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Адрес

Федеральное государственное бюджетное учреждение науки Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук, Москва, Россия

Контакты

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Образование

2005–2008	Россия, Москва	Институт биоорганической химии им. акад. М.М. Шемякина и Ю.А. Овчинникова РАН	канд. хим. наук
2007–2007	Россия, Пущино	Школа по конфокальной и электронной микроскопии, организованная фирмой Leica	сертификат о прохождении практики
2000–2005	Россия, Москва	Московский государственный университет им. М.В. Ломоносова, биологический факультет, кафедра биоорганической химии	диплом с отличием (специалист)

Работа в ИБХ

2016–наст.вр.	Старший научный сотрудник
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Членство в советах и комиссиях ИБХ

Профсоюзный комитет

Научные интересы

геронтология, теория эволюции, теоретическая биология, нейрохимия, биология липидов, онкология

Степени и звания

Кандидат наук (Химические науки, 03.00.04 — Биохимия)

Гранты и проекты

2023–2024	Взаимодействие противоположно направленных сигналов эндогенных биоактивных липидов лизофосфатидилинозита, анандамида и 2-арахидоноилглицерина в процессах регуляции пролиферации и смерти клеток рака молочной железы
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Публикации

- Zhdanov V, Kaplin D, **Akimov M**, Antonov A, Gasanov M, Malchenko V (2025). Ensemble Machine Learning Models for Rice and Wheat Yield Prediction: A Comparative Study Across Districts in India's Kharif and Rabi Seasons. *J INDIAN SOC REMOT* , , [10.1007/s12524-025-02186-z](#)
- Oshchepkov M, Kovalenko L, Kalistratova A, Sherstyanykh G, Gorbacheva E, Antonov A, Khadour N, **Akimov M** (2025). Anti-Proliferative Activity of Ethylenediurea Derivatives with Alkyl and Oxygen-Containing Groups as Substituents. *Biomedicines* 13 (2), 316, [10.3390/biomedicines13020316](#)
- Akimov MG**, Gretskeya NM, Gorbacheva EI, Khadour N, Sherstyanykh GD, Bezuglov VV (2025). Two-Step Cell Death Induction by the New 2-Arachidonoyl Glycerol Analog and Its Modulation by

Lysophosphatidylinositol in Human Breast Cancer Cells. *Int J Mol Sci* 26 (2), 820, [10.3390/ijms26020820](https://doi.org/10.3390/ijms26020820)

