

Резюме: Спеченкова Надежда Андреевна



Адрес

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

Контакты

<https://www.ibch.ru/users/1391>

Образование

2017– 2021	Россия, Москва	Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук	Аспирант
2011– 2017	Россия, Москва	Российский государственный аграрный университет – МСХА имени К. А. Тимирязева (ФГБОУ ВО РГАУ – МСХА имени К. А. Тимирязева)	Бакалавр, Магистр

Работа

2015– 2016	Россия, Москва	Институт биологии развития имени Н. К. Кольцова РАН	младший научный сотрудник
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Работа в ИБХ

2023–наст.вр.	Научный сотрудник
2020–2023	Младший научный сотрудник
2020–2022	Младший научный сотрудник

Научные интересы

Plant science

Членство в сообществах

Российское общество биохимиков и молекулярных биологов при Российской академии наук

Степени и звания

2022	Кандидат наук (Химические науки, 1.5.6 - Биотехнология)
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Публикации

- Kalinina NO, **Spechenkova NA**, Taliansky ME (2025). Biotechnological Approaches to Plant Antiviral Resistance: CRISPR-Cas or RNA Interference? *Biochemistry (Mosc)* 90 (6), 804–817, [10.1134/S0006297925600139](https://doi.org/10.1134/S0006297925600139)
- Samarskaya VO, Koblova S, Suprunova T, Rogozhin EA, **Spechenkova N**, Yakunina S, Love AJ, Kalinina NO, Taliansky M (2025). Poly ADP-Ribosylation in a Plant Pathogenic Oomycete *Phytophthora infestans*: A Key Controller of Growth and Host Plant Colonisation. *J Fungi (Basel)* 11 (1), 29, [10.3390/jof11010029](https://doi.org/10.3390/jof11010029)
- Samarskaya V, Kuznetsova M, Gryzunov N, **Spechenkova N**, Bagdasarova P, Ryabov E, Taliansky M, Kalinina NO (2024). Identification of Two Novel Recombinant Types of Potato Virus Y from *Solanum tuberosum* Plants in Southern Region of Russia. *PLANT DIS* 109 (5), 998–1003, [10.1094/PDIS-10-24-2151-SC](https://doi.org/10.1094/PDIS-10-24-2151-SC)
- Gryzunov N, Morozov SY, Suprunova T, Samarskaya V, **Spechenkova N**, Yakunina S, Kalinina NO,

