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Адрес

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Образование

| | | | |
|-----------|----------------------|------|----------------------|
| 2007–2010 | Россия, Долгопрудный | МФТИ | к.ф.-м.н., Биофизика |
| 2001–2007 | Россия, Долгопрудный | МФТИ | магистр |

Работа в ИБХ

| | |
|---------------|---------------------------|
| 2022–наст.вр. | Заведующий лабораторией |
| 2018–наст.вр. | Старший научный сотрудник |

Членство в советах и комиссиях ИБХ

Ученый совет

Награды

| | | |
|------|---|--|
| 2018 | Премия Правительства Москвы молодым ученым | За исследование пространственной структуры клеточных рецепторов с одним трансмембранным сегментом |
|------|---|--|

Научные интересы

ЯМР-спектроскопия, мембраноподобные среды, структуры мембранных белков, механизмы активации рецепторных тирозинкиназ, биофизика фолдинга.

Структура низкомолекулярных соединений, системы люциферин/люциферазы

Членство в сообществах

член Российского общества Биохимиков и Молекулярных Биологов с 2011 года
член FEBS с 2011 года

Степени и звания

| | |
|------|---|
| 2021 | Доктор наук (Химические науки, 02.00.10 — Биоорганическая химия) |
| 2010 | Кандидат наук (Физико-математические науки, 03.01.02 — Биофизика) |

Гранты и проекты

| | |
|-------------------|--|
| 2022– наст.вр. | Исследование структурной организации толл-подобных рецепторов и их сигнальных комплексов по данным ЯМР-спектроскопии |
| 2019– наст.вр. | Структурная биология мембранных белков для создания новых лекарственных и диагностических средств |

2020– [Изучение роли внеклеточного примембранного региона и трансмембранного домена](#)
наст.вр. [рецептора нейротрофинов TrkA в процессе передачи сигнала через мембрану](#)

2020– [Исследование структурных основ внутриклеточной сигнализации Толл-подобных рецепторов](#)
2021 [методами спектроскопии ЯМР в растворе](#)

2014– [Структурные основы молекулярных механизмов передачи сигнала интегральными](#)
2018 [мембранными белками I типа](#)