4. **Akimov MG**, Gretskeya NM, Gorbacheva EI, Khadour N, Chernavskaya VS, Sherstyanykh GD, Kovaleko TF, Fomina-Ageeva EV, Bezuglov VV (2024). The Interaction of the Endocannabinoid Anandamide and Paracannabinoid Lysophosphatidylinositol during Cell Death Induction in Human Breast Cancer Cells. *Int J Mol Sci* 25 (4), 2271, [10.3390/ijms25042271](https://doi.org/10.3390/ijms25042271)
5. **Akimov MG**, Dudina PV, Vyunova TV, Kalueff AV, Gretskeya NM, Bezuglov VV (2024). Role of key endocannabinoids and their receptors in breast cancer. *Reviews on Clinical Pharmacology and Drug Therapy* 22 (1), 41–51, [10.17816/RCF623144](https://doi.org/10.17816/RCF623144)
6. Gretskeya N, **Akimov M**, Andreev D, Zalygin A, Belitskaya E, Zinchenko G, Fomina-Ageeva E, Mikhalyov I, Vodovozova E, Bezuglov V (2023). Multicomponent Lipid Nanoparticles for RNA Transfection. *Pharmaceutics* 15 (4), , [10.3390/pharmaceutics15041289](https://doi.org/10.3390/pharmaceutics15041289)
7. **Akimov MG**, Gretskeya NM, Dudina PV, Sherstyanykh GD, Zinchenko GN, Serova OV, Degtyaryova KO, Deyev IE, Bezuglov VV (2023). The Mechanisms of GPR55 Receptor Functional Selectivity during Apoptosis and Proliferation Regulation in Cancer Cells. *Int J Mol Sci* 24 (6), , [10.3390/ijms24065524](https://doi.org/10.3390/ijms24065524)
8. Kovshova T, Mantrov S, Boiko S, Malinovskaya J, Merkulova M, Osipova N, Moiseeva N, **Akimov M**, Dudina P, Senchikhin I, Ermolenko Y, Gelperina S (2023). Co-delivery of Paclitaxel and Etoposide Prodrug by Human Serum Albumin and PLGA nanoparticles: synergistic cytotoxicity in brain tumor cells. *J Microencapsul* 40 (4), 1–48, [10.1080/02652048.2023.2188943](https://doi.org/10.1080/02652048.2023.2188943)
9. Kochetkov KA, Gorunova ON, Bystrova NA, Dudina PV, **Akimov MG** (2022). Synthesis and physiological activity of new imidazolidin-2-one bis-heterocyclic derivatives. *Russ Chem Bull* 71 (11), 2395–2403, [10.1007/s11172-022-3667-z](https://doi.org/10.1007/s11172-022-3667-z)
10. Oshchepkov M, Kovalenko L, Kalistratova A, Ivanova M, Sherstyanykh G, Dudina P, Antonov A, Cherkasova A, **Akimov M** (2022). Anti-Proliferative and Cytoprotective Activity of Aryl Carbamate and Aryl Urea Derivatives with Alkyl Groups and Chlorine as Substituents. *Molecules* 27 (11), , [10.3390/molecules27113616](https://doi.org/10.3390/molecules27113616)
11. Gamisonia AM, Yushina MN, Fedorovagolina IA, **Akimov MG**, Eldarov CM, Pavlovich SV, Bezuglov VV, Gretskeya NM, Sukhikh GT, Bobrov MY (2021). N-Acyl Dopamines Induce Apoptosis in Endometrial Stromal Cells from Patients with Endometriosis. *Int J Mol Sci* 22 (19), , [10.3390/ijms221910648](https://doi.org/10.3390/ijms221910648)
12. **Akimov MG**, Fomina-Ageeva EV, Dudina PV, Andreeva LA, Myasoyedov NF, Bezuglov VV (2021). ACTH(6–9)PGP Peptide Protects SH-SY5Y Cells from H₂O₂, tert-Butyl Hydroperoxide, and Cyanide Cytotoxicity via Stimulation of Proliferation and Induction of Prosurvival-Related Genes. *Molecules* 26 (7), , [10.3390/molecules26071878](https://doi.org/10.3390/molecules26071878)
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14. Bandyopadhyaya S, **Akimov MG**, Verma R, Sharma A, Sharma D, Kundu GC, Gretskeya NM, Bezuglov VV, Mandal CC (2021). N-arachidonoyl dopamine inhibits epithelial-mesenchymal transition of breast cancer cells through ERK signaling and decreasing the cellular cholesterol. *J Biochem Mol Toxicol* 35 (4), e22693, [10.1002/jbt.22693](https://doi.org/10.1002/jbt.22693)
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20. Sviridova LA, Protopopova PS, **Akimov MG**, Dudina MS, Melnikova EK, Kochetkov KA (2020). Synthesis of new physiologically active (2-oxoimidazolidin-5-yl)indoles. *MENDELEEV COMMUN* 30 (3), 347–349, [10.1016/j.mencom.2020.05.029](https://doi.org/10.1016/j.mencom.2020.05.029)
21. Prutkov AN, Chudinov MV, Matveev AV, Grebenkina LE, **Akimov MG**, Berezovskaya YV (2020). 5-alkylvinyl-1,2,4-triazole nucleosides: Synthesis and biological evaluation. *Nucleosides Nucleotides Nucleic Acids* 39 (7), 1–21, [10.1080/15257770.2020.1723624](https://doi.org/10.1080/15257770.2020.1723624)
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25. (конференция) **Akimov M**, Loginova E, Musin M (2019). A graph-based approach for learner-tailored teaching of Korean grammar constructions. *IEEE Int Conf Data Min Workshops* 2018-November, 349–354, [10.1109/ICDMW.2018.00057](https://doi.org/10.1109/ICDMW.2018.00057)
26. (конференция) **Akimov M**, Ashba A, Gretskaya N, Bezuglov V (2018). N-acyl dopamines (NADA) require a certain cellular cholesterol level to induce cell death. *FEBS Open Bio* 8 (Supp.), 75–ShT.23–2.
27. (книга) **Akimov MG**, Gretskaya NM, Bezuglov VV (2017). Endovanilloids as differentiation inducers for mammalian cells. 33, 197–208.
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35. **Akimov MG**, Gretskaya NM, Karnoukhova VA, Serkov IV, Proshin AN, Shtratnikova VY, Bezuglov VV (2014). The effect of docosahexaenoic acid moiety on the cytotoxic activity of 1,2,4-thiadiazole derivatives. *Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry* 8 (1), 43–46,

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41. Ostroumova TV, Markova LN, **Akimov MG**, Gretskaia NM, Bezuglov VV (2010). Docosahexaenoyl dopamine in freshwater hydra: Effects on regeneration and metabolic changes. *RUSS J DEV BIOL* 41 (3), 164–167, [10.1134/S1062360410030045](https://doi.org/10.1134/S1062360410030045)
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43. **Акимов МГ** (2009). Мембраны и рак. , .
44. **Akimov MG**, Nazimov IV, Gretskaia NM, Zinchenko GN, Bezuglov VV (2009). Sulfation of N-acyl dopamines in rat tissues. *Biochemistry (Mosc)* 74 (6), 681–685, [10.1134/S0006297909060133](https://doi.org/10.1134/S0006297909060133)
45. Bezuglov VV, Gretskaia NM, Klinov DV, Bobrov MY, Shibanova ED, **Akimov MG**, Fomina-Ageeva EV, Zinchenko GN, Bairamashvili DI, Miroshnikov AI (2009). Nanocomplexes of recombinant proteins and polysialic acid: Preparation, characteristics, and biological activity. *Russ. J. Bioorganic Chem.* 35 (3), 320–325, [10.1134/S1068162009030066](https://doi.org/10.1134/S1068162009030066)
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53. Bezuglov VV, Gretskaia NM, Blazhenova AV, Andrianova EL, **Akimov MG**, Bobrov MY, Nazimov IV, Kisel MA, Sharko OL, Novikov AV, Krasnov NV, Shevchenko VP, Shevchenko KV, VYunova TV, Myasoedov NF (2006). Arachidonoyl amino acids and arachidonoyl peptides: Synthesis and properties. *Russ. J. Bioorganic Chem.* 32 (3), 231–239, [10.1134/S1068162006030046](https://doi.org/10.1134/S1068162006030046)