

## Կենսաբանության գիտահետազոտական ինստիտուտ

Ընդհանուր և մոլեկուլային գենետիկայի լաբորատորիա  
Ավագ գիտական աշխատող

## 🌐 Լեզուների իմացություն

Հայերեն English Русский

## 📖 Հրատարակումներ

Հոդված

### **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 27-28, 2023 ABSTRACTS PAPERS BY YOUNG SCIENTISTS  
2023 11-14

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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 Herbmед Pharmacology 2022 339-347

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

Lusine Khondkaryan, Diana Andreasyan, 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 Khachatrian, Gohar Tadevosyan, Lilit Apresyan,

Nelly Babayan, Helga Stopper, Zaven Navoyan

Journal of Cheminformatics 2022 69

Հոդված

### **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

Հոդված

**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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Հոդված

**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

БЮЛЛЕТЕНЬ ЭКСПЕРИМЕНТАЛЬНОЙ БИОЛОГИИ И МЕДИЦИНЫ (BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE)  
2021 30-33

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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

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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

Journal of Herbmed Pharmacology 2019 160-162

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Հոդված

**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 Apresian, Rouben Aroutiounian, Natalia Vorobyeva, Margarita Pustovalova, Anna Grekhova, Andreyan N. Osipov

International Journal of Molecular Sciences 2019 5140

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Հոդված

**Радиозащитный эффект креатина при повреждении ДНК моноклеарных 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.

Radiation and Risk (Радиация и риск) 2019 119-131

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

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

Aroutiounian R

International Journal of Radiology & Radiation Therapy 2018 85-86

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Հոդված

**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 Hovhannisyanyan, Bagrat Grigoryan, Ruzanna Grigoryan, Natalia Sarkisyan,

Gohar Tsakanova, Samvel Haroutiunian, Rouben Aroutiounian

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

Hovhannisyanyan G, Aroutiounian R, Babayan N, Harutyunyan T, Liehr T

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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. Derdzian, B.A.Grigoryan, N.E.Grigoryan, L.S.Hakobyan,

S.G.Haroutyuniyan, V.V. Harutiunyan, K.L.Hovhannesyanyan, 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,

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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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Գիտաժողովի նյութ

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

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

Rouben AROUTIOUNIAN, Margarita MALAKYAN

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Գիտաժողովի նյութ

**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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Գիտաժողովի նյութ

**Photodynamic activity and structure/activity relationship of new porphyrins in vitro as potential photosensitizers for application in photodynamic therapy of cancer**

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

Lusine H. Khondkaryan, Nelli S. Babayan

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Գիտաժողովի նյութ

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

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

N. Babayan

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Գիտաժողովի նյութ

**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

**The genotoxic and cytotoxic effects of ochratoxin a and t-2 toxin in rats bone marrow and**

## **blood cells**

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

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Գիտաժողովի նյութ

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

Արությունյան Ք.Մ., Օգանեսյան Գ.Գ., Գրիգորյան Բ.Ա., Շահանույան Գ.Յ., Արությունյան Տ.Գ., Արությունյան Տ.Ա.,

Բաբայան Ն.Տ.

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Գիտաժողովի նյութ

### **Кинетика репарации ДНК и эпигенетические изменения при облучении сверхкороткими импульсами ускоренных электронов**

Արությունյան Ք.Մ., Օգանեսյան Գ.Գ., Գրիգորյան Բ.Ա., Արությունյան Տ.Ա., Բաբայան Ն.Տ.

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Գիտաժողովի նյութ

### **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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### **Biomedical applications of ultrafast beams: status and plans**

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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Գիտաժողովի նյութ

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

Rouben Aroutiounian, Tigran Harutyunyan, Andreyan Osipov, Natalya Vorobyeva, Galina Hovhannisyany,

Anzhela Sargsyan, Bagrat Grigoryan, Samvel Haroutiounian, Thomas Liehr, Nelly Babayan

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Գիտաժողովի նյութ

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

Nelly Babayan

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