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Адрес

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Образование

1999– 2004	Россия, Москва	МГУ им. М.В. Ломоносова, биологический факультет, кафедра биоорганической химии	Диплом по специальности «биохимия» с отличием
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Преподавание

2005– наст.вр.	Россия, Москва	МГУ им. М.В. Ломоносова, биологический факультет, кафедра биоорганической химии	Молекулярные механизмы мембранного транспорта
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Работа в ИБХ

2017–наст.вр.	Главный научный сотрудник
	Старший научный сотрудник

Членство в советах и комиссиях ИБХ

Ученый совет

Владение языками

русский, английский

Награды

2016	Премия Правительства Москвы молодым ученым	За изучение разнообразия природных блокаторов калиевых каналов и создание молекулярных инструментов для фундаментальных исследований и скрининговых систем на их основе
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Степени и звания

Кандидат наук (Химические науки, 02.00.10 — Биоорганическая химия)

Гранты и проекты

2014– 2016	Молекулярные основы действия животных ядов
2022– 2024	Модуляторы мутантных натриевых каналов
2020– 2022	Получение селективных блокаторов калиевого канала человека Kv1.3

2020– [Лиганды ионных каналов с уникальной селективностью](#)
2022

2019– [Токсины из природных ядов модулируют болевую сенситизацию в чувствительных нейронах](#)
2022 [посредством механизмов, не зависящих от деполяризации](#)

Публикации

1. Aleksandrova EV, Syroegin EA, Basu RS, **Vassilevski AA**, Gagnon MG, Polikanov YS (2025). Mechanism of release factor-mediated peptidyl-tRNA hydrolysis on the ribosome. *Science* 388 (6753), eads9030, [10.1126/science.ads9030](#)
2. Nikolaev M, Gataulina E, Fedorova I, Baleeva N, Baranov M, **Vassilevski A**, Tikhonov D (2025). Optical control of calcium-permeable AMPA receptors by azobenzene–spermines. *Br J Pharmacol* , , [10.1111/bph.70111](#)
3. Trofimov YA, Chugunov AO, **Vassilevski AA** (2025). Secondary chelation through shared water provides ion selectivity in bacterial sodium channels. *Structure* , , [10.1016/j.str.2025.05.010](#)
4. Egorkin NA, Aleksin AM, Sedlov IA, Zhiganov NI, Bodunova DV, Varfolomeeva LA, Slonimskiy YB, Ziganshin RH, Popov VO, Boyko KM, **Vassilevski AA**, Maksimov EG, Sluchanko NN (2025). A green dichromophoric protein enabling foliage mimicry in arthropods. *Proc Natl Acad Sci U S A* 122 (23), e2502567122, [10.1073/pnas.2502567122](#)
5. Gigolaev AM, Iureva DA, Lagosha SV, Brazhe AR, Zhorov BS, **Vassilevski AA** (2025). Golden Gate cloning enables efficient concatemer construction for biophysical analysis of heterozygous potassium channel variants from patients with epilepsy. *Int J Biol Macromol* 307 (Pt 3), 141802, [10.1016/j.ijbiomac.2025.141802](#)
6. Scherbakov KA, **Vassilevski AA**, Chugunov AO (2025). Potassium channel selectivity is determined by square antiprismatic ion chelation. *Int J Biol Macromol* 305 (Pt 1), 140690, [10.1016/j.ijbiomac.2025.140690](#)
7. Oparin P, Khokhlova O, Cherkashin A, Nadezhdin K, Palikov V, Palikova Y, Korolkova Y, Mosharova I, Rogachevskaja O, Baranov M, Shaidullova K, Ermakova E, Lushpa V, Bruter A, Deykin A, Ivanova E, Silaeva Y, Dyachenko I, Bocharov E, Sitdikova G, Andreev-Andrievskiy A, Poteryaev D, Shuster A, Murashev A, Kolesnikov S, Stepanenko V, Grishin E, **Vassilevski AA** (2025). Potent painkiller from spider venom antagonizes P2X3 receptors without dysgeusia. *Mol Ther* 33 (2), 771–785, [10.1016/j.ymthe.2024.12.036](#)
8. Tikhonova TB, Sharkov AA, Zhorov BS, **Vassilevski AA** (2024). Diverse biophysical mechanisms in voltage-gated sodium channel Nav1.4 variants associated with myotonia. *FASEB J* 38 (16), e23883, [10.1096/fj.202400867R](#)
9. Chernykh MA, Duzheva MA, Kuldyushev NA, Peigneur S, Berkut AA, Tytgat J, **Vassilevski AA**, Chugunov AO (2024). Scorpion Neurotoxin BeM9 Derivative Uncovers Unique Interaction Mode with Nav1.5 Sodium Channel Isoform. *Russ. J. Bioorganic Chem.* 50 (4), 1341–1350, [10.1134/S1068162024040083](#)
10. Zavarzina II, Kuzmenkov AI, Dobrokhotoev NA, Maleeva EE, Korolkova YV, Peigneur S, Tytgat J, Krylov NA, **Vassilevski AA**, Chugunov AO (2024). The scorpion toxin BeKm-1 blocks hERG cardiac potassium channels using an indispensable arginine residue. *FEBS Lett* 598 (8), 889–901, [10.1002/1873-3468.14850](#)
11. Ojomoko LO, Kryukova EV, Egorova NS, Salikhov AI, Epifanova LA, Denisova DA, Khomutov AR, Sukhov DA, **Vassilevski AA**, Khomutov MA, Tsetlin VI, Shelukhina IV (2023). Inhibition of nicotinic acetylcholine receptors by oligoarginine peptides and polyamine-related compounds. *Front Pharmacol* 14 (14), 1327603, [10.3389/fphar.2023.1327603](#)
12. Oparin PB, Nikodimov SS, **Vassilevski AA** (2023). Venoms with oral toxicity towards insects. *Toxicon* 235, 107308, [10.1016/j.toxicon.2023.107308](#)
13. Krylov NA, Tabakmakher VM, Yureva DA, **Vassilevski AA**, Kuzmenkov AI (2023). Kalium 3.0 is a comprehensive depository of natural, artificial, and labeled polypeptides acting on potassium channels. *Protein Sci* 32 (11), e4776, [10.1002/pro.4776](#)
14. Kuzmenkov AI, Gigolaev AM, Pinheiro-Junior EL, Peigneur S, Tytgat J, **Vassilevski AA** (2023). Methionine-isoleucine dichotomy at a key position in scorpion toxins inhibiting voltage-gated potassium channels. *Toxicon* 231, 107181, [10.1016/j.toxicon.2023.107181](#)
15. Mineev KS, Chernykh MA, Motov VV, Prudnikova DA, Pavlenko DM, Kuzmenkov AI, Peigneur S, Tytgat J,

