

Резюме: Мартынов Владимир Иванович

Адрес

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

Контакты

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Образование

1983–2013	Россия, Москва	Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова РАН (ИБХ РАН)	Присуждена учёная степень доктора химических наук, диссертация «Посттрансляционные модификации белков семейства GFP»
1975–1983	Россия, Москва	Институт биоорганической химии им. М.М. Шемякина АН СССР (ИБХ)	Присуждена учёная степень кандидата химических наук, диссертация «Исследование молекулярной организации зрительного родопсина »
1970–1975	Россия, Москва	Московский государственный университет им. М.В. Ломоносова (МГУ, химический факультет)	Диплом химика

Работа в ИБХ

2018–наст.вр.	Главный научный сотрудник
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Научные интересы

Основные научные интересы В.И. Мартынова связаны с исследованиями структуры и функции светочувствительных белков, а также возможностью их применения в молекулярной, клеточной биологии и в тераностике различных заболеваний.

Степени и звания

Доктор наук (Химические науки)

Гранты и проекты

2023–2024	Модульные пептидно-белковые конструкции для ранней диагностики и лечения онкологических заболеваний
2020–2022	Гибридные конструкции для нацеленной доставки синтетических фотосенсибилизаторов к раковым клеткам
2018–2020	Создание новых генетически кодируемых агентов для тераностики раковых заболеваний

Публикации

1. Efimova AS, Ustimova MA, Frolova AY, **Martynov VI**, Deyev SM, Fedorov YV, Fedorova OA, Pakhomov AA (2024). Styryl dyes for viscosity measurement and detection of pathological processes in mitochondria of living cells using fluorescence lifetime imaging microscopy, a critical study. *Opt Mater (Amst)* 159 (2), 116517, [10.1016/j.optmat.2024.116517](https://doi.org/10.1016/j.optmat.2024.116517)

