

## 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

<https://www.ibch.ru/users/276>

## Работа в ИБХ

	Заведующий отделом
2018–наст.вр.	Главный научный сотрудник
2021–наст.вр.	Заместитель директора по науке

## Членство в советах и комиссиях ИБХ

Методическая комиссия
Аттестационная комиссия
Диссертационный совет
Ученый совет

## 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

Доктор наук (Химические науки, 02.00.10 — Биоорганическая химия)

## Гранты и проекты

2022– наст.вр.	<a href="#">Оптимизация биолюминесцентной системы грибов для прикладных биоаналитических и биоимиджинговых технологий</a>
2020– 2022	<a href="#">Чех: Разработка панели люминесцентных репортеров для изучения растительных гормонов in vivo на основе генетически кодируемой люминесценции</a>
2016– 2021	<a href="#">Создание первой в мире генетически кодируемой системы автономной биолюминесценции эукариот</a>
2018– 2021	<a href="#">Поиск ферментов биосинтеза и инженерия метаболического пути гиспидина - биосинтетического предшественника люциферина грибов - в микроорганизмах</a>

## Публикации

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2. Shakhova ES, Karataeva TA, Markina NM, Mitiouchkina T, Palkina KA, Perfilov MM, Wood MG, Hoang TT, Hall MP, Fakhranurova LI, Alekberova AE, Malyshevskaya AK, Gorbachev DA, Bugaeva EN, Pletneva LK, Babenko VV, Boldyreva DI, Gorokhovatsky AY, Balakireva AV, Gao F, Choob VV, Encell LP, Wood KV, **Yampolsky IV**, Sarkisyan KS, Mishin AS (2024). An improved pathway for autonomous bioluminescence imaging in eukaryotes. *Nat Methods* , , [10.1038/s41592-023-02152-y](#)
3. Mujawar A, Phadte P, Palkina KA, Markina NM, Mohammad A, Thakur BL, Sarkisyan KS, Balakireva AV, Ray P, **Yampolsky I**, De A (2023). Triple Reporter Assay: A Non-Overlapping Luciferase Assay for the Measurement of Complex Macromolecular Regulation in Cancer Cells Using a New Mushroom Luciferase–Luciferin Pair. *Sensors (Basel)* 23 (17), , [10.3390/s23177313](#)
4. 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:Keroplataidae) fungus gnat oxyluciferin. *Biochem Biophys Res Commun* 676, 1–5, [10.1016/j.bbrc.2023.07.035](#)
5. 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](#)
6. Zagitova RI, Purtov KV, Shcheglov AS, Mineev KS, Dubinnyi MA, Myashnyanko 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](#)
7. Palkina KA, Balakireva AV, Belozero OA, Chepurnykh TV, Markina NM, Kovalchuk SI, Tsarkova AS, Mishin AS, **Yampolsky IV**, Sarkisyan KS (2023). Domain Truncation in Hispidin Synthase Orthologs from Non-Bioluminescent Fungi Does Not Lead to Hispidin Biosynthesis. *Int J Mol Sci* 24 (2), 1317, [10.3390/ijms24021317](#)
8. Terekhov SS, Shmygarev VI, Purtov KV, Smirnov IV, **Yampolsky IV**, Tsarkova AS (2022). Drug design strategies for the treatment of coronavirus infection. *Bulletin of Russian State Medical University* 6 (6), 126–128, [10.24075/brsmu.2022.067](#)
9. 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](#)
10. 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](#)
11. Shakhova ES, Markina NM, Mitiouchkina TY, Bugaeva EN, Karataeva TA, Palkina KA, Fakhranurova LI, **Yampolsky IV**, Sarkisyan KS, Mishin AS (2022). Systematic Comparison of Plant Promoters in *Nicotiana* spp. Expression Systems. *Int J Mol Sci* 23 (23), 15441, [10.3390/ijms232315441](#)
12. 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](#)
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16. Beregovaya KA, Myshkina NM, Chepurnykh TV, Kotlobay AA, Purtov KV, Petushkov VN, Rodionova NS, **Yampolsky IV** (2021). Rational Design and Mutagenesis of Fungal Luciferase from *Neonothopanus nambi*. *Dokl Biochem Biophys* 496 (1), 14–17, [10.1134/S1607672921010026](https://doi.org/10.1134/S1607672921010026)
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19. Mitiouchkina T, Mishin AS, Somermeyer LG, Markina NM, Chepurnykh TV, Guglya EB, Karataeva TA, Palkina KA, Shakhova ES, Fakhranurova LI, Chekova SV, Tsarkova AS, Golubev YV, Negrebetsky VV, Dolgushin SA, Shalaev PV, Shlykov D, Melnik OA, Shipunova VO, Deyev SM, Bubyrev AI, Pushin AS, Choob VV, 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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25. Osipova ZM, Shcheglov AS, **Yampolsky IV** (2019). Autonomous bioluminescent systems: Prospects for use in the imaging of living organisms. *Bulletin of Russian State Medical University* 9 (6), 62–65, [10.24075/brsmu.2019.083](https://doi.org/10.24075/brsmu.2019.083)
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  33. (конференция) Palkina K, Markina N, Mokrushina Y, Chepurnykh T, Sarkisyan K, **Yampolsky I** (2018). Biosynthesis of hispidin by plant type III polyketide synthases in yeast and mammalian cell cultures. *FEBS Open Bio* 8 (1), 172–173.
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  37. Осипова ЗМ, Щеглов АС, **Ямпольский ИВ** (2018). Новая биолюминесцентная система грибов: перспективы использования в медицинских исследованиях. (1), 80–83, [10.24075/vrgmu.2018.004](https://doi.org/10.24075/vrgmu.2018.004)
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