

# Inga Levon Bazukyan

## Faculty of Biology

Chair of Biochemistry, Microbiology, and Biotechnology  
Associate professor

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## 🎓 Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology
<b>Date</b>	1992 - 1997
<b>Degree name</b>	Qualified specialist

## 🎓 Scientific Rank/degree

<b>Institution</b>	Yerevan State University
<b>Date</b>	2007
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences
<b>Scientific Supervisor</b>	Արթուր Համբարձումյան
<b>Research Topic</b>	COMPARATIVE CHARACTERIZATION AND POSSIBLE APPLICATION OF PHENYLALANINE – AMMONIA-LYASES OF PLANT (HELIANTHUS TUBEROSUS L.) AND YEAST (RHODOTORULA AURANTIACA KM-1) ORIGIN

<b>Institution</b>	Yerevan State University
<b>Date</b>	2015
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Biological sciences

## 🌐 Language skills

Հայերեն Russian English

## 💼 Work experience

<b>Institution</b>	Astghik Medical Center, Yerevan
<b>Period of time</b>	2019 - 2021
<b>Rank/degree</b>	Medical Laboratory Scientist

<b>Institution</b>	University of Traditional Medicine of Armenia, Yerevan
<b>Period of time</b>	2016 - 2020

<b>Rank/degree</b>	Invited Professor
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2015 till now
<b>Rank/degree</b>	Associate Professor
<b>Institution</b>	Yerevan State University, Yerevan
<b>Period of time</b>	2008 - 2015
<b>Rank/degree</b>	Assistant of Professor
<b>Institution</b>	«Vitamax E» PC, Yerevan
<b>Period of time</b>	2008 - 2015
<b>Rank/degree</b>	Senior microbiologist
<b>Institution</b>	Yerevan State University, Yerevan
<b>Period of time</b>	2006 - 2009
<b>Rank/degree</b>	Scientific Researcher, Lecturer
<b>Institution</b>	Yerevan State University, Yerevan
<b>Period of time</b>	1997 - 2006
<b>Rank/degree</b>	Senior Researcher

## **Scientific interests**

- biotechnology
- microbiology
- biochemistry

## **Participation in international conferences and seminars**

<b>22/06/2020</b>	ASM Microbe 2020 ASM United States of America (the)
<b>29/11/2020 - 30/11/2020</b>	V International Conference of Biotechnology and Health. SCIENTIFIC AND PRODUCTION CENTER "ARMBIOTECHNOLOGY" NAS RA Armenia
<b>20/11/2021 - 22/11/2021</b>	«BIOTECHNOLOGY: Science and Practice. Innovation and Business» SCIENTIFIC AND PRODUCTION CENTER "ARMBIOTECHNOLOGY" NAS RA Armenia

**29/09/2023 -** 31st International Conference of FFC "Functional Foods and Bioactive Compounds: Modern and Medieval Approaches"  
**01/10/2023** Yerevan State University  
Armenia

**09/11/2023 -** International conference "Kliment's day 2023 - 60 year Faculty of Biology  
**11/11/2023** Sofia State University  
Bulgaria

## Membership

**Institution** Biotechnological Armenian Association

**Period of time** 2007 till now

**Institution** Federation of European Microbiological Society

**Period of time** 2006 till now

**Institution** Federation of European Biochemical Society

**Period of time** 2005 till now

**Institution** American Society of Microbiologist

**Period of time** 2013 till now

## Publications

### *Article*

#### **Amplicon-based metagenomic characterization of the microbiome of the traditional “Bieno” cheese produced in North Macedonia**

Inga Bazukyan, Slavica Josifovska, Vilma Posheva, Vesselin V. Doytchinov, Konstantinos Papadimitriou,

Velitchka Gotcheva, Svetoslav G. Dimov

Food Bioscience 2024 103552

### *Article*

#### **Important properties of lactic acid bacteria and their role in industry**

T. Aleksanyan, L.(Lusine) Hakobyan, S. Dimov, T. Haertle, I. Bazukyan

Microbial Essentialism: An Industrial Prospective 2024 1-46

### *Article*

#### **In Silico Probiogenomic Characterization of *Lactobacillus delbrueckii* subsp. *lactis* A4 Strain Isolated from an Armenian Honeybee Gut**

Bazukyan Inga, Georgieva-Miteva D., Velikova T., Dimov S.G.

