

## 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/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

2021–2023 [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 наночастиц с лекарствами](#)

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- Drozdova M, Makhonina A, Gladikh D, Artyukhov A, Bryukhanov L, Mezhuiev 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)
- 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)
4. 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)
  5. 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)
  6. 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)
  7. 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)
  8. Drozdova M, Vodyakova M, Tolstova T, Chernogortseva M, Sazhnev N, Demina T, Aksenova N, Timashev P, Kildeeva N, **Markvicheva E** (2023). Composite Hydrogels Based on Cross-Linked Chitosan and Low Molecular Weight Hyaluronic Acid for Tissue Engineering. *Polymers (Basel)* 15 (10), 2371, [10.3390/polym15102371](https://doi.org/10.3390/polym15102371)
  9. 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)
  10. 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)
  11. Drozdova MG, Demina TS, Dregval OA, Gaidar AI, Andreeva ER, Zelenetskii AN, Akopova TA, **Markvicheva EA** (2022). Macroporous Hyaluronic Acid/Chitosan Polyelectrolyte Complex-Based Hydrogels Loaded with Hydroxyapatite Nanoparticles: Preparation, Characterization and In Vitro Evaluation. *Polysaccharides* 3 (4), 745–760, [10.3390/polysaccharides3040043](https://doi.org/10.3390/polysaccharides3040043)
  12. 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)
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