

Babayan Samvel Nelly

✉ nellybabayan@ysu.am

Research Institute of Biology

Laboratory of General and Molecular Genetics

Senior researcher

🌐 Language skills

Հայերեն English Русский

📖 Publications

Article

Enhancing Chemical-Induced Human Carcinogenic Risk Evaluation through Advanced AI Technologies

Nelly Babayan, Helga Stopper, Lusine Khondkaryan, Ani Tevosyan, Gohar Tadevosyan, Lilit Apresyan, Lusine Adunts, Zaven Navoyan

Proceedings MDPI 2024 12

Article

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

Article

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

Article

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 Herbmec Pharmacology 2022 339-347

Article

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

Lusine Khondkaryan, Diana Andreevyan, Yervand Hakobyan, Ezgi Eylül Bankoglu, Rouben Aroutiounian, Helga Stopper, Nelly Babayan

Asian Pacific journal of cancer prevention 2022 3869-3875

Article

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

Article

Increased Yield of Residual γ 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

Article

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

Article

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

Article

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

Article

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 Herbmед Pharmacology 2019 160-162

Article

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
MYCOTOXIN RESEARCH 2019 1-9

Article

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

Article

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., Хондкярян Л.Г., Акопян Ж.И.

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

Article

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

Article

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

Journal of Food Biochemistry 2017 e12363, 9

<http://onlinelibrary.wiley.com/doi/10.1111/jfbc.2017.41.issue-3/issuetoc>

Article

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 Haroutiounian, Rouben Aroutiounian

Journal of Radiation Research 2017 894-897

<https://academic.oup.com/jrr>

Article

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

Molecular Cytogenetics 2016 7

<https://molecularcytogenetics.biomedcentral.com/>

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. Derdzyan, B.A.Grigoryan, N.E.Grigoryan, L.S.Hakobyan, S.G.Harutyunian, 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

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

F1000Research 2016 1921

<https://f1000research.com/>

Article

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

Hovhannesian G, Aroutiounian R, Harutyunyan T, Babayan N

Proceedings of the YSU B: Chemical and Biological Sciences 2016 64-66

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

Article

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

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

Molecular Cytogenetics 2015 25; 5

<https://molecularcytogenetics.biomedcentral.com/>

Conference

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

Conference

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

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

Conference

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

Conference

Genetic effects: DNA radiation damage and repair

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

N. Babayan

Conference

Neurotoxicity and epigenetic effects of ochratoxin a in vitro

Nelly Babayan, Gohar Tadevosyan, Lusine Khondkaryan, Ruzanna Grigoryan, Natalya Sarkisyan,

Rouben Aroutiounian, Helga Stopper

Conference

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

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

Conference

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.

Conference

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

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

Conference

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

Conference

Biomedical applications of ultrafast beams: status and plans

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

Conference

Neuronal cell lines as a model to investigate ochratoxin a neurotoxicity

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

Conference

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

Rouben Aroutiounian, Tigran Harutyunyan, Andreev Osipov, Natalya Vorobyeva, Galina Hovhannisyan,

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

Conference

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

Nelly Babayan
