

1. Gunawan, M. A.; Poinsot, D.; Domenichini, B.; Dirand, C.; Chevalier, S.; Fokin, A. A.; Schreiner, P. R.; Hierso, J.-P. The functionalization of nanodiamonds (*diamondoids*) as a key parameter of their easily controlled self-assembly in micro- and nanocrystals from the vapor phase. *Nanoscale* **2015**, *7*, 1956–1962.
2. Zhuk, T. S.; Koso, T.; Pashenko, A. E.; Hoc, N. T.; Rodionov, V. N.; Serafin, M.; Schreiner, P. R.; Fokin, A. A. Toward an understanding of diamond sp²-defects with unsaturated diamondoid oligomer model. *J. Am. Chem. Soc.* **2015**, *137*, 6577–6586.
3. Bremer, M.; Untenecker, H.; Gunchenko, P. A.; Fokin, A. A.; Schreiner P. R. Inverted carbon geometries: Challenges to experiment and theory. *J. Org. Chem.* **2015**, *80*, 6520–6524.
4. Lourie, L. F.; Serguchev, Yu. A.; Bentya, A. V.; Ponomarenko, M. V.; Rusanov, E. B.; Vovk, M. V.; Fokin, A. A.; Ignat'ev, N. V. Metal free electrophilic fluoro-cyclization of unsaturated N-hydroxy- and N-acetoxyamides with N–F reagents. *J. Fluor. Chem.* **2015**, *179*, 42–47.
5. Valentin, L.; Henss, A.; Tkachenko, B. A.; Fokin, A. A.; Schreiner, P. R.; Becker, S.; Würtele, C.; Schindler, S. Transition metal complexes with cage-opened diamondoid tetracyclo[7.3.1.1^{4,12}.0^{2,7}]tetradeca-6.11-diene. *J. Coor. Chem.* **2015**, *68*, 3295–3301.
6. Syniugin, A. R.; Chekanov, M. O.; Savitskiy, P. V.; Pashenko, A. E.; Zhuk, T. S.; Yarmoluk, S. M.; Fokin, A. A. New method for the synthesis of pyrrolo[2,3-b]dihydroquinolines. *Tetrahedron Lett.* **2016**, *57*, 213–215.
7. Zhang, J. L.; Ishiwata, H.; Babinec, T. M.; Radulaski, M.; Müller, K.; Lagoudakis, K. G.; Dory, C.; Dahl, J.; Edgington, R.; Soulière, V.; Ferro, G.; Fokin, A. A.; Schreiner, P. R.; Shen, Z.-X.; Melosh, N.; Vuckovic, J. Hybrid group IV nanophotonic structures incorporating diamond silicon-vacancy color centers. *Nano Lett.* **2016**, *16*, 212–217.
8. Karthik, T. N.; Ge, C.; Fabbri, J. D.; Clay, W.; Tkachenko, B. A.; Fokin, A. A.; Schreiner, P. R.; Dahl, J. E.; Carlson, R. M. K.; Shen, Z. X.; Melosh, N. A. Ultra-low effective work function surfaces using diamondoid monolayers. *Nature Nanotech.* **2016**, *11*, 267–273.
9. Ponomarenko, M. V.; Grabowsky, S.; Pal, R.; Röschenthaler, G.-V., Fokin, A. A. SF₅-Enolates in Ti(IV)-mediated aldol reactions. *J. Org. Chem.* **2016**, *81*, 6783–6791.
10. Tverdiy, D. O. Chekanov, M. O.; Savitskiy, P. V.; Syniugin, A. R.; Yarmoliuk, S. M. Fokin, A. A. Efficient preparation of imidazo[1,5-*a*]pyridine-1-carboxylic acids. *Synthesis* **2016**, *48*, A–I.
11. Moncea O.; Gunawan, M. A.; Poinsot, D.; Cattey. H.; Becker, J.; Yurchenko, R. I.; Butova, E. D.; Hausmann, H.; Sekutor, M.; Fokin, A. A.; Hierso, J.-C.; Schreiner, P. R. Defying stereotypes with nanodiamonds: Stable primary diamondoid phosphines, *J. Org. Chem.* **2016**, *81*, 8759–8769.
