

Կենսաբանության գիտահետազոտական ինստիտուտ  
Ընդհանուր և մոլեկուլային գենետիկայի լաբորատորիա  
Ավագ գիտաշխատող

## 🌐 Լեզուների իմացություն

Հայերեն English Русский

## 📖 Հրատարակումներ

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### **DNA DAMAGE INDUCED BY ULTRASHORT PULSED ELECTRON BEAM IRRADIATION IN HUMAN CANCER AND NORMAL CELLS**

Alisa Manukyan, Nelly Babayan, Lusine Khondkaryan, Ruzanna Grigoryan, Natalya Sarkisyan, Tigran Harutyunyan, Bagrat Grigoryan, Rouben Aroutiounian

ARMENIAN MEETING Climate Changes: Adaptation Yerevan, March 2728, 2023 ABSTRACTS PAPERS BY YOUNG SCIENTISTS  
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### **Datasets Construction and Development of QSAR Models for Predicting Micronucleus In Vitro and In Vivo Assay Outcomes**

Lusine Khondkaryan, Ani Tevosyan, Hayk Navasardyan, Hrant Khachatryan, Gohar Tadevosyan, Lilit Apresyan, Gayane Chilingaryan, Zaven Navoyan, Helga Stopper, Nelly Babayan  
Toxics 2023 785

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### **Screening of phytochemicals, toxicities, and activities of three Dillenia species**

Pornnarong Siripiyasing, Kittiya Silawong, Tikumporn Thooptianrat, Runglawan Sudmoon, Nelly Babayan, Lusine Khondkaryan, Lilit Apresyan, Tawatchai Tanee, Arunrat Chaveerach  
Journal of Herbmed Pharmacology 2022 339-347

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### **Incidence and Risk Factors of Acute Leukemias in Armenia: A Population-Based Study**

Lusine Khondkaryan, Diana Andriasyan, Yervand Hakobyan, Ezgi Eylül Bankoglu, Rouben Aroutiounian, Helga Stopper, Nelly Babayan  
Asian Pacific journal of cancer prevention 2022 3869-3875

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### **Improving VAE based molecular representations for compound property prediction**

Ani Tevosyan, Lusine Khondkaryan, Hrant Khachatryan, Gohar Tadevosyan, Lilit Apresyan, Nelly Babayan, Helga Stopper, Zaven Navoyan  
Journal of Cheminformatics 2022 69

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**Increased Yield of Residual  $\gamma$ H2AX Foci in p53-Deficient Human Lung Carcinoma Cells Exposed to Subpicosecond Beams of Accelerated Electrons**

N. Yu. Vorobyeva, N. S. Babayan, B. A. Grigoryan, A. A. Sargsyan, L. G. Khondkaryan, L. S. Apresyan, A. K. Chigasova, E. I. Yashkina, D. V. Guryev, S. M. Rodneva, A. A. Tsishnatti, Yu. A. Fedotov, R. M. Arutyunyan, A. N. Osipov

БЮЛЛЕТЕНЬ ЭКСПЕРИМЕНТАЛЬНОЙ БИОЛОГИИ И МЕДИЦИНЫ (BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE)  
2022 760-763

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**Helix pomatia albumen gland water soluble protein extract as powerful antiaging agent**

Nelly Babayan, Gohar Tsakanova, Violetta Ayvazyan, Elina Arakelova, Anna Ayvazyan, Stepan Tatikyan, Laura Djavadovna, Ruzanna Grigoryan, Natalya Sargsyan, ArsenArakelyan

Experimental Gerontology 2021 111244

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**КОЛОНИЕОБРАЗУЮЩАЯ СПОСОБНОСТЬ И ОСТАТОЧНЫЕ ФОКУСЫ БЕЛКОВ РЕПАРАЦИИ ДНК В ФИБРОБЛАСТАХ ЛЁГКИХ ЧЕЛОВЕКА, ОБЛУЧЁННЫХ СУБПИКОСЕКУНДНЫМИ ПУЧКАМИ УСКОРЕННЫХ ЭЛЕКТРОНОВ**

