Zaytsev Roman G., Isaeva Vera I., Ananikov Valentine P. Dynamic behavior of metal nanoparticles in MOF materials: analysis with electron microscopy and deep learning.Phys. Chem. Chem. Phys. 2023, 25, 32, 21640-21648.  10.1039/D3CP02595K |
| 44. Dmitry V Pasyukov, Maxim A Shevchenko, Alexander V Astakhov, Mikhail E Minyaev, Yu Zhang, Victor M Chernyshev, Valentine P Ananikov. New class of RSO2-NHC ligands and Pd/RSO2-NHC complexes with tailored electronic properties and high performance in catalytic C–C and C–N bonds formation. Dalton Trans. 2023, 52, 34, 12067-12086.  10.1039/D3DT02296J |
| 45. Pospelov Evgeny V., Zhirov Alexander V., Kamidolla Baglan, Sukhorukov Alexey Yu. Reductive Denitrogenation of Six-membered Cyclic Nitronates to Densely Substituted Dihydrofurans with Raney® Nickel/AcOH System.Adv Synth & Catalysis. 2023, 365, 17, 2850-2857.  10.1002/adsc.202300573 |
| 46. Budnikov Alexander S., Krylov Igor B., Ushakov Ivan E., Subbotina Irina Rudolfovna, Monin Fedor K., Nikishin Gennady I., Efimov Nikolay N., Gorbunov Dmitry, Gritsan N.P., Tretyakov Evgeny, Yu Bing, Terent'ev Alexander O. Two Discoveries in One Crystal: σ-Type Oxime Radical as an Unforeseen Building Block in Molecular Magnetics and Its Spatial Structure.Inorg. Chem. 2023, 62, 28, 10965–10972.  10.1021/acs.inorgchem.3c00947 |
| 47. Kashin Alexey S., Prima Darya O., Arkhipova Daria M., Ananikov Valentine P. An unusual Microdomain Factor Controls Interaction of Organic Halides with the Palladium Phase and Influences Catalytic Activity in the Mizoroki-Heck Reaction.Micro and Nano. 2023, 19, 43.  10.1002/smll.202302999 |
| 48. Fomenkov Dmitri I., Budekhin Roman A., Vil’ Vera A., Terent'ev Alexander O. The Ozone and Hydroperoxide Teamwork: Synthesis of Unsymmetrical Geminal Bisperoxides from Alkenes.Org. Lett. 2023, 25, 25, 4672–4676.  10.1021/acs.orglett.3c01477 |
| 49. Harutyunyan Arpine S., Shahkhatuni Aleksan G., Kostyukovich Alexander Yu., Ananikov Valentine P. The influence of superbasic conditions and solvent effects on NMR spectra and structural parameters of acetylene in solution.Journal of Molecular Liquids. 2023, 385.  10.1016/j.molliq.2023.122381 |
| 50. Ghosh Indrajit, Shlapakov Nikita, Karl Tobias A., Düker Jonas, Nikitin Maksim, Burykina Julia V., Ananikov Valentine P., König Burkhard. General cross-coupling reactions with adaptive dynamic homogeneous catalysis. Nature. 2023, 619, 87-93.  10.1038/s41586-023-06087-4 |
| 51. Ivanov Evgeniy, Lebedeva E. Yu., Baranov Pavel G., Kravchenko Angelina N. Volume properties of bioactive glycoluril-derivatives of gamma-aminobutyric acid in aqueous solutions between 278.15 and 318.15 K.Journal of Molecular Liquids. 2023, 384.  10.1016/j.molliq.2023.122234 |
| 52. Mulina O.M., Doronin Mikhail M., He Liangnian, Terent'ev Alexander O. Disulfides as versatile starting reagents: effective sulfonylation of alkenes with disulfides under electrochemical conditions.Organic Chemistry Frontiers. 2023, 10, 14, 3559-3566.  10.1039/D3QO00589E |
| 53. Rudnitskaya Olga V., Tereshina Tatiana A., Dobrokhotova Ekaterina V., Kultyshkina Ekaterina K., Chumakova N.A., Kokorin Alexander I., Zubavichus Yan V., Khrustalev Victor N.  First Iridium(IV) Chloride–Dimethyl Sulfoxide Complex [H(dmso)2][IrCl5(dmso-κO)]: Synthesis and Structure along with Novel Polymorph Modifications of [H(dmso)2][trans-IrCl4(dmso-κS)2] and [H(dmso)][trans-IrCl4(dmso-κS)2].ACS Omega. 2023, 8, 23, 20569–20578.  10.1021/acsomega.3c01012 |
| 54. Ivanov Roman E., Ivanova Elizaveta, Merkulov Vladislav, Zharkov Mikhail N., Kuchurov Ilya V., Zlotin Sergei G. Autocatalytic Green Synthesis of Imines in Traceless Medium.EurJOC. 2023, 26, 25.  10.1002/ejoc.202300366 |
| 55. Kalinin Mikhail A., Medvedko Alexey V., Minyaev Mikhail E., Vatsadze Sergey Z. Synthesis of N,N′-Unsymmetrical 9-Amino-5,7-dimethyl-bispidines.J. Org. Chem. 2023, 88, 11, 7272–7280.  10.1021/acs.joc.3c00514 |
| 56. Shaferov Alexander V., Arakelov Sergey T., Teslenko Fedor E., Pivkina Alla N., Muravyev Nikita V., Fershtat Leonid L. First Example of 1,2,5-Oxadiazole-Based Hypergolic Ionic Liquids: a New Class of Potential Energetic Fuels.Chemistry-A European Journal. 2023, 29, 44.  10.1002/chem.202300948 |
| 57. Gazizov Almir S., Smolobochkin Andrey V., Rizbayeva T. S., Vatsadze Sergey Z., Burilov Alexander R., Sinyashin Oleg G., Alabugin Igor V. “Stereoelectronic Deprotection of Nitrogen”: Recovering Nucleophilicity with a Conformational Change.J. Org. Chem. 2023, 88, 11, 6868–6877.  10.1021/acs.joc.3c00161 |
| 58. Andrea Angeli, Victor Kartsev, Anthi Petrou, Boris Lichitsky, Andrey Komogortsev, Athina Geronikaki, Claudiu T SupuranSubstituted furan sulfonamides as carbonic anhydrase inhibitors: Synthesis, biological and in silico studies. Bioorganic Chemistry. 2023, 138.  10.1016/j.bioorg.2023.106621 |
| 59. Anastasia Konstantinova, Victor Stroylov, Denis Pozdyshev, Matej Sova, Saboury Ali Akbar, Vladimir Muronetz, Yulia Stroylova. Substituted cinnamides: Characterization of non-toxic inhibitors of alpha-synuclein aggregation. Mendeleev Communications. 2023, 33, 3, 334-336.  10.1016/j.mencom.2023.04.012 |
| 60. Guzelia I. Sadrtdinova, Daniil A. Bardonov, Konstantin A. Lyssenko, Mikhail E. Minyaev, Ilya E. Nifant'ev, Dmitrii M. Roitershtein. (Cyclopentadienyl)neodymium borohydrides with auxiliary N3-heterocyclic ligands. Mendeleev Communications. 2023, 33, 3, 357-359.  10.1016/j.mencom.2023.04.019 |
| 61. Elena O. Levina, Ekaterina V. Bartashevich, Alexey E. Batalov, Oleg A. Rakitin, Vladimir G. Tsirelson. How electron delocalization influences the electron-withdrawing properties of isomeric benzobischalcogenadiazoles. Mendeleev Communications. 2023, 33, 3, 372-375.  10.1016/j.mencom.2023.04.024 |
| 62. Sergey S. Lunkov, Artem A. Zemtsov, Vitalij V. Levin, Alexander D. Dilman. Photocatalytic reduction of fluoroalkyl-substituted alcohols activated by pentafluoropyridine. Mendeleev Communications. 2023, 33, 3, 387-389.  10.1016/j.mencom.2023.04.028 |
| 63. Timur I. Mukhametshin, Dmitry B. Vinogradov, Pavel V. Bulatov, Valery G. Nikitin, Vladimir A. Petrov. Synthesis of segmented polyurethanes based on furazan units. Mendeleev Communications. 2023, 33, 3, 408-410.  10.1016/j.mencom.2023.04.034 |
| 64. Igor I. Mishanin, Tatiana V. Bogdan, Aleksey V. Smirnov, Petr A. Chernavskii, Natalia N. Kuznetsova, Viktor I. Bogdan. Formation of active phases of Fe/C, Cr/C and Fe–Cr/C catalysts in oxidative dehydrogenation of ethane. Mendeleev Communications. 2023, 33, 3, 422-424.  10.1016/j.mencom.2023.04.039 |
| 65. Oleg V. Khazipov, Anastasia S. Pyatachenko, Victor M. Chernyshev, Valentine P. Ananikov. A Simple Protocol for the C-N Cross-Coupling of Aryl Chlorides with Amines Applying Ni/NHC Catalysis.ChemCatChem. 2023, 15, 13.  10.1002/cctc.202300466 |
| 66. Tatiana V. Bogdan, Natalia A. Bobrova, Aleksey E. Koklin, Igor I. Mishanin, Ekaterina G. Odintsova, Marina L. Antipova, Valentina E. Petrenko, Viktor I. Bogdan. Structure Of Aqueous Solutions Of Lignin Treated By Sub- And Supercritical Water: Experiment And Simulation.Journal of Molecular Liquids. 2023, 383.  10.1016/j.molliq.2023.122030 |
| 67. Artem G. Savchenko, Mikhail O. Zubkov, Dr. Vladimir A. Kokorekin, Jinbo Hu, Alexander D. Dilman. Sulfones Bearing Perfluorinated Pyridine Group: Synthesis and Photocatalytic Reaction with α-(Trifluoromethyl)styrenes. ChemCatChem. 2023, 15, 12.  10.1002/cctc.202300505 |
| 68. Maxim A. Novikov, Roman A. Novikov, Yury V. Tomilov. Boronyl borinic esters: preparation as B2pin2/ sec BuLi/TFAA adducts, structural insights and reactivity in Pd-catalyzed allylic borylation. Chemistry-An Asian Journal. 2023, 18, 12.  10.1002/asia.202300219 |
| 69. Andrey V. Perepelov, Alexander S. Shashkov, Deborah Kim, Nataliya V. Potekhina, Andrey S. Dmitrenok, Sof'ya N. Senchenkova, Lubov V. Dorofeeva, Lyudmila I. Evtushenko, Elena M. Tul'skaya. A highly branched novel galactofuranan in the cell wall of Clavibacter tesselarius VKM Ac-1406.Carbohydrate Research. 2023, 529.  10.1016/j.carres.2023.108823 |
| 70. Elena Redina, Natalia Arkhipova, Gennady Kapustin, Olga Kirichenko, Igor Mishin, Leonid Kustov. Ceria-modified copper phyllosilicate catalyst for one-pot hydroamination of 5-HMF with nitro-compounds. ChemCatChem. 2023, 15, 11.  10.1002/cctc.202300294 |
| 71. Alexey S. Galushko, Daniil A. Boiko, Evgeniy O. Pentsak, Dmitry B. Eremin, and Valentine P. Ananikov. Time-Resolved Formation and Operation Maps of Pd Catalysts Suggest a Key Role of Single Atom Centers in Cross-Coupling.J. Am. Chem. Soc. 2023, 145, 16, 9092–9103.  10.1021/jacs.3c00645 |