12. Onys'ko, P.P.; Zamulko, K.A.; Kyselyova, O.I.; Yelenich, I.P.; Rassukana, Yu.V. Synthesis of Polyfluoroalkylated α-Aminophosphonic/toiphosphonic acids derivatives. *J. Fluorine Chem.* **2016**, *185*, 191-196

13. Hoc, N. T.; Kushko, A. O.; Fokin, A. A.; Rodionov, V. N. Functional derivatives of diamantanone. *Russ. J. Org. Chem.* **2016**, 52, 8, 1209–1211.
14. O. Vasylkevych, O. Kofanova, K. Tkachuk, O. Kofanov. Alkylphenol Derivatives of the Polymer of Thiocyanic Acid and 5-Amino-1,2,4-Dithiazole-3-Thione as an Effective Additives to Fuels and Lubricants. *Восточноевропейский журнал передовых технологий*. **2016**, 3, 6(81) 45-51.
15. D.A.Pisanenko, Yu.L.Voljanskii. Synthesis and Antimicrobial Activity of Some Substituted Cyclopentyl Phenols. *Intern.J.Chem.Biomol.Science*. **2016**, 2, 1, p.1-3.
16. D.A.Pisanenko, Yu.E.Klimko, A.V.Gaidai. Corrosion-Protecting Properties of Bis Quaternized Derivates of Some N-Arylnicotinamides. *Intern.J.Materials Chem.Phys.*, **2016**, 2, 2, p.45-49.
17. Yan, H.; Hohman, J. N.; Li, F. H.; Jia, C.; Solis-Ibarra, D.; Wu, B.; Dahl, J. E. P.; Carlson, R. M. K.; Tkachenko, B. A.; Fokin, A. A.; Schreiner, P. R.; Vailionis, A.; Kim, T. R.; Devereaux, T. P.; Shen, Z.-X.; Melosh, N. A. Hybrid metal-organic chalcogenide nanowires with electrically conductive inorganic core through diamondoid-directed assembly. *Nat. Mater.* **2017**, 16, 349–355.
18. Fokin, A. A.; Pashenko, A. E.; Bakhonsky, V. V.; Zhuk, T. S.; Chernish, L. V.; Gunchenko, P. A.; Kushko, A. O.; Becker, J.; Wende, R. C.; Schreiner, P. R. Chiral building blocks based on 1,2-disubstituted diamantanes. *Synthesis*, **2017**, 49, 2003–2008.
19. Meinke, R.; Gillen, R.; Bischoff, T.; Knecht, A.; Richter, R.; Merli, A.; Fokin, A. A.; Koso, T. V.; Rodionov, V. N. Schreiner, P. R.; Moller, T.; Rander, T.; Thomsen, C.; Maultzsch, J. From isolated diamondoids to a van-der-Waals crystal: A theoretical and experimental analysis of a trishomocubane and a diamantane dimer in the gas and solid phase. *J. Chem. Phys.* **2017**, 147, 4, 044303 (6 p).
20. Fokin, A.; Zhuk, T.; Blomeyer, S.; Pérez, C.; Chernish, L.; Pashenko, A.; Antony, J.; Vishnevskiy, Y.; Berger, R.; Grimme, S.; Logemann, C.; Schnell, M.; Mitzel, N.; Schreiner, P. Intramolecular London Dispersion Interaction Effects on Gas Phase and Solid State Structures of Diamondoid Dimers. *J. Amer. Chem. Soc.* **2017**, DOI: 10.1021/jacs.7b07884.
21. Tyborski, C.; Gillen, R.; Fokin, A.; Koso, T.; Fokina, N.; Hausmann, H.; Rodionov, V.; Schreiner, P. R.; Thomsen, C.; Maultzsch, J.. Electronic and Vibrational Properties of Diamondoid Oligomers. *J. Phys. Chem.* **2017**, accepted, DOI: 10.1021/acs.jpcc.7b07666.
22. Воробйова В. І., Чигиринець О. Е., Єфімова В. Г., Пилипенко Т. М., Василькевич О. І., Пічахчі В. В. Вивчення компонентного складу біологічно активних сполук спиртового екстракту гребнів винограду/ // *Технічні науки та технології*. **2016**, 2, 189-195.
23. Pisanenko D.A., Klimko Yu.E., Voljanskii Yu.L.. Synthesis and antimicrobial activity of some halogenated isopentyl phenols. *Chemistry Research Journal*. **2017**, 2(2), 23-27.
