

# Lilit Sergey Gabrielyan

## Faculty of Biology

Chair of Biochemistry, Microbiology, and Biotechnology  
Associate professor

45-19  
(374) 71-05-19

lgabrielyan@ysu.am  
   

## Education

Institution	Yerevan State University
Faculty	Biology Faculty, Department of Biophysics
Date	1994 - 1999
Degree name	Qualified specialist

## Scientific Rank/degree

Institution	Yerevan State University
Date	2012
Degree name	Associate professor
Specialty	Biological sciences
Institution	Yerevan State University
Date	2006
Degree name	Candidate
Specialty	Biological sciences

## Language skills

Հայերեն English Deutsch Русский

## Work experience

Institution	Yerevan State University
Period of time	2022 till now
Rank/degree	Chairman of the Competition Committee, Academic Council, Biology Faculty

Institution	Yerevan State University
Period of time	2016 till now
Rank/degree	Associate Professor, Department of Biochemistry, Microbiology and Biotechnology, Biology Faculty

Institution	Yerevan State University
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<b>Period of time</b>	2015 - 2016
<b>Rank/degree</b>	Associate Professor, Department of Microbiology, Microbe and Plants Biotechnology, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2012 - 2015
<b>Rank/degree</b>	Associate Professor, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2007 - 2012
<b>Rank/degree</b>	Assistant Professor, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2006 - 2018
<b>Rank/degree</b>	Senior Scientific Researcher, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2003 - 2006
<b>Rank/degree</b>	Junior Scientific Researcher, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2001 - 2003
<b>Rank/degree</b>	Senior Lab. Assistant, Department of Biophysics, Biology Faculty

## **Scientific interests**

- Bioenergetics and biochemistry of phototrophic microorganisms (bio-hydrogen production; photo-fermentation; regulation of microbial growth; redox regulation; purple bacteria; green algae)
- biophysics and bioenergetics of biological membranes (membrane ion transfer, membrane potential, proton motive force, proton-translocating ATPase)
- nanotechnology (green synthesis of nanoparticles, physicochemical characteristics, antibacterial potential)

## **Membership**

<b>Institution</b>	Member of the Academic Council of the Faculty of Biology
<b>Period of time</b>	2022 till now

## **State awards and honorary titles**

- 2011 The “Best scientific work” award of The National Academy of Sciences of Armenia, World Armenian Congress and The Union of Armenians in Russia
- 2022 “Award for Excellence in Teaching at Yerevan State University” in the category of Natural Sciences

## Publications

### Article

#### **Improvement of biomass and biohydrogen generation in *Parachlorella kessleri* using ethanol and brewery production wastes as cultivation media**

Jemma Manoyan, Diana Hakobyan, Lilit Gabrielyan, Iren Shahazizyan, Lusine Sahakyan, Ela Minasyan,

Liana Gabrielyan

International Journal of Hydrogen Energy 2025 400-410

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### Article

#### **A novel approach for synthesizing silver nanoparticles with antibacterial and cytotoxic activities using the leaf extract of hydroponically grown *Moringa oleifera***

Anush Aghajanyan, Marina Timotina, Tatevik Manutyan, Ani Harutyunyan, Mikayel Ginovyan,

Robin Schubert, Sofiya Aydinyan, Karen Trchounian, Lilit Gabrielyan, Liana Gabrielyan

Scientific Reports 2025 1-18

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### Article

#### **Gold nanoparticles activate hydrogenase synthesis and improve heterotrophic growth of *Ralstonia eutropha* H16**

Tatevik Manutyan, Syuzanna Blbulyan, Anait Vassilian, Tatiana Semashko, Gayane Kirakosyan,

Lilit Gabrielyan, Karen Trchounian, Anna Poladyan

FEMS Microbiology Letters 2024 1-8

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### Article

#### **Comparison of sulfur and nitrogen deprivation effects on photosynthetic pigments, polyphenols, photosystems activity and H<sub>2</sub> generation in *Chlorella vulgaris* and *Parachlorella kessleri***