2. Frolova AY, Pakhomov AA, Deyev SM, **Martynov VI** (2024). Influence of Peptide Linkers on the Functional Properties of Hybrid Structures with Selective pH-Dependent Binding to Cancer Cells. *Russ. J. Bioorganic Chem.* 50 (4), 1141–1149, [10.1134/S1068162024040010](https://doi.org/10.1134/S1068162024040010)
3. Frolova AY, Kim EE, Kononevich YN, **Martynov VI**, Deyev SM, Pakhomov AA (2024). Octa-BODIPY dye for monitoring live cell parameters using fluorescence lifetime imaging microscopy. *Opt Spectrosc* 132 (4), 358–363, [10.61011/EOS.2024.04.58874.26-24](https://doi.org/10.61011/EOS.2024.04.58874.26-24)
4. Frolova AY, Pakhomov AA, Kakuev DL, Sungurova AS, Dremina AA, Mamontova ED, Deyev SM, **Martynov VI** (2023). Hybrid protein-peptide system for the selective pH-dependent binding and photodynamic ablation of cancer cells. *J Photochem Photobiol B* 249, 112803, [10.1016/j.jphotobiol.2023.112803](https://doi.org/10.1016/j.jphotobiol.2023.112803)
5. Efimova AS, Ustimova MA, Maksimova MA, Frolova AY, **Martynov VI**, Deyev SM, Pakhomov AA, Fedorov YV, Fedorova OA (2023). Synthesis and optical characteristics of 4-styrylpyridinium dyes and their conjugates with antibody. *MENDELEEV COMMUN* 33 (3), 384–386, [10.1016/j.mencom.2023.04.027](https://doi.org/10.1016/j.mencom.2023.04.027)
6. Pakhomov AA, Efremova AV, Kononevich YN, Ionov DS, Maksimova MA, Volodin AD, Korlyukov AA, Dubinets NO, **Martynov VI**, Ivanov AA, Muzafarov AM (2023). NIR-I fluorescent probes based on distyryl-BODIPYs with two-photon excitation in NIR-II window. *ChemPhotoChem* 7 (5), e20220032, [10.1002/cptc.202200324](https://doi.org/10.1002/cptc.202200324)
7. Mamaeva AA, Frolova AY, Kakuev DL, **Martynov VI**, Deyev SM, Pakhomov AA (2023). Co-expression of different proteins in Escherichia coli using plasmids with identical origins of replication. *Biochem Biophys Res Commun* 641, 57–60, [10.1016/j.bbrc.2022.12.020](https://doi.org/10.1016/j.bbrc.2022.12.020)
8. Pakhomov AA, Efremova AV, Maksimova MA, Kononevich YN, Ionov DS, Dubinets NO, **Martynov VI**, Muzafarov AM, Alfimov MV (2023). Spectral Properties of Functional Distyryl Derivatives of BODIPY. *HIGH ENERG CHEM+* 57 (3), 192–199, [10.1134/S0018143923030104](https://doi.org/10.1134/S0018143923030104)
9. Frolova AY, Kutyakov SV, **Martynov VI**, Deyev SM, Pakhomov AA (2023). BODIPY Dye Derivative for Irreversible Fluorescent Labeling of Eukaryotic Cells and Their Simultaneous Cytometric Analysis. *Acta Naturae* 15 (4), 92–99, [10.32607/actanaturae.26879](https://doi.org/10.32607/actanaturae.26879)
10. Pakhomov AA, Belova AS, Khchoyan AG, Kononevich YN, Ionov DS, Maksimova MA, Frolova AY, Alfimov MV, **Martynov VI**, Muzafarov AM (2022). Ratiometric Singlet Oxygen Sensor Based on BODIPY-DPA Dyad. *Molecules* 27 (24), 9060, [10.3390/molecules27249060](https://doi.org/10.3390/molecules27249060)
11. Mamaeva AA, **Martynov VI**, Deyev SM, Pakhomov AA (2022). Comparison of Colorimetric and Fluorometric Chemosensors for Protein Concentration Determination and Approaches for Estimation of their Limits of Detection. *Chemosensors (Basel)* 10 (12), 542, [10.3390/chemosensors10120542](https://doi.org/10.3390/chemosensors10120542)
12. Frolova AY, Pakhomov AA, Kakuev DL, Sungurova AS, Deyev SM, **Martynov VI** (2022). Cancer cells targeting with genetically engineered constructs based on a pH-dependent membrane insertion peptide and fluorescent protein. *Biochem Biophys Res Commun* 612, 141–146, [10.1016/j.bbrc.2022.04.112](https://doi.org/10.1016/j.bbrc.2022.04.112)
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14. **Martynov I**, Pakhomov A (2021). BODIPY derivatives as fluorescent reporters of molecular activities in living cells. *RUSS CHEM REV* 90 (10), 1213, [10.1070/RCR4985](https://doi.org/10.1070/RCR4985)
15. Goryashchenko AS, Pakhomov AA, Ryabova AV, Romanishkin ID, Maksimov EG, Orsa AN, Serova OV, Mozhaev AA, Maksimova MA, **Martynov VI**, Petrenko AG, Deyev IE (2021). FLIM-Based Intracellular and Extracellular pH Measurements Using Genetically Encoded pH Sensor. *Biosensors (Basel)* 11 (9), , [10.3390/bios11090340](https://doi.org/10.3390/bios11090340)
16. Orsa AN, Goryashchenko AS, Serova OV, Mozhaev AA, **Martynov VI**, Pakhomov AA, Svirshchevskaya EV, Petrenko AG, Deyev IE (2021). Generation and Characteristics of Genetically Encoded Fluorescent Sensors of Extracellular pH. *Russ. J. Bioorganic Chem.* 47 (5), 1060–1065, [10.1134/S1068162021040178](https://doi.org/10.1134/S1068162021040178)
17. Pakhomov AA, Pastukhova AA, Tishkin GV, **Martynov VI** (2021). Transformations of the Chromophore in the Course of Maturation of a Chromoprotein from Actinia equina. *Russ. J. Bioorganic Chem.* 47 (1), 230–235, [10.1134/S1068162021010167](https://doi.org/10.1134/S1068162021010167)
18. Frolova AY, Pakhomov AA, **Martynov VI** (2021). Physicochemical Properties of Photoconvertible Fluorescent Protein from Montastraea cavernosa. *Russ. J. Bioorganic Chem.* 47 (1), 244–251,

19. Pakhomov AA, Frolova AY, Tabakmakher VM, Chugunov AO, Efremov RG, **Martynov VI** (2020). Impact of external amino acids on fluorescent protein chromophore biosynthesis revealed by molecular dynamics and mutagenesis studies. *J Photochem Photobiol B* 206, 111853, [10.1016/j.jphotobiol.2020.111853](https://doi.org/10.1016/j.jphotobiol.2020.111853)
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23. Pakhomov AA, Chertkova RV, Deyev IE, Petrenko AG, **Martynov VI** (2017). Generation of photoactivatable fluorescent protein from photoconvertible ancestor. *Russ. J. Bioorganic Chem.* 43 (3), 340–343, [10.1134/S106816201703013X](https://doi.org/10.1134/S106816201703013X)
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