

Избранные публикации официального оппонента  
доктора физико-математических наук Махаевой Елены Евгеньевны  
по тематике защищаемой диссертации

1. Frolov D. G., Makhaeva E. E., Keshtov M. L. Electrochromic behavior of films and "smart windows" prototypes based on conjugated and non-conjugated poly(pyridiniumtriflate)s. // *Synthetic Metals*. — 2019. — V. 248. — P. 14–19.
2. Keshtov M. L., Kuklin S. A., Konstantinov I. O., Ostapov I. E., Makhaeva E. E., Nikolaev A. Y., Xie Z., Zou Y., Sharma G. D. Random d1–a1–d1–a2 terpolymers based on diketopyrrolopyrrole and benzothiadiazolequinoxaline (btqx) derivatives for high-performance polymer solar cells. // *New Journal of Chemistry*. — 2019. — V. 43. — P. 1–10.
3. Kozhunova E. Y., Ji Q., Labuta J., Nasimova I. R., Makhaeva E. E., Ariga K. <sup>1</sup>H NMR study of thermo-induced collapse of polyelectrolyte microgels. // *Express Polymer Letters*. — 2018. — V. 12. — №. 11. — P. 1005–1013.
4. Keshtov M. L., Kuklin S. A., Konstantinov I. O., Peregudov A. S., Zhi-Yuan X., Ostapov I. E., Makhaeva E. E., Khokhlov A. R. 5,6-bis(9-(2-decyltetradecyl)-6-fluoro-9h-carbazol-3-yl)naphtho[2,1-b:3,4-b']dithiophene as a promising donorstructure for d–a conjugated copolymers with a narrow bandgap. // *Doklady Chemistry*. — 2018. — V. 482. — P. 213–219.
5. Kuklin S. A., Konstantinov I. O., Peregudov A. S., Ostapov I. E., Makhaeva E. E., Khokhlov A. R., Keshtov M. L. Bis[1,3]thiazolo[4,5-f:5',4'-h]thieno[3,4-b]quinoxaline derivatives as new building blocks of polymers for organic electronics. // *Doklady Chemistry*. — 2018. — V. 482. — № 1. — P. 207–211.
6. Pichugov R. D., Malyshkina I. A., Makhaeva E. E. Electrochromic behavior and electrical percolation threshold of carbon nanotube/poly(pyridiniumtriflate) composites. // *Journal of Electroanalytical Chemistry*. — 2018. — V. 823. — P. 601–609.
7. Frolov D. G., Petrov M. M., Makhaeva E. E., Keshtov M. L., Khokhlov A. R. Electrochromic behavior of poly(pyridiniumtriflates) films: Electrolyte ions influence. // *Synthetic Metals*. — 2018. — V. 239. — P. 29–35.
8. Pichugov R. D., Makhaeva E. E., Keshtov M. L. Fast switching electrochromicnanocomposite based on poly(pyridinium salt) and multiwalled carbon nanotubes. // *Electrochimica Acta*. — 2018. — V. 260. — P. 139–149.
9. Bogdashkina D. V., Makhaeva E. E., Khokhlov A. R. Features of the interaction of alcian blue with gels based on copolymer of N-vinylcaprolactam and

methacrylic acid. // *Polymer Science. Series A.* — 2018. — V. 60. — № 2. — P. 198–205.

10. Keshtov M. L., Kuklin S. A., Konstantinov I. O., Godovskii D. Y., Zou Y., Ostapov I. E., Makhaeva E. E., Khokhlov A. R. New quinoxaline-containing monomers for narrow-bandgap polymers. // *Doklady Chemistry.* — 2018. — V. 482. — № 1. — P. 195–200.

11. Strokov I. V., Abramchuk S. S., Makhaeva E. E. Salt and pH effect on thermoresponsive behavior of multiwalled carbon nanotube (mwcnt)/poly(*n*-vinylcaprolactam) dispersion. // *Colloid and Polymer Science.* — 2018. — P. 1–9.

12. Богдашкина Д. В., Махаева Е. Е., Хохлов А. Р. Особенности взаимодействия альцианового синего с гелями на основе сополимера *n*-винилкапролактама с метакриловой кислотой. // *Высокомолекулярные соединения. Серия А.* — 2018. — Т. 60. — № 2. — С. 154–161.

13. Gavrilova N. D., Malyshkina I. A., Makhaeva E. E., Novik V. K., Vorobiev A. V. Dielectric relaxation anomalies in polyacrylic acid and their relationship with “critical” points of water. // *Ferroelectrics.* — 2016. — V. 504. — № 1. — P. 3–14.