

Сведения об официальном оппоненте

Сильников Владимир Николаевич, доктор химических наук, специальность 02.00.10 — «Биоорганическая химия», заведующий лабораторией, Федеральное государственное бюджетное учреждение науки Институт химической биологии и фундаментальной медицины СО РАН.

Список основных публикаций по теме диссертации за последние 5 лет:

1. Amirkhanov N. V., Bardasheva A. V., Silnikov V. N., Tikunova N. V. Synthetic Antimicrobial Peptides. V. Histidine-containing Antifungal Peptides with a “Linear” Type of Amphipathicity // Russian Journal of Bioorganic Chemistry. – 2024. – V. 50. – No. 4. – P. 1325-1340. – DOI: 10.1134/S1068162024040150
2. Shram S. I., Shcherbakova, T. A., Abramova, T. V., Smirnovskaya, M. S., Balandina, A. I., Kulikov, A. V., Švedas V. K., Silnikov V. N., Myasoedov N. F., Nilov, D. K. A New Approach for Studying Poly (ADP-Ribose) Polymerase Inhibitors Using Permeabilized Adherent Cells // Biochemistry (Moscow). – 2024. – V. 89. – No. 9. – P. 1619-1630. – DOI: 10.1134/S0006297924090086
3. Сумарокова А. Д., Афонюшкин В. Н., Миронова Т. Е., Черепушкина В. С., Афонюшкин А. В., Стацевич Л. Н., Сильников В. Н. Изучение биологической активности препаратов серебра на организменной модели инфекции болезни Ньюкасла // Сибирский вестник сельскохозяйственной науки. – 2024. – V. 54. – No. 7. – P. 96-105. – <https://doi.org/10.26898/0370-8799-2024-7-10>
4. Amirkhanov N. V., Bardasheva A. V., Silnikov V. N., Tikunova N. V. Synthetic Antimicrobial Peptides. V. Histidine-containing Antifungal Peptides with a “Linear” Type of Amphipathicity // Russian Journal of Bioorganic Chemistry. – 2024. – V. 50. – No. 4. – P. 1325-1340. – <https://doi.org/10.1134/S1068162024040150>
5. Wang M., Moskalev I. A., Zakhарова О. D., Kasatova A. I., Silnikov V. N., Popova T. V., Godovikova T. S. Development of theranostics albumin auristatin conjugates for combining chemotherapy with boron neutron capture therapy. – 2023. – <https://doi.org/10.21203/rs.3.rs-3589431/v1>
6. Grigor’eva A. E., Bardasheva A. V., Ryabova E. S., Tupitsyna A. V., Zadvornyykh D. A., Koroleva L. S., Silnikov V. N., Tikunov, N. V., Ryabchikova E. I. Changes in the Ultrastructure of Staphylococcus aureus Cells Make It Possible to Identify and Analyze the Injuring Effects of Ciprofloxacin, Polycationic Amphiphile and Their Hybrid // Microorganisms. – 2023. – V. 11. – No. 9. – P. 2192. – <https://doi.org/10.3390/microorganisms11092192>
7. Shram S. I., Shcherbakova, T. A., Abramova, T. V., Baradieva, E. C., Efremova, A. S., Smirnovskaya, M. S., Silnikov V. N., Švedas V. K., Nilov, D. K. Natural guanine derivatives exert parp-inhibitory and cytoprotective effects in a model of cardiomyocyte damage under oxidative stress // Biochemistry (Moscow). – 2023. – V. 88. – No. 6. – P. 783-791. – <https://doi.org/10.1134/S0006297923060068>
8. Antonova L. V., Sevostianova V. V., Silnikov V. N., Krivkina E. O., Velikanova E. A., Mironov A. V., Shabaev A. R., Senokosova E. A., Khanova M. Y., Glushkova T. V., Akentieva T. N., Sinitskaya A. V., Markova V. E., Shishkova D. K., Lobov A. A., Repkin E. A., Stepanov A. D., Kutikhin A. G., Barbarash L. S. Comparison of the Patency and Regenerative Potential of Biodegradable Vascular Prostheses of Different Polymer Compositions in an Ovine Model // International Journal of Molecular Sciences. – 2023. – V. 24. – No. 10. – P. 8540. – <https://doi.org/10.3390/ijms24108540>
9. Raskolupova V. I., Wang M., Dymova M. A., Petrov G. O., Shchudlo I. M., Taskaev S. Y., Abramova T. V., Godovikova T. S., Silnikov V. N., Popova T. V. Design of the new closo-dodecarborate-containing gemcitabine analogue for the albumin-based theranostics