| 72. Vladislav S. Kostromitin, Vitalij V. Levin, and Alexander D. Dilman. Dual Photoredox/Copper Catalyzed Fluoroalkylative Alkene Difunctionalization.J. Org. Chem. 2023, 88, 9, 6252–6262.  10.1021/acs.joc.3c00448 |
| 73. Daniil A. Rusanov, Samah Mutasim Alfadul, Ekaterina Yu. Portnyagina, Dr. Eugenia A. Silyanova, Nikita A. Kuznetsov, Kirill E. Podpovetny, Alexander V. Samet, Victor V. Semenov, Maria V. Babak. Toward “E-ring-free” lamellarin analogues: synthesis and preliminary biological evaluation. ChemBioChem. 2023, 24, 11.  10.1002/cbic.202300161 |
| 74. Tatiana V. Burova, Natalia V. Grinberg, Alexander S. Dubovik, Irina G. Plashchina, Anatoly I. Usov, Valerij Y. Grinberg. Soluble complexes of ovalbumin with fucoidan: Energetics of binding, protein stability and functional properties. Food Hydrocolloids. 2023, 142.  10.1016/j.foodhyd.2023.108767 |
| 75. Valentina Birukova, Alexander Scherbakov, Anastasia Ilina, Diana Salnikova, Olga Andreeva, Yaraslau Dzichenka, Igor Zavarzin, Yulia Volkova. Discovery of highly potent proapoptotic antiestrogens in a series of androst-5,16-dienes D-modified with imidazole-annulated pendants. The Journal of Steroid Biochemistry and Molecular Biology. 2023, 231.  10.1016/j.jsbmb.2023.106309 |
| 76. Sai-Yan Ren, Qi Zhou, He-Yang Zhou, Lin-Wei Wang, Olga M. Mulina, Stanislav A. Paveliev, Hai-Tao Tang, Alexander O. Terentʼev, Ying-Ming Pan, and Xiu-Jin Meng. Three-Component Electrochemical Aminoselenation of 1,3-Dienes.J. Org. Chem. 2023, 88, 9, 5760–5771.  10.1021/acs.joc.3c00214 |
| 77. Matvey K. Ilyushchenko, Rinat F. Salikov, Alena D. Sokolova, Veronika V. Litvinenko, Alexander Yu. Belyy, Dmitry N. Platonov, and Yury V. Tomilov. Cascade Vinylation/8π-Electrocyclization and Cu(II)-Catalyzed Dehydrogenation toward Highly Stable Formally Antiaromatic Cycloheptatrienyl Anions.J. Org. Chem. 2023, 88, 9, 5661–5670.  10.1021/acs.joc.3c00142 |
| 78. Anton A. Galochkin, Vladimir V. Baranov, Karl A. Hansford, Louise I. M. Friberg, Elena D. Strel'tzova, Egor S. Lipatov, Yulia V. Nelyubina, Angelina N. Kravchenko. Synthesis, Structures and Antifungal Activity of Selenoglycolurils.ChemistrySelect. 2023, 8, 14.  10.1002/slct.202300765 |
| 79. Andrey S. Kirillov, Egor A. Semenov, Oleg V. Bityukov, Maria A. Kuznetsova, Valentina N. Demidova, Alexander N. Rogozhin, Alexei P. Glinushkin, Vera A. Vil’ and Alexander O. Terent'ev. An environmentally benign way to synthesize 2-thiocyano-1,3-dicarbonyl compounds with high antifungal activity: a key role of solvent.Org. Biomol. Chem. 2023, 21, 17, 3615-3622.  10.1039/D3OB00474K |
| 80. Elena N. Sigida, Evelina L. Zdorovenko, Alexander S. Shashkov, Andrey S. Dmitrenok, Yulia P. Fedonenko. Structure of the O-specific polysaccharide of Ochrobactrum endophyticum KCTC 42485T containing 3-(3-hydroxy-2,3-dimethyl-5-oxoprolyl)amino-3,6-dideoxy-d-galactose.Carbohydrate Research. 2023, 527.  10.1016/j.carres.2023.108810 |
| 81. Alexander Yu. Kostyukovich, Evgeniy G. Gordeev, Valentine P. Ananikov. Metadynamics simulations of R–NHC reductive elimination in intermediate palladium complexes of cross-coupling and Mizoroki–Heck reactions. Mendeleev Communications. 2023, 33, 2, 153-156.  10.1016/j.mencom.2023.02.002 |
| 82. Milana U. Agaeva, Badma N. Mankaev, Vladislav I. Filippenko, Valeriia A. Serova, Mikhail P. Egorov, Sergey S. Karlov. A convenient synthesis of N,N',N''-trisubstituted diethylenetriamines.Mendeleev Communications. 2023, 33, 2, 157-159.  10.1016/j.mencom.2023.02.003 |
| 83. Oleg V. Khazipov, Anastasia S. Pyatachenko, Dmitry V. Pasyukov, Mikhail E. Minyaev, Victor M. Chernyshev. A pyridine promoted ‘weak base route’ to (NHC)2NiCl2 complexes with bulky N,N'-diaryl carbene ligands.Mendeleev Communications. 2023, 33, 2, 180-183.  10.1016/j.mencom.2023.02.010 |
| 84. Jinyi Liu, Haojie Yu, Li Wang, Tao Chen, Sergey Z. Vatsadze, Dingning Chen, Di Shen, Yu Wang. Preparation of Ferrocene-Terminated Dendrimers for the Thermal Decomposition of Ammonium Perchlorate.Macromolecular Rapid Communications. 2023, 44, 13.  10.1002/marc.202300084 |
| 85.  Ilya E. Nifant’ev, Alexander A. Vinogradov, Alexey A. Vinogradov, Vladimir V. Bagrov, Artem V. Kiselev, Mikhail E. Minyaev, Tatyana I. Samurganova, and Pavel V. Ivchenko. Heterocene Catalysts and Reaction Temperature Gradient in Dec-1-ene Oligomerization for the Production of Low Viscosity PAO Base Stocks.Ind. Eng. Chem. Res. 2023, 62, 15, 6347–6353.  10.1021/acs.iecr.3c00755 |
| 86. Alexey N. Bilyachenko, Victor N. Khrustalev, Grigorii S. Astakhov, Anna Y. Zueva, Ivan S. Arteev, Yan V. Zubavichus, Alexander A. Korlyukov, Pavel V. Dorovatovskii, Lidia S. Shul’pina, Nikolay S. Ikonnikov, Marina V. Kirillova, Elena S. Shubina, Yuriy N. Kozlov, Alexander M. Kirillov, and Georgiy B. Shul’pin. Cagelike Rb2-, K2-, and Na2-Tetracopper(II) Silsesquioxanes with Quaternary Ammonium Cations: Synthesis, Structures, and Catalytic Activity.Organometallics. 2023, 42, 18, 2577–2589.  10.1021/acs.organomet.2c00649 |
| 87. Alexander E. Varakutin, Ilia Yu Shinkarev, Egor A. Muravsky, Darina I. Nasyrova, Aida I. Samigullina, Marina N. Semenova, Victor V. Semenov. Synthesis of tetraalkoxyaryldihydrobenzo[g]indazoles from metabolites of dill and parsley seeds essential oil. Tetrahedron. 2023, 137.  10.1016/j.tet.2023.133365 |
| 88. Vasiliy A. Chaliy, Elena S. Kelbysheva, Mariam G. Ezernitskaya, Tatyana V. Strelkova, Dr. Anastasia V. Bochenkova, Dr. Michael G. Medvedev, Dr. Lyudmila N. Telegina. CO-preserving Photoinduced Transfer of Cymantrenyl Moiety: a Tandem Experimental and Computational Investigation.Chemistry-A European Journal. 2023, 29, 29.  10.1002/chem.202203949 |
| 89. Andrey N. Komogortsev, Boris V. Lichitskii, Constantine V. Milyutina and Valeriya G. Melekhina. Photochemical synthesis and ring–chain–ring tautomerism of benzo[4,5]imidazo[1,2-a]cyclopenta[e]pyridines.Org. Biomol. Chem. 2023, 21, 13, 2720-2728.  10.1039/D3OB00273J |
| 90. Dmitriy Vorobiev, Natalya Heintz, Elena Korina, Oleg Grafov, Sergey Gusev, Anton Abramyan, Vyacheslav Avdin, Oleg Bol'shakov. Testing the Support Effect on Deposited CuO Nanoparticles in Ullmann Reaction.Inorganic Chemistry Communications. 2023, 151.  10.1016/j.inoche.2023.110608 |
| 91. Ilya E. Nifant'ev, Alexander A. Vinogradov, Alexey A. Vinogradov, Mikhail E. Minyaev, Vladimir V. Bagrov, Ildar I. Salakhov, Nadim M. Shaidullin, Anatoly E. Chalykh, Alexey V. Shapagin, Pavel V. Ivchenko. Heterocene-catalyzed ethylene/oct-1-ene copolymerization under MAO-free and low-MAO conditions: The synthesis of highly statistical copolymers and their use in blending with HDPE.Polymer. 2023, 272.  10.1016/j.polymer.2023.125836 |
| 92. Vladimir P. Zaytsev, Nataliya S. Surina, Kuzma M. Pokazeev, Evgeniya R. Shelukho, Elizaveta D. Yakovleva, Maryana A. Nadirova, Roman A. Novikov, Victor N. Khrustalev, Fedor I. Zubkov. Cascade of the acylation/intramolecular oxo-Diels–Alder reaction for the diastereoselective synthesis of thienyl substituted hexahydropyrano[3,4–c]pyrrole-1,6-diones.Tetrahedron Letters. 2023, 120.  10.1016/j.tetlet.2023.154434 |
| 93. Vera A. Vil’, Yana A. Barsegyan, Leah Kuhn, Alexander O. Terent’ev, and Igor V. Alabugin. Creating, Preserving, and Directing Carboxylate Radicals in Ni-Catalyzed C(sp3)–H Acyloxylation of Ethers, Ketones, and Alkanes with Diacyl Peroxides.Organometallics. 2023, 42, 18, 2598–2612.  10.1021/acs.organomet.2c00663 |
| 94. Liliya T. Sahharova, Julia V. Burykina, Alexander Yu. Kostyukovich, Dmitry B. Eremin, Daniil A. Boiko, Artem N. Fakhrutdinov, and Valentine P. Ananikov. Expanding the Role of Dimeric Species: On-Cycle Involvement, Improved Stability, and Control of Stereo-Specificity. A Case Study of Atom-Economic Catalytic Hydrothiolation.ACS Catal. 2023, 13, 6, 3591–3604.  10.1021/acscatal.2c06406 |
| 95. Badma N. Mankaev, Valeriia A. Serova, Mikhail A. Syroeshkin, Anna Ya. Akyeva, Alexey V. Sobolev, Andrei V. Churakov, Elmira Kh. Lermontova, Mikhail E. Minyaev, Yury F. Oprunenko, Maxim V. Zabalov, Kirill V. Zaitsev, Galina S. Zaitseva, Sergey S. Karlov. Synthesis of ONO-Ligated Tetrylenes Based on 2,6-bis(2-Hydroxyphenyl)pyridines: Influence of Ligand Sterics on the Structure of the Products.European Journal of Inorganic Chemistry. 2023, 26, 11.  10.1002/ejic.202200690 |
| 96. Evgeniia E. Ondar, Mikhail V. Polynski, Valentine P. Ananikov. Predicting 195Pt NMR Chemical Shifts in Water-Soluble Inorganic/Organometallic Complexes with a Fast and Simple Protocol Combining Semiempirical Modeling and Machine Learning.ChemPhysChem. 2023, 24, 11.  10.1002/cphc.202200940 |
