

Резюме: Минеев Константин Сергеевич

Адрес

Федеральное государственное бюджетное учреждение науки Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук, Москва, Россия

Контакты

<https://www.ibch.ru/users/756>

Образование

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

Работа в ИБХ

Ведущий научный сотрудник

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
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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

2019– наст.вр.	Структурная биология мембранных белков для создания новых лекарственных и диагностических средств
2020– наст.вр.	Изучение роли внеклеточного примембранного региона и трансмембранного домена рецептора нейротрофинов TrkA в процессе передачи сигнала через мембрану

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

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

Публикации

1. 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](#)
2. 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](#)
3. 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](#)
4. **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, Gordeliy 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](#)
5. 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](#)
6. **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* , , [10.1002/prot.26074](#)
7. 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](#)
8. 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](#)
9. **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](#)
10. 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](#)
11. 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](#)
12. 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](#)
13. 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](#)
14. Kot EF, Wang Y, Goncharuk SA, Zhang B, Arseniev AS, Wang X, **Mineev KS** (2020). Oligomerization analysis as a tool to elucidate the mechanism of EBV latent membrane protein 1 inhibition by pentamidine. *BIOCHIM BIOPHYS ACTA* 1862 (10), 183380, [10.1016/j.bbamem.2020.183380](#)
15. Mikhaylov AA, Kuleshov AV, Solyev PN, Korlyukov AA, Dorovatovskii PV, **Mineev KS**, Baranov MS (2020).

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 29. 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. Logashina YA, Solstad RG, **Mineev KS**, Korolkova YV, Mosharova IV, Dyachenko IA, Palikov VA, Palikova YA, Murashev AN, Arseniev AS, Kozlov SA, Stensvåg K, Haug T, Andreev YA (2017). New disulfide-stabilized fold provides sea anemone peptide to exhibit both antimicrobial and TRPA1 potentiating properties. *Toxins (Basel)* 9 (5), , [10.3390/toxins9050154](https://doi.org/10.3390/toxins9050154)
 34. Kaskova ZM, Dörr FA, Petushkov VN, Purtov KV, Tsarkova AS, Rodionova NS, **Mineev KS**, Guglya EB, Kotlobay A, Baleeva NS, Baranov MS, Arseniev AS, Gitelson JI, Lukyanov S, Suzuki Y, Kanie S, Pinto E, Mascio PD, Waldenmaier HE, Pereira TA, Carvalho RP, Oliveira AG, Oba Y, Bastos EL, Stevani CV, Yampolsky IV (2017). Mechanism and color modulation of fungal bioluminescence. *Sci Adv* 3 (4), e1602847, [10.1126/sciadv.1602847](https://doi.org/10.1126/sciadv.1602847)
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 37. Bocharov EV, Bragin PE, Pavlov KV, Bocharova OV, **Mineev KS**, Polyansky AA, Volynsky PE, Efremov RG, Arseniev AS (2017). The Conformation of the Epidermal Growth Factor Receptor Transmembrane Domain Dimer Dynamically Adapts to the Local Membrane Environment. *Biochemistry* 56 (12), 1697–1705, [10.1021/acs.biochem.6b01085](https://doi.org/10.1021/acs.biochem.6b01085)
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 39. **Mineev KS**, Nadezhdin KD (2017). Membrane mimetics for solution NMR studies of membrane proteins. *Nanotechnol Rev* 6 (1), 15–32, [10.1515/ntrev-2016-0074](https://doi.org/10.1515/ntrev-2016-0074)
 40. **Mineev KS**, Nadezhdin KD, Goncharuk SA, Arseniev AS (2017). Façade detergents as bicelle rim-forming agents for solution NMR spectroscopy. *Nanotechnol Rev* 6 (1), 93–103, [10.1515/ntrev-2016-0069](https://doi.org/10.1515/ntrev-2016-0069)
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