Insects 2023 1-12

### *Article*

#### **The effects of ultraviolet, gamma- and X-ray irradiation on the growth, antibacterial activity**

## **and radio-protective of Lactobacillus rhamnosus**

I.L.Bazukyan, A.V. Rostomyan, A.G. Hovhannisyan, T.M. Aleksanyan, L.L. Hakobyan, A.M. Dallakyan,

T. Haertle

Letters in Applied Microbiology 2022 1151-1159

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### *Article*

## **Antifungal Activity of Lactic Acid Bacteria Isolates and Their Associations: The Effects of Ca and Mg Divalent Cations**

Lusine Matevosyan, Inga Bazukyan, Armen Trchounian

Current Microbiology 2020 959-966

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### *Manual*

## **ՄՈԼԵԿՈՒԼԱՅԻՆ ՄԱՆՐԵԱԲԱՆՈՒԹՅԱՆ ԼԱԲՈՐԱՏՈՐ ԱՇԽԱՏԱՆՔԵՐ**

Հ.Հ. Փանոսյան, Ա.Ա. Մարգարյան, Ի.Լ. Բազուկյան, Ա.Հ. Թոշոնյան

2020 120

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### *Article*

## **Comparative analysis of the effect of Ca and Mg ions on antibacterial activity of lactic acid bacteria isolates and their associations depending on cultivation conditions**

Lusine Matevosyan, Inga Bazukyan, Armen Trchounian

AMB Express 2019 1-11

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### *Article*

## **Antifungal and antibacterial effects of newly created lactic acid bacteria associations depending on cultivation media and duration of cultivation**

Lusine Matevosyan, Inga Bazukyan, Armen Trchounian

BMC Microbiology 2019 1-8

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### *Article*

## **IDENTIFICATION AND COMPARATIVE CHARACTERIZATION OF NEW LACTIC ACID BACTERIA ISOLATED FROM ARMENIAN DAIRY PRODUCTS BY PHENOTYPIC AND MOLECULAR METHODS**

I.L. Bazukyan

Proceedings of the YSU B: Chemical and Biological Sciences 2018 45-51

<http://ysu.am/science/en/scientific-magazine>

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### *Article*

## **Antifungal activity of lactobacilli isolated from Armenian dairy products: an effective strain and its probable nature**

Inga Bazukyan, Lusine Matevosyan, Anna Toplaghalyan, Armen Trchounian

AMB Express 2018 1-8

<https://amb-express.springeropen.com/>

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### *Article*

## **The effects of different carbon sources on the antifungal activity by lactic acid bacteria**

Anna Toplaghalyan, Inga Bazukyan, Armen Trchounian

Current Microbiology 2017 168-174

<http://www.springer.com/life+sciences/microbiology/journal/284>

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### *Article*

## **Aggregation and Adhesion Activity of Lactobacilli Isolated from Fermented Products In Vitro**

**and In Vivo: a Potential Probiotic Strain**

S. Grigoryan, I. Bazukyan, A. Trchounian

Probiotics and Antimicrobial Proteins 2017 1-8

<http://www.springer.com/chemistry/journal/12602>

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*Article*

**Application of silver nanoparticles and CdSe quantum dots sensitized with of C-like lectin for detection of St. aureus Comparison of various approaches**

