

# Anush Martin Babayan

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## Research Institute of Biology

Laboratory of Microbiology, Bioenergetics and Biotechnology

Junior Researcher

## Education

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<b>Institution</b>	YEREVAN STATE UNIVERSITY
<b>Faculty</b>	Faculty of Biology, Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2011 - 2013
<b>Degree name</b>	Masters

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<b>Institution</b>	YEREVAN STATE UNIVERSITY
<b>Faculty</b>	Faculty of Biology, Biology
<b>Date</b>	2007 - 2011
<b>Degree name</b>	Bachelor

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## Work experience

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<b>Institution</b>	YEREVAN STATE UNIVERSITY
<b>Period of time</b>	2023 till now
<b>Rank/degree</b>	lecturer

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<b>Institution</b>	YEREVAN STATE UNIVERSITY
<b>Period of time</b>	2013 - 2023
<b>Rank/degree</b>	senior laboratory assistant

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## Scientific interests

- Biochemistry and Biotechnology
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## Publications

*Article*

**The potential of blackcurrant, fig, and grape leaf extracts in the development of new preparations for overcoming antibiotic resistance and enhancing the efficacy of chemotherapeutic agents**

Mikayel Ginovyan, Silvard Tadevosyan, Anahit Shirvanyan, Anush Babayan, Barbara Kusznerewicz, Izabela Koss-Mikołajczyk, Marika Mróz, Agnieszka Bartoszek, Naira Sahakyan

BMC Complementary Medicine and Therapies 2025 1-54

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*Article*

**Origanum vulgare Ethanol Extract Modulates the Activity of Antioxidant Enzymes**

Anush M. Babayan, Naira Zh. Sahakyan

Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry 2025 316–326

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*Article*

**ANTIMICROBIAL ACTIVITY OF ETHANOL EXTRACTS OF RIBES NIGRUM AND RIBES RUBRUM LEAVES**

A.M. Babayan, N.Zh. Sahakyan

Proceedings of the YSU B: Chemical and Biological Sciences 2023 54-62

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*Article*

**The Action Mechanisms, Anti-Cancer and Antibiotic-Modulation Potential of Vaccinium myrtillus L. Extract**

Mikayel Ginovyan, Anush Babayan, Anahit Shirvanyan, Alvard Minasyan, Meri Qocharyan,

Barbara Kusznierevicz, Izabela Koss-Mikołajczyk, Nikolay Avtandilyan, Anne Vejux, Agnieszka Bartoszek,

Naira Sahakyan

Discovery Medicine 2023 590-611

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*Article*

**ANTIMICROBIAL AND ANTIOXIDANT ACTIVITIES OF OCIMUM BASILICUM VAR. PURPUREUM ETHANOL EXTRACT**

A.M. Babayan

Proceedings of the YSU B: Chemical and Biological Sciences 2023 258-268

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*Article*

**THE CHEMICAL COMPOSITION AND ANTIOXIDANT PROPERTIES OF SOME SPECIES OF ARTEMISIA GENUS, REPRESENTED IN ARMENIAN FLORA**

A. M. BABAYAN, M. T. PETROSYAN, N. Zh. SAHAKYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2022 161-168

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*Article*

**Essential oil and ethanol extract of oregano (Origanum vulgare L.) from Armenian flora as natural source of terpenes, flavonoids and other phytochemicals with antiradical, antioxidant, metal chelating, tyrosinase inhibitory and antibacterial activity**

Armenuhi Moghrovyan, Naira Sahakyan, Anush Babayan, Naira Chichoyan, Margarit Petrosyan,

Armen Trchounian

CURRENT PHARMACEUTICAL DESIGN 2019 1809-1816

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*Article*

**Chemical composition and some biological activities of the essential oils from basil Ocimum different cultivars**

Ani Avetisyan, Anahit Markosian, Margarit Petrosyan, Naira Sahakyan, Anush Babayan, Samvel Aloyan,

Armen Trchounian

BMC Complementary and Alternative Medicine 2017 1-8

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

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*Article*

**The radical scavenging activity of some species of Artemisia genus, represented in Armenian flora**

Babayan A., Sahakyan N., Petrosyan M., Trchounian A.

Հայաստանի կենսաբանական հանդես 2017 96-99

<http://biology.asj-oa.am/>

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*Article*

**Amberboa sosnovskyi Iljin in vitro culture obtaining**

M. Petrosyan, N. Sahakyan, A. Babayan, A. Trchounian

Electronic Journal of Natural Sciences of NAS RA 2015 7-10

<http://ejns.sci.am>

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*Article*

**Sizolophus balzamita Lam. մեկուսացված կալուսի ստացման, աճի և նյութափոխանակության որոշ առանձնահատկությունների շուրջ**

Դավթյան Հ., Սահակյան Ն., Բաբայան Ա., Պետրոսյան Մ.

ԵՊՀ ՈԻԳԸ գիտական հոդվածների ժողովածու 2015 56-61

<http://www.ysu.am/sss/hy>

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*Article*

**Hypericum elongatum Ledeb. Մեկուսացված կուլտուրայի միկրոբազմացման առանձնահատկությունները**

Իսաջյան Ս., Սահակյան Ն., Բաբայան Ա., Պետրոսյան Մ.

ԵՊՀ ՈԻԳԸ գիտական հոդվածների ժողովածու 2015 99-105

<http://www.ysu.am/sss/hy>

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*Article*

**Оценка антимикробной и антиоксидантной активностей изолированной культуры Hypericum elongatum Ledeb**

Бабаян А.М., Петросян М.Т., Саакян Н.Ж., Трчунян А. А, Исаджян С.А.

