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Работа в ИБХ

2017–наст.вр.	Главный научный сотрудник
2026–2024	Профессор

Членство в советах и комиссиях ИБХ

Ученый совет

Степени и звания

Доктор наук (Химические науки, 02.00.10 — Биоорганическая химия)

Гранты и проекты

2025– наст.вр.	Разработка противовоспалительных и анальгетических лекарственных средств с новым механизмом действия через модуляцию активности ноцицептивных ионных каналов
2014– 2016	Молекулярные технологии управления нейросигнализацией
2020– 2022	ЕАПИ: Структура и функция рибосом-инактивирующих белков в разработке рекомбинантных токсинов нового поколения
2017– 2019	Доклинические исследования анальгетического лекарственного средства на основе ингибитора кислото-чувствительных каналов
2018– 2020	Изучение фармакологических свойств эндогенных и экзогенных модуляторов кислоточувствительных ионных каналов на экспрессированных рецепторах и на животных моделях in vivo

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- Osmakov DI, Korolkova YV, Maleeva EE, Logashina YA, Dubodel ES, Lubova KI, Koshelev SG, Andreev YA, **Kozlov SA** (2026). Gene arrangement within concatemeric constructs governs the functional divergence of human and rat ASIC3 concatemers. *J Physiol Biochem* 82 (1), , [10.1007/s13105-026-01201-2](https://doi.org/10.1007/s13105-026-01201-2)
- Galenko-Yaroshevsky PA, Zelenskaya AV, Suzdalev KF, Popova TN, Kvetkina AN, Shamatova MM, Chuyan EN, Ravaeva MY, Murashko RA, Glechyan TR, Sergeeva AV, Ishkhanyan NN, Gulevskaya ON, Chubinskiy-Nadezhdin VI, Krylskii ED, Priymenko NA, Klimovich AA, Leychenko EV, **Kozlov SA** (2026). The TRPV1 Channel Modulator Imidazo[1,2-a]Indole Derivative Exhibits Pronounced and Versatile Anti-Inflammatory Activity In Vivo. *Biomedicines* 14 (1), 60, [10.3390/biomedicines14010060](https://doi.org/10.3390/biomedicines14010060)
- Galenko-Yaroshevsky PA, Zelenskaya AV, Suzdalev KF, Chuyan EN, Ravaeva MY, Murashko RA, Vassiliev PM, Glechyan TR, Sergeeva AV, Leychenko EV, Chubinskiy-Nadezhdin VI, Gulevskaya ON, Korolkova YV,