Н.С.Бабаян, Д.В.Гурьев, Н.Ю.Воробьева, Б.А.Григорян, Г.Л.Тадевосян, Л.С.Апресян, А.К.Чигасова, Е.И.Яшкина, С.М.Роднева, А.А.Цишнатти, Ю.А.Федотов, Н.К.Саркисян, А.Т.Манукян, Р.М.Арутюнян, А.Н.Осипов

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**Low Repair Capacity of DNA Double-Strand Breaks Induced by Laser-Driven Ultrashort Electron Beams in Cancer Cells**

Nelly Babayan, Natalia Vorobyeva, Bagrat Grigoryan, Anna Grekhova, Margarita Pustovalova, Sofya Rodneva, Yuriy Fedotov, Gohar Tsakanova, Rouben Aroutiounian, Andreyan Osipov

International Journal of Molecular Sciences 2020 9488

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**Genotoxic potential of selected medicinal plant extracts in human whole blood cultures**

Babayan Nelly, Harutyunyan Karina, Balayan Karine, Tadevosyan Gohar, Hayrapetyan Manush, Musayelyan Ruzanna, Grigoryan Ruzanna, Sarkisyan Natalya, Khondkaryan Lusine

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**Ochratoxin A induces global DNA hypomethylation and oxidative stress in neuronal cells in vitro**

Nelly Babayan, Gohar Tadevosyan, Lusine Khondkaryan, Ruzanna Grigoryan, Natalya Sarkisyan, Rouben Haroutiounian, Helga Stopper

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**Laser Driven Ultrashort Pulsed Electron Beam Radiation at Doses of 0.5 and 1.0 Gy Induces Apoptosis in Human Fibroblasts**

Nelly Babayan, Bagrat Grigoryan, Lusine Khondkaryan, Gohar Tadevosyan, Natalya Sarkisyan, Ruzanna Grigoryan, Lilit Apresyan, Rouben Aroutiounian, Natalia Vorobyeva, Margarita Pustovalova, Anna Grekhova, Andreyan N. Osipov  
International Journal of Molecular Sciences 2019 5140

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**Радиозащитный эффект креатина при повреждении ДНК мононуклеарных клеток периферической крови и адаптационные возможности креатин-креатинкиназной системы мозга и печени крыс**

Нерсесова Л.С., Петросян М.С., Бабаян Н.С., Тадевосян Г.Л., Хондкарян Л.Г., Акопян Ж.И.

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**Gender differences in DNA damage/repair after laser-generated ultrafast electron beam irradiation**

Babayan N, Grigoryan B, Hovhannisyan G, Tadevosyan G, Khondkaryan L, Grigoryan R, Sarkisyan N,

Aroutiounian R

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**Screening of phytochemicals and toxicity of medicinal plants, Dillenia species, reveals potential natural product resources**

Tikumporn Thooptianrat, Arunrat Chaveerach, Runglawan Sudmoon, Tawatchai Tanee, Thomas Liehr,

Nelli Babayan

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**Dose-rate effect of ultrashort electron beam radiation on DNA damage and repair in vitro**

Nelly Babayan, Galina Hovhannisyan, Bagrat Grigoryan, Ruzanna Grigoryan, Natalia Sarkisyan,

Gohar Tsakanova, Samvel Haroutiounian, Rouben Aroutiounian

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**Comparative analysis of individual chromosome involvement in micronuclei induced by mitomycin C and bleomycin in human leukocytes.**

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**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. Derdzyan, B.A.Grigoryan, N.E.Grigoryan, L.S.Hakobyan,

S.G.Haroutyounian, V.V. Harutiunyan, K.L.Hovhannesyan, V.G.Khachatryan, N.W.Martirosyan,

