

Research Institute of Physics

Laboratory of Physics of Macromolecules

Head of laboratory

Language skills

Հայերեն Русский English

Publications

Article

Binding Parameters of CuTAIPyP4 and CoTAIPyP4 Porphyrins to DNA Using Adsorption Isotherms [Параметры связывания CuTAIPyP4 и CoTAIPyP4 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

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

Bleomycin and Olaparib Induced Modulation of Poly (ADP-Ribose) Polymerase 1 Activity and Chromatin Structure in Thymocyte Nuclei

Anush L. Asatryan, Karine S. Matinyan, Lusine G. Aslanyan, Yeva B. Dalyan, Irina G. Artsruni

Asian Journal of Pharmaceutics 2023 502-508

Article

Structural Transitions in Complementary G-Rich and C-Rich Strands and Their Mixture at Various pH Conditions

Yeva B. Dalyan, Ishkhan V. Vardanyan, Samvel G. Haroutiunian, Milena Kh. Badalyan

ACS Omega 2023 47051-47056

Article

Photovoltaic Tweezers Based on Optical Holography: Application to 2D Trapping of DNA Molecules on a Lithium Niobate Crystal

Lusine Aloyan, Yeva Dalyan, Lusine Tsarukyan, Anahit Badalyan, Rafael Drampyan

Optical Memory and Neural Network 2023 S384-S395

Article

FLAP Collaboration: Tasks and Perspectives. Study of Fundamentals and New Applications of Controllable Generation of Electromagnetic Radiation by Relativistic Electrons Using Functional Materials

L. Aloyan, A. Avetisyan, Y. Dalyan, L. Grigoryan, N. Karapetyan, V. Kocharyan, A. Mkrtchyan,

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

THE INFLUENCE OF UREA ON G-QUADRUPLEX AND i-MOTIF STRUCTURES IN COMPLEMENTARY DNA SEQUENCES

Ye. B. Dalyan, L. G. Aslanyan, I. V. Vardanyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2020 115-122

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

ПЛАВЛЕНИЕ ДНК ОПУХОЛЕНОСЯЩИХ КРЫС, ЛЕЧЕНЫХ 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

Effect of urea on G-quadruplex stability

Yeva B. Dalyan, Ishkhan Vardanyan, Lusine Aslanyan, Tigran V. Chalikian, Jordan Ko, Byul G. Kim

Journal of Physical Chemistry B 2017 6511-6519

<http://pubs.acs.org/journal/jpcbfk>

Article

Thermodynamics of interaction of meso-tetra-(4-Noxyethylpyridyl) porphyrin and its Cu(II)- and Co(II)- containing derivatives with A and B forms of DNA

Ani A. Avetisyan, Ishkhan V. Vardanyan, Yeva B. Dalyan

Journal of Porphyrins and Phthalocyanines 2017 731-738

Article

Two-photon microscopy imaging of oxidative stress in human living erythrocytes.

GOHAR TSAKANNOVA, ELINA ARAKELOVA, VIOLETTA AYVAZYAN, ANNA AYVAZYAN, STEPAN TATIKYAN,

ROUBEN AROUTIOUNIAN, YEVA DALYAN, SAMVEL HAROUTIUNIAN, VASIL TSAKANOV, ARSEN ARAKELYAN

BIOMEDICAL OPTICS EXPRESS 2017 5834-5846

Article

AREAL low energy electron beam applications in life and materials sciences.

V.M. Tsakanov, R.M. Aroutiounian, G.A. Amatuni, L.R. Aloyan, L.G. Aslanyan, V.Sh. Avagyan, N.S. Babayan,

V.V. Buniatyan, Y.B. Dalyan, H.D. Davtyan, M.V. Derdzian, B.A. Grigoryan, N.E. Grigoryan, L.S. Hakobyan,

S.G.Haroutyunian, V.V. Harutiunyan, K.L.Hovhannesyan, V.G.Khachatryan, N.W.Martirosyan, G.S. Melikyan, A.G.Petrosyan, V.H.Petrosyan, A.A.Sahakyan, V.V.Sahakyan, A.A.Sargsyan, A.S.Simonyan, S.Sh.Tatikyan, G.V.Tsakanova, E.Tsovyanyan, A.S.Vardanyan, V.V.Vardanyan, A.S.Yeremyan, H.N.Yeritsyan, G.S.Zanyan

