

**Сведения о научных руководителях  
диссертации Берекчияна Михаила Вартановича**  
**«Диффузия заряженных частиц через поры нанометрового размера в анодном оксиде  
алюминия»**

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Список основных научных публикаций по специальности 02.00.21 – химия твёрдого тела за последние 5 лет:

1. Pyatkov E.S., Berekchiyan M.V., Yeliseyev A.A., **Lukashin A.V.**, Petukhov D.I., Solntsev K.A. *Electrochemical Detection of Barrier Layer Removal for Preparation of Anodic Alumina Membranes with High Permeance and Mechanical Stability*// Inorganic Materials: Applied Research, 2018, 9, 82-87
2. Chernova E.A., Petukhov D.I., Kapitanova O.O., Boytsova O.V., **Lukashin A.V.**, Eliseev A.A. *Nanoscale architecture of graphene oxide membranes for improving dehumidification performance*// Наносистемы: физика, химия, математика, 2018, 9, 614-621
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Список основных научных публикаций по специальности 05.17.18 – мембранные и мембранные технологии за последние 5 лет:

1. Chernova E.A., Roslyakov I.V., Dorofeev S.G., **Lukashin A.V.** *Composite membranes based on geometrically constrained PIM-1 for dehumidification of gas mixtures*// Наносистемы: физика, химия, математика, 2019, 10, 282-288
2. Chernova E.A., Bermeshev M.A., Petukhov D.I., Boytsova O.V., **Lukashin A.V.**, Eliseev A.A. *The effect of geometric confinement on gas separation characteristics of additive*

- poly[3-(trimethylsilyl)tricyclononene-7]// Nanosystems: physics, chemistry, mathematics, 2018, 9, 252-258*
3. Petukhov D.I., Eliseev Artem A., Poyarkov A.A., **Lukashin A.V.**, Eliseev Andrei A. *Porous polypropylene membrane contactors for dehumidification of gases// Наносистемы: физика, химия, математика, 2017, 8, 798-803*
  4. Pyatkov E.S., Surtayev V.N., Petukhov D.I., Chernova E.A., **Lukashin A.V.**, Solntsev K.A., Eliseev A.A. *Conditioning of associated petroleum gas using capillary condensation technique with asymmetric microporous anodic alumina membranes// Нефтяное хозяйство, 2016, 5, 82-85*
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Список основных научных публикаций по специальности 02.00.21 – химия твёрдого тела за последние 5 лет:

1. Yorov Kh. E., Khodan A.N., Baranchikov A.E., Utochnikova V.V., Simonenko N.P., Beliukov A.N., **Petukhov D.I.**, Kanaev A., Ivanov V.K. *Superhydrophobic and luminescent highly porous nanostructured alumina monoliths modified with tris(8-hydroxyquinolinato)aluminium// Microporous and Mesoporous Materials, 2020, 293, 109804-&*
2. Kurilenko K.A., Shlyakhtin O.A., **Petukhov D.I.**, Garshev A.V., Valeev R.G. *Modification of Li<sub>1</sub>[Li<sub>0.13</sub>Ni<sub>0.2</sub>Mn<sub>0.47</sub>Co<sub>0.2</sub>]O<sub>2</sub> cathode material by layered CeO<sub>2</sub>-C coating// Journal of Solid State Electrochemistry, 2019, 23, 433-439*
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8. Kurilenko K.A., Shlyakhtin O.A., Brylev O.A., **Petukhov D.I.**, Garshev A.V. *Effect of nanostructured carbon coatings on the electrochemical performance of*

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1. **Petukhov D.I.**, Komkova M.A., Brotsman V.A., Poyarkov A.A., Eliseev Ar A., Eliseev An A. *Membrane condenser heat exchanger for conditioning of humid gases// Separation and Purification Technology*, 2020, 241, 116697-&
2. Wozniak A.I., Bermesheva E.V., Borisov I.L., **Petukhov D.I.**, Bermeshev M.V., Volkov A.V., Finkelshtein E.Sh. *Addition Polyalkylnorbornenes: A Promising New Class of Si-Free Membrane Materials for Hydrocarbons Separation// Macromolecular Rapid Communications*, 2019, 40, 1900206-&
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7. **Petukhov D.I.**, Berekchiian M.V., Eliseev A.A. *Meniscus Curvature Effect on the Asymmetric Mass Transport through Nanochannels in Capillary Condensation Regime// Journal of Physical Chemistry C*, 2018, 122, 29537-29548
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9. Chernova E., **Petukhov D.**, Boytsova O., Alentiev A., Budd P., Yampolskii Yu., Eliseev A. *Enhanced gas separation factors of microporous polymer constrained in the channels of anodic alumina membranes// Scientific reports*, 2016, 6, 31183-&
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11. **Petukhov D.I.**, Eliseev A.A. *Gas permeation through nanoporous membranes in the transitional flow region// Nanotechnology*, 2016, 27, 085707-&

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