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 32. Кузьменков АИ, Пеньёр С, Титгат Я, **Василевский АА** (2019). Фармакологическая характеристика пептидных лигандов калиевых каналов MeКТх13-2 и MeКТх13-3 из яда скорпиона *Mesobuthus eupeus*.

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37. Shenkarev ZO, Shulepko MA, Peigneur S, Myshkin MY, Berkut AA, **Vassilevski AA**, Tytgat J, Lyukmanova EN, Kirpichnikov MP (2019). Recombinant Production and Structure-Function Study of the Ts1 Toxin from the Brazilian Scorpion Tityus serrulatus. *Dokl Biochem Biophys* 484 (1), 9–12, [10.1134/S1607672919010034](https://doi.org/10.1134/S1607672919010034)
38. Utkin Y, **Vassilevski A**, Kudryavtsev D, Undheim EAB (2019). Editorial: Animal Toxins as Comprehensive Pharmacological Tools to Identify Diverse Ion Channels. *Front Pharmacol* 10 (APR), 423, [10.3389/fphar.2019.00423](https://doi.org/10.3389/fphar.2019.00423)
39. Kuzmenkov AI, Nekrasova OV, Peigneur S, Tabakmakher VM, Gigolaev AM, Fradkov AF, Kudryashova KS, Chugunov AO, Efremov RG, Tytgat J, Feofanov AV, **Vassilevski AA** (2018). K1.2 channel-specific blocker from Mesobuthus eupeus scorpion venom: Structural basis of selectivity. *Neuropharmacology* 143, 228–238, [10.1016/j.neuropharm.2018.09.030](https://doi.org/10.1016/j.neuropharm.2018.09.030)
40. Kuldyushev NA, Mineev KS, Berkut AA, Peigneur S, Arseniev AS, Tytgat J, Grishin EV, **Vassilevski AA** (2018). Refined structure of BeM9 reveals arginine hand, an overlooked structural motif in scorpion toxins affecting sodium channels. *Proteins* 86 (10), 1117–1122, [10.1002/prot.25583](https://doi.org/10.1002/prot.25583)
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