

## Research Institute of Physics

Laboratory of Physics of Macromolecules

Researcher

## Publications

### Article

#### **Interaction of MnTOEtPyP4 porphyrin with DNA**

Gayane V. Ananyan, Yeva B. Dalyan, Nelli H. Karapetyan, Vigen G. Barkhudaryan, Ani A. Avetisyan

Journal of Biomolecular Structure and Dynamics 2023 7290-7296

### Article

#### **Molecular Transformations in DNA under the Influence of UV-radiation**

Vigen G. Barkhudaryan, Gayane V. Ananyan, Nelli H. Karapetyan

Current Applied Polymer Science 2020 1-7

### Book

#### **ԲԱՐՁՐԱՄՈԼԵԿՈՒԼԱՅԻՆ ՄԻԱՑՈՒԹՅՈՒՆՆԵՐԻ ՖԻԶԻԿԱ**

Վ. ԲԱՐԴՈՒՂԱՐՅԱՆ

2020 287

### Article

#### **Development of viscometric methods for studying the interaction of porphyrins with DNA**

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Biomolecular Structure and Dynamics 2019 1-6

### Book

#### **Մոլեկուլարի կառուցվածքը և հատկությունները**

Վ. Բարդուղարյան

2019 222

### Article

#### **Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part IV: Meso-tetra-(4N-allylpyridyl) porphyrin and its Cu-, Co and Zn-containing derivatives**

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Porphyrins and Phthalocyanines 2018 1-8

### Article

#### **Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part III: Meso-tetra-(3N-allylpyridyl) porphyrin and its Cu-, Co- and Zn- containing derivatives**

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Porphyrins and Phthalocyanines 2017 110-115

<http://www.worldscientific.com/worldscinet/jpp>

### Article

#### **Interaction of Meso-tetra-(4N-allylpyridyl) porphyrin and its Cu-, Co- and Zn- containing**

**derivatives with DNA**

Barkhudaryan V. G., Ananyan G. V.

Biological Journal of Armenia 2017 84-93

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*Article***Alterations of molecular characteristics of polyethylene under the influence of heat treatment**

Vigen G. Barkhudaryan

International Journal of Plastics Technology 2016 231-240

<http://www.springer.com/chemistry/polymer+science/journal/12588>

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*Article***Application of viscometric methods for studying the interaction of various porphyrins with DNA**

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Biomolecular Structure and Dynamics 2016 136

<http://www.tandfonline.com/action/journalInformation?journalCode=tbsd20#.V25anP...>

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*Article***Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part II: Meso-tetra-(3N-hydroxyethylpyridyl) porphyrin and its Ni-, Cu-, Co- and Zn-containing derivatives**

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Porphyrins and Phthalocyanines 2016 766-772

<http://www.worldscientific.com/worldscinet/jpp>

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*Article***Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part I: meso-tetra-(4N-hydroxyethylpyridyl) porphyrin and its Ni-, Cu-, Co- and Zn-containing derivatives**

V.G. Barkhudaryan, G.V. Ananyan, Y.B. Dalyan, S.G. Harutunyan

Journal of Porphyrins and Phthalocyanines 2014 594-599

<http://www.worldscientific.com/worldscinet/jpp>

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*Monograph***Молекулярный ансамбль и пространственная организация макромолекул**

Виген Бархударян

2014 201

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*Manual***Մոլեկուլային Փիզիկա**

Վ. Բարխուդարյան

2014 332

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*Article***Viscometric and Light scattering investigation of the hydrogen bonds in the solutions of Polycarbonol**

V.G. Barkhudaryan.

International Journal of Plastics Technology 2012 17-23

<http://www.springer.com/chemistry/polymer+science/journal/12588>

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*Conference*

**Application of viscometric methods for studying the interaction of various porphyrins with DNA**

Vigen G. Barkhudaryan, Gayane V. Ananyan

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**Application of viscometric methods for studying the interaction of various porphyrins with DNA**

Vigen G. Barkhudaryan, Gayane V. Ananyan

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*Conference*

**Effect of configuration of porphyrin molecule on the complexation with DNA**

G.V. Ananyan, V.G. Barkhudaryan

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*Conference*

**Alterations of Molecular Characteristics of Polyethylene Under the Influence of External Effects**

Vigen Barkhudaryan

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*Conference*

**Influence of structural features of porphyrins on their ability to effect on DNA**

V. G. Barkhudaryan, G. V. Ananyan

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*Conference*

**The effect of porphyrins configuration on the hydrodynamic behavior of DNA solutions**

Vigen G. Barkhudaryan, Gayane V. Ananyan

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*Conference*

**Molecular alterations in DNA under UV-irradiation**

Gayane V. Ananyan, Nelli H. Karapetyan, Vigen G. Barkhudaryan

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*Conference*

**Effect of Nanoparticles on Erythrocyte Membranes at Irradiation**

N.H. Karapetyan, G.V. Ananyan, R.S. Ghazaryan, T.M. Jomardyan, V.G. Barkhudaryan, V. Kalantaryan

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*Conference*

**The effect of the molecular mass of PEG on the nature of its interaction with DNA**

Ani A. Avetisyan, Gayane V. Ananyan, Vigen G. Barkhudaryan

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*Conference*

**The futures of complex formation of poly[d(A-C)]. poly[d(G-T)] with porphyrins**

Gayane V. Ananyan, Nelli H. Karapetyan, Yeva B. Dalyan

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*Conference*

**Characterization and differentiation of binding modes of water-soluble porphyrins at complexation with DNA**

Vigen G. Barkhudaryan, Gayane V. Ananyan, Yeva B. Dalyan

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