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## Образование

2007–2012	Москва	РХТУ им. Менделеева, ВХК РАН	Красный диплом
2005–2007	Москва	Московский Химический Лицей 1303	Золотая медаль

## Работа в ИБХ

2024–наст.вр.	Старший научный сотрудник
2026–2026	Доцент
2019–2024	Старший научный сотрудник

## Владение языками

русский, английский

## Степени и звания

2016	Кандидат наук (Химические науки, 02.00.10 — Биоорганическая химия)
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## Гранты и проекты

2021– 2024	<a href="#">Установление интермедиатов биосинтетического пути люциферина полихет рода <i>Odontosyllis</i></a>
2018– 2020	<a href="#">Разработка методов синтеза аналогов люциферина высших грибов и изучение их фотохимических свойств</a>

## Публикации

- Iuzabchuk DA, Andrianova AA, Yampolsky IV, **Kaskova ZM**, Smirnov IV (2026). Beyond Antiviral Therapy: Untapped Potential of HIV & HCV Protease Inhibitors. *Med Res Rev* , , [10.1002/med.70040](https://doi.org/10.1002/med.70040)
- Kuznetsova AA, Makhin AP, Bulygin AA, Andrianova AA, Miturich VS, Zagitova RI, Shmygarev VI, Fadeeva AA, Yatskin ON, Belozeroва OA, Smirnov IV, Yampolsky IV, **Kaskova ZM**, Kuznetsov NA (2026). Design and In Vitro Evaluation of Novel GC373-like SARS-CoV-2 Main Protease Inhibitors. *Curr Issues Mol Biol* 48 (2), , [10.3390/cimb48020142](https://doi.org/10.3390/cimb48020142)
- Zamuner CK, Soares DMM, Nóbrega BB, Bechara EJH, **Kaskova ZM**, Mishin AS, Sarkisyan KS, Yampolsky IV, Stevani CV (2026). Caffeoylpyruvate hydrolase from the bioluminescent fungus *Neonothopanus gardneri* is the key recycling enzyme in the fungal bioluminescence pathway. *FEBS J* , , [10.1111/febs.70554](https://doi.org/10.1111/febs.70554)
- Malyshevskaya AK, Barykin AD, Kisilichuk DA, Chepurnykh TV, Shakhova ES, Perfilov MM, Belozeroва OA, Palkina KA, Markina NM, Zamuner CK, Soares DMM, Zagitova RI, **Kaskova ZM**, Stevani CV, Gorokhovatsky AY, Mishin AS, Sarkisyan KS, Yampolsky IV (2026). Fungal oxyluciferin is recycled by caffeoylpyruvate hydrolases. *FEBS J* , , [10.1111/febs.70555](https://doi.org/10.1111/febs.70555)

5. Ayogu JI, Lyu M, Barykin AD, Fadeeva AA, **Kaskova ZM**, Anderson JC (2025). Chimeric fungal–firefly luciferins exhibit red shifted fungal bioluminescence. *Org Biomol Chem* 23 (44), 10186–10193, [10.1039/d5ob01589h](https://doi.org/10.1039/d5ob01589h)
6. Fadeeva AA, **Osipova ZM**, Chepurnykh TV, Myshkina NM (2025). Modern tumor imaging models for rodents: potential and prospects in translational medicine. *Bulletin of Russian State Medical University* (2), , [10.24075/brsmu.2025.015](https://doi.org/10.24075/brsmu.2025.015)
7. Dobronos MA, **Osipova ZM**, Myshkina NM (2024). Potential of non-traditional cell cultures for production of biotherapeutic proteins. *Bulletin of Russian State Medical University* (3), 52–55, [10.24075/brsmu.2024.022](https://doi.org/10.24075/brsmu.2024.022)
8. Stevani CV, Zamuner CK, Bastos EL, Nóbrega BB, Soares DM, Oliveira AG, Bechara EJ, Shakhova ES, Sarkisyan KS, Yampolsky IV, **Kaskova ZM** (2024). The living light from fungi. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews* 58, , [10.1016/j.jphotochemrev.2024.100654](https://doi.org/10.1016/j.jphotochemrev.2024.100654)
9. Barykin AD, Chepurnykh TV, **Osipova ZM** (2024). Deep learning in modelling the protein–ligand interaction: new pathways in drug development. *Bulletin of Russian State Medical University* (1), 49–53, [10.24075/brsmu.2024.002](https://doi.org/10.24075/brsmu.2024.002)
10. Makhin AP, Miturich VS, Vavilov MV, Lyakhovich MS, Andrianova AA, Zagitova RI, Shmygarev VI, Fadeeva AA, Yatskin ON, Belozero OA, Tsatsakis A, Yampolsky IV, **Kaskova ZM** (2024). Improved synthesis of two quisqualic acid analogs containing hydantoin and imidazolidinone moieties. *Chem Heterocycl Compd (N Y)* 60 (5-6), 262–268, [10.1007/s10593-024-03331-1](https://doi.org/10.1007/s10593-024-03331-1)
11. Kotlobay AA, Dubinnyi MA, Kovalchuk SI, Makhin AP, Miturich VS, Lyakhovich MS, Fontaine DM, Southworth TL, Shmygarev VI, Yatskin ON, Branchini BR, Yampolsky IV, **Kaskova ZM** (2023). Structure elucidation of Keroplatus (Diptera:Keroplastidae) fungus gnat oxyluciferin. *Biochem Biophys Res Commun* 676, 1–5, [10.1016/j.bbrc.2023.07.035](https://doi.org/10.1016/j.bbrc.2023.07.035)
12. Bolt YV, Dubinnyi MA, Litvinenko VV, Kotlobay AA, Belozero OA, Zagitova RI, Shmygarev VI, Yatskin ON, Guglya EB, Kublitski VS, Baranov MS, Yampolsky IV, **Kaskova ZM**, Tsarkova AS (2023). Total Synthesis of Racemic Thieno[3,2-f]thiochromene Tricarboxylate, a Luciferin from Marine Polychaeta *Odontosyllis undecimdonata*. *Org Lett* 25 (26), 4892–4897, [10.1021/acs.orglett.3c01696](https://doi.org/10.1021/acs.orglett.3c01696)
13. Блохина АЕ, Палкина КА, Шахова ЕС, Малышевская АК, **Осипова ЗМ**, Мышкина НМ (2023). МЕТАБОЛИЧЕСКАЯ ИНЖЕНЕРИЯ — ПЕРСПЕКТИВНЫЙ ПУТЬ ПОЛУЧЕНИЯ ВЫСОКОЭФФЕКТИВНЫХ ПРОДУЦЕНТОВ БИОЛОГИЧЕСКИ АКТИВНЫХ ВЕЩЕСТВ. , , [10.24075/vrgmu.2023.014](https://doi.org/10.24075/vrgmu.2023.014)
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  37. **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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