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|  | ZYUZIN, Mikhail V.<br>Candidate of Science   |
| Research interests  | Development of nanomaterials for biomedical applications, drug delivery, light-sensitive nanomaterials, microfluidics  |
| List of the supervisor's research projects<br>(participation/supervision)         | <ul style="list-style-type: none"> <li>✓ Photosensitive carriers as a universal platform for targeted delivery and photomediated release of drugs for efficient treatment of skin melanoma (supervision)</li> <li>✓ Development of a combined method for the treatment of breast cancer using targeted radionuclide therapy in combination with immunotherapy (supervision)</li> </ul>   |
| List of potential thesis topics   | <ul style="list-style-type: none"> <li>✓ Development of multifunctional materials for theranostics</li> <li>✓ Microfluidic synthesis of nanomaterials</li> <li>✓ Microfluidic platforms for biosensing</li> </ul>  |
| Publications in the last five years   | 73 (Scopus / Web of Science / RSCI)  |
| Key publications  | <ol style="list-style-type: none"> <li>1. T. Karpov, A. Postovalova, D. Akhmetova, A. R. Muslimov, E. Eletskaya, M. V. Zyuzin, A. S. Timin, Universal Chelator-Free Radiolabeling of Organic and Inorganic- Based Nanocarriers with Diagnostic and Therapeutic Isotopes for Internal Radiotherapy, <i>Chem. Mater.</i> 2022, 34, 6593–6605</li> <li>2. I. G. Koryakina, M. Naumochkin, D. I. Markina, S. A. Khubezhov, A. P. Pushkarev, A. A. Evstrapov, S. V. Makarov, M. V. Zyuzin, Single-Step Microfluidic Synthesis of Halide Perovskite Nanolasers in Suspension, <i>Chem. Mater.</i> 2021, 33, 2777–2784</li> <li>3. G. P. Zograf, A. S. Timin, A. R. Muslimov, I. I. Shishkin, A. Nominé, J. Ghanbaja, P. Ghosh, Q. Li, M. V. Zyuzin, S. V. Makarov*, All-Optical Nanoscale Heating and Thermometry with Resonant Dielectric Nanoparticles for Controllable Drug Release in Living Cells, <i>Laser Photonics Rev.</i> 2020, 1900082</li> <li>4. E. N. Gerasimova, V. V. Yaroshenko, P. M. Talianov, O. O. Peltek, M. A. Baranov, P. V. Kapitanova, D. A. Zuev, A. S. Timin, M. V. Zyuzin, Real-Time Temperature Monitoring of Photoinduced Cargo Release inside Living Cells Using Hybrid Capsules Decorated with Gold Nanoparticles and Fluorescent Nanodiamonds, <i>ACS Appl.Mater.Interfaces</i> 2021, 13, 36737–36746</li> <li>5. I. G. Koryakina, S. V. Bachinin, E. N. Gerasimova, M. V. Timofeeva, S. A. Shipilovskikh, A. S. Bukatin, A. Sakhatskii, A. S. Timin, V. A. Milichko, M. V. Zyuzin, Microfluidic synthesis of</li> </ol> |

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|   | metal-organic framework crystals with surface defects for enhanced molecular loading, Chem. Eng. J. 2023, 452, 139450  |
| Code of the subject area of the PhD program | 1.3.2 Devices and Methods of Experimental Physics<br>1.3.6 Optics<br>1.3.8 Condensed State Physics<br>1.5.2 Biophysics |