| 97. Andrey V. Perepelov, Deborah Kim, Elena M. Tul'skaya, Nataliya V. Potekhina, Andrey S. Dmitrenok, Sof'ya N. Senchenkova, Lubov V. Dorofeeva, Lyudmila I. Evtushenko, Alexander S. Shashkov. A novel cell wall galactofuranan in Clavibacter phaseoli VKM Ac-2641T.Carbohydrate Research. 2023, 525.  10.1016/j.carres.2023.108778 |
| 98. Vladislav S. Kostromitin, Artem O. Sorokin, Vitalij V. Levin and Alexander D. Dilman. Aminals as powerful XAT-reagents: activation of fluorinated alkyl chlorides.Chem. Sci. 2023, 14, 12, 3229-3234.  10.1039/D3SC00027C |
| 99. Roman O. Pankov, Darya O. Prima, Alexander Yu. Kostyukovich, Mikhail E. Minyaev and Valentine P. Ananikov. Synthesis and a combined experimental/theoretical structural study of a comprehensive set of Pd/NHC complexes with o-, m-, and p-halogen-substituted aryl groups (X = F, Cl, Br, CF3). Dalton Trans. 2023, 52, 13, 4122-4135.  10.1039/D2DT03665G |
| 100. Mikhail Yu. Mashkin, Marina A. Tedeeva, Anna A. Fedorova, Evgeniya R. Fatula, Alexander V. Egorov, Stanislav V. Dvoryak, Konstantin I. Maslakov, Alexander V. Knotko, Alexander E. Baranchikov, Gennadii I. Kapustin, Dmitrii I. Petukhov, Tatyana B. Shatalova, Igor V. Morozov, Leonid M. Kustov, Alexander L. Kustov. Synthesis of CexZr1-xO2/SiO2 supports for chromium oxide catalysts of oxidative dehydrogenation of propane with carbon dioxide. J Chem Technol Biotechnol. 2023, 98, 5, 1247-1259.  10.1002/jctb.7339 |
| 101. Ilgiz I. Islamov, Adelya V. Yusupova, Vladimir A. D'yakonov, Usein M. Dzhemilev. Synthesis of new ionic liquids based on (5Z,9Z)-alkadienoic acids and choline. Mendeleev Communications. 2023, 33, 1, 50-52.  10.1016/j.mencom.2023.01.015 |
| 102. Galina V. Pazynina, Svetlana V. Tsygankova, Marina A. Sablina, Nadezhda V. Shilova, Alexander S. Paramonov, Alexander O. Chizhov, Nicolai V. Bovin. Synthesis of Sug1-4GalNAcα disaccharides and their interaction with human blood antibodies. Mendeleev Communications. 2023, 33, 1, 107-108.  10.1016/j.mencom.2023.01.033 |
| 103. Alexander V. Belyakov, Vladimir V. Kuznetsov, Galina S. Shimanskaya, Anatoly N. Rykov, Alexander S. Goloveshkin, Yulia V. Novakovskaya, Igor F. Shishkov. Molecular structure of 1,1',6,6'-tetraaza-7,7'-bi(bicyclo[4.1.0]heptane) in gas, solid and solution phases: GED, XRD and NMR data combined with quantum chemical calculations.Mendeleev Communications. 2023, 33, 1, 95-98.  10.1016/j.mencom.2023.01.030 |
| 104. Vyacheslav N. Borshch, Svetlana Ya. Zhuk, Elena V. Pugacheva, Tshepo Duncan Dipheko, Dmitrii E. Andreev, Yurii A. Agafonov, Oleg L. Eliseev. Co–Cu–La catalysts for selective CO2 hydrogenation to higher hydrocarbons. Mendeleev Communications. 2023, 33, 1, 55-57.  10.1016/j.mencom.2023.01.017 |
| 105. Daniil A. Boiko, Alexey S. Kashin, Vyacheslav R. Sorokin, Yury V. Agaev, Roman G. Zaytsev, Valentine P. Ananikov. Analyzing ionic liquid systems using real-time electron microscopy and a computational framework combining deep learning and classic computer vision techniques. Journal of Molecular Liquids. 2023, 376.  10.1016/j.molliq.2023.121407 |
| 106. Do Van Quy, Alexey A. Kruzhilin, Nadezhda V. Stolpovskaya, Sergey V. Baranin, Mikhail A. Prezent, Mikhail E. Minyaev, Khidmet S. Shikhaliev. Diastereoselective synthesis of pyrimido[1,2-a][1,3,5]triazines based on the Biginelli reaction.Tetrahedron. 2023, 134.  10.1016/j.tet.2023.133298 |
| 107.  Pavel A. Kumandin, Alexandra S. Antonova, Roman A. Novikov, Kirill A. Vasilyev, Marina A. Vinokurova, Mikhail S. Grigoriev, Anton P. Novikov, Daria K. Polianskaia, Kirill B. Polyanskii, and Fedor I. Zubkov. Properties and Catalytic Activity of Hoveyda–Grubbs-Type Catalysts with an S → Ru Coordination Bond in a Six-Membered Chelate Ring.Organometallics. 2023, 42, 3, 218–234.  10.1021/acs.organomet.2c00556 |
| 108. Alexei N. Izmest'ev, Angelina N. Kravchenko and Galina A. Gazieva. A new reversible transformation of oxindolylidene derivatives of imidazothiazolotriazine into 3-[(imidazotriazin-3-yl)thio]-2-oxoquinoline-4-carboxylates.Org. Biomol. Chem. 2023, 21, 8, 1827-1834.  10.1039/D2OB02242G |
| 109. Daria V. Chernysheva, Ekaterina A. Sidash, Maksim S. Konstantinov, Victor A. Klushin, Denis V. Tokarev, Dr. Veronica E. Andreeva, Evgeny A. Kolesnikov, Vasily V. Kaichev, Nina V. Smirnova, Valentine P. Ananikov. “Liquid-to-solid” conversion of biomass wastes enhanced by nitrogen doping for the preparation of high-value-added carbon materials for energy storage with superior characteristics. ChemSusChem. 2023, 16, 8.  10.1002/cssc.202202065 |
| 110. Vladimir V. Burmistrov, Christophe Morisseau, Tatyana K. Shkineva, Dmitry V. Danilov, Boris Gladkikh, Gennady M. Butov, Robert R. Fayzullin, Tatyana Ya. Dutova, Bruce D. Hammock, Igor L. Dalinger. Adamantyl-ureas with pyrazoles substituted by fluoroalkanes as soluble epoxide hydrolase inhibitors. Journal of Fluorine Chemistry. 2023, 266.  10.1016/j.jfluchem.2023.110087 |
| 111. Mikhail M. Vinogradov, Yulia V. Nelyubina, Roman A. Novikov. The first supraicosahedral osmacarboranes and dynamic behavior of 13-vertex carborane. Polyhedron. 2023, 232.  10.1016/j.poly.2023.116291 |
| 112. Anton A. Gladkov, Vitalij V. Levin, and Alexander D. Dilman. Photoredox Promoted Barbier-Type Reaction of Alkyl Iodides with N-Alkyl and N-Aryl Imines.J. Org. Chem. 2023, 88, 2, 1260–1269.  10.1021/acs.joc.2c02598 |
| 113. Irina K. Goncharova, Roman A. Novikov, Irina P. Beletskaya, Ashot V. Arzumanyan. Recyclable and Convenient-to-Handle Pt/Ethylene Glycol Catalytic System – an Approach to Sustainable Hydrosilylation.Journal of Catalysis. 2023, 418, 70-77.  10.1016/j.jcat.2023.01.004 |
| 114. Gleb M. Averochkin, Evgeniy G. Gordeev, Fedor A. Kucherov and Valentine P. Ananikov. Rapid access to molecular complexity from bioderived 5-HMF derivatives via cascade cycloadditions. Green Chemistry. 2023, 25, 3, 1045-1055.  10.1039/D2GC04197A  **2024 год** |
| 1. N.A. Bakuleva, B.V. Lichitsky, D.V. Tsyganov, A.N. Komogortsev, V.G. Melekhina and E.V. Tretyakov. Synthesis of substituted 5-aryl-2,3-dihydropyrazine 1,4-dioxides based on condensation of N,N′-(2,3-dimethylbutane-2,3-diyl)bis(hydroxylamine) with various arylglyoxals. Journal of Heterocyclic Chemistry. 2024,61,7,1057-1065. 10.1002/jhet.4826 |
| 2. R.Y. Balakhonov, E.B. Gaeva, I.S. Mekeda, R.A. Dolotov, A.V. Metelitsa and V.Z. Shirinian. Structure and photophysical properties of furoquinoline aza-helicenes: Fluorescence enhancement by protonation. Dyes and Pigments. 2024,225. 10.1016/j.dyepig.2024.112032 |
| 3. V.A. Balycheva, B.K. Chabuka, L.R. Kuhn, P.G. Shangin, A.Y. Akyeva, I.V. Krylova, V.A. Korolev, A.V. Lalov, M.P. Egorov, I.V. Alabugin and M.A. Syroeshkin. Redox Upconversion and Electrocatalytic Cycles in Activation of Si-Si Bonds: Diverging Reactivity in Hole- and Electron-Catalyzed Transformations. Journal of Physical Chemistry C. 2024,128,11,4581-4599. 10.1021/acs.jpcc.4c00538 |
| 4. O.V. Bityukov, P.Y. Serdyuchenko, V.A. Vil, G.I. Nikishin, L.N. He and A.O. Terent'ev. Co-Catalyzed Peroxidation of Cyclic β-Dicarbonyls. European Journal of Organic Chemistry. 2024,27,13. 10.1002/ejoc.202400078 |
| 5. O.V. Bityukov, K.V. Skokova, V.A. Vil’, G.I. Nikishin, A.O. Terent’ev. Electrochemical Generation of Peroxy Radicals and Subsequent Peroxidation of 1,3-Dicarbonyls in an Undivided Cell. Organic Letters. 2024,26,1,166-171. 10.1021/acs.orglett.3c03780 |
| 6. D.D. Borisov, R.A. Novikov and Y.V. Tomilov. Three-Component Synthesis of Substituted Perhydropyrans from β-Styrylmalonates, Aldehydes, and Alkoxyaluminum Dichlorides. Organic Letters. 2024,26,5,1022-1027. 10.1021/acs.orglett.3c04097 |
| 7. P. Buikin, A. Korlyukov, E. Kulikova, R. Novikov and A. Vologzhanina. Crystal structure of rilpivirine hydrochloride, N6H19C22Cl. Powder Diffraction. 2024,39,3,151-158. 10.1017/S0885715624000228 |
| 8. N.S. Bushkov, A.V. Rumyantsev, A.V. Pichugov, A.A. Zhizhin, D.Y. Aleshin, E.I. Gutsul, R.U. Takazova, D.K. Kitaeva, F.M. Dolgushin, R.A. Novikov, P.A. Zhizhko and D.N. Zarubin. The Role of L-Ligands in Silica-Supported Ti Oxo/Imido Heterometathesis Catalysts. Applied Organometallic Chemistry. 2024,38,12. 10.1002/aoc.7746 |
| 9. N.S. Bushkov, A.V. Rumyantsev, A.A. Zhizhin, T.V. Strelkova, R.A. Novikov, E.I. Gutsul, R.U. Takazova, D.K. Kitaeva, N.A. Ustynyuk, P.A. Zhizhko and D.N. Zarubin. Tungsten Oxide Dispersed on Silica as Robust and Readily Available Oxo/Imido Heterometathesis Catalyst. ChemPlusChem. 2024,89,8. 10.1002/cplu.202400029 |
