

Резюме: Ямпольский Илья Викторович



Адрес

Федеральное государственное
бюджетное учреждение науки
Институт биоорганической химии им.
академиков М.М. Шемякина и Ю.А.
Овчинникова Российской академии
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Контакты

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Работа в ИБХ

2018–наст.вр.	Главный научный сотрудник
2021–наст.вр.	Заместитель директора по научной работе
2026–2026	Профессор
2017–2025	Заведующий отделом

Членство в советах и комиссиях ИБХ

Методическая комиссия
Аттестационная комиссия
Диссертационный совет
Ученый совет

Награды

2025	Национальная премия в области будущих технологий ВЫЗОВ	За расшифровку молекулярных механизмов биолюминесценции и создание светящихся растений
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Научные интересы

Области научных интересов: Медицинская химия, полный синтез, биолюминесценция, люминесцентные и флуорогенные красители, установление механизмов биосинтеза.

Также И. В. Ямпольский посвящает много времени преподаванию химии для школьников и студентов, специализирующихся в области биологии, являясь автором около десятка оригинальных лекционных курсов.

Степени и звания

2016	Доктор наук (Химические науки, 02.00.10 — Биоорганическая химия)
2009	Кандидат наук (Химические науки, 03.00.04)

Ссылки и контакты

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Гранты и проекты

- 2025– [Генеративный дизайн белков для защиты растений и управления их физиологией](#)
наст.вр.
-
- 2022– [Оптимизация биолюминесцентной системы грибов для прикладных биоаналитических и](#)
2024 [биоимиджинговых технологий](#)
-
- 2020– [Чех: Разработка панели люминесцентных репортеров для изучения растительных гормонов in](#)
2022 [vivo на основе генетически кодируемой люминесценции](#)
-
- 2016– [Создание первой в мире генетически кодируемой системы автономной биолюминесценции](#)
2021 [эукариот](#)
-
- 2018– [Поиск ферментов биосинтеза и инженерия метаболического пути гиспидина -](#)
2021 [биосинтетического предшественника люциферина грибов - в микроорганизмах](#)
-
- 2018– [Изучение структурно-функциональной организации гиспидин-3-гидроксилазы](#)
2020
-

Публикации

1. 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](#)
2. Silina EV, Prazdnova EV, Emelyantsev SA, Khmelevtsova LE, Statsenko VN, Manturova NE, Palkina KA, **Yampolsky IV**, Stupin VA (2026). Studying the Biological Activity of Cerium Dioxide Nanoparticles Using Bacterial Biosensors. *Int J Mol Sci* 27 (7) , , [10.3390/ijms27073179](#)
3. Balakireva AV, Karataeva TA, Karampelias M, Mitiouchkina TY, Morozov VV, Macháček J, Shakhova ES, Perfilov MM, Belozeroва OA, Kovalchuk SI, Palkina KA, Drážná N, Vondráková Z, Müller K, Kalachova T, Fleiss A, Fernandez-Moreno JP, Alonso JM, Stepanova AN, Fakhranurova LI, Markina NM, Gorbachev DA, Bugaeva EN, Delnova GM, Choob VV, **Yampolsky IV**, Petrášek J, Mishin AS, Sarkisyan KS (2026). Non-invasive imaging of defence responses in plants. *Nat Commun* , , [10.1038/s41467-026-70075-1](#)
4. 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](#)
5. Wang T, Ge J, Qu C, Wang Z, Chen H, Li J, Wang S, Guan X, Chen T, Si Z, Hu K, Ding X, Liu L, Zhang J, Mishin AS, **Yampolsky IV**, Du H (2026). Expanding agroinfiltration host range with broad-spectrum effectors monitored by autoluminescent reporter. *Hortic Res* , uhag126, [10.1093/hr/uhag126](#)
6. Shcheglov AS, Lukyanov SA, **Yampolsky IV** (2026). A Bacterial Bioluminescent System as a Tool for Monitoring Biogenic Aldehydes. *Dokl Biochem Biophys* , , [10.1134/S1607672926600041](#)
7. Guglya EB, Shcheglov AS, **Yampolsky IV** (2026). Antibacterial Depsipeptides: One Common Feature, Diversity of Structures and Mechanisms of Action. *Curr Med Chem* , , [10.2174/0109298673428505251208173220](#)
8. De A, **Yampolsky I** (2025). Multiplexed bioluminescence reporter assay: Empowering screening strategy for future medicine. *Med Res Arch* 13 (12) , , [10.18103/mra.v13i12.7033](#)
9. Shcheglov AS, Purtov KV, Zagitova RI, Kozhemyako VB, Tsarkova AS, Pepoyan A, **Yampolsky IV** (2025). Chaetopterus Luciferase: A Promising Tool for Online Lipid Peroxidation Detection. *Int J Mol Sci* 26 (24), 12119, [10.3390/ijms262412119](#)
10. Palkina KA, Choob VV, **Yampolsky IV**, Mishin AS, Balakireva AV (2025). Pros and Cons of Interactions Between Crops and Beneficial Microbes. *Agriculture (Switzerland)* 15 (24), 2526, [10.3390/agriculture15242526](#)
11. Morozov VV, **Yampolsky IV**, Iskakov BK, Balakireva AV (2025). Strengths and Limitations of Salicylic Acid Reporters. *Int J Mol Sci* 26 (21) , , [10.3390/ijms262110610](#)
12. Ge J, Wang T, Qu C, Balakireva AV, **Yampolsky IV**, Du H (2025). Biotechnologies based on the fungal bioluminescence pathway. *Trends Biotechnol* , , [10.1016/j.tibtech.2025.10.011](#)

