

## Публикации лаборатории 2021 г.

### Статьи в зарубежных журналах

1. **Effect of Particle Sizes on the Efficiency of Fluorinated Nanodiamond Neutron Reflectors**, Aleksenskii,A; Bleuel,M; Bosak,A; Chumakova,A; Dideikin,A; Dubois,M; Korobkina,E; Lychagin,E; Muzychka,A; Nekhaev,G; Nesvizhevsky,V; Nezvanov,A; Schweins,R; Shvidchenko,A; Strelkov,A; Turlybekuly,K; Vul',A; Zhernenkov,K, *Nanomaterials*, v.11(11), 3067 (2021) **Q1**  
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2. **Valence Band Structure Engineering in Graphene Derivatives**, Shnitov,VV; Rabchinskii,MK; Brzhezinskaya,M; Stolyarova,DY; Pavlov,SV; Baidakova,MV; Shvidchenko,AV; Kislenko,VA; Kislenko,SA; Brunkov,PN, *Small*, v.17 ArtNo: #2104316 (2021) **Q1**  
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3. **Structure of Diffusion Polymer Membranes for Molecular and Ionic Transport**, Lebedev,VT; Kulvelis,YV; Torok,G; Ivankov,OI; Polotskaya,GA; Vinogradova,LV; Vul,AY; Primachenko,ON; Marinenko,EA; Odinkov,AS, *J. Surf. Invest. X-ray*, v.15, 5, pp.939-946 (2021) **Q4**  
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4. **Diamond based nanostructures with metal-organic molecules**, Lebedev,VT; Török,G; Kulvelis,YV; Soroka,MA; Fomin,EV; Vul,AYa; Garg,S, *Soft Materials*, in Press (2021) **Q3**  
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6. **The 20-Year Russian-Italian Scientific Collaboration in Industrial Applications of Neutrons and Prospects on High Flux Reactor “PIK” of Russian National Centre “Kurchatov Institute”**, Rogante,M; Lebedev,VT; Kulvelis,Y; Vul,AY; Kozlov,VS; Konoplev,KA, *Neutron News*, v. 32, 3, pp. 9-15 (2021) **Q4**  
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7. **Manganese-grafted detonation nanodiamond, a novel potential MRI contrast agent**, Panich,AM; Shames,AI; Aleksenskii,AE; Yudina,EB; Vul',AYa, *Diam. Relat. Mater.*, v. 119, 108590 (2021) **Q2**  
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8. **Clustering of Diamond Nanoparticles, Fluorination and Efficiency of Slow Neutron Reflectors**, Aleksenskii,A; Bleuel,M; Bosak,A; Chumakova,A; Dideikin,A; Dubois,M; Korobkina,E; Lychagin,E; Muzychka,A; Nekhaev,G; Nesvizhevsky,V; Nezvanov,A; Schweins,R; Shvidchenko,A; Strelkov,A; Turlybekuly,K; Vul',A; Zhernenkov,K, *Nanomaterials*, 11(8), 1945 (2021) **Q1**  
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13. **Graphene oxide chemistry management via the use of KMnO<sub>4</sub>/K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> oxidizing agents**, Shiyanova,KA; Gudkov,MV; Rabchinskii,MK; Sokura,LA; Stolyarova,DYu; Baidakova,MV; Shashkin,DP; Trofimuk,AD; Smirnov,DA; Komarov,IA; Timofeeva,VA; Melnikov,VP, *Nanomaterials*, 11(4), p. 915 (2021) **Q1**  
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17. **Detonation nanodiamonds dispersed in polydimethylsiloxane as a novel electrorheological fluid: Effect of nanodiamonds surface**, Kuznetsov,NM; Belousov,SI; Kamyshinsky,RA; Vasiliev,AL; Chvalun,SN; Yudina,EB; Vul,AYa, *Carbon*, v.174, pp. 138-147 (2021) **Q1**  
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2. **Модификация механизма протонной проводимости перфторированного мембранного сополимера при помощи наноалмазов**, Кульвелис,ЮВ; Примаченко,ОН; Гофман,ИВ; Одинок,АС; Швидченко,АВ; Юдина,ЕБ; Мариненко,ЕА; Лебедев,ВТ; Вуль,АЯ, *Изв. АН, сер. хим.*, т.9, стр. 1713-1717 (2021)
3. **Modification of the mechanism of proton conductivity of the perfluorinated membrane copolymer by nanodiamonds**, Kulvelis,YV; Primachenko,ON; Gofman,IV; Odinokov,AS; Shvidchenko,AV; Yudina,EB; Marinenko,EA; Lebedev,VT; Vul,AY, *Russ. Chem. Bull.*, v.70, 9, pp. 1713-1717 (2021) **Q3**  
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4. **Теплопроводность наножидкостей: влияние формы частиц**, Эйдельман,ЕД; Вуль,АЯ, *Письма ЖТФ*, т.47, 20, стр. 45-47 (2021) **Q3**  
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