| 10. I.S. Chaschin, E.I. Perepelkin, M.A. Sinolits, G.A. Badun, M.G. Chernysheva, N.M. Ivanova, V.G. Vasil`ev, O.A. Kizas, N.M. Anuchina, G.A. Khugaev, D.V. Britikov and N.P. Bakuleva. Coating based on chitosan/vancomycin nanoparticles: Patterns of formation in a water-carbon dioxide biphase system and in vivo stability. International Journal of Biological Macromolecules. 2024,278,3. 10.1016/j.ijbiomac.2024.134940 |
| 11. A.Y. Chernenko, V.A. Baydikova, V.V. Kutyrev, A.V. Astakhov, M.E. Minyaev, V.M. Chernyshev and V.P. Ananikov. Base-Ionizable Anionic NHC Ligands in Pd-catalyzed Reactions of Aryl Chlorides. ChemCatChem. 2024,16,5. 10.1002/cctc.202301471 |
| 12. I.D. Deltsov, D.B. Vinogradov, K.A. Monogarov and L.L. Fershtat. Azobis(polynitrophenyl-1,2,5-oxadiazoles) as Heat-Resistant Friction-Insensitive Energetic Materials. J. Org. Chem. 2024,90,1,733-741. 10.1021/acs.joc.4c02678 |
| 13. T.D. Dipheko, M.E. Osman, E.A. Permyakov, V.V. Maximov, Y.Y. Ponkratova, V.S. Dorokhov, A.G. Cherednichenko and V.M. Kogan. A Study of the Effects of K‑Modification and (Co, Ni, Fe)-Promotion on a Supported MoS2‑Based Catalyst for Ethanol Conversion. Journal of Physical Chemistry C. 2024,128,28,11507-11521. 10.1021/acs.jpcc.4c01872 |
| 14. T.E. Khoranyan, A.A. Larin, K.Y. Suponitsky, I.V. Ananyev, I.N. Melnikov, E.K. Kosareva, N.V. Muravyev, I.L. Dalinger, A.N. Pivkina and L.L. Fershtat. First Alliance of Pyrazole and Furoxan Leading to High-Performance Energetic Materials. ACS Applied Materials and Interfaces. 2024,16,40,53972-53979. 10.1021/acsami.4c12242 |
| 15. A.N. Izmest’ev, S.S. Isakov, A.N. Kravchenko and G.A. Gazieva. The synthesis and antitumor activity of novel 1-alkyl-3-phenyland 3-alkyl-1-phenylimidazothiazolotriazines. Chemistry of Heterocyclic Compounds. 2024,60,45750,196-204. 10.1007/s10593-024-03318-y |
| 16. A.V. Kiselev, I.E. Nifant'ev, A.A. Vinogradov, A.A. Vinogradov, V.V. Bagrov, A.V. Afanaseva, M.E. Minyaev and P.V. Ivchenko. Rational design of ansa-heterocenes with a long SiOSi bridge as a catalysts for selective dimerization of oct-1-ene. Applied Catalysis A: General. 2024,680,. 10.1016/j.apcata.2024.119756 |
| 17. D.A. Kolykhalov, A.N. Golysheva and B.Y. Karlinskii. Efficient tunable approach for 5-(hydroxymethyl)furfural and 2,5-diformylfuran production from fructose in DMSO with bromide catalysis. Catalysis Communications. 2024,186,. 10.1016/j.catcom.2023.106831 |
| 18. A.N. Komogortsev, B.V. Lichitsky, C.V. Milyutin and V.G. Melekhina. Straightforward method for the synthesis of 2H-furo[3,2-b]pyran-2-one derivatives starting from allomaltol. Journal of Heterocyclic Chemistry. 2024,61,1,86-92. 10.1002/jhet.4744 |
| 19. A.N. Komogortsev, V.G. Melekhina, C.V. Milyutin and B.V. Lichitsky. Synthesis of 2-aminothiazoles containing 3-hydroxypyran-4-one fragment based on condensation of substituted α-arylaminoketones with thioure. Journal of Heterocyclic Chemistry. 2024,61,10,1531-1541. 10.1002/jhet.4876 |
| 20. A.N. Komogortsev, C.V. Milyutin and B.V. Lichitsky. Base-promoted cascade recyclization of allomaltol derivatives containing an amide fragment into substituted 3-(1-hydroxyethylidene)tetronic acids. Beilstein Journal of Organic Chemistry. 2024,20,2585-2591. 10.3762/bjoc.20.217 |
| 21. E. Kudryavtseva, B. Lichitsky, A. Komogortsev, C. Milyutin and E. Tretyakov. The Study of Reaction of Hexafluoro-1,4-Napthoquinone With Substituted 5-Aminopyrazoles. Journal of Heterocyclic Chemistry. 2024,61,12,1932-1941. 10.1002/jhet.4911 |
| 22. E.N. Kudryavtseva, B.V. Lichitsky, A.N. Komogortsev, C.V. Milyutin and E.V. Tretyakov. Synthesis of substituted 5,6,7,8-tetrafluoro-1H-benzo[f]indol-4,9-diones based on the reaction of hexafluoro-1,4-napthoquinone with methyl 3-aminocrotonates. Journal of Heterocyclic Chemistry. 2024,61,10,1554-1563. 10.1002/jhet.4872 |
| 23. E.N. Kudryavtseva, B.V. Lichitsky and E.V. Tretyakov. Synthesis of substituted N'-(3,5,6,7,8-pentafluoro-1,4-dioxo-1,4-dihydronaphthalen-2-yl)hydrazides by condensation of acyl hydrazines and perfluoro-1,4-naphthoquinone. ChemistrySelect. 2024,9,43. 10.1002/slct.202404996 |
| 24. Y. V. Kuznetsov, M. O. Tserfas, A. M. Scherbakov, O. E. Andreeva, D. I. Salnikova, E. I. Bozhenko, I. V. Zavarzin and I. S. Levina. Synthesis of 13β- and 13α-epimers of 3-hydroxy-17-hydroxymethylestra-1,3,5(10)-triene and considerations on their hormonal and antiproliferative potency. Steroids. 2024,212. 10.1016/j.steroids.2024.109527 |
| 25. A.N. Kuznetsova, N.E. Leonov, O.V. Anikin, M.S. Klenov, A.M. Churakov, Y.A. Strelenko, R.A. Novikov, I.V. Fedyanin, A.N. Pivkina, T.S. Kon’kova, V.P. Sinditskii, A.D. Smirnova and V.A. Tartakovsky. Parent 1,4-dihydro-[1,2,3]triazolo[4,5-d][1,2,3]triazole and its derivatives as precursors for the design of promising high energy density materials. New Journal of Chemistry. 2024,49,1,311 - 320. 10.1039/d4nj04427d |
| 26. L.S. Kuznetsova, K.D. Ivanova, E.A. Lantsova, E.A. Saverina, A.S. Kharkova, C. Guetnga, M.S. Lipkin, O.A. Kamanina, T.V. Kozlova, N.M. Popova, A.A. Savishcheva, T.V. Losev, D.R. Bekmansurov, V.A. Chaliy, M.G. Medvedev, A.N. Vereshchagin, V.A. Arlyapov and V.P. Ananikov. Cross-Disciplinary Glucose Biosensors: An ORMOSIL/Enzyme Material for Enhanced Detection. ACS Applied Polymer Materials. 2024,6,20,12405–12419. 10.1021/acsapm.4c01394 |
| 27. S.A. Kuznetsova, S.M. Yunusov, M. North, V.P. Zhereb, E.A. Khakina, A. Naumkin, N.N. Lobanov, V.N. Khrustalev, D. Chusov, E.S. Kalyuzhnaya, M.M. Ilyin, V.V. Morozov, A.S. Kashin, M.G. Ezernitskaya and Y.N. Belokon. Chiral Organic Salt Supported Pd Nanoparticles as Selective Heterogeneous Catalysts of Hydrogenation Reactions. ChemistrySelect. 2024,9,41. 10.1002/slct.202402788 |
| 28. E.A. Lantsova, P.V. Rybochkin, E.A. Saverina and O.A. Kamanina. Biohybrid silicon-organic materials architecture obtained using various structure-affecting agents. Journal of Sol-Gel Science and Technology. 2024,110,1,134-141. 10.1007/s10971-024-06347-3 |
| 29. E. R. Lopat'eva, I. B. Krylov, I. R. Subbotina, G. I. Nikishin and A. O. Terent'ev. Re-Examination of Self-Decay Chemistry of Phthalimide-N-oxyl Redox-Organocatalyst for Free-Radical CH-Functionalization – Puzzle Begins to Come Together. ChemCatChem. 2024,16,20. 1. 10.1002/cctc.202400793 |
| 30. V. Malakhova, A. Scherbakov, D. Sorokin, H. Leanavets, Y. Dzichenka, I. Zavarzin and Y. Volkova. Exploration and biological evaluation of 20-vinyl pregnenes: A step forward toward selective modulators of the estrogen receptor α signaling for breast cancer treatment. Archiv der Pharmazie. 2024,357,7. 10.1002/ardp.202300651 |
| 31. C.V. Milyutin, A.N. Komogortsev and B.V. Lichitsky. Synthesis of 1,2,3-triazoles containing an allomaltol moiety from substituted pyrano[2,3-d]isoxazolones via base-promoted Boulton–Katritzky rearrangement. Beilstein Journal of Organic Chemistry. 2024,20,1334-1340. 10.3762/bjoc.20.117 |
| 32. Moiseeva N.V., Sokolov A., Andreev I., Ratmanova N., Trushkov I. and Kokorekin V.. Electrooxidative Thiocyanation of Hydroxy‐ and Alkoxybenzenes. European Journal of Organic Chemistry. 2024,27,47. 10.1002/ejoc.202400937 |
| 33. N.V. Muravyev, D.B. Meerov, K.A. Monogarov, E.K. Kosareva, I.N. Melnikov, D.K. Pronkin, L.L. Fershtat, M.S. Klenov, A.V. Kormanov, I.L. Dalinger, I.V. Kuchurov, I.V. Fomenkov and A.N. Pivkina. Impact and Friction Sensitivity of Reactive Chemicals: From Reproducibility Study to Benchmark Data Set for Modeling. Industrial and Engineering Chemistry Research. 2024,63,15,6504-6511. 10.1021/acs.iecr.3c04394 |
| 34. R.A. Novikov, D.D. Borisov, D.A. Denisov, M.A. Novikov, K.V. Potapov, Y.V. Tkachev and Y.V. Tomilov. The concept of Gallium-controlled double C–H functionalization of aliphatic CH2-groups driven by Vinyl carbocations. Nature Communications. 2024,15,1. 10.1038/s41467-024-51237-5 |
| 35. V.E. Opryshko, D.S. Ivanov, A.A. Danshina, S.A. Krasnova, A.V. Eshtukov-Shcheglov, A.A. Mikhaylov, A.Y. Smirnov and M.S. Baranov. Chemodivergent Phototransformations of Green Fluorescent Protein Related Chromophores: Wavelength-Dependent Photodimerization and Spirocyclization. Advanced Synthesis and Catalysis. 2024,367,5. 10.1002/adsc.202401001 |
| 36. S.N. Ostarkov, Ya.I. Lichtenstein, Yu.A. Antonova, Yu.V. Nelyubina, V.K. Lesnikov and A.A. Tabolin. Divergent Annulations of 5,6-Dihydro-4H-1,2-Oxazine N-Oxides and Enol Diazoacetates for the Switchable Chemoselective Synthesis of Fused 1,2-Oxazine Derivatives. European Journal of Organic Chemistry. 2024,27,45. 10.1002/ejoc.202400768 |
| 37. Pasyukov D.V., Shevchenko M.A., Minyaev M.E., Chernyshev V. and Ananikov V.P.. 4‐Halomethyl‐Substituted Imidazolium Salts: a Versatile Platform for the Synthesis of Functionalized NHC Precursors. Chemistry - An Asian Journal. 2024,19,24. 10.1002/asia.202400866 |