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S.Sh.Tatikyan, G.V.Tsakanova, E.Tsovyan, A.S.Vardanyan, V.V.Vardanyan, A.S.Yeremyan, H.N.Yeritsyan,

G.S.Zanyan

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**Synthesis, characterization and toxicity studies of pyridinecarboxaldehydes and L-tryptophan derived Schiff bases and corresponding copper (II) complexes**

Malakyan M, Babayan N, Grigoryan R, Sarkisyan N, Tonoyan V, Tadevosyan D, Matosyan V,

Aroutiounian R, Arakelyan A

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**Cell viability and DNA damage in MRC5 and HeLa cell lines after histone H1 knockout by CRISPR-Cas9 genome editing technology**

Hovhannisyan G, Aroutiounian R, Harutyunyan T, Babayan N

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**Influence of aflatoxin B1 on copy number variants in human leukocytes in vitro.**

Harutyunyan T, Hovhannisyan G, Babayan N, Othman MA, Liehr T, Aroutiounian R

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**PROTECTIVE EFFECTS OF SCHIFF BASE CYCLIC AMINO ACID DERIVATIVES AGAINST MYCOTOXINS GENO- AND CYTOTOXICITY**

Tigran HARUTYUNYAN, Galina HOVHANNISYAN, Nelli BABAYAN, Thomas LIEHR, Arsen ARAKELYAN,

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**New doxorubicin nanosize composites' anticancer activity in vitro and in vivo**

Babayan N, Apresyan L, Harutyunyan T, Grigoryan S, Arakelova E

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Angela A. Sargsyan, Sona V. Galstyan, Elen A. Hakobyan, Diana H. Vardanyan, Areg Galstyan,

Lusine H. Khondkaryan, Nelli S. Babayan

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**Genetic effects: DNA radiation damage and repair**

R. Aroutiounian, G. Hovhannisyan, B. Grigoryan, G. Tsakanova, S. Haroutiunian, T. Harutyunyan,

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**Neurotoxicity and epigenetic effects of ochratoxin a in vitro**

Nelly Babayan, Gohar Tadevosyan, Lusine Khondkaryan, Ruzanna Grigoryan, Natalya Sarkisyan, Rouben Aroutiounian, Helga Stopper

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*Գիտաժողովի նյութ*

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Harutyunyan Tigran, Hovhannisyan Galina, Babayan Nelli, Arakelyan Arsen, Aroutiounian Rouben

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**Оценка повреждений и репарации ДНК при облучении сверхкороткими импульсами ускоренных электронов.**

Арутюнян Р.М., Оганесян Г.Г., Григорян Б.А., Цаканова Г.В., Арутюнян С.Г., Арутюнян Т.А., Бабаян Н.С.

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**DNA double-strand break repair efficiency in cancer cells exposed to laser-driven ultrashort electron beams**

Andreyan Osipov, Nelly Babayan, Natalia Vorobyeva, Bagrat Grigoryan, Anna Chigasova-Grekhova, Margarita Pustovalova, Sofya Rodneva, Yuriy Fedotov, Gohar Tsakanova, Rouben Aroutiounian

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Tsakanova G, Karalyan Z, Babayan N, Arakelova E, Ayvazyan V, Ayvazyan A, Tatikyan S, Grigoryan B

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**Neuronal cell lines as a model to investigate ochratoxin a neurotoxicity**

Babayan N, Grigoryan R, Sarkisyan N, Malakyan M, Stopper H, Aroutiounian R

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**Genetic effects of ultrashort pulsed electron beam irradiation - 7 years of joint experience**

Rouben Aroutiounian, Tigran Harutyunyan, Andrean Osipov, Natalya Vorobyeva, Galina Hovhannisyan, Anzhela Sargsyan, Bagrat Grigoryan, Samvel Haroutiounian, Thomas Liehr, Nelly Babayan

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**Differences in DNA Damage and Repair in Human Cancer and Normal Cells after Ultrashort Pulsed Electron Beam Irradiation**

Nelly Babayan

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