

## Publications

---

*Article*

**Sequence disorder-induced first order phase transition in confined polyelectrolytes**

Y.Sh. Mamasakhlisov, V.F. Morozov, V. Stepanyan, A. Badasyan, R. Podgornik

Journal of Chemical Physics 2024 134906

---

*Article*

**Physical Adsorption of Single-Stranded DNA on Carbon Nanotube**

V. F. Morozov, D. G. Khechoyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 65-68

---

*Article*

**The Conductivity of the Monolayer of DNA - Quantum Dot Complexes in the Presence of Intercalating Charged Ligands**

Y.S. Mamasakhlisov, V.F. Morozov, S.A. Tonoyan, E.M. Kazaryan, A.Y. Mamasakhlisov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 87-93

---

*Article*

**Differential Melting Curves in Heterogeneous Biopolymers**

V. F. Morozov, A. Y. Mamasakhlisov, A. Asatryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 259-264

---

*Article*

**Sensitivity of DNA Sensors in the Presence of Charged Ligands**

Sh.A. Tonoyan, A.A. Hakobyan, A.K. Andreassian, V.F. Morozov, Y.Sh. Mamasakhlisov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2018 179-186

---

*Article*

**Straight Calculations of Helix-Coil Transition Parameters in Heteropolymers**

A.V. Asatryan, A.K. Andriasyan, A.A. Hakobyan, Sh.A. Tonoyan, Y.Sh. Mamasakhlisov, V.F. Morozov

Proceedings of the YSU A. Physical and Mathematical Sciences 2018 47-54

---

*Article*

**Переход порядок-беспорядок в гетерогенных биологических макромолекулах**

А.В. Асатрян, А.К. Андриясян, Ш.А. Тоноян, Е.Ш. Мамасахлисов, В.Ф. Морозов

Вестник Российско-Армянского Университета: Физико-математические и естественные науки 2018 41-54

---

*Article*

**Effect of ligands binding on the isotherm of hybridization of the DNA-chip**

H.L. Tsaturyan, Sh.A. Tonoyan, V.F. Morozov, Y.Sh. Mamasakhlisov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2017 180-188

<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

---

*Article*

**Possible mechanism of non-monotone behavior of helix-coil transition temperature in two-component solvent**

Sh.A. Tonoyan, A.V. Asatryan, D.L.Hayrapetyan, Y.Sh. Mamasakhlisov, V.F. Morozov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2016 93-98

<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

---

*Article*

**Generalized model of polypeptide chain for helix-coil transition in two-component solvent**

Sh.A. Tonoyan, A.V. Asatryan, Mirtavoosi Saadat, Y.Sh. Mamasakhlisov, V.F. Morozov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2015 375-380

<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

---

*Conference*

**The dsDNA duplex stability and carbon nanotube induced crystallization: the effect of two - component solvent**

Sh.A. Tonoyan, A.V. Asatryan, S. Mirtavoosi, Y.Sh. Mamasakhlisov, V.F. Morozov

---

*Conference*

**Theoretical Description of ssDNA Adsorption on Carbon Nanotubes**

Shushanik Tonoyan, Davit Khechoyan, Vardges Mambreyan, Vladimir Morozov, Yevgeni Mamasakhlisov

---

*Conference*

**Constrained Annealing Approach for Order-Disorder Transitions in heterogeneous Macromolecular Systems**

Shushanik Tonoyan, A. Andreassian, A. Hakobyan, V.F. Morozov, Y.Sh. Mamasakhlisov

---

*Conference*

**The Helix-Coil Transition the Frames of GMPC. Ligands Effects**

Vladimir Morozov, Aram Andriasyan, Saadat Mirtavoosi, Shushanik Tonoyan, Yevgeni Mamasakhlisov

---