13. Khokhlova AN, Vavilov MV, Chepurnykh TV, Rodionova NS, Petushkov VN, **Yampolsky IV**, Dubinny MA (2025). Earthworms as a source of new approaches in biomedical research. *Bulletin of Russian State Medical University* 2025-October-December (6), 220–223, [10.24075/brsmu.2025.067](https://doi.org/10.24075/brsmu.2025.067)
14. Morozov VV, Balakireva AV, Perfilov MM, Chepurnykh TV, **Yampolsky IV**, Sarkisyan KS, Mishin AS (2025). Constitutive Promoters Functional in Plant, Fungal, and Bacterial Hosts. *ACS Synth Biol* 14 (6), 2375–2379, [10.1021/acssynbio.4c00802](https://doi.org/10.1021/acssynbio.4c00802)
15. Sorokin B, Filimonova A, Emelianova A, Kublitski V, Gvozd A, Shmygarev V, **Yampolsky I**, Guglya E, Gusev E, Kuzmin D (2025). Novel Triazeneindole Antibiotics: Synthesis and Hit-to-Lead Optimization. *Int J Mol Sci* 26 (5), 1870, [10.3390/ijms26051870](https://doi.org/10.3390/ijms26051870)
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17. Petushkov VN, Vavilov MV, Khokhlova AN, Zagitova RI, Belozero OA, Shcheglov AS, Kovalchuk SI, Tsarkova AS, Rodionova NS, **Yampolsky IV**, Dubinnyi MA (2024). *Henlea* earthworm bioluminescence comprises violet-blue BRET from tryptophan 2-carboxylate to deazaflavin cofactor. *Biochem Biophys Res Commun* 708, 149787, [10.1016/j.bbrc.2024.149787](https://doi.org/10.1016/j.bbrc.2024.149787)
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23. Dmitrieva DA, Belozero OA, Mishin AV, **Yampolsky IV**, Kotlobay AA (2024). New transaminase from *Odontosyllis undecimdonga* the first potential enzyme of the luciferin biosynthesis pathway. *Biochimie* 228, 82–88, [10.1016/j.biochi.2024.08.012](https://doi.org/10.1016/j.biochi.2024.08.012)
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- 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)
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 30. Shmygarev VI, Prokopenko YA, Terekhov SS, Zakharova MY, Dubinnyi MA, Smirnov IV, **Yampolsky IV**, Tsarkova AS (2022). Amicoumacin-based prodrug development approach. *Bulletin of Russian State Medical University* 6 (2022), 99–105, [10.24075/brsmu.2022.073](https://doi.org/10.24075/brsmu.2022.073)
 31. Petushkov VN, Vavilov MV, Ivanov IA, Ziganshin RH, Rodionova NS, **Yampolsky IV**, Tsarkova AS, Dubinnyi MA (2022). Deazaflavin cofactor boosts earthworms *Henlea* bioluminescence. *Org Biomol Chem* 21 (2), 415–427, [10.1039/D2OB01946A](https://doi.org/10.1039/D2OB01946A)
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 33. (конференция) Blokhina AE, Palkina KA, Sarkisyan KS, **Yampolsky IV**, Markina NM (2022). Biosynthesis Catalyzed by Plant Type III Polyketide Synthases in Mammalian Cells. , , [10.1002/2211-5463.13440](https://doi.org/10.1002/2211-5463.13440)
 34. Makarieva TN, Romanenko LA, Mineev KS, Shubina LK, Guglya EB, Kalinovskaya NI, Ivanchina NV, Guzii AG, Belozero OA, Kovalchuk SI, Popov RS, Denisenko VA, Mikhailov VV, Babenko VV, Iliina EN, Malakhova MV, Terekhov SS, Kudzhaev AM, Dmitrenok PS, **Yampolsky IV**, Stonik VA (2022). Streptocinnamides A and B, Depsipeptides from *Streptomyces* sp. KMM 9044. *Org Lett* 24 (27), 4892–4895, [10.1021/acs.orglett.2c01714](https://doi.org/10.1021/acs.orglett.2c01714)
 35. Gerasimov AS, Rogozhkin SO, Shakhova ES, Chepurnykh TV, Gorokhovatsky AY, Myshkina NM, Balakireva AV, **Yampolsky IV** (2021). Recombinant Production of Hispidin-3-Hydroxylase: the Key Enzyme in Fungal Luciferin Biosynthesis. *Russ. J. Bioorganic Chem.* 47 (5), 1066–1076, [10.1134/S1068162021040099](https://doi.org/10.1134/S1068162021040099)
 36. 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)
 37. Gorokhovatsky AY, Chepurnykh TV, Shcheglov AS, Mokrushina YA, Baranova MN, Goncharuk SA, Purtov KV, Petushkov VN, Rodionova NS, **Yampolsky IV** (2021). The Recombinant Luciferase of the Fungus *Neonothopanus nambi*: Obtaining and Properties. *Dokl Biochem Biophys* 496 (1), 52–55, [10.1134/S1607672921010051](https://doi.org/10.1134/S1607672921010051)
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- Dolgov SV, Kondrashov FA, **Yampolsky IV**, Sarkisyan KS (2020). Plants with genetically encoded autoluminescence. *Nat Biotechnol* 38 (8), 944–946, [10.1038/s41587-020-0500-9](https://doi.org/10.1038/s41587-020-0500-9)
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