

## Publications

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*Article*

**Statistical mechanics of DNA-nanotube adsorption**

Yevgeni Mamasakhlisov, Shushanik Tonoyan, Davit Khechoyan, Artem Badasyan

Physical Review E 2020 062422(1-5)

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*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

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*Article*

**The double-stranded DNA stability in presence of a flexible polymer**

Yevgeni Mamasakhlisov, Hakob Sngryan, Shushanik Tonoyan, Artur Hakobyan, Poghos Vardevanyan

Journal of Biomolecular Structure and Dynamics 2018 1-12

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*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

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*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. Physical and Mathematical Sciences 2018 47-54

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*Article*

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

A.B. Асатрян, А.К. Андриасян, Ш.А. Тоноян, Е.Ш. Мамасахлисов, В.Ф. Морозов

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

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*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>

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*Article*

**Fluctuations in order-disorder transitions in the DNA-ligand complexes with various binding mechanisms**

Y.Sh. Mamasakhlisov, A.P. Antonyan, A.Y. Mamasakhlisov, Sh.A. Tonoyan, P.H. Vardevanyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2017 173-179  
<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

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*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>

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*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>

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*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

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*Conference*

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

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

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*Conference*

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

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

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*Conference*

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

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

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