24. Zhyhadlo, Y.Y. ; Gaidai, A.V.; Levandovskiy, I.A.; Bezduddy, A.V.; Rassukana, Y.V. Facile synthesis of 3-(trifluoromethyl)adamantane derivatives. *J. Fluor. Chem.* **2017**, 201, 11-14.
25. Rassukana, Y.V.; Bezgubenko, L.V.; Stanko, O.V.; Rusanov, E.B. ; Kulik, I.B.; Onys'ko, P.P. Diastereoselective cycloaddition of (S)-N-(1-phenylethylimino) trifluoropropionate

- and trifluoroethylphosphonate with diazomethane. *Tetrahedron – Asymmetry*, **2017**, 28, 555-560.
- 26. Kirilchuk, A.A.; Rozhenko, A.B.; Leszczynski, J. On structure and stability of pyrimidine ylenes and their homologues. *Comput. Theor. Chem.* **2017**, 1103, 83-91.
 - 27. Rassukana Y. V., Stanko O. V., Yelenich I. P., Onys'ko P. P.. Silylated iminophosphonates: Novel reactive synthons for the preparation of fluorinated aminophosphonates and aminophosphonic acids. *Tetrahedron Lett.* **2017**, 58, 3449-3452.
 - 28. Klimenko, K.; Lyakhov, S.; Shibinskaya, M.; Karpenko, A.; Marcou, G.; Horvath, D.; Zenkova, M.; Goncharova, E.; Amirkhanov, R.; Krysko, A.; Andronati, S.; Levandovskiy, I.; Polishchuk, P.; Kuz'min, V.; Varnek, A. Virtual screening, synthesis and biological evaluation of DNA intercalating antiviral agents, *Bioorg. Med. Chem. Lett.*, **2017**, 3915–3919.
 - 29. Chalyk, B. A., Isakov, A. A., Butko, M. V., Hrebeniuk, K. V., Savych, O. V., Kucher, O. V., Gavrilenko, K. S., Druzhenko, T. V., Yarmolchuk, V. S., Zozulya, S. and Mykhailiuk, P. K., Synthesis of 6-Azaspido[4.3]alkanes: Innovative Scaffolds for Drug Discovery. *Eur. J. Org. Chem.*, **2017**: 4530–4542. doi:10.1002/ejoc.201700536.
 - 30. Tereshchenko, A. D.; Myronchuk, J.S.; Leitchenko, L.D.; Knysh, I.V.; Tokmakova, G.O.; Litsis, O.O.; Tolmachev, A.; Liubchak, K.; Mykhailiuk, P. Synthesis of 3-oxadiazolyl/triazolyl morpholines: Novel scaffolds for drug discovery, *Tetrahedron*, Volume 73, Issue 6, 2017, Pages 750-757, ISSN 0040-4020, <https://doi.org/10.1016/j.tet.2016.12.052>.
 - 31. Kokhan, S. O., Valter, Y. B., Tymtsunik, A. V., Komarov, I. V. and Grygorenko, O. O. (2017), Bicyclo[1.1.1]pentane-Derived Building Blocks for Click Chemistry. *Eur. J. Org. Chem.*, **2017**: 6450–6456. doi:10.1002/ejoc.201701296
 - 32. Chalyk, B. A., Butko, M. V., Yanshyna, O. O., Gavrilenko, K. S., Druzhenko, T. V. and Mykhailiuk, P. K., Synthesis of Spirocyclic Pyrrolidines: Advanced Building Blocks for Drug Discovery. *Chem. Eur. J.* **2017**, doi:10.1002/chem.201702362
 - 33. Gunchenko, P. A.; Li, J.; Liu, B.; Chen, H.; Pashenko, A. E.; Bakhonsky, V. V.; Zhuk, T. S.; Fokin, A. A. Aerobic oxidations with N-hydroxyphthalimide in trifluoroacetic acid. *Molec. Cat.* **2018**, 446, 72-79
 - 34. Gunawan, M. A.; Moncea, O.; Poinsot, D.; Keskes, M.; Domenichini, B.; Heintz, O.; Chassagnon, R.; Herbst, F.; Carlson, R. M. K.; Dahl, J. E.P.; Fokin, A. A.; Schreiner, P. R.; Hierso, J.-C. Nanodiamond-Palladium Core–Shell Organohybrid Synthesis: A Mild Vapor-Phase Procedure Enabling Nanolayering Metal onto Functionalized sp^3 -Carbon. *Adv. Funct. Mater.* **2018**, 1705786 (15 p)
 - 35. Yan, H.; Yang, F.; Pan, D.; Lin, Y.; Hohman, J. N.; Solis-Ibarra, D.; Li, F. H.; Dahl, J. E. P.; Carlson, R. M. K.; Tkachenko, B. A.; Fokin, A. A.; Schreiner, P. R.; Galli, G.; Mao, W. L.; Shen Z.-X.; Melosh, N.M. Sterically controlled mechanochemistry under hydrostatic pressure. *Nature* **2018**, 554, 505–510.