| 38. Pospelov E., Zhirov A., Kamidolla B. and Sukhorukov A.. Accessing Polysubstituted NH Pyrroles from Nitroalkenes via [4+2]‐Cycloaddition/Reductive Ring Contraction Strategy. European Journal of Organic Chemistry. 2024,27. 10.1002/ejoc.202400627 |
| 39. E.A. Redina, I.B. Krylov, R.A. Novikov, G.I. Kapustin, O.P. Tkachenko, K.V. Vikanova, I.I. Ivanova, A.S. Dmitrenok and L.M. Kustov. High-performance Pt/CeO2-ZrO2 catalysts for selective hydrogenation of α,β-unsaturated aldehydes to unsaturated alcohols under mild reaction conditions: “Giant” hydrogen spillover behind the activity enhancement. Journal of Catalysis. 2024,429. 10.1016/j.jcat.2023.115231 |
| 40. P.V. Rybochkin, R.N. Perchikov, B.Y. Karlinskii, O.A. Kamanina, V.A. Arlyapov, A.S. Kashin and V.P. Ananikov. Aerobic bacteria-supported biohybrid palladium catalysts for efficient cross-coupling reactions. Journal of Catalysis. 2024,429. 10.1016/j.jcat.2023.115238 |
| 41. R.F. Salikov, A.Y. Belyy, M.K. Ilyushchenko, D.N. Platonov, A.D. Sokolova and Y.V. Tomilov. Antiaromaticity of Cycloheptatrienyl Anions: Structure, Acidity, and Magnetic Properties. Chemistry - A European Journal. 2024,30,41. 10.1002/chem.202401041 |
| 42. A.V. Shaferov, I.V. Ananyev, K.A. Monogarov, I.V. Fomenkov, A.N. Pivkina and L.L. Fershtat. Energetic Methylene-Bridged Furoxan-Triazole/Tetrazole Hybrids. ChemPlusChem. 2024,89,12. 10.1002/cplu.202400496 |
| 43. Shashkov A.S., Arbatsky N.P., Senchenkova S.N., Kasimova A.A., Dmitrenok A.S., Shneider M.M., Knirel Y.A., Hall R.M. and Kenyon J.J.. Characterization of the carbapenem-resistant Acinetobacter baumannii clinical reference isolate BAL062 (CC2:KL58:OCL1): resistance properties and capsular polysaccharide structure. American Society for Microbiology. 2024,9,10. 10.1128/msystems.00941-24 |
| 44. N.S. Shlapakov, A.D. Kobelev, J.V. Burykina, A.Y. Kostyukovich, B. König and V.P. Ananikov. Reversible Radical Addition Guides Selective Photocatalytic Intermolecular Thiol-Yne-Ene Molecular Assembly. Angewandte Chemie - International Edition. 2024,63,13. 10.1002/anie.202314208 |
| 45. A.D. Shuvaev, M.A. Feoktistov, F.E. Teslenko and L.L. Fershtat. Electrochemical Approach Toward Mesoionic 1,2,3-Triazole 1-Imines. Advanced Synthesis and Catalysis. 2024,366,24,5050-5060. 10.1002/adsc.202400761 |
| 46. Y.A. Sidunets, V.G. Melekhina and L.L. Fershtat. Tandem diazotization/cyclization approach for the synthesis of a fused 1,2,3-triazinone-furazan/furoxan heterocyclic system. Beilstein Journal of Organic Chemistry. 2024,20,2342-2348. 10.3762/bjoc.20.200 |
| 47. A.D. Sokolova, D.N. Platonov, A.Y. Belyy, R.F. Salikov, K.S. Erokhin and Y.V. Tomilov. The Antiaromatic Nucleophilic Substitution Reaction (SNAAr) in Cycloheptatrienyl-Anion Containing Zwitterions with a Möbius-Aromatic Intermediate. Organic Letters. 2024,26,28,5877–5882. 10.1021/acs.orglett.4c01446 |
| 48. A.V. Stepanov, V.N. Yarovenko, D.I. Nasyrova, L.G. Dezhenkova, I.O. Akchurin, M.M. Krayushkin, V.V. Ilyushenkova, A.E. Shchekotikhin and E.V. Tretyakov. A Spin-Labeled Derivative of Gossypol. Molecules. 2024,29,20. 10.3390/molecules29204966 |
| 49. R.A. Tuktarova, L.U. Dzhemileva, U.M. Dzhemilev and V.A. D’yakonov. New Synthetic Analogs of Natural 5Z,9Z-Dienoic Acids – Hybrid Molecules Based on Oleanolic Acid: Synthesis and Study of Antitumor Activity. Cancers. 2024,16,23. 10.3390/cancers16233893 |
| 50. R. A. Tuktarova, L. U. Dzhemileva and U. M. Dzhemilev. (5Z,9Z)-14-[(3,28-Dioxoolean-12-en-28-yl)oxy]tetradeca-5,9-dienoic Acid with Cytotoxic Activity. Molbank. 2024,2024,1. 1. 10.3390/M1758 |
| 51. D. B. Vinogradov, A. N. Izmest'ev, A. N. Kravchenko, N. G. Kolotyrkina and G. A. Gazieva. Regioselective synthesis of new imidazo[4,5-e][1,3]thiazino[2,3-c][1,2,4]triazines via reaction of imidazo[4,5-e][1,2,4]triazinethiones with ethyl phenylpropiolate. Journal of Heterocyclic Chemistry. 2024,61,1,137-145. 10.1002/jhet.4753 |
| 52. E.E. Vinogradova, V.A. Karnoukhova, A.N. Kravchenko and G.A. Gazieva. Construction of New Heterocyclic System, Imidazo[4,5-d]thiazolo[4,3-b]oxazole, via Cascade Reaction of Thioglycolurils with α-Bromoketones. Asian Journal of Organic Chemistry. 2024,13,11. 10.1002/ajoc.202400369 |
| 53. R.A. Zilberg, J.B. Teres, E.O. Bulysheva, I.V. Vakulin, G.R. Mukhametdinov, O.V. Khromova, M.V. Panova, M.G. Medvedev, V.I. Maleev and V.A. Larionov. Chiral octahedral cobalt(III) complex immobilized on Carboblack C as a novel robust and readily available enantioselective voltammetric sensor for the recognition of tryptophan enantiomers in real samples. Electrochim. Acta. 2024,492. 10.1016/j.electacta.2024.144334 |
| 54. T.P. Zosim, R.N. Kadikova, R.A. Novikov, A.A. Korlyukov, O.S. Mozgovoj and I.R. Ramazanov. The TaCl5-Mediated Reaction of Dimethyl 2-Phenylcyclopropane-1,1-dicarboxylate with Aromatic Aldehydes as a Route to Substituted Tetrahydronaphthalenes. Molecules. 2024,29,12,. 10.3390/molecules29122715 |
| 55. K.V. Agliulin, A.V. Stepanov, V.N. Yarovenko, M.M. Krayushkin, E.V. Tretyakov, D.I. Nasyrova, V.V. Ilyushenkova, A.O. Ait and T.M. Valova. Synthesis, structure and properties of spin-labeled photosensitive chromone derivative. Mendeleev Communications. 2024,34,6,828-830. 10.1016/j.mencom.2024.10.019 |
| 56. Anufriev S.A., Timofeev S.V., Nasyrova D.I., Sivaev I.B. and Bregadze V.I.. Synthesis of C-Mercuro Derivatives of ortho-Carborane. Crystal Structure of Bis(2-phenyl-ortho-carboran-1-yl)mercury. Russian Journal of Inorganic Chemistry. 2024,69,625–629. 10.1134/s0036023624600187 |
| 57. S.P. Balabanova, A.A. Voronin, A.M. Churakov, M.S. Klenov, I.V. Fedyanin and V.A. Tartakovsky. A new heterocyclic system of tetrazolo(aminotriazolofurazan). Russian Chemical Bulletin. 2024,73,10,2968-2973. 10.1007/s11172-024-4414-4 |
| 58. A.Y. Chernenko, V.A. Baydikova, M.E. Minyaev and V.M. Chernyshev. Nitron analogs containing an N-arylcarbamoylmethyl group and Pd complexes derived therefrom: synthesis and catalytic activity in the Suzuki—Miyaura reaction. Russian Chemical Bulletin. 2024,73,4,932-949. 1. 10.1007/s11172-024-4206-x |
| 59. L.S. Konstantinova, A.S. Chechulina, N.V. Obruchnikova, E.A. Knyazeva, B. Kan, T. Duan, Y. Chen and O.A. Rakitin. Bromination of naphtho[2,3-c][1,2,5]thiadiazole-4,9-dione. Russian Chemical Bulletin. 2024,73,10,3038-3044. 1. 10.1007/s11172-024-4420-6 |
| 60. M.E. Lugovoi, A.N. Izmest'ev, N.G. Kolotyrkina, E.S. Izmalkova, A.N. Kravchenko and G.A. Gazieva. Synthesis of new heterylmethylidene derivatives of isomeric imidazo[4,5-e]thiazolo-fused [1,2,4]triazines. Mendeleev Communications. 2024,34,4,558-560. 10.1016/j.mencom.2024.06.029 |
| 61. A.V. Medved’ko, M.O. Ermakov and S.Z. Vatsadze. The first example of the use of 4-amino-2,2,6,6-tetramethylpiperidine-1-oxyl in the Mannich reaction to obtain radical-labeled bispidines. Russian Chemical Bulletin. 2024,73,5,1460-1464. 10.1007/s11172-024-4266-y |
| 62. Mishanin I.I., Bogdan T.V. and Bogdan V.I.. The Influence of Pretreatment of Carbon Support on the Catalytic Activity of Fe–Cr Oxide Systems in the Oxidative Dehydrogenation of Ethane. Solid Fuel Chemistry. 2024,58,4,265-272. 10.3103/s0361521924700149 |
| 63. M.V. Polyakov, M.D. Vedenyapina, A.M. Skundin, I.A. Yaremenko and P.S. Radulov. Electrochemical behavior of a flat gold electrode in an acetonitrile solution of 1,2,4,5-tetraoxane. Russian Chemical Bulletin. 2024,73,4,863-870. 10.1007/s11172-024-4200-3 |
| 64. A.I. Samigullina, A.O. Isaeva, D.K. Komunarova, R.N. Burangulova, E.L. Gavrilova, D.V. Zakharychev and A.T. Gubaidullin. Polymorphism in N4-Ethyl-N1-(Diphenylphosphoryl)Acetyl-Thiosemicarbazide crystals. Journal of Structural Chemistry. 2024,65,3,596-609. 10.1134/S0022476624030144 |
| 65. Y.N. Tkachenko, M.A. Shevchenko, I.V. Lavrentev, D.V. Pasyukov, M.E. Minyaev and V.M. Chernyshev. Cyclization of 5,6-Diarylpyrrolo[3,4-d]pyrimidine-2,4-diones into Pyrrolo[1,2-f]phenanthridine Derivatives: Intramolecular C–H Arylation under Ru/NHC Catalysis. Russian Journal of General Chemistry. 2024,94,2,327-336. 10.1134/S1070363224020087 |
| 66. E.E. Vinogradova, A.A. Larin and G.A. Gazieva. Synthesis of hybrid molecules based on thioglycolurils and 1,2,5-oxadiazoles via the Eschenmoser sulfide contraction. Mendeleev Communications. 2024,34,1,122-125. 10.1016/j.mencom.2024.01.037 |
| 67. A.M. Zakirov, A.V. Medved’ko, I.I. Troshin, E.V. Tretyakov and S.Z. Vatsadze. Synthesis of spin-labeled bispidines. Russian Chemical Bulletin. 2024,73,5,1253-1260. 10.1007/s11172-024-4241-7 |