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment
2016 248-253

<http://www.journals.elsevier.com/nuclear-instruments-and-methods-in-physics-res...>

Article

New Porphyrins/Calf Thymus DNA Complexes. Their Thermostability

Lusine ALOYAN, Yeva DALYAN, Aleksey GOGOLEV

Advanced Materials Research 2015 554-558

Article

THERMODYNAMICS OF INTERACTIONS OF CoTOEPyP4 PORPHYRIN WITH A-DNA.

A.A. Avetisyan, Ye.B. Dalyan

Proceedings of the YSU B: Chemical and Biological Sciences 2014 40-45

<http://www.ysu.am/science/hy/journals>

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

EVALUATION OF ERRORS IN DETERMINATION OF DNA MELTING CURVE REGISTERED WITH DIFFERENTIAL SCANNING CALORIMETRY

D.Y. LANDO, I.E. GRIGORYAN, A.S. FRIDMAN, E.N. GALYUK, Y.B. DALYAN, S.G. HAROUTIUNIAN

Հայաստանի կենսաբանական հանդես 2013 6-12

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

COMPARATIVE ANALYSIS OF THE EFFECTS OF PLATINUM COMPOUNDS ON THERMOSTABILITY OF DNA

I. E. GRIGORYAN, Ye. B. DALYAN, S. G. HAROUTIUNIAN

Proceedings of the YSU A. Physical and Mathematical Sciences 2011 52-57

Article

Microcalorimetric Investigation of DNA, poly(dA)poly(dT) and poly[d(A-C)]poly[d(G-T)]

Melting in the Presence of Water Soluble (Meso tetra (4 N oxyethylpyridyl) Porphyrin) and its Zn Complex

J. Monaselidze, Majagaladze, Sh. Barbakadze, D. Khachidze, M. Gorgoshidze, Y. Kalandadze,
S. Haroutiunian, Y. Dalyan, V. Vardanyan
Journal of Biomolecular Structure and Dynamics 2008 419-424

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

The comparative study of H₂TOEPyP₄ and CoTOEPyP₄ porphyrins with A-DNA

A. Avetisyan, Y. Dalyan

Conference

The comparative study of CuTOEPyp₄-porphyrin with A- and B-forms of DNA

A.A.Avetisyan, Y.B.Dalyan

Conference

Development of anticancer drug transporter on base of gold nanoparticles

L.R.Aloyan, Y.B.Dalyan

Conference

The investigation of sodium-induced G-quadruplex stability and thermodynamics in urea solution

L.G.Aslanyan, I.V.Vardanyan, Y.B.Dalyan

Conference

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

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

Conference

The DNA Damage Induced by Higher Energy Electrons in Presence of Porphyrins

L. R. Aloyan, L.G. Aslanyan, Y. B. Dalyan

Conference

High energy electron beam radiation influence on DNA in the presence of porphyrins

L.R. Aloyan, L.G. Aslanyan, Y.B. Dalyan

Conference

The influence of CuTOEPyP₄ porphyrin on DNA damage induced by high energy electron beam radiation.

L. R. Aloyan, Y. B. Dalyan, S.G Haroutiunian

Conference

The influence of FeTOEPyP₄ porphyrins on DNA damage induced by high energy electron beam radiation.

L.R. Aloyan, Y.B. Dalyan, S.G. Haroutiunian

Conference

INFLUENCE OF CATION PORPHYRINES ON DNA DAMAGE DURING ELECTRON BEAM IRRADIATION

L.R. Aloyan, Y.B. Dalyan, S.G Haroutiunian

Conference

Bessel Beam Assisted Photovoltaic Trapping of Micro/nanoobjects on a Lithium Niobate Crystal

L. Aloyan, Y. Dalyan, L. Tsarukyan, A. Badalyan, R. Drampyan

Conference

Optical Techniques for the Study of DNA-porphyrin Interactions

L. Aloyan, Y. Dalyan

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

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

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