- Shamatova MM, Vasileva VY, Ishkhanyan NN, **Kozlov SA** (2025). Analgesic activity of imidazo[1,2-a]indole derivative and its involvement of TRPV1 and κ -opioid receptors. *Res. Res. Pharm.* 11 (4), 17–37, [10.18413/rrpharmacology.11.641](https://doi.org/10.18413/rrpharmacology.11.641)
4. Palikov VA, Ismailova AM, Kazakov VA, Kholina AV, Borozdina NA, Mikhaylov ES, Pavlov VM, **Kozlov SA**, Kalabina EA, Dyachenko IA (2025). Awake Rat Model of Ischemic Stroke with Neuropsychiatric Complications During a Seven-Day Observation. *J Vis Exp* 2025–December (226), , [10.3791/69194](https://doi.org/10.3791/69194)
 5. Osmakov DI, Dubodel ES, Kalinovskii AP, Koshelev SG, Andreev YA, Korolkova YV, **Kozlov SA** (2025). Human acid-sensing ion channel 1a/3 heteromers at a 1:2 ratio expand the functional capabilities of homomeric ASIC3 and are likely to be physiologically relevant. *Natl Sci Rev* 12 (11), nwaf418, [10.1093/nsr/nwaf418](https://doi.org/10.1093/nsr/nwaf418)
 6. Sintsova O, Peigneur S, Kalina R, Otstavnykh N, Garbuz M, Klimovich A, Priymenko N, Shamatova M, Pavlenko A, **Kozlov S**, Gladkikh I, Isaeva M, Tytgat J, Leychenko E (2025). The major component of *Heteractis magnifica* sea anemone venom, RpIII, exhibits strong subtype selectivity for insects over mammalian voltage-gated sodium channels. *Neuropharmacology* 274, 110466, [10.1016/j.neuropharm.2025.110466](https://doi.org/10.1016/j.neuropharm.2025.110466)
 7. Osmakov DI, Khasanov TA, Maleeva EE, Pavlov VM, Palikov VA, Belozero OA, Koshelev SG, Korolkova YV, Dyachenko IA, **Kozlov SA**, Andreev YA (2025). Two Amino Acid Substitutions Improve the Pharmacological Profile of the Snake Venom Peptide Mambalgin. *Toxins (Basel)* 17 (3), 101, [10.3390/toxins17030101](https://doi.org/10.3390/toxins17030101)
 8. Khasanov TA, Mineev KS, Kalinovskii AP, Korolkova YV, Palikov VA, Palikova YA, Dyachenko IA, **Kozlov SA**, Andreev YA, Osmakov DI (2025). Sea anemone Cys-ladder peptide Ms13-1 induces a pain response as a positive modulator of acid-sensing ion channel 1a. *FEBS J* 292 (10), 2671–2687, [10.1111/febs.70032](https://doi.org/10.1111/febs.70032)
 9. Khasanov TA, Maleeva EE, Koshelev SG, Palikov VA, Palikova YA, Dyachenko IA, **Kozlov SA**, Andreev YA, Osmakov DI (2024). Mutagenesis of the Peptide Inhibitor of ASIC3 Channel Introduces Binding to Thumb Domain of ASIC1a but Reduces Analgesic Activity. *Mar Drugs* 22 (9), 382, [10.3390/md22090382](https://doi.org/10.3390/md22090382)
 10. Kalinovskii AP, Logashina YA, Palikova YA, Palikov VA, Osmakov DI, Mineev KS, Belozero OA, Shmygarev VI, **Kozlov SA**, Dyachenko IA, Korolkova YV, Andreev YA (2024). A Diterpenoid of the Medicinal Plant *Andrographis paniculata* Targets Cutaneous TRPV3 Channel and Relieves Itch. *J. Nat. Prod.* 87 (7), 1852–1859, [10.1021/acs.jnatprod.4c00626](https://doi.org/10.1021/acs.jnatprod.4c00626)
 11. Osmakov DI, Onoprienko LV, Kalinovskii AP, Koshelev SG, Stepanenko VN, Andreev YA, **Kozlov SA** (2024). Opioid Analgesic as a Positive Allosteric Modulator of Acid-Sensing Ion Channels. *Int J Mol Sci* 25 (3), 1413, [10.3390/ijms25031413](https://doi.org/10.3390/ijms25031413)
 12. Osmakov DI, Tarasova NV, Nedorubov AA, Palikov VA, Palikova YA, Dyachenko IA, Andreev YA, **Kozlov SA** (2023). Nocistatin and Products of Its Proteolysis Are Dual Modulators of Type 3 Acid-Sensing Ion Channels (ASIC3) with Algesic and Analgesic Properties. *Biochemistry (Mosc)* 88 (12-13), 2137–2145, [10.1134/S0006297923120155](https://doi.org/10.1134/S0006297923120155)
 13. Wu J, Xiong W, Li J, Liao H, Chai J, Huang X, Lai S, **Kozlov S**, Chu X, Xu X (2023). Peptide TK-HR from the Skin of Chinese Folk Medicine Frog *Hoplobatrachus rugulosus* Accelerates Wound Healing via the Activation of the Neurokinin-1 Receptor. *J Med Chem* 66 (23), 16002–16017, [10.1021/acs.jmedchem.3c01434](https://doi.org/10.1021/acs.jmedchem.3c01434)
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 15. Tsetlin V, Shelukhina I, **Kozlov S**, Kasheverov I (2023). Fifty Years of Animal Toxin Research at the Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry RAS. *Int J Mol Sci* 24 (18), 13884, [10.3390/ijms241813884](https://doi.org/10.3390/ijms241813884)
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 17. Danilevich VN, **Kozlov SA**, Sorokin VV, Mulyukin AL (2023). Highly purified DNA-containing cell envelopes from fungi for direct use in PCR. *Anal Chim Acta* 1273, 341528, [10.1016/j.aca.2023.341528](https://doi.org/10.1016/j.aca.2023.341528)
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23. Tereshin MN, Komyakova AM, Stepanenko VN, Myagkikh IV, Shoshina NS, Korolkova YV, Leychenko EV, **Kozlov SA** (2022). Optimized method for the recombinant production of a sea anemone's peptide. *MENDELEEV COMMUN* 32 (6), 745–746, [10.1016/j.mencom.2022.11.012](https://doi.org/10.1016/j.mencom.2022.11.012)
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25. Osmakov DI, Kalinovskii AP, Belozero OA, Andreev YA, **Kozlov SA** (2022). Lignans as Pharmacological Agents in Disorders Related to Oxidative Stress and Inflammation: Chemical Synthesis Approaches and Biological Activities. *Int J Mol Sci* 23 (11), , [10.3390/ijms23116031](https://doi.org/10.3390/ijms23116031)
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27. Kalinovskii AP, Osmakov DI, Koshelev SG, Lubova KI, Korolkova YV, **Kozlov SA**, Andreev YA (2022). Retinoic Acid-Differentiated Neuroblastoma SH-SY5Y Is an Accessible In Vitro Model to Study Native Human Acid-Sensing Ion Channels 1a (ASIC1a). *Biology (Basel)* 11 (2), , [10.3390/biology11020167](https://doi.org/10.3390/biology11020167)
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