Jemma Manoyan, Lilit Hakobyan, Tatsiana Samovich, Nikolai Kozel, Naira Sahakyan,

Hanna Muravitskaya, Vadim Demidchik, Lilit Gabrielyan

International Journal of Hydrogen Energy 2024 408-418

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### Article

#### **Phototrophic microorganisms as the future of green biotechnology**

Lilit Hakobyan, Lilit Gabrielyan

Microbial Essentialism: An Industrial Prospective 2024 181-205

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### Article

#### **Comparative Study of Physicochemical Properties and Antibacterial Potential of Cyanobacteria *Spirulina platensis*-Derived and Chemically Synthesized Silver Nanoparticles**

Ani Harutyunyan, Liana Gabrielyan, Anush Aghajanyan, Susanna Gevorgyan, Robin Schubert,

Christian Betzel, Wojciech Kujawski, Lilit Gabrielyan

ACS Omega 2024 29410–29421

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### Article

#### **СИНТЕЗ БИОВОДОРОДА КЛЕТКАМИ ЗЕЛЕНЫХ МИКРОВОДОРОСЛЕЙ И СПОСОБЫ ЕГО СТИМУЛИЯЦИИ**

М. А. МЫСЛЕЙКО, М. С. ВЕЧЕРЕК, Дж. Г. МАНОЯН, Л. С. ГАБРИЕЛЯН, Т. В. САМОВИЧ, Н. В. КОЗЕЛ,

А. О. МУРАВИЦКАЯ, В. В. ДЕМИДЧИК

Экспериментальная биология и биотехнология 2024 36-45

*Article*

**ОСОБЕННОСТИ ДЕЙСТВИЯ ЭЛЕКТРОМАГНИТНОГО ИЗЛУЧЕНИЯ КРАЙНЕ ВЫСОКИХ ЧАСТОТ НА ЗЕЛЕНУЮ ВОДОРОСЛЬ PARACHLORELLA KESSLERI И ПЕРСПЕКТИВЫ ЕГО ПРИМЕНЕНИЯ**

Габриелян Л.С.

СЛАБЫЕ И СВЕРХСЛАБЫЕ ПОЛЯ И ИЗЛУЧЕНИЯ В БИОЛОГИИ И МЕДИЦИНЕ 2024 43-45

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*Article*

**THE EFFECT OF EXTREMELY HIGH-FREQUENCY ELECTROMAGNETIC RADIATION ON THE BIOMASS YIELD AND PHOTOSYNTHETIC PIGMENT CONTENT IN CYANOBACTERIA ARTHROSPIRA PLATENSIS**

Harutyunyan A.A., Manoyan J.G., Hambaryan L.R., Gabrielyan L.S.

SCIENTIFIC PROCEEDINGS OF THE IXth INTERNATIONAL CONGRESS LOW AND SUPER-LOW FIELDS AND RADIATION IN BIOLOGY AND MEDICINE  
2024 98-99

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*Article*

**EFFECT OF VARIOUS CARBON SOURCES ON THE GROWTH PROPERTIES AND MORPHOLOGY OF SPIRULINA PLATENSIS**

A. A. HARUTYUNYAN, J. G. MANOYAN, L. R. HAMBARYAN, L. S. GABRIELYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 164-171

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*Article*

**Growth characteristics, biohydrogen production and photochemical activity of photosystems in green microalgae Parachlorella kessleri exposed to nitrogen deprivation**

Jemma Manoyan, Tatsiana Samovich, Nikolai Kozel, Vadim Demidchik, Lilit Gabrielyan

International Journal of Hydrogen Energy 2022 16815-16823

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*Article*

**Biosynthesis of silver nanoparticles using extracts of Stevia rebaudiana and evaluation of antibacterial activity**

Marina Timotina, Anush Aghajanyan, Robin Schubert, Karen Trchounian, Lilit Gabrielyan

World Journal of Microbiology and Biotechnology 2022 1-10

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*Article*

**Ribes nigrum L. Extract-Mediated Green Synthesis and Antibacterial Action Mechanisms of Silver Nanoparticles**

Zaruhi Hovhannisyan, Marina Timotina, Jemma Manoyan, Lilit Gabrielyan, Margarit Petrosyan,

Barbara Kusznierewicz, Agnieszka Bartoszek, Claus Jacob, Mikayel Ginovyan, Karen Trchounian,