**Патенты**

**2020 год**

1. **Патент № 2729424** **Российская Федерация** «Органический светоизлучающий диод» В. М. Коршунов, Т. Н. Чмовж, Е. А. Князева, И. В. Тайдаков, Л. В. Михальченко, Е. А. Вараксина, Р. Р. Сайфутяров, И. Х. Аветисов, О. А. Ракитин зарегистрирован в государственном реестре изобретений РФ 06.08.2020 по заявке № 2019142522 с приоритетом от 19.12.2019 г., Патентовладелец: ИОХ РАН.
2. **Патент № 2724764 Российская Федерация** «Способ получения наноразмерной нитроцеллюлозы или композитов на ее основе» / Жарков М.Н., Кучуров И.В., Злотин С.Г. // зарегистрирован в Гос. реестре изобретений РФ 25.06.**2020** г. по заявке № 2019130520 с приоритетом от 27.09.2019 г. Патентообладатель ИОХ РАН.
3. **Патент № 2729422 Российская Федерация** «Катализатор для удаления оксидов серы из дымовых газов электростанций» / Цыбулевский А.М., Боливар Э., Кустов Л. М., Грейш А.А., Соколовский П.В., Богданов В.Н., Гилядов И.Г. // зарегистрирован в государственном реестре изобретений РФ 06.08.2020 по заявке 2019133972 с приоритетом от 24.10.2019 Патентовладелец: ИОХ РАН и Компания М Кемикал Инкорпорейтед.
4. **Патент № 2729424** **Российская Федерация** «Органический светоизлучающий диод» В. М. Коршунов, Т. Н. Чмовж, Е. А. Князева, И. В. Тайдаков, Л. В. Михальченко, Е. А. Вараксина, Р. Р. Сайфутяров, И. Х. Аветисов, О. А. Ракитин зарегистрирован в государственном реестре изобретений РФ 06.08.2020 по заявке № 2019142522 с приоритетом от 19.12.2019 г., Патентовладелец: ИОХ РАН.
5. **Патент № 198292** **Российская Федерация** «Устройство для получения метано-водородной смеси» / Баннов А.Г, Брестер А.Е, Попов М.В. // зарегистрирован в государственном реестре полезных моделей РФ 30.06.2020 г. по заявке № 2020105482 с приоритетом от 04.02.2020 г. Патентовладельцы: ИОХ РАН, Новосибирский Государственный Технический Университет.
6. **Патент № 2747110 Российская Федерация** «Замещенные [(3-нитро-1*Н*-1,2,4-триазол-1-ил)-*NNO*-азокси]фуразаны и способ их получения» / Кленов М.С., Гуляев Д.А., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений РФ 27.04.2021 г. по заявке № 2020133933 с приоритетом от 15.10.2020 г. Патентовладелец: ИОХ РАН.
7. **Патент № 2756321 Российская Федерация** «Замещенные [(3,4-динитро-1*Н*-пиразол-1-ил)-*NNO*-азокси]фуразаны и способ их получения» / Кленов М.С., Коннов А.А., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений РФ 29.09.2021 по заявке № 2020135027 с приоритетом от 26.10.2020 г. Патентовладелец: ИОХ РАН.