Inga L. Bazukyan, Varduh A. Hovhannisyan, Vardan.K. Gasparyan

Talanta 2017 1-16

<http://www.sciencedirect.com/science/journal/00399140?sdc=1>

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*Article*

**ՀԱՅԱՍՏԱՆԻ ԹԹՈՒ ԴՐԱՅՎԱՌԵԴԵԼԻՑ ՄԵԿՈՒՄԱՑՎԱԾ ԿԱԹԱՍԹԵՎԱՅԻՆ ԲԱԿՏԵՐԻԱՆԵՐԻ**

**ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅԱՆ ՕԺՏՎԱԾ ԲԱՂԱԴՐԻՉՆԵՐԻ ՈՐՈՇ ՀԱՏԿՈՒԹՅՈՒՆՆԵՐԸ**

Արշալույս Վերոյան, Ինգա Բազուկյան, Արմեն Թռչունյան

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածոլ 2017 147-156

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*Article*

**Lactobacilli isolated from the Armenian fermented milk product matsoun: growth properties, antibacterial and proteolytic activity and their dependence on pH**

Andranik Keryan, Inga Bazukyan, Armen Trchounian

INTERNATIONAL JOURNAL OF DAIRY TECHNOLOGY 2016 1-10

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1471-0307/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1471-0307/issues)

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*Article*

**ՏԱՐՐԵՐ ԴԵՂԱԲՈՒՅՔՆԵՐԻ ԼՈՒԾԱՄՉԱՆՁՆՆԵՐԻ ԱՉԴԵՑՈՒԹՅՈՒՆ ԿԱԹԱՍԹԵՎՔԻ ՄԵՐԱՆՆԵՐԻ**

**ԹԹՎԱԿՈԱԶԱՄԱՆ ԵՎ ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅԱՆ ՎՐԱ**

Սարգսիկ Հանիսյան, Ինգա Բազուկյան

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածոլ 2015 90-98

<http://www.yssu.am/ssss/hy>

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*Article*

**ISOLATION OF LACTIC ACID BACTERIA WITH BROAD-RANGE ANTIMICROBIAL AND PROTEOLYTIC ACTIVITY FROM ARMENIAN TRADITIONAL DAIRY PRODUCTS**

Yeter Simonyan, Andranik Keryan, Inga Bazukyan

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածոլ 2015 37-42

<http://www.yssu.am/ssss/hy>

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*Article*

**ԿԱԹԱՍԹԵՎԱՅԻՆ ԲԱԿՏԵՐԻԱՆԵՐԻ ՊՐՈՓԻՈՏԻԿ ՀԱՏԿՈՒԹՅՈՒՆՆԵՐԻ ՈՒՍՈՒՄՆԱՄԻՐՈՒԹՅՈՒՆԸ**

Արշալույս Վերոյան, Ինգա Բազուկյան

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածոլ 2015 26-32

<http://www.yssu.am/ssss/hy>

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*Article*

**АНТИМИКРОБНАЯ АКТИВНОСТЬ ХИТОЗАНОВЫХ ПЛЕНОК, МОДИФИЦИРОВАННЫХ ПИРАЗОЛ КАРБОНОВЫМИ КИСЛОТАМИ**

А.Э. Акопян, А.А. Маргарян, О.С. Аттарян, Г.В. Асратян, И.Л. Базукян, О.А. Паносян, А.А. Трчунян

Հայաստանի կենսաբանական հանդես 2015 45-49

*Article*

**Inhibition of Growth and Antimicrobial Activity of New Lactobacilli Strains Isolated From Armenian Dairy Product Matsoun with EDTA in Low Concentrations: Comparative Study with Gram-Positive and Gram-Negative Bacteria**

A.G. Keryan, Y.A. Simonyan, I.L. Bazukyan, A.H. Trchounian

ՀՀ ԳԱԱ գեղուցական 2014 149-155

<http://www.flib.sci.am/eng/Reports/Frame.html>

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*Article*

**Phenotypic characteristics of the new lactobacilli strain isolated from matsoun, the Armenian traditional sour-milk product**

