

Lusine Rafik Aloyan

Institute of Physics

Chair of Condensed Matter Physics

Associate professor

☎ 29-30

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ℝ⁶ 

Education

Institution	Yerevan State University
Faculty	Molecular Physics
Date	2002 - 2006
Degree name	PhD student

Institution	Yerevan State University
Faculty	Physics
Date	2000 - 2002
Degree name	Masters

Institution	Yerevan State University
Faculty	Physics
Date	1996 - 2000
Degree name	Bachelor

Scientific Rank/degree

Institution	Yerevan State University
Date	2008
Degree name	Postgraduate
Scientific Supervisor	Yeva Dalyan
Research Topic	The role of side substituents in the complex formation of pyridyl porphyrins with DNA.

Language skills

English Русский

Work experience

Institution	Yerevan State University
Period of time	2024 till now
Rank/degree	Associate Professor

Article

Investigating the impact of metalloporphyrins on DNA damage during electron beam irradiation

A. Avetisjan, L. Mkrtchyan, S. Khosrovyan, L. Aloyan

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment
2025 170328

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

Enhanced DNA damage induced by ultrashort electron beams in the presence of a Cu-containing porphyrin

L. Aloyan, H. Margaryan, P. Karataev

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment
2024 169099

Manual

Պարոպր-կծիկ անցումը ՂՆԹ-ի մոլեկուլում

Լուսինե Ալոյան

2024 50

Article

Spectral Study of the Binding of TMetAlPyP3 and ZnTMetAlPyP3 Porphyrins to DNA

L. R. Aloyan, A. A. Avetisyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 99-103

Article

Influence of Cation Porphyrins on DNA Damage during Irradiation by X-rays

L. Aloyan, A. Avetisyan, V. Arakelyan, H. Margaryan

Journal of Physics: Conference Series 2023 012009

Article

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

Lusine Aloyan, Yeva Dalyan, Lusine Tsarukyana, 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,

A. Movsisyan, A. Saharian, A. Shahbazyan, A. Baldin, 37

Article

Formation of Parallel X-ray Beams with Controllable Quantity and Distances

T.R. Muradyan, E.H. Bagdasaryan, S.M. Petrosyan, H.H. Samsonyan, L.R. Aloyan, A.V. Shahverdyan,

V.R. Kocharyan

Armenian Journal of Physics 2020 175-179

Article

Focusing of X-Rays inside a single crystal under the temperature gradient

L. R. Aloyan, V. V. Margaryan, K. T. Hayrapetyan, S. N. Noreyan, V. A. Khachatryan, A. A. Kiziridi

Journal of Contemporary Physics (Armenian Academy of Sciences) 2017 264-270

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.Hovhannesian, 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.Tsovyan, 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

X-ray diffraction method for determination of interplanar spacing and temperature distribution in crystals under an external temperature gradient

V. R. Kocharyan, A. S. Gogolev, A. E. Movsisyan, A. H. Beybutyan, S. G. Khlopuzyan, L. R. Aloyan

Journal of Applied Crystallography 2015 853-856

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>

Conference

Development of anticancer drug transporter on base of gold nanoparticles

L.R.Aloyan, Y.B.Dalyan

Conference

INFLUENCE OF PORPHYRINS ON DNA DAMAGE INDUCED BY HIGHER ENERGY ELECTRONS

L.R. Aloyan

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

The DNA Damage Induced by X-Ray Irradiation in the Presence of Porphyrins

L.R. Aloyan, H.G. Margaryan

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

Влияние мультипликативного шума на выходной сигнал ДНК-биосенсора

Алоян Л., Аракелян В.Б., Парсаданян М.А., Вардеванян П.О.

Conference

Influence of Cation Porphyrins on DNA Damage during Irradiation by X-rays

L.R. Aloyan, A.A. Avetisyan, V.B. Arakelyan, H.G. Margaryan

Conference

Ionizing radiation effects on biological molecules

L.R. Aloyan

Conference

The Influence of Porphyrins on DNA Damage Induced by Electron Beam

L. Aloyan, V. Arakelyan, A. Avetisyan, H. Margaryan

Conference

The investigation of irradiation effect on DNA/cisplatin complexes in presence of AgTOEPyP4 Porphyrin by absorption spectroscopy method

Ani Avetisyan, Lusine Mkrtchyan, Lusine Aloyan

Conference

Investigation of irradiated DNA/porphyrin complexes by optical methods

Lusine Aloyan, Ani Avetisyan

Conference

Investigating the Impact of Metalloporphyrins on DNA Damage During Eletron Beam Irradiation

A. Avetisyan, L. Aloyan, L. Mkrtchyan, S. Khosrovyan