 - 36. Yan, H.; Narasimha, K. T.; Denlinger, J.; Li, F. H.; Mo, S.-K.; Nathan Hohman, J.; Dahl, J. E. P.; Carlson, R. M. K.; Tkachenko, B.A.; Fokin, A. A.; Schreiner, P. R.; Hussain, Z.; Shen, Z.-X.; Melosh, N.A. Monochromatic photocathodes from graphene-stabilized diamondoids. *Nano Lett.*, **2018**, 18, 1099–1103
 - 37. Hoc, N. T.; Fokin, A. A.; Rodionov, V. N. Towards 3-(2-adamantylidene)diamantane derivatives through the McMurry crosscoupling reaction. *Org. Commun.* **2018**, 11, 2x, 75-79.
 - 38. N. T.; Fokin, A. A.; Rodionov, V. N. Synthesis of 10-methoxydiamantan-3-one. *MOLBANK*. **2018**, 2, UNSP M990. DOI:10.3390/M990.
 - 39. Moncea, O.; Poinsot, D.; Fokin, A. A.; Schreiner, P. R.; Hierso, J.C. Palladium-catalyzed C2-H arylation of unprotected (N-H)-indoles "Onwater" using primary diamantyl

- phosphine oxides as a class of primary phosphine oxide ligands. *Chem.Cat.Chem.*, **2018**, 10, 2915 – 2922.
40. Gebbie, M. A.; Ishiwata, H.; McQuade P.J.; Petrak, V.; Taylor, A.; Freiwald, C.; Dahl, J. E.; Carlson, R. M. K.; Fokin, A. A.; Schreiner, P. R.; Shen, Z.-X.; Nesladek, M.; Melosh, N. A. Experimental measurement of the diamond nucleation landscape reveals classical and nonclassical features. *PNAS*, **2018**, 115, 33, 8284–8289
41. Becker, J.; Zhyhadlo, Y. Y.; Butova, E. D.; Fokin, A. A.; Schreiner, P. R.; Ferster, M.; Holthausen, M. C.; Specht, P.; Schindler, S. Aerobic aliphatic hydroxylation reactions by copper complexes: A simple clip-and-cleave concept. *Chem. Eur. J.* **2018**, 24, 15543–15549. This work is featured: Cover picture of the Chemistry - a European Journal, 2108, issue 24.
42. D.A.Pisanenko, Yu.E.Klimko, S.Dubskaja (студ.), Yu.L.Voljanskii. Synthesis and Antimicrobial Activity of Some 3-{N-Arylcarboxamido}-N-benzyl halides. *Chem.Res.Journal*, **2017**, 2{5}, 338-241. (в отчет за 2017 не вкл.)
43. Прокоф'єва Г.Н., Писаненко Д.А., Сеннік А.С., Книш Н.В.(студ.) Дослідження екологічно чистих технічних мийних засобів. *Енерготехнологии и ресурсосбережение*, **2018**, №1, с.43-45.
44. , V.; Chygrynets', O.; Skiba, M.; Zhuk, T.; Kurmakova, I.; Bondar, O. A comprehensive study of grape pomace extract and its active components as effective vapour phase corrosion inhibitor of mild steel. *Int. J. Corros. Scale Inhib.*, 2018, 7, #.2, 185–202.
45. O. Vasylkevych, O. Kofanov, O. Kofanova, K. Tkachuk. Synergism of stable nitroxyl radicals and amines during the oxidation process of motor fuels and oils at increased temperatures *Восточно- Европейский журнал передовых технологий*. **2017**, 6 (6), 4-9.
