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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/ru/users/129>

Работа в ИБХ

2019–наст.вр.	Главный научный сотрудник
	Ведущий научный сотрудник

Научные интересы

Ее научные интересы связаны с получением новых биоматериалов для биомедицины (системы с контролируемой доставкой лекарств, нано-капсулирование биоактивных пептидов и белков, микрокапсулирование животных клеток, биодegradируемые матриксы (скаффолды) для репарации тканей и др..

Членство в сообществах

Участвует в работе русских научных и зарубежных обществ. Является представителем и главным координатором международного общества Bioencapsulation Research Group в России, представляет Россию (является экспертом и входит в координационный комитет) в международных программах COST (840 и 865).

Степени и звания

Доктор наук (Химические науки, 03.00.04 — Биохимия)

Гранты и проекты

2021–2023	Новые мультитаргетные гибридные белки на основе высокоспецифичного мутантного варианта цитокина TRAIL DR5-B с эффекторными пептидами для параллельного воздействия на различные сигнальные пути, влияющие на развитие опухолей
2018–2020	Опухолевые сфероиды, полученные с помощью RGD-пептидов, как новые 3D in vitro модели для изучения цитотоксичности наноносителей с лекарствами

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- Akasov R, Selina O, Tolstova T, Gileva A, Burov S, Klyachko N, **Markvicheva E** (2026). Three-dimensional mesenchymal stromal cells spheroids generated by RGD-induced self-assembly technique for tissue engineering. *Cytotechnology* 78 (3), 80, [10.1007/s10616-026-00951-7](https://doi.org/10.1007/s10616-026-00951-7)
- Afanasyeva KA, Budanova UA, Sebyakin YL, Gileva AM, Drozdova MG, **Markvicheva EA** (2025). Fluorescently Labelled Cationic Liposomes with Sunitinib and the BODIPY-FL/L-Carnitine Conjugate for Theranostics. *Russ. J. Bioorganic Chem.* 51 (6), 2812–2822, [10.1134/S1068162025603660](https://doi.org/10.1134/S1068162025603660)
- Trushina D, Gileva A, Yagolovich A, Gasparian M, Kurbanova L, Burov S, Bukreeva T, Pallaeva T, Artemov V, Oleinikov V, **Markvicheva E** (2025). Synergistic effect of DR5-targeted capsules loaded with doxorubicin in drug-resistant 3D tumour spheroids. *J Microencapsul*, 1–16, [10.1080/02652048.2025.2570651](https://doi.org/10.1080/02652048.2025.2570651)
- Yagolovich AV, Isakova AA, Artykov AA, Vorontsova YV, Mazur DV, Antipova NV, Pavlyukov MS, Shakhparonov MI, Gileva AM, **Markvicheva EA**, Plotnikova EA, Pankratov AA, Kirpichnikov MP, Gasparian

- ME, Dolgikh DA (2024). Correction: Yagolovich et al. DR5-Selective TRAIL Variant DR5-B Functionalized with Tumor-Penetrating iRGD Peptide for Enhanced Antitumor Activity against Glioblastoma. 2022, , 12687. *Int J Mol Sci* 25 (10), , [10.3390/ijms25105334](https://doi.org/10.3390/ijms25105334)
5. Drozdova M, Makhonina A, Gladkikh D, Artyukhov A, Bryukhanov L, Mezhuev Y, Lozinsky V, **Markvicheva E** (2024). Hydroxyapatite-loaded macroporous calcium alginate hydrogels: Preparation, characterization, and in vitro evaluation. *Biopolymers* 115 (4), e23583, [10.1002/bip.23583](https://doi.org/10.1002/bip.23583)
 6. Yagolovich AV, Kuskov AN, Kulikov PP, Bagrov DV, Petrova PA, Kukovyakina EV, Isakova AA, Khan II, Pokrovsky VS, Nosyrev AE, Stamati PC, **Markvicheva EA**, Gasparian ME, Spandidos DA, Tsatsakis AM (2024). Assessment of the effects of amphiphilic poly (N-vinylpyrrolidone) nanoparticles loaded with bortezomib on glioblastoma cell lines and zebrafish embryos. *Biomed Rep* 20 (3), 37, [10.3892/br.2024.1725](https://doi.org/10.3892/br.2024.1725)
 7. Mishchenko EV, Gileva AM, **Markvicheva EA**, Koroleva MY (2023). Nanoemulsions and Solid Lipid Nanoparticles with Encapsulated Doxorubicin and Thymoquinone. *Colloid Journal of the USSR (English Translation of Kolloidnyi Zhurnal)* 85 (5), 736–745, [10.1134/S1061933X23600707](https://doi.org/10.1134/S1061933X23600707)
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 12. Gileva A, Trushina D, Yagolovich A, Gasparian M, Kurbanova L, Smirnov I, Burov S, **Markvicheva E** (2023). Doxorubicin-Loaded Polyelectrolyte Multilayer Capsules Modified with Antitumor DR5-Specific TRAIL Variant for Targeted Drug Delivery to Tumor Cells. *Nanomaterials (Basel)* 13 (5), , [10.3390/nano13050902](https://doi.org/10.3390/nano13050902)
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