Satenik Noriki Mirzoyan

satenik.mirzoyan@ysu.am

Research Institute of Biology
Laboratory of Microbiology, Bioenergetics and Biotechnology
Scientific Worker

Faculty of Biology
Research Institute of Biology
Laboratory of Microbiology, Bioenergetics and Biotechnology
Scientific Worker

Publications

Article

Growth and hydrogen production by Escherichia coli during utilization of sole and mixture of sugar beet, alcohol, and beer production waste
Kairat Bekbayev, Satenik Mirzoyan, Akerke Toleugazykyzy, Dinara Tlevlessova, Anait Vassilian, Anna Poladyan, Karen Trchounian

Biomass Conversion and Biorefinery 2024 909-919

Article

Relationship between proton/ potassium fluxes and central carbon catabolic pathways in different Saccharomyces cerevisiae strains under osmotic stress conditions
Anahit Shirvanyan, Satenik Mirzoyan, Karen Trchounian

Process Biochemistry 2023 309-318

Conference

Regulation of catalase and superoxide dismutase activities by sodium and potassium ions in Saccharomyces cerevisiae
A. Shirvanyan, S. Mirzoyan, K. Trchounian

2023 107-108

https://2023.febscongress.org/

Article

Coffee silverskin as a substrate for biobased production of biomass and hydrogen by Escherichia coli
Satenik Mirzoyan, Hayarpi Aghekyan, Liana Vanyan, Anait Vassilian, Karen Trchounian

International Journal of Energy Research 2022 23110-23121

Conference

Potassium and proton ions transport during glucose fermentation in Saccharomyces cerevisiae under glycerol-induced osmotic stress at different pHs
A. Shirvanyan, S. Mirzoyan, K. Trchounian

2022 179-180

https://2022congress.febs-iubmb-pabmb.org

Conference

WINE GRAPE WASTE APPLICATION FOR ESCHERICHIA COLI BIOMASS AND H2 PRODUCTION

Syuzanna Blbulyan, Lusine Baghdasaryan, Satenik Mirzoyan, Anahit Vassilian, Tatiana Semashko,

Anna Poladyan

2022 423

https://www.femsbelgrade2022.org/

Article

HYDROGEN PRODUCTION AND UTILIZATION OF BREWERY SPENT GRAINS WASTE BY Escherichia coli

Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

ՎԵՐԱԿԱՆԳՆՎՈՂ ԵՎ ՄԱՔՈՒՐ ԷՆԵՐԳԻԱՅԻ 7-ՐԴ ՄԻՋԱԶԳԱՅԻՆ ՀԱՄԱԺՈՂՈՎԻ ՆՅՈՒԹԵՐ 2021 65-68

Article

PECULIARITIES OF GROWTH PARAMETERS OF SACCHAROMYCES CEREVISIAE UNDER DIFFERENT CONDITIONS

Anahit H. Shirvanyan, Satenik N. Mirzoyan, Karen A .Trchounian

Proceedings of the YSU B Chemical and Biological Sciences 2021 255-265

Article

BIOMASS AND BIOHYDROGEN PRODUCTION BY ESCHERICHIA COLI UPON CONSUMPTION OF MEAT INDUSTRY AND LIGNOCELLULOSIC CORN WASTES MIXTURE

Syuzanna Blbulyan, Satenik Mirzoyan, Karen Trchounian, Anna Poladyan

Proceedings of the YSU B Chemical and Biological Sciences 2021 224-231

Conference

Prospects of industrial and kitchen wastes application in H2 production

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

2021 108-109

http://www.mbio.bas-net.by/2021/index.php

Conference

Biohydrogen Production from Roasted Coffee Waste: Understanding the Role of E. coli Hydrogenases During Fermentation

S. Mirzoyan, L. Vanyan, H. Aghekyan, A. Poladyan, K. Trchounian

2021 WMF 21-0438

https://www.worldmicrobeforum.org/

Conference

Optimization of Fruits Waste Pretreatment for E. coli Growth and H2 Production

S. Mirzoyan, A. Vassilian, A. Poladyan, K. Trchounian

2021 WMF 21-0437

https://www.worldmicrobeforum.org/

Conference

Biomass and biohydrogen production by Escherichia coli upon consumption of meat and lignocellulosic waste mixture

Syuzanna Blbulyan, Anna Poladyan, Satenik Mirzoyan, Liana Mnatsakanyan, Karen Trchounian

2021 21-22

http://biotechnology-spib-2021.com/

Article

Roasted coffee wastes as a substrate for Escherichia coli to grow and produce hydrogen
Hripsime Petrosyan, Liana Vanyan, Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

FEMS Microbiology Letters 2020 fnaa088 ,7Ɛ2

Article

Enhanced hydrogen gas production from mixture of beer spent grains (BSG) and distiller's grains (DG) with glycerol by Escherichia coli
Satenik Mirzoyan, Akerke Toleugazykyzy, Kairat Bekbayev, Armen Trchounian, Karen Trchounian

International Journal of Hydrogen Energy 2020 17233-17240

Article

Hydrogen production by Escherichia coli during anaerobic utilization of mixture of lactose and glycerol: enhanced rate and yield, prolonged production
Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

International Journal of Hydrogen Energy 2019 9272-9281

Article

H2 PRODUCTION AND ROLE OF HYDROGENASES IN ESCHERICHIA COLI BATCH CULTURES DURING FERMENTATION OF MIXTURE OF GLYCEROL AND ACETATE AT DIFFERENT pHs
Mirzoyan S.