- composition // Molecules. – 2023. – V. 28. – No. 6. – P. 2672. – <https://doi.org/10.3390/molecules28062672>
10. Vedenkin A. S., Stovbun S. V., Bukhvostov A. A., Zlenko D. V., Stovbun I. S., Silnikov V. N., Fursov V. V., Kuznetsov D. A. Anti-cancer activity of ultra-short single-stranded polydeoxyribonucleotides // Investigational New Drugs. – 2023. – V. 41. – No. 1. – P. 153-161. – <https://doi.org/10.1007/s10637-023-01333-y>
11. Zadvornykh D., Zhang Z., Liu C., Serpokrylova I., Bardasheva A., Tikunova N., Silnikov V., Koroleva L. Antibacterial activity of cationic amphiphil conjugates with ciprofloxacin // Int. J. Health Sci. – 2022. – V. 6. – P. 3009-3023. – <https://doi.org/10.53730/ijhs.v6nS7.12110>
12. Антонова Л. В., Миронов А. В., Шабаев А. Р., Сильников В. Н., Кривкина Е. О., Матвеева В. Г., Великанова Е. А., Сенокосова Е. А., Ханова М. Ю., Севостьянова В. В., Глушкова Т. В., Мухамадияров Р. А., Барбараши Л. С. Тканеинженерные сосудистые заплаты—сравнительная характеристика и результаты преклинических испытаний на модели овцы // Вестник трансплантологии и искусственных органов. – 2022. – Т. 24. – №. 4. – С. 94-108. – <https://doi.org/10.15825/1995-1191-2022-4-94-108>
13. Mironov V., Shchugoreva I. A., Artyushenko P. V., Morozov D., Borbone N., Oliviero G., Zamay T. N., Moryachkov R. V., Kolovskaya O. S., Lukyanenko K. A., Song Y., Merkuleva I. A., Zabluda V.N., Peters G., Koroleva L. S., Veprintsev D. V., Glazyrin Y. E., Volosnikova E. A., Belenkaya S. V., Esina T. I., Isaeva A. A., Nesmeyanova V. S., Shanshin D. V., Berlina A. N., Komova N. S., Svetlichnyi V. A., Silnikov V. N., Shcherbakov D. N., Zamay G. S., Zamay S. S., Smolyarova T., Tikhonova E. P., Chen K. H.-C., Jeng U-S., Condorelli G., de Franciscis V., Groenhof G., Yang C., Moskovsky A. A., Fedorov D. G., Tomilin F. N., Tan W., Alexeev Y., V. Berezovski M., Kichkailo A. S. Structure-and interaction-based design of anti-SARS-CoV-2 aptamers // Chemistry—A European Journal. – 2022. – V. 28. – No. 12. – P. e202104481. – <https://doi.org/10.1002/chem.202104481>
14. Popova T., Dymova M. A., Koroleva L. S., Zakharova O. D., Lisitskiy V. A., Raskolupova V. I., Sycheva T., Taskaev S., Silnikov V. N., Godovikova T. S. Homocystamide conjugates of human serum albumin as a platform to prepare bimodal multidrug delivery systems for boron neutron capture therapy // Molecules. – 2021. – V. 26. – No. 21. – P. 6537. – <https://doi.org/10.3390/molecules26216537>
15. Ozerskaya A. V., Zamay T. N., Kolovskaya O. S., Tokarev N. A., Belugin K. V., Chanchikova N. G., Badmaev O. N., Zamay G. S., Shchugoreva I. A., Moryachkov R. V., Zabluda V. N., Khorzhevskii V. A., Shepelevich N., Gappoев S. V., Karlova E. A., Saveleva A. S., Volzhentsev A. A., Blagodatova A. N., Lukyanenko K. A., Veprintsev D. V., Smolyarova T. E., Tomilin F. N., Zamay S. S., Silnikov V. N., Berezovski M. V., Kichkailo. A. S. 11C-radiolabeled aptamer for imaging of tumors and metastases using positron emission tomography-computed tomography // Molecular Therapy-Nucleic Acids. – 2021. – V. 26. – P. 1159-1172. – DOI: [10.1016/j.omtn.2021.10.020](https://doi.org/10.1016/j.omtn.2021.10.020)
16. Bogdanova Y. G., Antonova L. V., Silnikov V. N., Khanova M. Y., Senokosova E. A., Barbarash L. S. Impact of modification on the energy characteristics of surfaces and matrix properties of the new effective polymer vascular implants // Key Engineering Materials. – 2021. – V. 899. – P. 342-354. – <https://doi.org/10.4028/www.scientific.net/KEM.899.342>
17. Антонова Л. В., Кривкина Е. О., Сильников В. Н., Груздева О. В., Резьова М. А., Акентьева Т. Н., Глушкова Т. В., Ткаченко В. О., Сахарова В. М., Барбараши Л. С. Оценка биосовместимости и антимикробных свойств биодеградируемых сосудистых протезов различного полимерного состава с аромобогенным и противомикробным лекарственным покрытием // Вестник трансплантологии и искусственных органов. – 2021. – Т. 23. – №. 2. – С. 122-136. – <https://doi.org/10.15825/1995-1191-2021-2-122-136>
18. Raskolupova V. I., Popova T. V., Zakharova O. D., Nikotina A. E., Abramova T. V., Silnikov V. N. Human Serum Albumin Labelling with a New BODIPY Dye Having a Large Stokes