Публикации

1. Artemieva LE, **Mineev KS**, Arseniev AS, Goncharuk SA (2022). Expression, purification and characterization of SORCS2 intracellular domain for structural studies. *Protein Expr Purif* 193, 106058, [10.1016/j.pep.2022.106058](#)
2. Kot EF, Franco ML, Vasilieva EV, Shabalkina AV, Arseniev AS, Goncharuk SA, **Mineev KS**, Vilar M (2022). Intrinsically disordered regions couple the ligand binding and kinase activation of Trk neurotrophin receptors. *iScience* 25 (6), 104348, [10.1016/j.isci.2022.104348](#)
3. Lushpa VA, Goncharuk MV, Lin C, Zalevsky AO, Talyzina IA, Luginina AP, Vakhrameev DD, Shevtsov MB, Goncharuk SA, Arseniev AS, Borshchevskiy VI, Wang X, **Mineev KS** (2021). Modulation of Toll-like receptor 1 intracellular domain structure and activity by Zn²⁺ ions. *Commun Biol* 4 (1), 1003, [10.1038/s42003-021-02532-0](#)
4. Burakova LP, Lyakhovich MS, **Mineev KS**, Petushkov VN, Zagitova RI, Tsarkova AS, Kovalchuk SI, Yampolsky IV, Vysotski ES, Kaskova ZM (2021). Unexpected Coelenterazine Degradation Products of Photoprotein Photoinactivation. *Org Lett* 23 (17), 6846–6849, [10.1021/acs.orglett.1c02410](#)
5. Franco ML, Nadezhdin KD, Light TP, Goncharuk SA, Soler-Lopez A, Ahmed F, **Mineev KS**, Hristova K, Arseniev AS, Vilar M (2021). Interaction between the transmembrane domains of neurotrophin receptors p75 and TrkA mediates their reciprocal activation. *J Biol Chem* 297 (2), 100926, [10.1016/j.jbc.2021.100926](#)
6. **Mineev KS**, Goncharuk SA, Goncharuk MV, Povarova NV, Sokolov AI, Baleeva NS, Smirnov AY, Myasnyanko IN, Ruchkin DA, Bukhdruker S, Remeeva A, Mishin A, Borshchevskiy V, Gordelyi V, Arseniev AS, Gorbachev DA, Gavrikov AS, Mishin AS, Baranov MS (2021). NanoFAST: structure-based design of a small fluorogen-activating protein with only 98 amino acids. *Chem Sci* 12 (19), 6719–6725, [10.1039/d1sc01454d](#)
7. Zhang B, Wang Y, Lin C, Li H, Wang X, Peng Y, **Mineev KS**, Wilson AJ, Wang H, Wang X (2021). Targeting the transmembrane domain 5 of latent membrane protein 1 using small molecule modulators. *Eur J Med Chem* 214, 113210, [10.1016/j.ejmech.2021.113210](#)
8. **Mineev KS**, Kuzmenkov AI, Arseniev AS, Vassilevski AA (2021). Structure of MeuNaTx α -1 toxin from scorpion venom highlights the importance of the nest motif. *Proteins* 89 (8), 1055–1060, [10.1002/prot.26074](#)
9. Goncharuk MV, Lushpa VA, Goncharuk SA, Arseniev AS, **Mineev KS** (2021). Sampling the cultivation parameter space for the bacterial production of TLR1 intracellular domain reveals the multiple optima. *Protein Expr Purif* 181, 105832, [10.1016/j.pep.2021.105832](#)
10. Zaitseva ER, Smirnov AY, Myasnyanko IN, **Mineev KS**, Sokolov AI, Volkhina TN, Mikhaylov AA, Baleeva NS, Baranov MS (2021). Imidazol-5-ones as a substrate for [1,5]-hydride shift triggered cyclization. *New J Chem* 45 (4), 1805–1808, [10.1039/d0nj05738j](#)
11. **Mineev KS**, Kryukova EV, Kasheverov IE, Egorova NS, Zhmak MN, Ivanov IA, Senko DA, Feofanov AV, Ignatova AA, Arseniev AS, Utkin YN, Tsetlin VI (2021). Spatial Structure and Activity of Synthetic Fragments of Lynx1 and of Nicotinic Receptor Loop C Models. *Biomolecules* 11 (1), 1–16, [10.3390/biom11010001](#)
12. Korolkova Y, Maleeva E, Mikov A, Lobas A, Solovyeva E, Gorshkov M, Andreev Y, Peigneur S, Tytgat J, Kornilov F, Lushpa V, **Mineev K**, Kozlov S (2021). New Insectotoxin from Tibellus Oblongus Spider Venom Presents Novel Adaptation of ICK Fold. *Toxins (Basel)* 13 (1), , [10.3390/toxins13010029](#)
13. Zaitseva ER, Smirnov AY, Ivanov IA, **Mineev KS**, Baranov MS (2020). Synthesis of 5-(aminomethylidene)imidazol-4-ones by using N,N-dialkylformamide acetals. *Chem Heterocycl Compd (N Y)* 56 (8), 1097–1099, [10.1007/s10593-020-02779-1](#)
14. Goncharuk SA, Artemieva LE, Nadezhdin KD, Arseniev AS, **Mineev KS** (2020). Revising the mechanism of

- p75NTR activation: intrinsically monomeric state of death domains invokes the 'helper' hypothesis. *Sci Rep* 10 (1), 13686, [10.1038/s41598-020-70721-8](https://doi.org/10.1038/s41598-020-70721-8)
15. Zaitseva ER, Smirnov AY, Scherbinina SI, Zasedateleva VV, **Mineev KS**, Baranov MS (2020). Correction to: Synthesis of methylsulfanyl analogs of Kaede protein chromophore. *Chem Heterocycl Compd (N Y)* 56 (8), 1108, [10.1007/s10593-020-02782-6](https://doi.org/10.1007/s10593-020-02782-6)
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 31. Kot EF, Goncharuk SA, Arseniev AS, **Mineev KS** (2018). Phase Transitions in Small Isotropic Bicelles.

- Langmuir* 34 (11), 3426–3437, [10.1021/acs.langmuir.7b03610](https://doi.org/10.1021/acs.langmuir.7b03610)
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 33. Lesovoy DM, Mineev KS, Bragin PE, Bocharova OV, Bocharov EV, Arseniev AS (2017). NMR relaxation parameters of methyl groups as a tool to map the interfaces of helix–helix interactions in membrane proteins. *J Biomol NMR* 69 (3), 165–179, [10.1007/s10858-017-0146-1](https://doi.org/10.1007/s10858-017-0146-1)
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