A.G. Keryan, I.L. Bazukyan, Yu.G. Popov, A.H. Trchounian

Գիտաբժշկական հանդես 2014 18-23

<http://nih.am/journal/>

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*Article*

**Բուհական կրթական համակարգում լաբորատոր աշխատանքների իրականացման ժամանակակից մոտեցումները:**

Հ.Հ. Փանոսյան, Ի.Լ. Բազուկյան, Ա.Ա. Մարգարյան, Յու.Գ. Պոպով, Ա.Հ. Թռչունյան

Բնագետ 2014 145-146

<http://www.ystu.am/bnaget>

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*Article*

**Synthesis of amphiphilic, chalcogen-based redox modulators with in vitro cytotoxic activity against cancer cells, macrophages and microbes**

Peng Du, Uma M. Visvanathan, Khairan Khairan, Tomislav Buric, Nathaniel E. B. Saidu, Zhanjie Xu,

Benjamin Hanf, Inga Bazukyan, Armen Trchounian, Frank Hannemann, Ingolf Bernhardt,

Torsten Burkholz, Britta Diesel, Alexandra K. Kiemer, Karl-Herbert Schafer, Mathias Montenarh,

Gilbert Kirsch, Claus Jacob

Medicinal Chemical Communications 2014 25-31

<http://www.rsc.org/journals-books-databases/about-journals/medchemcomm>

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*Manual*

**Մանրէաբանության լաբորատոր աշխատանքներ, ուսումնամեթոդական ձեռնարկ**  
Թռչունյան Ա.Հ., Փանոսյան Հ.Հ., Բազուկյան Ի.Լ., Մարգարյան Ա.Ա., Պոպով Յու.Գ.

2014 316

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*Article*

**Կարևորակային բակտերիաները՝ XXI դարի բուժարարներ**  
Ինգա Բազուկյան, Արմեն Թռչունյան, Լուսինե Մաթևոսյան

Գիտության աշխարհում 2013 44-48

<http://www.ga.isec.am>

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*Article*

**Some properties of antibacterial component of lactic acid bacteria isolated from Armenian dairy products**

I.L. Bazukyan, A.M. Babayan, A. Trchounian

Electronic Journal of Natural Sciences of NAS RA 2013 38-43

*Article*

**The large scale antibacterial, antifungal anti-phage efficiency of Petamcin-A: new multicomponent preparation for skin diseases treatment**

Mikayel Ginovyan, Andranik Keryan, Inga Bazukyan, Petros Ghazaryan, Armen Trchounian

Annals of Clinical Microbiology and Antimicrobials 2012 2-7

<https://ann-clinmicrob.biomedcentral.com/>

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*Article*

**Potential use of lactic acid bacteria for reduction of allergenicity and for longer conservation of fermented foods**

Inga Bazukyan, Yuri G. Popov, Shady El-Ghaish, Aynur Ahmadova, Imen Hadji-Sfaxi,

Kamel Eddine El Mecherfi, Yvan Choiset, Hanitra Rabesona, Mahmoud Sitohy, Akif A. Kuliev,

Fernanda Mozzi, Jean-Marc Chobert, Thomas Haertle

Trends in Food Science & Technology 2011 1-8

<http://www.journals.elsevier.com/trends-in-food-science-and-technology>

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*Article*

**Properties and Survival Under Simulated Gastrointestinal Conditions of Lactic Acid Bacteria Isolated from Armenian Cheeses and Matsuns**

I. Bazukyan, I. Movsesyan, N. Ahabekyan, R. Madoyan, Y. Popov, M. Dalgalarrodo, J. Chobert, T. Haertlé

Biotechnology & Biotechnological Equipment 2010 444-449

<http://www.tandfonline.com/loi/tbeq20#.V4SWt0t97cc>

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*Article*

**Catalytic Properties of Rhodotorula aurantiaca KM-1 Phenylalanine Ammonia-Lyase**

I.L. Bazukyan, A.A. Hambardzumyan, P.V. Tozalakyan, Yu.G. Popov, A.E. Vardanyan

Applied Biochemistry and Microbiology 2009 17-21

<http://www.springer.com/life+sciences/biochemistry+%26+biophysics/journal/10438>