Naira Sahakyan, Muhammad Jawad Nasim

Antibiotics 2022 1-17

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*Article*

**The prospects of brewery waste application in biohydrogen production by photofermentation of Rhodobacter sphaeroides.**

Lilit Hakobyan, Lilit Gabrielyan, Syuzanna Blbulyan, Armen Trchounian

International Journal of Hydrogen Energy 2021 289-296

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*Article*

**Antibacterial activity of royal jelly-mediated green synthesized silver nanoparticles**

Susanna Gevorgyan, Robin Schubert, Mkrtich Yeranosyan, Lilit Gabrielyan, Armen Trchounian,

Kristina Lorenzen, Karen Trchounian

AMB Express 2021 51

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*Article*

**Перспективы применения отходов алкогольной промышленности в фотовыделении водорода пурпурной бактерией *Rhodobacter sphaeroides***

Л. С. ГАБРИЕЛЯН

Journal of the Belarusian State University. Biology 2021 70-77

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*Article*

**THE ETHANOL INDUSTRY WASTE AS A VALUABLE FEEDSTOCK FOR HYDROGEN PHOTOPRODUCTION BY GREEN ALGAE CHLORELLA VULGARIS**

J.G. Manoyan, L.S. Gabrielyan

Proceedings of the YSU B: Chemical and Biological Sciences 2021 232-239

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*Article*

**Silver ion bioreduction in nanoparticles using *Artemisia annua* L. extract: characterization and application as antibacterial agents**

Anush Aghajanyan, Lilit Gabrielyan, Robin Shubert, Armen Trchounian

AMB Express 2020 1-9

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*Article*

**Comparable antibacterial effects and action mechanisms of silver and iron oxide nanoparticles on *Escherichia coli* and *Salmonella typhimurium***

Lilit Gabrielyan, Hamlet Badalyan, Vladimir Gevorgyan, Armen Trchounian

Scientific Reports 2020 13145(1-11)

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*Article*

**Growth properties and hydrogen yield in green microalga *Parachlorella kessleri*: Effects of low-intensity electromagnetic irradiation at the frequencies of 51.8 GHz and 53.0 GHz**

Jemma Manoyan, Lilit Gabrielyan, Vitaly Kalantaryan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2020 112016(1-6)

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*Article*

**Антибактериальные свойства наночастиц серебра и мембранотропные механизмы их действия.**

Л. С. ГАБРИЕЛЯН, А. А. ТРЧУНЯН

Journal of the Belarusian State University. Biology 2020 64-71

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*Article*

**Biohydrogen by *Rhodobacter sphaeroides* during photo-fermentation: Mixed vs. sole carbon sources enhance bacterial growth and H<sub>2</sub> production**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2019 674-679

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*Article*

**Комбинирование ионов Mg(II) и Fe(II) как подход к повышению выхода водорода в *Rhodobacter sphaeroides*.**

Габриелян Л. С.

Հայաստանի կենսարժական հանդի 2019 60-66

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*Article*

**НАКОПЛЕНИЕ БЕЛКА И ЭКСПРЕССИЯ ГЕНА НИТРАТРЕДУКТАЗЫ В КЛЕТКАХ SPIRULINA PLATENSIS В ЗАВИСИМОСТИ ОТ СПЕКТРАЛЬНОГО СОСТАВА СВЕТОДИОДНОГО ИЗЛУЧЕНИЯ**  
Н. В. КОЗЕЛ, М. С. РАДЮК, Т. В. САМОВИЧ, И. А. ДРЕМУК, Л. С. ГАБРИЕЛЯН

Proceedings of the National Academy of Sciences of Belarus. Biological Series 2019 180-189

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*Article*

**Antibacterial activities of transient metals nanoparticles and membranous mechanisms of action**

Lilit Gabrielyan, Armen Trchounian

World Journal of Microbiology and Biotechnology 2019 1-10

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*Article*

**Regulation of biohydrogen production by protonophores in novel green microalgae**

**Parachlorella kessleri**

Jemma Manoyan, Lilit Gabrielyan, Nikolai Kozel, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2019 1-5