46. O.O.; Kurkunov, M.; Levandovskiy, I.A.; Tymtsunik, A.V. Synthesis of 2-Azabicyclo[n.2.0]alkane-Derived Building Blocks. *Synthesis*, **2018**, V. 50 # 10, 1973-1978.
47. Stanko, O.V.; Rassukana, Y.V.; Zamulko, K.A.; Dyakonenko, V.V.; Svitlana V.Shishkina, S.V.; Onys'ko, P.P. Diastereoselective synthesis of polyfluoroalkylated α -aminophosphonic acid derivatives. *J. Fluorine Chem.* **2018**, V. 216, P. 47-56.
48. Moncea, O.; Casanova-Chafer, J.; Poinsot, D.; Ochmann, L.; Mboyi, C. D.M.; Nasrallah, H. O.; Llobet, E.; Makni, I.; El Atrous, M.; Brandes, S.; Rousselin, Y.; Domenichini, B.; Nuns, N.; Fokin, A.A.; Schreiner, P. R.; Hierso, J.-C. Diamondoid nanostructures as sp³-carbon-based gas sensors. *Angew. Chem. Int. Ed.* 2019, 58, 9933–9938.
49. Lopatina, Ya. Yu.; Vorobyova, V. I.; Fokin, A. A.; Schreiner, P. R.; Marchenko, A. A.; Zhuk, T. S. Structures and dynamics in thiolated diamantane derivative monolayers. *J. Phys. Chem. C* 2019, 123, 27477–27482.
50. , C.; Hueckstaedt, T.; Gillen, R.; Ott, T.; Fokina, N. A.; Fokin, A. A.; Schreiner, P. R.; Maultzsch, J. Vibrational signatures of diamondoid dimers with large intramolecular London dispersion interactions. *in press*, <https://doi.org/10.1016/j.carbon.2019.10.014>
51. O. V Stanko, Y. V Rassukana, P. P Onys'ko. Fluorinated iminophosphonates bearing stereodirecting phenylethyl group in synthesis of biorelevant scalemic aminophosphonates. *Phosphorus, Sulfur, Silicon*, **2019**, Vol.194 (4-6), p. 331-332.
52. O. V. Stanko, P. P. Onys'ko. Enantiomeric O,O-dimethyl α -iminotrifluoroethylphosphonates: Novel chiral building blocks in asymmetric synthesis of α -trifluoromethylated α -aminophosphonic acid derivatives. *J. Fluorine Chemistry*. **2019**. Vol. 219. P. 123-128.
53. O. V. Stanko, Y. P. Yelenich, P. P. Onys'ko, Y. V. Rassukana. NH-Polyfluoroalkyl iminophosphonates in the synthesis of α -amino- α -polyfluoroalkyl- γ -oxobutylphosphonic acids. *ЖОФХ*, **2019**. Т.17. вип. 2(66). – С. 5-10.

54. M. Kovalenko, D. V. Yarmoliuk, D. Serhiichuk, D. Chernenko, V. Smyrnov, A. Breslavskyi, O. V. Hryshchuk, I. Kleban, Yu.V. Rassukana. The Boron-Wittig Olefination of Aldehydes and Ketones with Bis[(pinacolato)boryl]methane: an Extended Reaction Scope. *Eur. J. Org. Chem.* **2019**. No. 33.p. 5624–5635.
55. Будько М.О., Степанов Д.М., Василькевич О.І. Розробка і дослідження способу збільшення фазової стабільності сумішевих моторних палив для покращення їх екологічних та експлуатаційних характеристик. *Відновлювана енергетика*. **2018**, 3 (54), 77-85
56. Нго Чунг Хок, А.О. Кушко, В.Н. Родионов, А.А. Фокин. Новый стереоселективный метод получения 9-триметилсилоксициамантилидендиамантанов с использованием реакции Мак-Мурри. *Znanstvena misel.* **2018**, V.1, No. 16, p. 15-17.
57. O.V. Gaidai, Y. Yu. Zhyhadlo, I. A. Levandovskiy, O. G. Sidorenko, O. V. Shishkin, S. V. Shishkina, Y. V. Rassukana. Reactions of Cookson's diketone with potassium halides in the polyphosphoric acid medium. *Zh. Org. Pharm. Chem.*, 2020. v.18. n. 1(69). p. 34-38.