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*Article*

**Study of antibacterial activity of lactic acid bacteria isolated from different regions of Armenia**

I.L. Bazukyan, A.S. Hakobyan

Electronic Journal of Natural Sciences of NAS RA 2008 18-21

<http://ejns.sci.am>

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*Article*

**Method of the simultaneous determination of L-phenylalanine and L-tyrosine by means phenylalanine - ammonia-lyase from Rhodotorula aurantiaca KM-1**

I.L. Bazukyan, A.A. Hambardzumyan, S.A. Andreasyan, Yu.G. Popov

Biological Journal of Armenia 2008 167-174

<http://www.flib.sci.am/eng/Biology/>

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*Article*

**Possibilities of application of Rhodotorula aurantiaca KM-1 phenylalanine — ammonia-lyase in L-phenylalanine synthesis from trans-cinnamic acid**

I.L. Bazukyan

Electronic Journal of Natural Sciences of NAS RA 2007 6-9

*Article*

**Выделение и изучение свойств молочнокислых бактерий из заквасок мацуна различных регионов Армении**

ПАНОСЯН О.А., Базукян И.Л., Акопян А.С.

Proceedings of the YSU B: Chemical and Biological Sciences 2006 149-152

<http://ysu.am/science/en/1465212714>

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*Article*

**Phenylalanine - Ammonia-Lyase of Rhodotorula Aurantiaca: Purification and Primary Characteristics**

I.L. Bazukyan, A.A. Hambardzumyan, A.E. Vardanyan

Biocatalysis and Biocatalytic Technologies 2006 9-21

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*Article*

**L-Фенилаланинի սինթեզը բուսական ֆենիլալանին-ամոնիակ-լիազի (ՖԱԼ) կիրառմամբ Հովկի Փանոսյան, Ինգա Բազուկյան, Ռուզաննա Չարարյան**

Երիտասարդ գիտնականների հոդվածների ժողովածոլ. Բնական գիտություններ 2000 70-73

<http://publishing.ysu.am/hy/1467361089>

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*Conference*

**Antifungal activity of Lactobacillus rhamnosus R-2002 isolated from Armenian dairy products: antifungal component, its probable nature and purification.**

Lusine A. Matevosyan, Inga L. Bazukyan

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*Conference*

**Study of host-microbial interaction of lactic acid bacteria.**

Grigoryan S., Bazukyan I., Grigoryan R., Sarkisyan N., Trchounian A.

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*Conference*

**Antifungal activity of Lactobacillus ramnosus R2002 isolated from Armenian dairy products:**

**Antifungal component, its probable and purification**

Lusine A. Matevosyan, Inga L. Bazukyan, Armen Trchounian

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*Conference*

**Controlled and uncontrolled pH as a tool to control the biological activity of two new**

**lactobacilli strains isolated from Armenian dairy product matsoun**

A. Keryan, I. Bazukyan, A. Trchounian

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*Conference*

**New lactic acid bacteria strains isolated from Armenian traditional dairy products with great potential for dairy production**

Y. Simonyan, A. Keryan, I. Bazukyan, A. Trchounian

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*Conference*

**Antibiotic resistant bacteria inhabiting Lake Sevan (ARmenia)**

Hovik Panosyan, Armine Margarayn, Inga Bazukyan, Ekaterine Jaiani, Ekaterine Gabashvili,

Marina Tediashvili

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*Conference*

**Antibiotic resistant environmental bacilli and their bacteriophages isolated from freshwater and marine environments of Georgia and Armenia**

Ekaterine Gabashvili, Nino Janelidze, Elene Didebulidze, Hovik Panosyan, Armine Margaryan,

Inga Bazukyan, George Tservadze, Marina Tediashvili, Ekaterine Jaiani

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*Conference*

**Антиоксидантная активность молочнокислых бактерий выделенных из заквашиваемых пищевых продуктов Армении**

Базукян И.Л.