- Taliansky M (2024). Genomes of Alphanucleorhabdovirus Physostegiae Isolates from Two Different Cultivar Groups of Solanum melongena. *Viruses* 16 (10), 1538, [10.3390/v16101538](https://doi.org/10.3390/v16101538)
5. Kalinina NO, **Spechenkova N**, Ilina I, Samarskaya VO, Bagdasarova P, Zavriev SK, Love AJ, Taliansky M (2024). Disruption of Poly(ADP-ribosyl)ation Improves Plant Tolerance to Methyl Viologen-Mediated Oxidative Stress via Induction of ROS Scavenging Enzymes. *Int J Mol Sci* 25 (17), 9367, [10.3390/ijms25179367](https://doi.org/10.3390/ijms25179367)
 6. Samarskaya VO, **Spechenkova N**, Ilina I, Suprunova TP, Kalinina NO, Love AJ, Taliansky ME (2023). A Non-Canonical Pathway Induced by Externally Applied Virus-Specific dsRNA in Potato Plants. *Int J Mol Sci* 24 (21), 15769, [10.3390/ijms242115769](https://doi.org/10.3390/ijms242115769)
 7. Samarskaya VO, Ryabov EV, Gryzunov N, **Spechenkova N**, Kuznetsova M, Ilina I, Suprunova T, Taliansky ME, Ivanov PA, Kalinina NO (2023). The Temporal and Geographical Dynamics of Potato Virus Y Diversity in Russia. *Int J Mol Sci* 24 (19), 14833, [10.3390/ijms241914833](https://doi.org/10.3390/ijms241914833)
 8. **Spechenkova N**, Samarskaya VO, Kalinina NO, Zavriev SK, MacFarlane S, Love AJ, Taliansky M (2023). Plant Poly(ADP-Ribose) Polymerase 1 Is a Potential Mediator of Cross-Talk between the Cajal Body Protein Coilin and Salicylic Acid-Mediated Antiviral Defence. *Viruses* 15 (6), , [10.3390/v15061282](https://doi.org/10.3390/v15061282)
 9. **Spechenkova NA**, Kalinina NO, Zavriev SK, Love AJ, Taliansky ME (2023). ADP-Ribosylation and Antiviral Resistance in Plants. *Viruses* 15 (1), 241, [10.3390/v15010241](https://doi.org/10.3390/v15010241)
 10. Samarskaya VO, **Spechenkova N**, Markin N, Suprunova TP, Zavriev SK, Love AJ, Kalinina NO, Taliansky M (2022). Impact of Exogenous Application of Potato Virus Y-Specific dsRNA on RNA Interference, Pattern-Triggered Immunity and Poly(ADP-ribose) Metabolism. *Int J Mol Sci* 23 (14), , [10.3390/ijms23147915](https://doi.org/10.3390/ijms23147915)
 11. Glushkevich A, **Spechenkova N**, Fesenko I, Knyazev A, Samarskaya V, Kalinina NO, Taliansky M, Love AJ (2022). Transcriptomic Reprogramming, Alternative Splicing and RNA Methylation in Potato (Solanum tuberosum L.) Plants in Response to Potato Virus Y Infection. *Plants (Basel)* 11 (5), , [10.3390/plants11050635](https://doi.org/10.3390/plants11050635)
 12. **Spechenkova N**, Fesenko IA, Mamaeva A, Suprunova TP, Kalinina NO, Love AJ, Taliansky M (2021). The Resistance Responses of Potato Plants to Potato Virus Y Are Associated with an Increased Cellular Methionine Content and an Altered SAM:SAH Methylation Index. *Viruses* 13 (6), , [10.3390/v13060955](https://doi.org/10.3390/v13060955)
 13. Fesenko I, **Spechenkova N**, Mamaeva A, Makhotenko AV, Love AJ, Kalinina NO, Taliansky M (2020). Role of the methionine cycle in the temperature-sensitive responses of potato plants to potato virus Y. *Mol Plant Pathol* 22 (1), 77–91, [10.1111/mpp.13009](https://doi.org/10.1111/mpp.13009)
 14. Ignatov AN, **Spechenkova NA**, Taliansky M, Kornev KP (2019). First report of clavibacter michiganensis subsp. Michiganensis infecting potato in Russia. *PLANT DIS* 103 (1), 147, [10.1094/PDIS-04-18-0691-PDN](https://doi.org/10.1094/PDIS-04-18-0691-PDN)
 15. Makarova SS, Khromov AV, **Spechenkova NA**, Taliansky ME, Kalinina NO (2018). Application of the CRISPR/Cas System for Generation of Pathogen-Resistant Plants. *Biochemistry (Moscow)* 83 (12-13), 1552–1562, [10.1134/S0006297918120131](https://doi.org/10.1134/S0006297918120131)
 16. Makarova S, Makhotenko A, **Spechenkova N**, Love AJ, Kalinina NO, Taliansky M (2018). Interactive Responses of Potato (Solanum tuberosum L.) Plants to Heat Stress and Infection With Potato Virus Y. *Front Microbiol* 9, 2582, [10.3389/fmicb.2018.02582](https://doi.org/10.3389/fmicb.2018.02582)
 17. Ignatov AN, Panycheva JS, **Spechenkova N**, Taliansky M (2018). First report of Clavibacter michiganensis subsp. sepedonicus infecting sugar beet in Russia. *PLANT DIS* 102 (12), 2634, [10.1094/PDIS-04-18-0693-PDN](https://doi.org/10.1094/PDIS-04-18-0693-PDN)