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Адрес

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

Контакты

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Образование

2008–2008	Россия, Москва	Московский государственный университет им. М.В. Ломоносова, кафедра биоинженерии биологического факультета	Защита кандидатской диссертации по биологическим наукам (специальность 03.00.02 Биофизика)
2005–2008	Россия, Долгопрудный	Московский Физико-Технический Институт (Государственный Университет) (МФТИ)	Аспирант.
2002–2005	Россия, Москва	Институт Биоорганической химии имени академиков М.М. Шемякина и Ю.А. Овчинникова РАН, Учебно Научный Центр.	
1999–2005	Россия, Долгопрудный	Московский Физико-Технический Институт (Государственный Университет) (МФТИ)	Бакалавр. Магистр.

Работа

2020–наст.вр.	Россия, Долгопрудный	МФТИ	доцент
2002–наст.вр.	Россия, Москва	ИБХ РАН	инж.-иссл. / мнс / нс /снс
2008–2018	Россия, Москва	МГУ им М.В. Ломоносова	научный сотрудник

Работа в ИБХ

2018–наст.вр.	Старший научный сотрудник	
2026–2026	Доцент	
2008–2018	Научный сотрудник	
2002–2008	Младший научный сотрудник	

Владение языками

русский, английский

Научные интересы

Структурная биология, молекулярная биология, биофизика, биохимия, эволюция (биология), эволюция (физика).

Членство в сообществах

FEBS

Степени и звания

2009	Кандидат наук (Биологические науки, 03.00.02 — Биофизика)

Ссылки и контакты

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Гранты и проекты

2025–наст.вр.	Исследование конформационной динамики при распознавании лигандов, активации и передаче сигнала хемокиновыми рецепторами
2025–наст.вр.	Роль примембранных регионов в функционировании нейротрофиновых рецепторов
2022–2024	Структурные основы функционирования нейротрофиновых рецепторов
2020–2022	Исследование структурных основ взаимодействия мембранных белков P75 и SORCS2 в процессе внутриклеточной сигнализации
2018–2023	Разработка новых молекулярных инструментов ферментативного и флуорогенного флуоресцентного мечения для прижизненной визуализации в живых системах
2017–2018	Изучение процессов связывания с лигандом и структурной динамики необычного хемокинового рецептора D6R человека с применением спектроскопии ЯМР
2019–2022	Структурная биология мембранных белков для создания новых лекарственных и диагностических средств
2020–2022	Изучение роли внеклеточного примембранного региона и трансмембранного домена рецептора нейротрофинов TrkA в процессе передачи сигнала через мембрану
2020–2021	Исследование структурных основ внутриклеточной сигнализации Толл-подобных рецепторов методами спектроскопии ЯМР в растворе
2014–2018	Структурные основы молекулярных механизмов передачи сигнала интегральными мембранными белками I типа

Публикации

1. Kornilov FD, Shabalkina AV, Goncharuk MV, Bocharov EV, **Goncharuk SA**, Mineev KS (2026). Transmembrane domains of TLR1 and TLR2 tend to specific heterotypic interaction. *Biochem Biophys*

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3. Bulgakova UV, Balagurov KI, Rudenko AY, Aysin KN, **Goncharuk SA**, Mariasina SS, Georgiev PG, Bocharov EV, Polshakov VI (2026). Structural Biology of Zinc-Binding Proteins and Peptides. *Russ. J. Bioorganic Chem.* 52 (3), 75, 10.1134/S1068162026601655
4. Dubinnyi MA, Bukhdruker SS, Borshchevskiy VI, Goncharuk MV, Okhrimenko IS, Bocharov EV, **Goncharuk SA** (2026). Structural Studies of Bacteriorhodopsin: What Do We Know and What Did We Miss? *Russ. J. Bioorganic Chem.* 52 (3), , 10.1134/S1068162026601734
5. Lin C, Li P, Savitskaya AG, Lyukmanova E, **Goncharuk SA**, Mineev KS, Du X, Wang Y, Wang X (2026). HMGB1 Binds to and Disrupts the Hairpin Structure of RNA15 and Inhibits Toll-like Receptor Activation. *J Biol Chem* 302 (3), 111155, 10.1016/j.jbc.2026.111155
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7. Lushpa VA, Goncharuk MV, Arseniev AS, Mineev KS, **Goncharuk SA** (2025). Effect of Intrinsically Disordered Regions on the Expression of TIR Domains of the Toll-like Receptor in the Soluble Form. *Russ. J. Bioorganic Chem.* 51 (3), 1092–1098, 10.1134/S1068162024606670
8. Gilvanov AR, Myasnyanko IN, **Goncharuk SA**, Goncharuk MV, Kublitski VS, Bodunova DV, Sidorenko SV, Maksimov EG, Baranov MS, Bogdanova YA (2025). Fluorescence Lifetime Multiplexing with Fluorogen-Activating FAST Protein Variants and Red-Shifted Arylidene–Imidazolone Derivative as Fluorogen. *Biosensors (Basel)* 15 (5), 274, 10.3390/bios15050274
9. Lushpa VA, Lin C, Talyzina IA, Goncharuk MV, Bocharov EV, Arseniev AS, Wang X, **Goncharuk SA**, Mineev KS (2025). The intracellular domain of TLR2 is capable of high-affinity Zn binding: possible outcomes for the receptor activation. *FEBS Lett* 599 (13), 1864–1879, 10.1002/1873-3468.70026
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14. Lushpa VA, Goncharuk MV, Talyzina IA, Arseniev AS, Bocharov EV, Mineev KS, **Goncharuk SA** (2024). TIR domains of TLR family-from the cell culture to the protein sample for structural studies. *PLoS One* 19 (7), e0304997, 10.1371/journal.pone.0304997
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