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*Conference*

**The large scale antimicrobial efficiency of a new multicomponent preparation for skin diseases treatment**

M. Ginovyan, P. Ghazaryan, I. Bazukyan, A. Trchounian

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*Conference*

**СИНТЕЗ И БИОЛОГИЧЕСКАЯ АКТИВНОСТЬ НЕКОТОРЫХ ПРОИЗВОДНЫХ 1,2,4- И 1,2,3-ТРИАЗОЛОВ**

А.С. Галстян, Т.В. Kochikyan, И.Л. Базукян, С.М. Бадалян, Т.А. Шахбазян

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*Conference*

**GUT microbiota and probiotics: In vitro and in vivo hydrophobicity and adhesion of lactic acid bacteria**

I. Bazukyan, T. Aleksanyan, A. Trchounian

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*Conference*

**The effect of different types of irradiation on the lactic acid bacteria isolated from Armenian dairy products**

Inga L. Bazukyan

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*Conference*

**Antibiotic Resistance of Bacteria: Novel Findings on Antimicrobial Agents and Activation of Resistance Genes**

I. Bazukyan, D. Soghomonyan, A. Margaryan, N. Sahakyan, M. Petrosyan, A. Trchounian

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*Conference*

**New lactic acid bacteria isolated from Armenian honeybee's gastrointestinal tract**

Bazukyan I., Petrosyan A., Sarukhanyan A., Trchounian A.

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*Conference*

**EFFECT OF CA AND MG IONS ON ANTIMICROBIAL ACTIVITY OF LACTIC ACID BACTERIA COMMUNITIES**

I. Bazukyan, A. Trchounian, L. Matevosyan

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*Conference*

**Effects of Different Metal Ions and Vitamins on Antibacteriophage Activity of Lactic Acid Bacteria**

I. Bazukyan

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*Conference*

**A carbon source dependence of the antibacterial activity of lactic acid bacteria isolated from the intestinal tract of Armenian honeybees**

I. Bazukyan, A. Arshakyan, A. Trchounian

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*Conference*

**Estimation of the effects of Ca and Mg ions on antifungal activity of lactic acid bacteria associations**

I. Bazukyan, L. Matevosyan, A. Trchounian

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*Conference*

**Electrophoretic mobility of lactic acid bacteria**

I.L. Bazukyan, A.K. Vardanyan, A.H. Trchounian

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*Conference*

**Antibacterial and cytotoxic effects of biological liquids of Armenian scorpions.**

I. Bazukyan, S. Hakobyan, T. Ghrejyan, G. Karagyan, M. Kalashian, A. Trchounian

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*Conference*

**Impact of different doses of ultrashort pulsed electron beam irradiation on biological properties of lactic acid bacteria isolated from Armenian dairy product**

I. Bazukyan, L. Matevosyan, A. Rostomyan, H. Davtyan, B. Grigoryan, G. Tsakanova

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*Conference*

**BIOLOGICAL ACTIVITY OF ARMENIAN HONEY BEES' VENOM AND LACTIC ACID BACTERIA ISOLATED FROM HONEYBEES' GUT**

Anahit Sahakyan, Nelli Vardazaryan, Mery Qocharyan, Nikolay Avtandilyan, Inessa Semerjyan,

Inga Bazukyan

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*Conference*

**METAGENOMIC STUDY OF "BIENO SIRENE" CHEESE FROM NORTH MACEDONIA**

SVETOSLAV G. DIMOV, SLAVICA JOSIFOVSKA, VILMA POSHEVA, VESSELIN V. DOYTCHINOV,

INGA BAZUKYAN, KONSTANTINOS PAPADIMITRIOU, VELITCHKA GOTCHEVA

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*Conference*

**ANTAGONISTIC ACTIVITY OF LACTIC ACID BACTERIA ISOLATED FROM VAGINAL MICROBIOME OF ARMENIAN DIFFERENT ETHNIC GROUPS AGAINST CLINICAL CANDIDA SPECIES**

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