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*Article*

**ДЕЙСТВИЕ ЭЛЕКТРОМАГНИТНОГО ИЗЛУЧЕНИЯ С ЧАСТОТОЙ 51,8 И 53,0 ГГц НА РОСТ, СОДЕРЖАНИЕ ПИГМЕНТОВ, ФОТОВЫДЕЛЕНИЕ ВОДОРОДА И АКТИВНОСТЬ FOF1-АТФазы ПУРПУРНОЙ БАКТЕРИИ Rhodobacter sphaeroides**

Л. Габриелян, В. Калантарян, А. Трчунян

Биофизика (Biophysics) 2018 468-474

<http://www.maik.ru/ru/journal/biofiz/>

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*Monograph*

**Metal Nanoparticles (eds. Y. Saylor, V. Irby): Chapter 4. Nanoparticles of Various Transition Metals and Their Applications as Antimicrobial Agents**

A. Trchounian, L. Gabrielyan, N. Mnatsakanyan

2018 161-211

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*Article*

**Characterization of light-dependent hydrogen production by new green microalga**

**Parachlorella kessleri in various conditions**

Lilit Gabrielyan, Lusine Hakobyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2017 207-210

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**Влияние режима освещения на выделение водорода фототрофными организмами**

Габриелян Л.С.

Биологический журнал Армении 2017 30-34

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

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*Article*

**Bio-hydrogen production by Rhodobacter sphaeroides during mixed carbon fermentation**

Hakobyan L.Y., Gabrielyan L.S, Trchounian A.H.

Biological Journal of Armenia 2017 110-113

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

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*Article*

**The distillers grains with solubles as a perspective substrate for obtaining biomass and producing bio-hydrogen by Rhodobacter sphaeroides**

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

BIOMASS & BIOENERGY 2016 90-94

<http://www.journals.elsevier.com/biomass-and-bioenergy>

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*Article*

**Novel approach of ethanol waste utilization: Biohydrogen production by mixed cultures of dark and photo-fermentative bacteria using distillers grains**

Harutyun Sargsyan, Karen Trchounian, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2016 2377-2382

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Biohydrogen production by purple non-sulfur bacteria Rhodobacter sphaeroides: Effect of low-intensity electromagnetic irradiation**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2016 592-596

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**The effect of Cu (I) and Cu (II) ions' low concentrations on growth, biohydrogen production and the FoF1-ATPase activity of Rhodobacter sphaeroides**

Lilit Hakobyan, Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2016 16807-16812

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Հայաստանի համբային աղբյուրներից մեկուսացված Rhodobacter sphaeroides բակտերիաներում կենսաքածնի ֆոտոադրության առանձնահատկությունները տարբեր վերականգնիչների և օքսիդիչների առկայությամբ**

Արփինն Պողոսյան, Լիլիթ Գաբրիելյան

ԵՊՀ ՈՒԳԸ գիտական հոդվածների ժողովածու 2016 102-107

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

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*Article*

**Comparative effects of Ni(II) and Cu(II) ions and their combinations on redox potential and hydrogen photoproduction by Rhodobacter sphaeroides**

Lilit Gabrielyan, Lilit Hakobyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2016 271-275

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**Novel properties of photofermentative biohydrogen production by purple bacteria Rhodobacter sphaeroides: effects of protonophores and inhibitors**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

Microbial Cell Factories 2015 131-141

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

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*Article*

**Study of membrane properties of Rhodobacter sphaeroides under various growth conditions.**

Gabrielyan L., Hakobyan L., Sargsyan H., Trchounian A.

European Biophysics Journal with Biophysics Letters 2015 S88-S88

<https://link.springer.com/journal/249>

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*Article*

**Light-dark duration alternation effects on Rhodobacter sphaeroides growth, membrane properties and bio-hydrogen production in batch culture**

Harutyun Sargsyan, Lilit Gabrielyan, Lilit Hakobyan, Armen Trchounian

International Journal of Hydrogen Energy 2015 4084-4091

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Regulation of hydrogen photoproduction in Rhodobacter sphaeroides batch culture by external oxidizers and reducers**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

