

	<p>NOVIKOV, Alexander S. Candidate of Science (St. Petersburg State University)</p>
<p>Research interests</p>	<p>Studying the properties of (bio)active and functional chemical systems at all levels of matter organizations (from the nano- to the macrolevel) using DFT calculation methods, chemoinformatics, correlation analysis, computer modeling and the creation of descriptor systems for describing complex macromolecules</p>
<p>List of the supervisor's research projects (participation/supervision)</p>	<p>The project "Infochemistry Scientific and Educational Center" (participation)</p>
<p>List of potential thesis topics</p>	<p>Studying the properties of (bio)active and functional chemical systems at all levels of matter organizations (from the nano- to the macrolevel) using computer modelling</p>
<p>Publications in the last five years</p>	<p>240 (Scopus / Web of Science / RSCI)</p>
<p>Key publications</p>	<ol style="list-style-type: none"> <li>1. Mikherdov A.S., Novikov A.S., Boyarskiy V.P., Kukushkin V.Yu. "The halogen bond with isocyano carbon reduces isocyanide odor" // Nat. Commun. 2020, V. 11. P. 2921.</li>   <li>2. Nikitina A.A., Milichko V.A., Novikov A.S., Larin A.O., Nandi P., Mirsaidov U., Andreeva D.V., Rybin M.V., Kivshar Y.S., Skorb E.V. "All-dielectric nanostructures with a thermoresponsible dynamic polymer shell" // Angew. Chem. Int. Ed. 2021, V. 60. P. 12737.</li>   <li>3. Rozhkov A.V., Krykova M.A., Ivanov D.M., Novikov A.S., Sinelshchikova A.A., Volostnykh M.V., Kononov M.A., Grigoriev M.S., Gorbunova Y.G., Kukushkin V.Yu. "Reverse arene sandwich structures based upon <math>\pi</math>-hole•••[MII](d8M = Pt, Pd) interactions, where positively charged metal centers play the role of a nucleophile" // Angew. Chem. Int. Ed. 2019, V. 58. P. 4164.</li>   <li>4. Rozhkov A.V., Krykova M.A., Ivanov D.M., Novikov A.S., Sinelshchikova A.A., Volostnykh M.V., Kononov M.A., Grigoriev M.S., Gorbunova Y.G., Kukushkin V.Yu. "Reverse arene sandwich structures based upon <math>\pi</math>-hole•••[MII](d8M = Pt, Pd) interactions, where positively charged metal centers play the</li> </ol>

	<p>role of a nucleophile” // <i>Angew. Chem. Int. Ed.</i> 2019, V. 58. P. 4164.</p> <p>5. Kulachenkov N., Barsukova M., Alekseevskiy P., Sapiyanik A. A., Sergeev M., Yankin A., Krasilin A. A., Bachinin S., Shipilovskikh S., Poturaev P., Medvedeva N., Denislamova E., Zelenovskiy P. S., Shilovskikh V. V., Kenzhebayeva Y., Efimova A., Novikov A. S., Lunev A., Fedin V. P., Milichko V. A. “Dimensionality mediated highly repeatable and fast transformation of coordination polymer single crystals for all-optical data processing” // <i>Nano Lett.</i> 2022, V. 22. P. 6972.</p>
Code of the subject area of the PhD program	<p>1.4.1 Inorganic Chemistry</p> <p>1.4.4 Physical Chemistry</p> <p>1.4.5 Chemoinformatics</p>