**2021 год**

1. **Патент № 2752760** **Российская Федерация** «Замещенные трициклические органические монопероксиды и способ их получения» / Яременко И.А., Радулов П.С., Белякова Ю.Ю., Терентьев А. О. // зарегистрирован в государственном реестре изобретений РФ 02.08.2021 г. по заявке № 2020141055 с приоритетом от 14.12.2020г. Патентообладатель: ИОХ РАН
2. **Патент № 2752940** **Российская Федерация** «Способ получения замещенных 5-гидроперокси-5-алкил-1,2-диоксолан-3-онов» / Барсегян Я. А., Виль В. А., Терентьев А. О. // зарегистрирован в государственном реестре изобретений РФ 11.08.2021 г. по заявке № 2020141057 с приоритетом от 14.12.2020г. Патентообладатель: ИОХ РАН.
3. **Патент № 2752951** **Российская Федерация** «Органический светоизлучающий диод» / Коршунов В.М., Чмовж Т. Н., Голованов И.С., Князева Е.А., Михальченко Л.В., Сайфутяров Р.Р., Аветисов И.Х., Тайдаков И. В., Ракитин О.А. // зарегистрирован в государственном реестре изобретений РФ 11.08.2021 г. по заявке № 2020137242 с приоритетом от 12.11.2020 г. Патентообладатель: ИОХ РАН
4. **Патент № 2752957** **Российская Федерация** «Способ получения трициклических органических дипероксидов» / Яременко И.А., Радулов П.С., Белякова Ю.Ю., Терентьев А. О. // зарегистрирован в государственном реестре изобретений РФ 11.08.2021 г. по заявке № 2020141056 с приоритетом от 14.12.2020г. Патентообладатель: ИОХ РАН.
5. **Патент № 2750297** **Российская Федерация** «Производные 1-(3-трет-бутил-4-гидрокси-8-метилпиразоло[5,1-c][1,2,4]триазин-1(4H)-ил)-2,2-дифтор-этанонов, способ их получения и их применение в качестве фотогенераторов кислоты» / Иванов С.М., Травень В.Ф., Иванов И.В., Долотов С.М. // зарегистрирован в государственном реестре изобретений РФ 25.06.2021 г. по заявке № 2020138817 с приоритетом от 26.11.2020г. Патентообладатель: ИОХ РАН.
6. **Патент № 2750639** **Российская Федерация** «Замещенные спироандростен-17,6'[1,3,4]тиадиазины, обладающие противовирусной активностью» / Малых А.Г., Павлов А.Р., Волкова Ю.А., Комков А.В., Менчиков Л.Г., Заварзин И.В. // зарегистрирован в государственном реестре изобретений РФ 30.06.2021 г. по заявке № 2021111981 с приоритетом от 27.04.2021г. Патентообладатель: ИОХ РАН.
7. **Патент № 2756161** **Российская Федерация** «Димерные четвертичные соли пиридиния, содержащие диоксинафталиновый фрагмент, обладающие биоцидным действием» / Верещагин А. Н., Фролов Н. А., Егоров М. П. // зарегистрирован в государственном реестре изобретений РФ 28.09.2021г. по заявке № 2020142557с приоритетом от 23.12.2020г. Патентообладатель: ИОХ РАН
8. **Патент № 2747110** **Российская Федерация** «Замещенные [(3-нитро-1*Н*-1,2,4-триазол-1-ил)-*NNO*-азокси]фуразаны и способ их получения» / Кленов М. С., Гуляев Д. А., Чураков А. М., Тартаковский В. А. // зарегистрирован в государственном реестре изобретений РФ 27.04.2021 г. по заявке № 2020133933 с приоритетом от 15.10.2020 г. Патентообладатель: ИОХ РАН.
9. **Патент № 2756321** **Российская Федерация** «Замещенные [(3,4-динитро-1*H*-пиразол-1-ил)-*NNO*-азокси]фуразаны и способ их получения» / Кленов М.С., Коннов А. А., Чураков А. М., Тартаковский В. А. // зарегистрирован в государственном реестре изобретений РФ 29.09.2021г. по заявке № 2020135027 с приоритетом от 26.10.2020 г. Патентообладатель: ИОХ РАН
10. **Патент № 2760680** **Российская Федерация** «3-(3,4-Динитропиразол-5-ил)-4-нитрофуразан и способ его получения» / Далингер И. Л., Вацадзе И. А., Шкинева Т. К., Шереметев А. Б., Муравьев Н. В., Мельников И.Н. // зарегистрирован в государственном реестре изобретений РФ 29.11.2021г. по заявке № 2021111978 с приоритетом от 27.04.2021г. Патентообладатель: ИОХ РАН.
11. **Патент № 2762560** **Российская Федерация** «3-(3-Нитропиразол-5-ил)-4-нитрофуразан и способ его получения» / Далингер И. Л., Вацадзе И. А., Шкинева Т. К., Шереметев А. Б., Муравьев Н. В., Косарева Е. С. // зарегистрирован в государственном реестре изобретений РФ 21.12.2021г. по заявке № 2021111974 с приоритетом от 27.04.2021г. Патентообладатель: ИОХ РАН.

**2022 год**

1. **Патент № 2765464** **Российская Федерация** «Способ получения эфиров пиперидин-4,4-дикарбоновых кислот» / Поспелов Е. В., Иоффе С. Л., Сухоруков А. Ю. // зарегистрирован в государственном реестре изобретений РФ 31.01.2022г. по заявке № 2021114265 с приоритетом от 20.05.2021г. Патентообладатель: ИОХ РАН.
2. **Патент № 2768870** **Российская Федерация** «3-Амино-4-{[4-(нитро-*NNO*-азокси)-фуразан-3-ил]-*NNO*-азокси}фуразан и способ его получения» / Кленов М.С., Леонов Н.Е., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений РФ 25.03.2022г. по заявке № 2021117823 с приоритетом от 18.06.2021 г. Патентообладатель: ИОХ РАН.
3. **Патент № 2772602** **Российская Федерация** «Нитраминопроизводные 2,6,8,10,12-пентанитро-2,6,8,10,12-гексаазаизовюрцитана и способы их получения» / Похвиснева Г. В., Терникова Т. В., Парахин В. В., Смирнов Г. А. // зарегистрирован в государственном реестре изобретений РФ 23.05.2022г. по заявке № 2021132070 с приоритетом от 02.11.2021г. Патентообладатель: ИОХ РАН.
4. **Патент № 2773080** **Российская Федерация** «Тримерные четвертичные соли пиридиния, обладающие биоцидным действием» / Верещагин А. Н., Фролов Н. А. // зарегистрирован в государственном реестре изобретений РФ 30.05.2022г. по заявке № 2021129046 с приоритетом от 05.10.2021 г. Патентообладатель: ИОХ РАН.
5. **Патент № 2775006** **Российская Федерация** «Замещенные (циано-*NNO*-азокси)фуразаны и способ их получения» / Кленов М.С., Леонов Н.Е., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений РФ 27.06.2022г. по заявке № 2021134207 с приоритетом от 24.11.2021г. Патентообладатель: ИОХ РАН.
6. **Патент № 2778517** **Российская Федерация** «Катализатор для селективного окисления арабинозы в арабоновую кислоту и способ селективного окисления арабинозы в арабоновую кислоту с использованием этого катализатора» / Кустов Л.М., Кустов А.Л. // зарегистрирован в государственном реестре изобретений РФ 22.08.2022г. по заявке № 2021138520 с приоритетом от 23.12.2021г. Патентообладатель: ИОХ РАН.
7. **Патент №** [**2779566**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Катализатор для селективного окисления арабинозы в арабоновую кислоту и способ селективного окисления арабинозы в арабоновую кислоту с использованием этого катализатора» / Кустов Л.М., Кустов А.Л. // зарегистрирован в государственном реестре изобретений РФ [09.09.2022](https://www1.fips.ru/ofpstorage/Doc/IZPM/RUNWC1/000/000/002/779/566/%D0%98%D0%97-02779566-00001/document.pdf)г. по заявке № 2021138519 с приоритетом от 23.12.2021г. Патентообладатель: ИОХ РАН.
8. **Патент №** [**2782118**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «1,1'-(*Е*)-Диазен-1,2-диилбис[3-(нитро-*NNO*-азокси)-1*Н*-1,2,4-триазол] и способ его получения» / Кленов М.С., Леонов Н.Е., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений РФ 21.10.2022г по заявке № 2022119318 с приоритетом от 14.07.2022г. Патентообладатель: ИОХ РАН.
9. **Патент №** [**2784323**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Электрохимический способ получения производных тетрагидрохинолина, применение их в качестве фунгицидных средств и фунгицидные композиции на их основе» / Виль В.А., Гришин С.С., Баберкина Е.П., Алексеенко А.Л., Коваленко А.Е., Глинушкин А.П., Терентьев А.О. // зарегистрирован в государственном реестре изобретений 23.11.2022г по заявке № 2022103403 с приоритетом от 10.02.2022г. Патентообладатель: ИОХ РАН.
10. **Патент №** [**2784328**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Способ приготовления катализатора для селективного гидрирования арабинозы в арабинитол, катализатор, приготовленный по этому способу, и способ селективного гидрирования арабинозы в арабинитол с использованием полученного катализатора» / Виканова К.В., Редина Е.А., Костюхин Е.М. Кустов Л.М. // зарегистрирован в государственном реестре изобретений 23.11.2022г по заявке № 2022125140 с приоритетом от 26.09.2022г. Патентообладатель: ИОХ РАН.
11. **Патент №** [**2784332**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Способ получения двумерных металл-органических каркасов» / Исаева В.И., Архипов Д. А., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 23.11.2022г по заявке № 2022125135 с приоритетом от 26.09.2022г. Патентообладатель: ИОХ РАН.
12. **Патент №** [**2784334**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Катализатор для получения синтез-газа и способ получения синтез-газа с его использованием» / Виканова К.В., Евдокименко Н.Д., Кустов А.Л. // зарегистрирован в государственном реестре изобретений 23.11.2022г по заявке № 2022125139 с приоритетом от 26.09.2022г. Патентообладатель: ИОХ РАН.
13. **Патент №** [**2784345**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Способ получения металл-органического каркаса на основе циркония» / Исаева В.И., Вергун В.В., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 23.11.2022г по заявке № 2022125136 с приоритетом от 26.09.2022г. Патентообладатель: ИОХ РАН.
14. **Патент №** [**2786218**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «Биметаллический катализатор для жидкофазного селективного гидрирования ацетиленовых углеводородов и способ его получения» // Шестеркина А.А., Стрекалова А.А., Кустов А.Л., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 19.12.2022г по заявке № 2022125134 с приоритетом от 26.09.2022г. Патентообладатель: ИОХ РАН.
15. **Патент №** [**2786221**](https://www1.fips.ru/registers-doc-view/fips_servlet?DB=RUPAT&DocNumber=2779566&TypeFile=html) **Российская Федерация** «*N*,*N′*-метилен-бис(полинитро-2,4,6,8,10,12-гексаазаизовюрцитаны) и способы их получения» // Похвиснева Г. В., Терникова Т. В., Парахин В. В., Смирнов Г. А. // зарегистрирован в государственном реестре изобретений 19.12.2022г по заявке № 2022128607 с приоритетом от 03.11.2022г. Патентообладатель: ИОХ РАН.

