

Gayane Volod Ananyan

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Research Institute of Physics

Laboratory of Physics of Macromolecules

Senior researcher

Education

Institution	Yerevan State University
Faculty	Chair of Molecular physics, faculty of Physics
Date	1983 - 1987
Degree name	PhD student

Institution	Yerevan State University
Faculty	Faculty of Physics
Date	1978 - 1983
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Yerevan State University
Date	2013
Degree name	Associate professor
Specialty	Physico-mathematical sciences

Institution	Yerevan State University
Date	2007
Degree name	Candidate
Specialty	Physico-mathematical sciences
Scientific Supervisor	Dalyan Yeva B
Research Topic	“The role of central metal at complexation of water-soluble metalloporphyrins with DNA”

Language skills

Հայերեն Русский English

Work experience

Institution	YSU, Interfaculty scientific-research laboratory of Structural Biophysics
Period of time	2009 till now

Rank/degree	Senior Scientific Researcher
Institution	Interfaculty scientific-research laboratory of Structural Biophysics, YSU
Period of time	2007 - 2009
Rank/degree	Scientific Researcher
Institution	Interfaculty scientific-research laboratory of Structural Biophysics, YSU
Period of time	2002 - 2007
Rank/degree	Junior Scientific Researcher
Institution	Department of Molecular Physics, Faculty of Physics, YSU
Period of time	1983 - 2002
Rank/degree	Laboratory Assistant

Publications

Article

INFLUENCE OF CATIONIC PORPHYRINS ON CISPLATIN-MODIFIED DNA

G. V. Ananyan, Ye. B. Dalyan, L. R. Aloyan, A. A. Avetisyan, N. H. Karapetyan

Proceedings of the YSU B: Chemical and Biological Sciences 2025 43-56

Article

Influence of Cu L-Histidinate Schiff Base Derivatives on Structural Features of Irradiated Rat's DNA

Nelli H. Karapetyan, Samvel G. Haroutiunian, Gayane V. Ananyan

Cell Biochemistry and Biophysics 2024 2557-2565

Article

Binding Parameters of CuTAlIPyP4 and CoTAlIPyP4 Porphyrins to DNA Using Adsorption Isotherms [Параметры связывания CuTAlIPyP4 и CoTAlIPyP4 порфиринов с ДНК по изотермам адсорбции]

G. V. Ananyan, N. H. Karapetyan, Y. B. Dalyan, R. S. Ghazaryan, S. G. Haroutiunian

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 347-352

Article

STABILITY AND CONDUCTIVITY OF BILAYER LIPID MEMBRANE IN PRESENCE NANOPARTICLES

Jomardyan, T. M., Ananyan, G. V., Arakelyan, V.

Proceedings of the YSU A. Physical and Mathematical Sciences 2023 23-30

Article

ANTICANCER EFFECT OF AgTOEPyP4 PORPHYRIN

N. H. KARAPETYAN, G. V. ANANYAN, S. G. HAROUTIUNIAN

ԵՊՀ գիտական տեղեկագիր. Զիմիա և կենսաբանություն: 2023 41-53

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

The structural features of poly(dG-dC).poly(dG-dC) at complexation with some porphyrins

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

Journal of Biomolecular Structure and Dynamics 2021 1-6

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

Article

pH-dependent complex formation of Zn-mesotetra(4-N-hydroxyethylpyridyl) porphyrin with cancer DNA

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

Journal of Biomolecular Structure and Dynamics 2020 1-6

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

Article

INFLUENCE OF ZINC OXIDE NANOPARTICLES ON BILAYER LIPID MEMBRANE PROPERTIES

A. L. TOROSYAN, G. V. ANANYAN, V. B. ARAKELYAN

Proceedings of the YSU A. Physical and Mathematical Sciences 2019 208-213

Article

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

Vigen G. Barkhudaryan, Gayane V. Ananyan

Journal of Porphyrins and Phthalocyanines 2018 1-8

Article

INFLUENCE OF NANOPARTICLES OF CuO ON THE STABILITY AND CONDUCTIVITY OF BLM

A. L. TOROSYAN, G. V. ANANYAN, V. B. ARAKELYAN

Proceedings of the YSU A. Physical and Mathematical Sciences 2018 p. 41-46

Article

Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part III: Meso-tetra-(3N-alylpyridyl) 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

ПЛАВЛЕНИЕ ДНК ОПУХОЛЕНОСЯЩИХ КРЫС, ЛЕЧЕННЫХ мезо-ТЕТРА(4-N-ГИДРОКСИЭТИЛПИРИДИЛ)ПОРФИРИНОМ И ЕГО Ag-, Zn-, Co-ПРОИЗВОДНЫМИ

Н.Г. Карапетян, Г.В. Ананян, Е.Б. Далян, С.Г. Арутюнян

Биофизика (Biophysics) 2017 458-463

http://elibrary.ru/title_about.asp?id=7680

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

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...>

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>

Article

Development of viscometric methods for studying the interaction of various porphyrins with DNA. Part I: meso-tetra-(4N-hydroxyethylpyridyl) orphyrin 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>

Article

The stability of DNA-porphyrin complexes in the presence of Mn(II) ions.

G. Ananyan, A. Avetisyan, L. Aloyan, Y. Dalyan

Biophysical Chemistry 2011 96-101

<http://www.elsevier.com/locate/biophyschem>

Article

DNA damage and anti-tumor activity induced by Zn, Ag and Co containing meso- tetra(4-N-oxyethylpyridyl)porphyrins in vivo

Nelli H. Karapetyan, Lusya V. Torosyan, Gayane V. Ananyan, Rafael E. Muradyan

Journal of Porphyrins and Phthalocyanines 2010 pp. 349-353

Conference

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

Vigen G. Barkhudaryan, Gayane V. Ananyan

Conference

The features of complexformation of poly(dI-dC) 2 with porphyrins

Gayane V. Ananyan, Nelli H. Karapetyan, Samvel G. Haroutiunian, Yeva B. Dalyan

Conference

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

Vigen G. Barkhudaryan, Gayane V. Ananyan

Conference

Лечение опухоленосщих крыс мезо-тетра(4N-гидроксиэтилпиридил) порфиринами H₂TOEtPyP₄ и AgTOEtPyP₄

Карапетыан Н.Г., Ананян Г.В., Далян Е.Б., Арутюнян С. Г.

Conference

Effect of configuration of porphyrin molecule on the complexation with DNA

G.V. Ananyan, V.G. Barkhudaryan

Conference

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

V. G. Barkhudaryan, G. V. Ananyan

Conference

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

Vigen G. Barkhudaryan, Gayane V. Ananyan

Conference

Changes in the stability and conductivity of BLM in the presence of zinc oxide nanoparticles

Anahit L. Torosyan, Gayane V. Ananyan, Valeri B. Arakelyan

Conference

Molecular alterations in DNA under UV-irradiation

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

Conference

Influence of Metal Oxide Nanoparticles in the Stability and Conductivity of BLM

G.V. Ananyan, Ts.M. Jomardyan, V.B. Arakelyan

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

Conference

Peculiarities of melting DNA from Crocker's sarcoma of a mouse treated with Ag-meso-tetra(4-N-hydroxyethylpyridyl) porphyrin in the presence of Mn²⁺ ions

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

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

Conference

Influence of ZnO nanoparticles in the stability and conductivity of BLM depending on its composition

Gayane V. Ananyan, Syuzi M. Grigoryan, Tsovinar Jomardyan, Ishkhan V. Vardanyan,

Valery. B. Arakelyan

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

Conference

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

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