Applied Energy 2014 20-25

<http://www.elsevier.com/locate/apenergy>

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*Article*

**Concentration-dependent effects of metronidazole, inhibiting nitrogenase, on hydrogen photoproduction and proton-translocating ATPase activity of Rhodobacter sphaeroides**

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2014 100-106

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Համակարգչային տեխնոլոգիաների կիրառման առավելությունները և փորձը բուհական**

**կենսաբանության դասավանդման ընթացքում**

Լ.Ս. Գաբրիելյան, Ա.Ա. Փոլադյան, Ա.Հ. Թոշոնյան

Բնագետ 2014 139-141

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*Article*

**The Effect of Various Metal Ions on Bio-hydrogen Production and F0F1-ATPase Activity of Rhodobacter Sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

NATO Science for Peace and Security Series C: Environmental Security, Black Sea Energy Resource Development and Hydrogen Energy Problems

2013 165-177

<http://www.springer.com/us/book/9789400761513>

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*Conference*

**New sources and optimized conditions for hydrogen production by Rhodobacter sphaeroides**

Lilit Gabrielyan, Lilit Hakobyan, Harutyun Sargsyan, Armen Trchounian

*Conference*

**Воздействие миллиметровых волн низкой интенсивности на рост и фотовыделение H<sub>2</sub> пурпурной бактерии Rhodobacter sphaeroides**

Габриелян Л.С., Саргсян А.Г., Оганян В.А., Трчунян А.А.

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*Conference*

**Comparative Effects of Cu(II) and Ni(II) Ions Low Concentrations on Rhodobacter sphaeroides**

**Growth Characteristics and Hydrogen Production**

L. Gabrielyan, A. Trchounian

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*Conference*

**Photofermentative Hydrogen Production by Rhodobacter sphaeroides Using Ethanol**

**Fermentation Waste**

L. Gabrielyan, H. Sargsyan, A. Trchounian

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*Conference*

**Advantages of mixed carbon fermentation in biological hydrogen production by Rhodobacter sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Окислительно-восстановительный потенциал и фотовыделение H<sub>2</sub> Rhodobacter sphaeroides: влияние ингибитора нитрогеназной активности.**

Габриелян Л.С.

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*Conference*

**Oxidizer and reducer different effects on proton-translocating FoF1-ATPase activity of Rhodobacter sphaeroides membrane vesicles**

L. Gabrielyan, L. Hakobyan, A. Trchounian

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*Conference*

**Combination of dark- and photo-fermentative bacteria to enhance hydrogen production from ethanol (distillers grains) waste**

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Metabolic cross-talk between nitrogenase and hydrogenase in Rhodobacter sphaeroides during photofermentation and hydrogen production**

Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Inhibitor studies on hydrogen photoproduction by Rhodobacter sphaeroides**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

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*Conference*

**Effect of iron and magnesium ions combination on hydrogen photoproduction by Rhodobacter sphaeroides**

L. Gabrielyan, A. Trchounian

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*Conference*

**Redox regulation of FoF1-ATPase activity of membrane vesicles of Rhodobacter sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Distiller's grains in bio-hydrogen production by Rhodobacter sphaeroides**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

Conference

**Light/dark duration as a tool to enhance bio-hydrogen production by Rhodobacter sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

Conference

**Developing hydrogen production biotechnology: cheap substrates, effective strains and optimized fermentative conditions**

K.Trchounian, A. Poladyan, L. Gabrielyan, A. Trchounian

Conference

**Effects of light/dark duration on hydrogen production by green microalgae Chlorella pyrenoidosa**

L. Gabrielyan, L. Hakobyan, A. Trchounian

Conference

**BIOENERGETICS OF PHOTOFERMENTATION: EFFECT OF PROTONOPHORES ON MEMBRANE-ASSOCIATED ATPASE ACTIVITY IN RHODOBACTER SPHAEROIDES**

H. Sargsyan, L. Gabrielyan, A. Trchounian

Conference

**Hydrogen cycle in purple non-sulfur bacteria: relationship between nitrogenase and hydrogenase**

L. Gabrielyan, H. Sargsyan, L. Hakobyan, A. Trchounian

Conference

**Membrane conductance of Rhodobacter sphaeroides and the input of FOF1- ATPase in its formation**

L. Hakobyan, L. Gabrielyan, A. Trchounian

Conference

**The role of FOF1-ATPase in biological hydrogen production by Rhodobacter sphaeroides during mixed carbon fermentation**