Shift // Molecules. – 2021. – V. 26. – No. 9. – P. 2679. –
<https://doi.org/10.3390/molecules26092679>

19. Gornostaev L. M., Rudenko D. S., Rukovets T. A., Fominykh O. I., Romashkova Y. G., Gatilov Y. V., Sil'nikov V. N. Reactions of (4 E)-3-Arylamino-4-(hydroxyimino) naphthalen-1 (4 H)-ones and (4 E)-2-[Arylamino (alkylamino)]-4-(hydroxyimino) naphthalen-1 (4 H)-ones with 2, 2-Dihydroxyindane-1, 3-dione // Russian Journal of Organic Chemistry. – 2021. – V. 57. – P. 165-169. – <https://doi.org/10.1134/S1070428021020056>
20. Popova T. V., Pyshnaya I. A., Zakharova O. D., Akulov A. E., Shevelev O. B., Poletaeva J., Zavjalov E. L., Silnikov V. N., Ryabchikova E. I., Godovikova T. S. Rational design of albumin theranostic conjugates for gold nanoparticles anticancer drugs: Where the seed meets the soil? // Biomedicines. – 2021. – V. 9. – No. 1. – P. 74. – <https://doi.org/10.3390/biomedicines9010074>
21. SILNIKOV V. N., KOROLEVA L., KRIVKINA E., BARBARASH L. Polymeric Materials with Antibacterial Activity: Problems of Choosing Low Molecular Weight Antibacterial Agents // Chemistry for Sustainable Development. – 2021. – V. 29. – No. 4. – P. 482-494.
22. Novopashina D. S., Vorobyeva M. A., Lomzov A. A., Silnikov V. N., Venyaminova A. G. Terminal mono-and bis-conjugates of oligonucleotides with closo-dodecaborate: Synthesis and physico-chemical properties // International Journal of Molecular Sciences. – 2020. – V. 22. – No. 1. – P. 182. – <https://doi.org/10.3390/ijms22010182>
23. Stovbun S. V., Vedenkin A. S., Bukhvostov A. A., Koroleva L. S., Silnikov V. N., Kuznetsov D. A. L. D-Polydeoxyribonucleotides to provide an essential inhibitory effect on DNA polymerase β of human myeloid leukemia HL60 cells // Biochemistry and Biophysics Reports. – 2020. – V. 24. – P. 100835. – <https://doi.org/10.1016/j.bbrep.2020.100835>
24. Raskolupova V. I., Popova T. V., Zakharova O. D., Abramova T. V., Silnikov V. N. New BODIPY Dye with a Large Stokes Shift for Biopolymer Labelling // Chemistry Proceedings. – 2020. – V. 3. – No. 1. – P. 72. – <https://doi.org/10.3390/ecsoc-24-08304>