

Резюме: Марквичева Елена Арнольдовна

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, биodeградируемые 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– [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](#)
2023

2018– [Опухолевые сфероиды, полученные с помощью RGD-пептидов, как новые 3D in vitro модели для изучения цитотоксичности наноносителей с лекарствами](#)
2020

Публикации

1. Drozdova M, Makhonina A, Gladkikh D, Artyukhov A, Bryukhanov L, Mezhuiev Y, Lozinsky V, **Markvicheva E** (2024). Hydroxyapatite-loaded macroporous calcium alginate hydrogels: Preparation, characterization, and in vitro evaluation. *Biospectroscopy*, e23583, [10.1002/bip.23583](#)
2. 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](#)
3. 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](#)
4. Afanasyeva KA, Gileva AM, **Markvicheva EA**, Budanova UA, Sebyakin YL (2023). Glycolipotriptide (N-

Lactitol-Gly)2-LysC16 and Its Fluorescently Labeled Analog for Visualizing Vector Systems for the Delivery of Biologically Active Substances to Target Cells. *Moscow University Chemistry Bulletin* 78 (5), 283–291, [10.3103/S0027131423050036](https://doi.org/10.3103/S0027131423050036)

5. Kildeeva N, Sazhnev N, Drozdova M, Zakharova V, Svidchenko E, Surin N, **Markvicheva E** (2023). Approaches to Obtaining Water-Insoluble Fibrous Matrices from Regenerated Fibroin. *Technologies (Basel)* 11 (5), 146, [10.3390/technologies11050146](https://doi.org/10.3390/technologies11050146)
6. Agapova OI, Efimov AE, Mochalov KE, Solovyeva DO, Gileva AM, **Markvicheva EA**, Yakovlev DV, Lyundup AV, Oleinikov VA, Agapov II, Gautier SV (2023). Correlative Fluorescent Scanning Probe Nanotomography Used to Study the Intracellular Distribution of Doxorubicin in MCF-7 Human Breast Adenocarcinoma Cells. *Dokl Biol Sci* 509 (1), 103–106, [10.1134/S0012496623700266](https://doi.org/10.1134/S0012496623700266)
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8. 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)
9. Tolstova T, Drozdova M, Popyrina T, Matveeva D, Demina T, Akopova T, Andreeva E, **Markvicheva E** (2023). Preparation and In Vitro Evaluation of Chitosan-g-Oligolactide Based Films and Macroporous Hydrogels for Tissue Engineering. *Polymers (Basel)* 15 (4), 907, [10.3390/polym15040907](https://doi.org/10.3390/polym15040907)
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11. 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 (2022). DR5-Selective TRAIL Variant DR5-B Functionalized with Tumor-Penetrating iRGD Peptide for Enhanced Antitumor Activity against Glioblastoma. *Int J Mol Sci* 23 (20), , [10.3390/ijms232012687](https://doi.org/10.3390/ijms232012687)
12. Sazhnev NA, Kildeeva NR, Drozdova MG, **Markvicheva EA** (2022). Fibrous Scaffolds for Tissue Engineering Electrospun from Fibroin-Containing Solutions. *FIBRE CHEM+* 53 (6), 370–372, [10.1007/s10692-022-10303-8](https://doi.org/10.1007/s10692-022-10303-8)
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