L. Hakobyan, L. Gabrielyan, A. Trchounian

Conference

ՄԱՆՐԵԼԵՐԻ ԿԵԼՍԱՏԵԽՆՈԼՈԳԻԱՆԵՐԻ ՄԱԳԻՍՏՐՈՍԱԿԱՆ ՆՈՐ ԾՐԱԳՐԵՐԻ ԴԱՍՎՎԱՆԴՄԱՆ  
ՄԵԹՈԴԱԲԱՆԱԿԱՆ ՄՈՏԵՑՈՒՄՆԵՐԸ ԵՐԵՎԱՆԻ ՊԵՏԱԿԱՆ ՀԱՍՏԱՏԱՐԱՆՈՒՄ  
Թոշումյան Կ.Ա., Գաբրիելյան Լ.Ս., Փոլադյան Ա.Ա., Թոշումյան Ա.Հ.

Conference

**Iron Oxide Nanoparticles As Antimicrobial Agents**

L. Gabrielyan, A. Trchounian

Conference

**NEW APPROACH IN HYDROGEN ENERGY BIOTECHNOLOGY: EFFECTS OF SOLE AND MIXED CARBON SOURCES ON HYDROGEN YIELD IN PURPLE NONSULFUR PHOTOSYNTHETIC BACTERIA AND THEIR SIGNIFICANCE**

Lilit Gabrielyan, Armen Trchounian

Conference

**Регуляция фотовыделения биоводорода пурпурной бактерией Rhodobacter sphaeroides**  
Габриелян Л.С., Акопян Л.Ю., Трчунян А.А.

Conference

**Enhancement of biohydrogen production by uncouplers in new green microalga Parachlorella kessleri.**  
L. Gabrielyan, A. Trchounian

Conference

**Անեցման պայմանների ազդեցությունը Ավանի (Հայաստան) աղի հանքից մեկուսացված  
Haloarcula japonica A2 շտամի ընդհանուր կարոտինոիդների արտադրության վրա  
Ազարյան Ա., Գաբրիելյան Լ., Փանոսյան Հ., Թօչումյան Ա.**

Conference

**Влияние электромагнитного излучения крайне высоких частот на состав  
фотосинтетических пигментов и выделение водорода фототрофными микроорганизмами**  
Габриелян Л.С., Блбулян С.С., Трчунян А.А.

Conference

**Overcoming Antibiotic Resistance: Heavy Metal Nanoparticles as Antibacterial Agents against  
Antibiotic Resistant Escherichia coli Strains**  
A. Trchounian, L. Gabrielyan, N. Sahakyan

Conference

**Regulation of hydrogen yield in green microalga Parachlorella kessleri by physicochemical  
factors**  
Alexandra Rubtsova, Lilit Gabrielyan, Armen Trchounian

Conference

**Effect of growth conditions on the growth rate, photosynthetic pigments content and pH  
value of new green microalga Parachlorella kessleri**  
L. Gabrielyan, J. Manoyan, A. Trchounian

Conference

**Optimization of growth conditions and substrates used as a tool altering the mode of  
metabolism of Rhodobacter sphaeroides: the role of membrane bound systems in the  
mechanisms of regulation.**  
L. Hakobyan, L. Gabrielyan, A. Trchounian

Conference

**HYDROPONIC STEVIA REBAUDIANA AS AN ALTERNATIVE PATH OF CULTIVATION: NOVEL  
ANTIBACTERIAL PROPERTIES**  
AGHAJANYAN Anush, GABRIELYAN Lilit, BABAKHANYAN Mikayel, HOVHANNISYAN Lusya,  
TRCHOUMAN ARMEN

Conference

**ЗЕЛЕНЫЙ СИНТЕЗ НАНОЧАСТИЦ СЕРЕБРА С ИСПОЛЬЗОВАНИЕМ ЭКСТРАКТА ARTEMISIA ANNUA L.**

А.А. Агаджанян, Л.С. Габриелян, А.А. Трчунян

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*Conference*

**Перспективы фотоферментативного выделения H<sub>2</sub> пурпурными бактериями при использовании углерод-содержащих продуктов.**