58. O.P. Blahun, A.B. Rozhenko, E. Rusanov, S. Zhersh, A.A. Tolmachev, D.M. Volochnyuk , O.O. Grygorenko. Twisting and Turning the Sulfonamide Bond: A Synthetic, Quantum Chemical, and Crystallographic Study. *J. Org. Chem.* **2020**, 85(8), p. 5288–5299. DOI: 10.1021/acs.joc.9b03394.
59. I. Kleban, D.S. Radchenko, A.V. Tymtsunik, S. Shuvakin, A. I. Konovets, Rassukana, Y. Grygorenko, O.O. Cyclopropyl boronic derivatives in parallel synthesis of sp^3 -enriched compound libraries. *Monatshefte für Chemie*, 2020, 151 (6), p.953-962.
60. A. S. Cherednichenko, L. V. Bezgubenko, E. B. Rusanov, P. P. Onys'ko, Y. V. Rassukana. Enantiomeric *N*-*tert*-butanesulfinylimines of methyl trifluoropyruvate: promising chiral building blocks in asymmetric synthesis of α -trifluoromethylated amino acids and derivatives, *ChemistrySelect*, 2020, 5, p. 13569-13574.
61. C. Tyborski, T. Hueckstaedt, R. Gillen, T. Ott, N. A. Fokina, A. A. Fokin, P. R. Schreiner, J. Maultzsch, Vibrational signatures of diamondoid dimers with large intramolecular London dispersion interactions. *Carbon* **2020**, 157, 201–207.
62. Fokin, A. A.; Bahonsky, V. V.; Koso, T. V.; Hoc, N. T.; Serafin, M.; Zhuk, T. S.; Rodionov, V. M.; Schreiner, P. R. Noncovalent interactions in crowded olefinic radical cations. *Zh. Org. Pharm. Chem.* **2020**, 18, 1, 5-13
63. Zhuk, T. S.; Lanovenko, S. V.; Pashenko, O. E.; Fokin, A. A. Luminescent properties of substituted 4-aminophthalimides: computations vs. experiment. *Zh. Org. Pharm. Chem.* **2020**, 18, 1, 52-57.
64. Gunchenko, P. A.; Chernish, L. V.; Tikhonchuk, E. Yu.; Becker, J.; Schreiner, P. R.; Fokin, A. A. Functionalization of diamantane dimers. *Zh. Org. Pharm. Chem.* **2020**, 18, 2, 57-59.
65. Butova, E. D.; Bahonsky, V. V.; Yurchenko, R. I.; Butov, S. O.; Moroz, M. M.; Fokin, A. A. *P*-Stereogenic diamondoid phosphines. *Zh. Org. Pharm. Chem.* **2020**, 18, 3, 35-38.
66. Bakhonsky, V. V.; Pashenko, A. A.; Becker, J.; Hausmann, H.; De Groot, H. J. M.; Overkleef, H. S.; Fokin, A. A.; Schreiner, P. R. Synthesis and antiproliferative activity of hindered, chiral 1,2-diaminodiamantane platinum(II) complexes. *Dalton. Trans.* **2020**, 49, 14009–14016.
67. D.A. Pisanenko, Yu.E.Klimko, A.V.Gaidai, S.V.Dubskaja. Dependence of Anti-Corrosion Properties on the Energy Characteristics of Benzylated of N-Arylicotinamides. *Farm. Chem.* **J.2020**, 7(2):64-67.
68. О.І. Василькевич, І.В.Коцій, Г.Ф.Дворко Кінетичні параметри іонізуючої здатності розчинників. Природа сольватацийних ефектів при гетеролізі 2-арил-2-хлорадамантанів Ж. Орг. Фарм. Хім., 2020, 18, №3(71), с. 25-34.

69. Kofanov, O., Vasylkevych, O., Kofanova, O., Zozul'ov, O., Kholkovsky, Y., Khrutba, V., Borysov, O., Bobryshov, O. Mitigation of the environmental risks resulting from diesel vehicle operation at the mining industry enterprises (2020) *Mining of Mineral Deposits*, 14 (2), pp. 110-118.