Biological Journal of Armenia 2019 66-73

Conference

Role of Acetate in Hydrogen producing Hydrogenase 3 Activity during Glycerol Fermentation in E. coli pH 7.5
S. Mirzoyan, A. Trchounian, K. Trchounian

2019 MBP-130

https://www.asm.org/Events/ASM-Microbe/Home

Conference

The impact of FOF1-ATPase on H2 producing hydrogenase activity in Escherichia coli during mixed carbon sources fermentation
H. Gevorgyan, S. Mirzoyan, A. Trchounian, K. Trchounian

2019 313-314

https://2019.febscongress.org/

Conference

The effect of the mixture acetate and glycerol on E. coli growth and H2 production during fermentation
S. Mirzoyan, A. Trchounian, K. Trchounian

2019 314

https://2019.febscongress.org/

Conference

The role of Escherichia coli hydrogenase 3 subunits in hydrogen production during fermentation of high glucose concentration at different pHs
Hripsime Petrosyan, Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

2019 318-318

https://2019.febscongress.org/

Conference

Role of dcu transporters in proton ATPase dependent proton flux during glucose fermentation at pH 7.5

Karen Trchounian, Gayane Mikoyan, Lusine Karapetyan, Satenik Mirzoyan, Antonio Valle, Jorge Bolivar, Armen Trchounian

2019 314-315

https://2019.febscongress.org/

Conference

The role of several subunits of Escherichia coli hydrogenase 4 in hydrogen production during fermentation of various glucose concentrations at pH 7.5

Liana Vanyan, Hripsime Petrosyan, Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

2019 315-315

https://2019.febscongress.org/

Conference

Utilization of tree leaves wastes and molecular hydrogen production by Escherichia coli

SATENIK MIRZOYAN, KAREN TRCHOUNIAN

2019 112-114

Article

Prolongation of H2 production during mixed carbon sources fermentation in E. coli batch cultures: New findings and role of different hydrogenases

Satenik Mirzoyan, Anait Vassilian, Armen Trchounian, Karen Trchounian

International Journal of Hydrogen Energy 2018 8739-8746

https://www.sciencedirect.com/journal/international-journal-of-hydrogen-energy/...

Article

Role of hydrogenases 3 and 4 in Escherichia coli growth and H2 producing hydrogenase activity during anaerobic utilization of lactose

Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

International Journal of Hydrogen Energy 2018 18151-18159

Conference

H2 production by Escherichia coli during utilization of lactose or mixture of lactose and glycerol: prolongation of production and role of hydrogenases 1 and 2 at different pH

Satenik Mirzoyan, Anait Vassilian, Armen Trchounian, Karen Trchounian

2018 P1: 11

https://www.whec2018.com

Conference

Role of F0F1-ATPase in H+ flux by Escherichia coli during lactose fermentation at different pHs

Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

2018 e116

http://ebec2018.org/index.php/Home

Conference

Role of dcu C4-dicarboxylate transporters in H2 production during fermentation of glucose or glycerol

Lusine Karapetyan, Satenik Mirzoyan, Antonio Valle, Jorge Bolivar, Armen Trchounian, Karen Trchounian

2018 e100

http://ebec2018.org/index.php/Home

Article

Evidence for hydrogenase-4 catalyzed biohydrogen production in Escherichia coli
Satenik Mirzoyan, Pablo Maria Romero-Pareja, Maria Dolores Coello, Armen Trchounian,

Karen Trchounian

International Journal of Hydrogen Energy 2017 21697-21703

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

Article

Hydrogen production by Escherichia coli growing in different nutrient media with glycerol: Effects of formate, pH, production kinetics and hydrogenases involved
Karen Trchounian, Satenik Mirzoyan, Anna Poladyan, Armen Trchounian

International Journal of Hydrogen Energy 2017 24026-24034

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

Conference

Growth and Hydrogen Production Properties of Escherichia Coli During Fermentation of the Mixture of Glucose, Glycerol and Formate at Di
K.Trchounian, S. Mirzoyan, P. Romero-Pareja, M. Coello, A. Vassilian, A. Trchounian

2017 SATYRDAY-612-612

https://www.asm.org/index.php/asm-microbe-2017

Conference

COMPENSATORY H2 PRODUCING ACTIVITY OF ESCHERICHIA COLI HYDROGENASES DURING MIXED CARBON SOURCES FERMENTATION
K. Trchounian, S. Mirzoyan, A. Vassilian, A. Trchounian

2017 095-095

http://fems-microbiology2017.kenes.com/

Conference

H2 PRODUCIION BY ESCHERICHIA COLI BATCH CULTURES DURING FERMENTATION OF GLYCEROL, LACTOSE AT DIFFERENT pHs
S. Mirzoyan, A. Poladyan, K. Trchounian, A. Trchounian

2017 107-107

http://fems-microbiology2017.kenes.com/

Conference

Effect of Different Substrates on Growth and Redox Potential Kinetics of Escherichia coli Wild Type and Hydrogenases Lacking Mutant
Anna Poladyan, Satenik Mirzoyan, Armen Trchounian

2016 315a

https://www.biophysics.org/2016meeting/Main

Conference

Hydrogen production by Escherichia coli wild type and hydrogenase mutants upon formate and glycerol fermentation under different growth conditions
A. Poladyan, S. Mirzoyan, K. Trchounian, A. Trchounian

2016 156-156
http://www.vaam-kongress.de/