Л.С. Габриелян, Л.Ю. Акопян, А.А. Трчунян

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*Conference*

**Влияние условий культивирования на выделение H<sub>2</sub> зеленой микроводорослью**

**Parachlorella kessleri.**

Л.С. Габриелян, Дж.Г. Маноян, А.А. Трчунян

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*Conference*

**Влияние стабилизатора на антибактериальные свойства наночастиц оксида железа.**

Тимотина М.И., Арутюнян А.А., Габриелян Л.С., Трчунян А.А.

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*Conference*

**Изучение антибактериального действия наночастиц серебра на *Salmonella typhimurium MDC1759*.**

Арутюнян А.А., Тимотина М.И., Габриелян Л.С., Трчунян А.А.

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*Conference*

**Перспективы применения отходов алкогольной промышленности в фотовыделении водорода пурпурной бактерией *Rhodobacter sphaeroides*.**

Габриелян Л.С.

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*Conference*

**Антибактериальные свойства наночастиц серебра и мембранотропные механизмы их действия.**

Габриелян Л.С., Трчунян А.А.

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*Conference*

**Antibacterial Activity and Action Mechanisms of Silver Nanoparticles against *Escherichia coli***

**Wild Type and Drug-resistant Strains and *Salmonella typhimurium***

L. Gabrielyan, N. Mnatsakanyan, A. Trchounian

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*Conference*

**Prospective Trends in Biotechnology for Biohydrogen**

Karen Trchounian, Anna Poladyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Effect of Electromagnetic Radiation on Growth Properties of Green Microalga Parachlorella Kessleri**

J. Manoyan, L. Gabrielyan, A. Trchounian

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*Conference*

**Biological Hydrogen Generation by Purple Bacteria as a Promising Way of Industrial Waste Treatment**

L. Hakobyan, S. Blbulyan, L. Gabrielyan, A. Trchounian

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Conference

**Comparative Investigation of Silver Nanoparticles Action on Growth Peculiarities and Survival of Various Bacteria**

M. Timotina, A. Harutyunyan, L. Gabrielyan, A. Trchounian

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Conference

**Prospects of industrial and kitchen wastes application in H<sub>2</sub> production**

Mirzoyan S., Manoyan J., Gabrielyan L., Trchounian K.

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Conference

**Antibacterial activity of Ribes nigrum extract-mediated synthesized AgNPs**

Hovhannisyan Z., Manoyan J., Petrosyan M., Gabrielyan L., Sahakyan N.

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Conference

**Effect of various carbon sources on the growth properties and photosynthetic pigments content of Spirulina platensis**

A. Harutyunyan, L. Hambaryan, L. Gabrielyan

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Conference

**Hydrogen generation in sulfur-deprived green microalgae Chlorella vulgaris**

L. Hakobyan, J. Manoyan, E. Panosyan, L. Gabrielyan

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Conference

**Brewer's spent grain as a potential substrate for hydrogen production by Parachlorella kessleri**

L. Gabrielyan, J. Manoyan, L. Gabrielyan

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Conference

**Antibacterial activity of silver nanoparticles biosynthesized from Stevia rebaudiana extract**

M. Timotina, A. Aghajanyan, L. Gabrielyan, K. Trchounian

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Conference

**Green synthesis of silver nanoparticles and their effect on the energy-dependent H<sup>+</sup> -fluxes across the bacterial membrane**

M. Timotina, T. Manutsyan, A. Aghajanyan, K. Trchounian, L. Gabrielyan

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Conference

**THE PHYSICOCHEMICAL AND ANTIMICROBIAL PROPERTIES OF SILVER NANOPARTICLES SYNTHESIZED BY Spirulina BIOMASS**

Harutyunyan A., Manoyan J., Gevorgyan S., Gabrielyan L., Aghajanyan A., Gabrielyan L.

