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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
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

1. 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](#)
2. 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](#)
3. 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](#)
4. Makhin AP, Miturich VS, Vavilov MV, Lyakhovich MS, Andrianova AA, Zagitova RI, Shmygarev VI, Fadeeva AA, Yatskin ON, Belozerova 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)* , , [10.1007/s10593-024-03331-1](#)
5. 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 *Keroplatatus* (Diptera:Keroplataidae) 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)

6. 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)
7. 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)
8. Zagitova RI, Purtov KV, Shcheglov AS, Mineev KS, Dubinnyi MA, Myasnyanko IN, Belozero OA, Pakhomova VG, Petushkov VN, Rodionova NS, Lushpa VA, Guglya EB, Kovalchuk S, Kozhemyako VB, Mirza JD, Oliveira AG, Yampolsky IV, **Kaskova ZM**, Tsarkova AS (2023). Conjugated Dienoic Acid Peroxides as Substrates in Chaetopterus Bioluminescence System. *Int J Mol Sci* 24 (11), 9466, [10.3390/ijms24119466](https://doi.org/10.3390/ijms24119466)
9. Blokhina AE, Palkina KA, Shakhova ES, Malyshevskaya AK, **Osipova ZM**, Myshkina NM (2023). Metabolic engineering is a promising way to generate highly effective producers of bioactive substances. *Bulletin of Russian State Medical University* 2023 (2), 53–55, [10.24075/brsmu.2023.014](https://doi.org/10.24075/brsmu.2023.014)
10. Kotlobay AA, Dubinnyi MA, Polevoi AV, Kovalchuk SI, **Kaskova ZM** (2022). Riboflavin as One of Possible Components of Keroplatus (Insecta: Diptera: Keroplatidae) Fungus Gnat Bioluminescence. *Russ. J. Bioorganic Chem.* 48 (6), 1215–1220, [10.1134/S1068162022060164](https://doi.org/10.1134/S1068162022060164)
11. Bolt YV, Baleeva NS, Nelyubina YV, Andrianova AA, **Kaskova ZM**, Tsarkova AS (2021). Novel Benzothiophene-Based Fluorescent Dye Exhibiting a Large Stokes Shift. *Synlett* 32 (20), 2059–2062, [10.1055/s-0040-1720925](https://doi.org/10.1055/s-0040-1720925)
12. 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](https://doi.org/10.1021/acs.orglett.1c02410)
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16. Kotlobay AA, Dubinnyi MA, Purtov KV, Guglya EB, Rodionova NS, Petushkov VN, Bolt YV, Kublitski VS, **Kaskova ZM**, Ziganshin RH, Nelyubina YV, Dorovatovskii PV, Eliseev IE, Branchini BR, Bourenkov G, Ivanov IA, Oba Y, Yampolsky IV, Tsarkova AS (2019). Bioluminescence chemistry of fireworm *Odontosyllis*. *Proc Natl Acad Sci U S A* 116 (38), 18911–18916, [10.1073/pnas.1902095116](https://doi.org/10.1073/pnas.1902095116)
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  37. Purtov KV, Petushkov VN, Baranov MS, Mineev KS, Rodionova NS, **Kaskova ZM**, Tsarkova AS, Petunin AI, Bondar VS, Rodicheva EK, Medvedeva SE, Oba Y, Oba Y, Arseniev AS, Lukyanov S, Gitelson JI, Yampolsky IV (2015). The Chemical Basis of Fungal Bioluminescence. *Angew Chem Int Ed Engl* 54 (28), 8124–8128, [10.1002/anie.201501779](https://doi.org/10.1002/anie.201501779)
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luciferin analogues from the bioluminescent earthworm *fridericia heliota*. *Chemistry* 21 (10), 3942–3947, [10.1002/chem.201406498](https://doi.org/10.1002/chem.201406498)

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