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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
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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

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

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

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PECULIARITIES OF GROWTH PARAMETERS OF SACCHAROMYCES CEREVISIAE UNDER DIFFERENT CONDITIONS
Anahit H. Shirvanyan, Satenik N. Mirzoyan, Karen A .Trchounian
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Hripsime Petrosyan, Liana Vanyan, Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

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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

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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.

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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

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Role of hydrogenases 3 and 4 in Escherichia coli growth and H2 producing hydrogenase activity during anaerobic utilization of lactose
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Evidence for hydrogenase-4 catalyzed biohydrogen production in Escherichia coli
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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

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Effect of Different Substrates on Growth and Redox Potential Kinetics of Escherichia coli Wild Type and Hydrogenases Lacking Mutant

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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

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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

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COMPENSATORY H2 PRODUCING ACTIVITY OF ESCHERICHIA COLI HYDROGENASES DURING MIXED CARBON SOURCES FERMENTATION
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H2 PRODUCIION BY ESCHERICHIA COLI BATCH CULTURES DURING FERMENTATION OF GLYCEROL, LACTOSE AT DIFFERENT pHs
S. Mirzoyan, A. Poladyan, K. Trchounian, A. Trchounian

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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

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

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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

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The effect of the mixture acetate and glycerol on E. coli growth and H2 production during fermentation
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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

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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

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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

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Role of F0F1-ATPase in H+ flux by Escherichia coli during lactose fermentation at different pHs
Satenik Mirzoyan, Armen Trchounian, Karen Trchounian

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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

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Utilization of tree leaves wastes and molecular hydrogen production by Escherichia coli
SATENIK MIRZOYAN, KAREN TRCHOUNIAN

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Prospects of industrial and kitchen wastes application in H2 production
Mirzoyan S., Manoyan J., Gabrielyan L., Trchounian K.

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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

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Optimization of Fruits Waste Pretreatment for E. coli Growth and H2 Production
S. Mirzoyan, A. Vassilian, A. Poladyan, K. Trchounian

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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

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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

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WINE GRAPE WASTE APPLICATION FOR ESCHERICHIA COLI BIOMASS AND H2 PRODUCTION
Syuzanna Blbulyan, Lusine Baghdasaryan, Satenik Mirzoyan, Anahit Vassilian, Tatiana Semashko, Anna Poladyan

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Regulation of catalase and superoxide dismutase activities by sodium and potassium ions in Saccharomyces cerevisiae

A. Shirvanyan, S. Mirzoyan, K. Trchounian