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Conference

**The antibacterial potential of Spirulina platensis-mediated green synthesized silver nanoparticles**

L. Gabrielyan, A. Harutyunyan, A. Aghajanyan, L. Gabrielyan

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Conference

**The effect of silver nanoparticles synthesized using Spirulina biomass on the hydrogen yield and FoF1-ATPase activity in Escherichia coli.**

A. Harutyunyan, D. Hakobyan, A. Aghajanyan, L. Gabrielyan

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*Conference*

**The case of industrial waste utilization by phototrophic microorganisms: incorporating active learning strategies for effective Biotechnology and Microbiology instruction at the graduate level**

L. Hakobyan, L. Gabrielyan

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*Conference*

**SPIRULINA-ի կենսագույն արժաքի և ավտոմատիկացման համար ստուգային ստանդարտ ԵՎ ԴՐԱՆՑ**

**ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅՈՒՆԸ**

Հարությունյան Ա.Ա., Մանոյան Զ.Գ., Աղաջանյան Ա.Ա., Գաբրիելյան Լ.Ս., Գաբրիելյան Լ.Ս.

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*Conference*

**CHLORELLACEAE ԸՆՏԱՆԻՔԻ ԶՐԻՄՈՒՈՒԵՐԻ ԱՃՄԱՆ ԲՆՈՒԹՅԱԳՐԵՐԸ և ԿԵՆՍԱԶՐԱԾՆԻ**

**ԱՐՏԱԴՐՈՒԹՅՈՒՆԸ ԿԵՆՍԹԻՆ ՏԱՐՐԵՐԻ ՍԱԿԱՎՈՒԹՅԱՆ ՊԱՅՄԱՆԱԵՐՈՒՄ**

Մանոյան Զ.Գ., Հակոբյան Լ.Յու., Մուրավիկյան Ա.Օ., Դեմիդչիկ Վ.Վ., Գաբրիելյան Լ.Ս.

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*Conference*

**Оценка продукции биоводорода и цифровой анализ фенотипа водорослей семейства**

**Chlorellecae беларусских и армянских штаммов**

Муравицкая А. О., Светлаков В. И., Бондаренко В. Ю., Самович Т. В., Козел Н. В., Соколик А. И., Габриелян Л. С., Маноян Д. Г., Демидчик А. И.

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*Conference*

**Membranous mechanisms of antibacterial action of Spirulina-derived silver nanoparticles on kanamycin-resistant Escherichia coli**

A. Harutyunyan, D. Hakobyan, A. Aghajanyan, L. Gabrielyan

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*Conference*

**Antibacterial, hemolytic and anticancer activities of silver nanoparticles biosynthesized by phycocyanin extracted from Spirulina**

L. Gabrielyan, A. Harutyunyan, A. Hambardzumyan, A. Aghajanyan, N. Avtandilyan, L. Gabrielyan

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*Conference*

**The cytotoxicity and antibacterial activity of Moringa oleifera-mediated silver nanoparticles**

M. Timotina, T. Manutsyan, M. Ginovyan, K. Trchounian, L. Gabrielyan, A. Aghajanyan

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*Conference*

**Application of active learning strategies to improve student engagement**

L. Hakobyan, L. Gabrielyan

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*Conference*

**Enhancement of H<sub>2</sub> production by Chlorella vulgaris using potato peel waste**

J. Manoyan, L. Hakobyan, L. Gabrielyan

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*Conference*

**Նոր մոտեցումներ միկրոշրիմուռների կենսագանգվածից կենսաբանական ակտիվությամբ օժտված արծաթի նաևոմասնիկների սինթեզի համար**  
Հարությունյան Ա.Ա., Մանույան Զ.Գ., Աղաջանյան Ա.Ա., Գաբրիելյան Լ.Ս., Գաբրիելյան Լ.Ս.

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*Conference*

**Արդյունաբերական թափոնների կիրառությունը կանաչ ջրիմուռներում կենսագանգվածի և կենսաքրածնի ստացման համար**  
Մանույան Զ.Գ., Հակոբյան Լ.Յու., Գաբրիելյան Լ.Ս.

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*Conference*

**Comparative Analysis of Antibacterial Properties of Silver Nanoparticles Synthesized Using “Green Biomass” of Phototrophic Organisms**

Lilit Gabrielyan, Ani Harutyunyan, Anush Aghajanyan, Liana Gabrielyan, Wojciech Kujawski

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