АКТУАЛЬНЫЕ ПРОБЛЕМЫ ГУМАНИТАРНЫХ И ЕСТЕСТВЕННЫХ НАУК 2014 38-41

<http://new.publikacia.net/>

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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

<http://ejns.sci.am>

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*Conference*

**Essential Oils of Basil Plants as Antimicrobial Agents**

M. Petrosyan, A. Avetisyan, A. Markosian, N. Sahakyan, A. Babayan, S. Aloyan, A. Trchounian

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*Conference*

**Essential oil of Origanum vulgare L. as a source with antibacterial activity**

Sahakyan N., Petrosyan M., Moghrovyan A., Chichoyan N., Hovhannisyan N., Babayan A., Mouradyan M,

Trchounian A.

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*Conference*

**Evaluation of antimicrobial and antioxidant activity of isolated culture of St.-John`s wort elongated (Hypericum elongatum LEDEB.)**

Babayan A., Petrosyan M.T, Sahakyan N.Zh., Trchounian A.H.

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*Conference*

**Free radical scavenging activity and total flavonoid content of essential oil and ethanol extracts of *Origanum vulgare* L., represented in Armenian flora**

Mariam Sh. Muradyan, Naira Zh. Sahakyan, Margarit T. Petrosyan, Anush A. Babayan, Armen Trchounian

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*Conference*

**Free radical scavenging activity and total flavonoid content of *Sambucus tigrani* Troitsky, growing in Armenian flora**

A. Babayan, M. Petrosyan, N. Sahakyan, M. Muradyan, A. Trchounian

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*Conference*

**Essential Oil from *Thymus vulgaris* L. as Antimicrobial Agent**

N. Sahakyan, M. Petrosyan, A. Avetisyan, A. Markosyan, S. Aloyan, A. Babayan, A. Trchounian

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*Conference*

***Stizolophus balsamita* Lam. isolated culture extracts as the antioxidant agents**

N. Sahakyan, M. Petrosyan, A. Babayan, A. Trchounian

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*Conference*

**Antimicrobial and antioxidant potential of some plant crude extract**

Margarit Petrosyan, Alvard Minasyan, Anahit Shirvanyan, Anush Babayan, Mikayel Ginovyan,

Naira Sahakyan

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*Conference*

**Prospects for the use of *Ficus carica* L. leave extract as bio-preservative agent**

Anahit Shirvanyan, Alvard Minasyan, Anush Babayan, Armine Moghrovyan, Naira Sahakyan,

Margarit Petrosyan, Karen Trchounian

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*Conference*

**THE OXIDATIVE STRESS AND POSSIBLE PREVENTIVE ACTION OF PLANT BORN POLYPHENOLS**

Anahit Shirvanyan, Anush Babayan, Alvard Minasyan, Margarit Petrosyan, Anna Poladyan,

Naira Sahakyan

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*Conference*

**From agro-bio-waste to application: the power of bilberry aerial part extract as anti-cancer and antibiotic-modulating agent**

N. Sahakyan, M. Ginovyan, A. Babayan, A. Shirvanyan, A. Minasyan, B. Kusznierevicz,

I. Koss-Mikołajczyk, N. Avtandilyan, A. Bartoszek

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*Conference*

**Harnessing plant extracts to overcome antibiotic resistance: leaf extracts of *Ribes nigrum*, *Ficus carica*, and *Vitis vinifera* as resistance modifiers of *E. coli* strains**

M. Ginovyan, A. Shirvanyan, S. Tadevosyan, A. Babayan, B. Kusznierevicz, N. Avtandilyan, A. Bartoszek,

N. Sahakyan

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*Conference*

## **Influence of *Origanum vulgare* extract on *Escherichia coli* metabolism**

Anush Babayan, Naira Sahakyan

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*Conference*

### **Modulation of antibiotic resistance by quercetin and catechins in *E. coli* DH5 $\alpha$ -pUC18 and *E. coli* pARG-25: a potential approach for overcoming antibiotic resistance**

Alvard Minasyan, Aram Aramyan, Silvard Tadevosyan, Anush Babayan, Naira Sahakyan

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*Conference*

### **Modulating antibiotic efficacy: the role of *Teucrium polium* in disrupting bacterial resistance mechanisms**

Silvard Tadevosyan, Anush Babayan, Mikayel Ginovyan, Naira Sahakyan

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*Conference*

### **Antibiotic Activity of Plant Metabolites and Possibilities of Their Application**

Aram Aramyan, Silvard Tadevosyan, Alvard Minasyan, Anush Babayan, Naira Sahakyan

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*Conference*

### **Comprehensive Assessment of the Biological and Chemical Properties of *Ficus carica* Leaf Ethanolic Extract**

Naira Vardanyan, Alvard Minasyan, Silvard Tadevosyan, Anush Babayan, Karen Trchounian,

Naira Sahakyan

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*Conference*

### ***Ocimum Basilicum* Var. *Purpureum* Impact on Bacterial Cell Metabolism**

Anush M. Babayan, Naira Zh. Sahakyan

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*Conference*

### **Antibiotic Potential of *Mentha Arvensis* Extract**

Sona Sargsyan, Silvard Tadevosyan, Anush Babayan, Alvard Minasyan, Andranik Davinyan,

Armenuhi Moghrovyan, Naira Sahakyan

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