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Адрес

Федеральное государственное
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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. Scherbakov KA, **Vassilevski AA**, Chugunov AO (2025). Potassium channel selectivity is determined by square antiprismatic ion chelation. *Int J Biol Macromol*, 140690, [10.1016/j.ijbiomac.2025.140690](#)
2. 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](#)
3. 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](#)
4. Chernykh MA, Duzheva MA, Kuldyshev 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](#)
5. Zavarzina II, Kuzmenkov AI, Dobrokhoto V, 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](#)
6. 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](#)
7. Oparin PB, Nikodimov SS, **Vassilevski AA** (2023). Venoms with oral toxicity towards insects. *Toxicon* 235, 107308, [10.1016/j.toxicon.2023.107308](#)
8. 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](#)
9. 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](#)
10. Mineev KS, Chernykh MA, Motov VV, Prudnikova DA, Pavlenko DM, Kuzmenkov AI, Peigneur S, Tytgat J, **Vassilevski AA** (2023). A scorpion toxin affecting sodium channels shows double cis–trans isomerism. *FEBS Lett* 597 (18), 2358–2368, [10.1002/1873-3468.14705](#)
11. Gigolaev AM, Tabakmakher VM, Peigneur S, Tytgat J, **Vassilevski AA** (2023). Structural Optimization of an α -Hairpinin Blocking Potassium Channels KV1.3. *J Evol Biochem Physiol* 59 (1), 192–199, [10.1134/S0022093023010167](#)
12. Gigolaev AM, Pinheiro-Junior EL, Peigneur S, Tytgat J, **Vassilevski AA** (2022). KV1.2-Selective Peptide with High Affinity. *J Evol Biochem Physiol* 58 (12), 2048–2057, [10.1134/S002209302206031X](#)
13. Kuzmenkov AI, Peigneur S, Nasburg JA, Mineev KS, Nikolaev MV, Pinheiro-Junior EL, Arseniev AS, Wulff H, Tytgat J, **Vassilevski AA** (2022). Apamin structure and pharmacology revisited. *Front Pharmacol* 13, 977440, [10.3389/fphar.2022.977440](#)
14. Gigolaev AM, Lushpa VA, Pinheiro-Junior EL, Tabakmakher VM, Peigneur S, Ignatova AA, Feofanov AV, Efremov RG, Mineev KS, Tytgat J, **Vassilevski AA** (2022). Artificial pore blocker acts specifically on voltage-gated potassium channel isoform KV1.6. *J Biol Chem* 298 (11), 102467, [10.1016/j.jbc.2022.102467](#)
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33. 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)
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35. 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)
36. Twomey EC, Yelshanskaya MV, **Vassilevski AA**, Sobolevsky AI (2018). Mechanisms of Channel Block in Calcium-Permeable AMPA Receptors. *Neuron* 99 (5), 956–968.e4, [10.1016/j.neuron.2018.07.027](https://doi.org/10.1016/j.neuron.2018.07.027)
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38. Andreev-Andrievskiy A, Popova A, Lagereva E, Osipov D, Berkut A, Grishin E, **Vassilevski A** (2017). Pharmacological analysis of Poecilotheria spider venoms in mice provides clues for human treatment. *Toxicon* 138, 59–67, [10.1016/j.toxicon.2017.08.013](https://doi.org/10.1016/j.toxicon.2017.08.013)
39. Kuzmenkov AI, **Vassilevski AA** (2017). Labelled animal toxins as selective molecular markers of ion channels: Applications in neurobiology and beyond. *Neurosci Lett* 679, 15–23, [10.1016/j.neulet.2017.10.050](https://doi.org/10.1016/j.neulet.2017.10.050)
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50. (конференция) Feofanov AV, Kudryashova KS, Nekrasova OV, **Vassilevski AA**, Kuzmenkov AI, Korolkova YV, Grishin EV, Kirpichnikov MP (2015). Quantitative confocal microscopy analysis as a basis for search and study of potassium kv1.X channel blockers. *Springer Proceedings in Physics* 164 (6), 249–254, [10.1007/978-3-319-16919-4_32](https://doi.org/10.1007/978-3-319-16919-4_32)
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