**2023 год**

1. **Патент № 2789599 Российская Федерация** «Способ получения (6*R*,7*S*,7a*S*)-6-((*R*)-1-(3,5-бис (трифторметил)фенил)этокси)-7-(4-фторфенил)гексагидро-3H-пирролизин-3-она**»** / Сухоруков А. Ю., Окладников И. В., Иоффе С. Л. // зарегистрирован в государственном реестре изобретений 06.02.2023г. по заявке № 2022118586 с приоритетом от 07.07.2022г. Патентообладатель: ИОХ РАН.
2. **Патент № 2791787** **Российская Федерация** «Способ очистки отработанного огнестойкого триарилфосфатного турбинного масла от кислых продуктов» / Петрова К.Е., Шулишов Е.В., Бакунин В.Н., Томилов Ю.В. // зарегистрирован в государственном реестре изобретений 13.03.2023г. по заявке № 2022103689 с приоритетом от 14.02.2022г.: Патентообладатель: ИОХ РАН.
3. **Патент № 2797201** **Российская Федерация** «Способ очистки воздуха от диэтиламина» / Землянский П.В., Кучеров А.В., Давшан Н.А., Кустов А.Л., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 31.05.2023г. по заявке № 2023108405 с приоритетом от 04.04.2023г. Патентообладатель: ИОХ РАН.
4. **Патент № 2798584** **Российская Федерация** «Способ очистки воздуха от этанола» / Землянский П.В., Кучеров А.В., Давшан Н.А., Кустов А.Л., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 23.06.2023г. по заявке № 2023108407 с приоритетом от 04.04.2023г. Патентообладатель: ИОХ РАН.
5. **Патент № 2801166** **Российская Федерация** «[N’-(изо)хинолилметилен]гидразиды 3-метокси-13,17-секоэстра-1,3,5(10)-триен-17-овой кислоты» / Иловайский А.И., Меркулова В.М., Чернобурова Е.И., Щетинина М.А., Заварзин И.В., Терентьев А.О., Щербаков А.М., Андреева О.Е. Сальникова Д.И. // зарегистрирован в государственном реестре изобретений 02.08.2023г. по заявке № 2023102869 с приоритетом от 09.02.2023г. Патентообладатель: ИОХ РАН.
6. **Патент № 2802012** **Российская Федерация** «Способ очистки воздуха от этанола» / Землянский П.В., Кучеров А.В., Давшан Н.А., Кустов А.Л., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 22.08.2023г. по заявке № 2023108406 с приоритетом от 04.04.2023г. Патентообладатель: ИОХ РАН.
7. **Патент № 2804394** **Российская Федерация** «Соли 3-амино-4-(1*H*-тетразол-5-ил-*NNO*-азокси)фуразана и способы их получения» / Кленов М.С., Леонов Н.Е., Чураков А.М., Тартаковский В.А. // зарегистрирован в государственном реестре изобретений 28.09.2023г. по заявке № 2023103789 с приоритетом от 20.02.2023г. Патентообладатель: ИОХ РАН.
8. **Патент № 2804396** **Российская Федерация** «Способ получения *N*-замещенных мостиковых 1,2,4-диоксазолидинов» / Ярёменко И.А., Белякова Ю.Ю., Радулов П.С., Терентьев А. О. // зарегистрирован в государственном реестре изобретений 28.09.2023г. по заявке № 2023103791 с приоритетом от 20.02.2023г. Патентообладатель: ИОХ РАН.
9. **Патент № 2807376** **Российская Федерация** «Способ получения металл-органического каркаса на основе циркония» / Исаева В.И., Вергун В.В., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 14.11.2023г. по заявке № 2023108408 с приоритетом от 04.04.2023г. Патентообладатель: ИОХ РАН.
10. **Патент № 2807778** **Российская Федерация** «Способ получения бактерицидных материалов для средств защиты органов дыхания» / Исаева В.И., Вергун В.В., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 21.11.2023г. по заявке № 2023109759 с приоритетом от 17.04.2023г. Патентообладатель: ИОХ РАН.
11. **Патент № 2807864** **Российская Федерация** «Способ получения цеолита со структурой типа ферриерит» / Макова А.С., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 21.11.2023г. по заявке № 2023109757 с приоритетом от 17.04.2023г на изобретение: Патентообладатель: ИОХ РАН.
12. **Патент № 2807866** **Российская Федерация** «Способ получения никелевого катализатора для жидкофазного селективного гидрирования ароматических непредельных углеводородов и нитросоединений» / Шестеркина А.А., Стрекалова А.А., Журавлева В.С., Кустов А.Л., Кустов Л.М. // зарегистрирован в государственном реестре изобретений 21.11.2023г. по заявке № 2023109758 с приоритетом от 17.04.2023г. Патентообладатель: ИОХ РАН.
13. **Патент № 2807870** **Российская Федерация** «Фосфорил замещенные 3-кето-андрост-4-ен-[16,17-d]пиридазины и способ их получения» / Волкова Ю.А., Щербаков А.М., Комков А. В., Заварзин И. В. // зарегистрирован в государственном реестре изобретений 21.11.2023г. по заявке № 2023125570 с приоритетом от 05.10.2023г. Патентообладатель: ИОХ РАН.

**2024 год**

1. **Патент № 2812568** **Российская Федерация** «Способ получения глицидола» / Тимофеева М.Н., Лукоянов И.А., Исаева В.И., Кустов Л.М., Адонин Н.Ю. // зарегистрирован в государственном реестре изобретений 30.01.2024г. по заявке № 2023110596 с приоритетом от 25.04.2023г. Патентообладатель: ИОХ РАН.

2. **Патент № 2812574** **Российская Федерация** «Соли 5-нитрамино-[1,2,3]триазоло[4,5-c][1,2,5]оксадиазола и способ их получения» / Воронин А.А., Балабанова С.П., Кленов М.С., Чураков А.М., Тартаковский В.А // зарегистрирован в государственном реестре изобретений 30.01.2024г. по заявке № 2023106217 с приоритетом от 16.03.2023г. Патентообладатель: ИОХ РАН.

3. **Патент № 2813466** **Российская Федерация** «3-(4-нитратометил-1Н-1,2,3-триазол-1-ил)-4-нитро-1,2,5-оксадиазол и способ его получения» / Епишина М.А., Куликов А.С., Ферштат Л.Л. // зарегистрирован в государственном реестре изобретений 12.02.2024г. по заявке № 2023120251 с приоритетом от 01.08.2023г. Патентообладатель: ИОХ РАН.

4. **Патент № 2817968** **Российская Федерация** «Производные 3-(5-нитратометил-1Н-1,2,3-триазол-1-ил)-4-нитро-1,2,5-оксадиазола и способ их получения» / Епишина М.А., Куликов А.С., Ферштат Л.Л. // зарегистрирован в государственном реестре изобретений 23.04.2024г. по заявке № 2023120252 с приоритетом от 01.08.2023г. Патентообладатель: ИОХ РАН.

5. **Патент № 2818440** **Российская Федерация** «Азо[5-(4-нитрофуразан-3-ил)-2-(1,3,4-тиадиазол)] и способ его получения» / Дельцов И. Д., Ферштат Л. Л. // зарегистрирован в государственном реестре изобретений 02.05.2024г. по заявке № 2023127262 с приоритетом от 24.10.2023г. Патентообладатель: ИОХ РАН.

6. **Патент № 2828547 Российская Федерация** «Циано-полинитро-2,4,6,8,10,12-гексаазаизовюрцитаны и способы их получения» / Похвиснева Г. В., Парахин В. В., Смирнов Г. А. // зарегистрирован в государственном реестре изобретений 14.10.2024г. по заявке № 2024100685 с приоритетом от 12.01.2024г. Патентообладатель: ИОХ РАН.

7. **Патент № 2831117** **Российская Федерация** «Способ получения замещенных 3-арилпирролов» / Сухоруков А.Ю., Поспелов Е. В., Жиров А. В. // зарегистрирован в государственном реестре изобретений 02.12.2024г. по заявке № 2024107218 с приоритетом от 20.03.2024г. Патентообладатель: ИОХ РАН.