70. Stepanov D., Vasylkevych O., Kofanov O. INVESTIGATION OF THE WATER ADDITION INFLUENCE ON THE GASOLINE PHYSICO-CHEMICAL PROPERTIES, ECOLOGICAL AND OPERATIONAL CHARACTERISTIC Науковий вісник ТДАТУ Вип. 10, том 1.,2020
71. Beznosyk Yu. O., Bugaieva L. M., Prymyska S. O. COMPUTER MODELING OF GAS PURIFICATION PROCESS IN ZEOLITES. Modern engineering and innovative technologies, 2020, issue 11, part 4, pp. 48-56. DOI: 10.30890/2567-5273.2020-11-04-071
72. V.B. KOVTUN1, O.G. SIDORENKO, M.D. KHOMIAKOVA3, I.A. LEVANDOVSKIY, "RETINOIDS IN DERMATOLOGY: FUNCTIONAL ACTIVITY AND PROSPECTS OF SYNTHETIC ANALOGUES", BIOTECHNOLOGIA ACTA, V. 13, No 5, 2020, in press
73. G Vasyliev, V Vorobyova, T Zhuk, Raphanus sativus L. Extract as a Scale and Corrosion Inhibitor for Mild Steel in Tap Water. *J. Chem.*, 2020, 5089758
74. Willey, T. M.; Lee, J. R. I.; Brehmer, D.; Mellone, O. A. P.; Landt, L.; Schreiner, P. R.; Fokin, A. A.; Tkachenko, B. A.; de Meijere, A.; Kozhushkov, S.; van Buuren, A. W. X-ray spectroscopic identification of strain and structure-based resonances in a series of saturated carbon-cage molecules: Adamantane, twistane, octahedrane, and cubane. *J. Vac. Sci. Technol. A* 2021, 39, 5, 053208.
75. Zhuk, T.S., Skorobohatko, O.S., Albuquerque, W., Zorn, H. Scope and limitations of biocatalytic carbonyl reduction with white-rot fungi *Bioorg. Chem.* 2021, 108, p. 104651
76. Shavrina, O.M., Bezduzhny, A.V., Rassukana, Yu. V. Synthesis and some transformations of all three isomers of alpha,alpha-difluoropyridinylacetonitrile. *J. Fluor. Chem.* 2021, 246, p. 109792.
77. A.B. Rozhenko, A.A. Kyrylchuk, Yu.O. Lapinska, Yu.V. Rassukana,V.V. Trachevsky, V.V. Pirozhenko, J. Leszczynski, P.P. Onysko. Z,E-Isomerism in a Series of Substituted Iminophosphonates: *Quantum Chemical Research. Organics*, 2021, 2(2), p. 84-97. DOI: 10.3390/org2020008.
78. S.O. Sotnik, A.I. Subota, A.Y. Kliuchynskyi, D.V. Yehorov, A.S. Lytvynenko, A.B. Rozhenko, S.V. Kolotilov, S.V. Ryabukhin, D.M. Volochnyuk. Cu-Catalyzed Pyridine Synthesis via Oxidative Annulation of Cyclic Ketones with Propargylamine. *J. Org. Chem.* 2021, 86(11), p. 7315–7325. DOI: 10.1021/acs.joc.0c03038.
79. T. Zhuk, V. V. Babkina, H. Zorn Aerobic C-C bond cleavage catalysed by whole-cell cultures of the white-rot fungus *Dichomitus albidofuscus*. *ChemCatChem*, 2021, <https://doi.org/10.1002/cctc.202101408>.
80. A. Marchenko, G. Koidan, A. Hurieva, K. Shvydenko, A. Rozhenko, E. Rusanov, A. Kyrylchuk, A. Kostyuk. Latent Nucleophilic Carbenes. *J. Org. Chem.* jo-2021-023979.R1
81. S. Medvedko, M. Ströbele, J. P. Wagner. Synthesis of Sterically Encumbered Thiourea S-Oxides through Direct Thiourea Oxidation. *Chem. Eur. J.* 2023, 29 (4), e202203005 (15).
82. V.Vorobyova, M. Skiba, A. Kushko. Tomato pomace extract as a novel corrosion inhibitor for the steel in industrial media: The role of chemical transformation of the extract and proinhibition effect. *J.Mol.Struct.*, 2022, 1264, 133155.
