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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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- 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, Priyenko 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)

3. 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)
4. 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)
5. 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)
6. 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)
7. 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)
8. 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)
9. 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)
10. 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)
11. 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)
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13. Korolkova Y, Mikov A, Lobas A, Solovyeva E, Surin A, Andreev Y, Gorshkov M, **Kozlov S** (2023). Venom-gland transcriptomics and venom proteomics of the *Tibellus oblongus* spider. *Sci Data* 10 (1), 820, [10.1038/s41597-023-02703-0](https://doi.org/10.1038/s41597-023-02703-0)
14. 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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23. Kalina RS, Kasheverov IE, Koshelev SG, Sintsova OV, Peigneur S, Pinheiro-Junior EL, Popov RS, Chausova VE, Monastyrnaya MM, Dmitrenok PS, Isaeva MP, Tytgat J, **Kozlov SA**, Kozlovskaya EP, Leychenko EV, Gladkikh IN (2022). Nicotinic Acetylcholine Receptors Are Novel Targets of APETx-like Toxins from the Sea Anemone *Heteractis magnifica*. *Toxins (Basel)* 14 (10), , [10.3390/toxins14100697](https://doi.org/10.3390/toxins14100697)
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26. 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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