83. V. Chornous, M. Vovk, M. Bratenko, Yu. Dmytriv, A. Rudnichenko, M. Skorobahatko, N. Kasian, L. Lisetski & I. Gvozdovskyy. Light-controllable chiral dopant based on azo-fragment: synthesis and characterization. *Liquid Crystals*, 2022, 10, 1322-1337.

84. Fokin, AA; Reshetylova, OK ; Pashenko, AE; Kivernik, A.; Zhuk, TS ; Becker, J ; Dahl, JEP; Carlson, RMK; Schreiner, PR. Synthetic Doping of Diamondoids through Skeletal Editing. *Org. Lett.* **2022**, *24*, 27, 4845–4849.
85. Zhuk, TS; Babkina, VV; Zorn, H. Aerobic C-C Bond Cleavage Catalyzed by Whole-Cell Cultures of the White-Rot Fungus *Dichomitus albidofuscus*. *ChemCatChem.*, **2022**, *14*, 3, e202101408.
86. O. M. Shavrina, P. P.Onys'ko, Yu.V. Rassukana. Mono- and difluorination of methylene group in isomeric pyrimidinyl- and pyridinylacetates with N-fluorobenzenesulfonimide. *J. Fluorine Chem.*, **2022**, *261*–262, 110027.
87. Aleksandrova, AM; Bezgubenko, LV; Rassukana, YV. Convenient preparative approaches to biorelevant dimethylphosphinoyl-derived compounds with the use of (trimethylsilyl)dimethylphosphinite. *Phosphorus, Sulfur, And Silicon, And The Related Elements*, **2022**, *197* (5-6), 571-573.
88. Rozhenko, AB ; Horbenko, YS ; Kyrylchuk, AA ; Zarudnitskii, EV ; Mykhaylychenko, SS ; Shermolovich, YG ; Grafov, AV. Stable Carbenes as Structural Components of Partially Saturated Sulfur-Containing Heterocycles. *Molecules*, **2022**, *27*, 5, 1458.
89. Kovalenko, Y., Tokarchuk, V., Kovalenko, S., Vasylkevych, O. Identifying the Influence of Redispersed Polymers on Cement Matrix Properties. *Eastern-European Journal of Enterprise Technologies*, **2022**, *4* (6-118), pp. 38–44.
90. Shishkina, S.V., Shaposhnik, A.M., Baumer, V.M., Rudiuk, V.V., Levandovskiy, I.A. 4-[(Benzylamino)carbonyl]-1-methylpyridinium halogenide salts: X-ray diffraction study and Hirshfeld surface analysis. *Acta Crystallographica Section E: Crystallographic Communications*, **2022**, *78*, 114–119.
91. Rudiuk, V.V., Shaposhnik, A.M., Baumer, V.M., Levandovskiy, I.A., Shishkina, S.V. 4-[(Benzylamino)carbonyl]-1-methylpyridinium bromide hemihydrate: X-ray diffraction study and Hirshfeld surface analysis. *Acta Crystallographica Section E: Crystallographic Communications*, **2022**, *78*, 496–499.
92. D. A. Pisanenko, Y. E. Klimko, I.V. Kostij, L. N. Shunko, Y. L. Voljanskii. Antimicrobial Activity of Some Halogenated Isoalkyl Phenols. *The Pharmaceutical and Chemical Journal*, **2022**, *9*(1),1-4.
93. Рудюк В.В., Філатов А.А., Бабаджанова Л.А., Ягупольський Ю.Л., Левандовський І.А. Розробка промислової технології синтезу активного фармацевтичного інгредієнта «6-метилурацил» Питання хімії та хімічної технології, 2023. В. 4(149). С. 77-82.
94. Shishkina S.V., Shaposhnik A.M., Dyakonenko V.V., Baumer V.M., Rudiuk V.V., Yanchuk I.B., Levandovskiy I.A. New Polymorphic Modifications of 6-Methyluracil: An Experimental and Quantum Chemical Study. *ACS Omega*, 2023. Vol. 8. P. 20661-20674. doi:[10.1021/acsomega.3c01231](https://doi.org/10.1021/acsomega.3c01231)
95. Fokin, A. A., Long but Strong C-C Single Bonds: Challenges for Theory. *Chem. Rec.* 2023, e202300170 (10 p).