

Prof. PINAR ÇALIK

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-8050-2020

ScopusID: 6603737686

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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Turkey 1994 - 1998

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 1992 - 1994

Dissertations

Doctorate, SERİN ALKALİ PROTEAZ ENZİMİ ÜRETİMİ İÇİN BİYOPROSES GELİŞTİRİLMESİ, Ankara Üniversitesi, 1998

Postgraduate, Serin Alkali Proteaz Üretimi İçin Biyoproses Tasarım Parametrelerinin Araştırılması, Ankara Üniversitesi, Kimya Mühendisliği (YI) (Tezli), 1994

Research Areas

Biochemical Reaction Engineering, Biotechnological Processes and Fermentation Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, 2006 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, 2000 - 2006

Lecturer, Ankara University, Faculty Of Engineering, Department Of Chemistry Engineering, 1998 - 2000

Research Assistant, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1995 - 1998

Expert, Ankara University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 1993 - 1994

Academic and Administrative Experience

Head of Department, Middle East Technical University, Faculty Of Engineering, Department Of Chemical Engineering, 2018 - 2024

Advising Theses

- ÇALIK P., Methodologies for prediction of transcription factors in transcriptional regulatory mechanisms in biocatalysis of reactions in yeast central pathways, Postgraduate, O.ULAŞ(Student), 2022
- Çalık P., Effects of metabolic engineering of ethanol utilization pathway in *Pichia pastoris* on recombinant protein production and transcription levels in central metabolism, Postgraduate, İ.DAYANKAÇ(Student), 2021
- Çalık P., KOKU H., Analysis and characterization of the *Pichia pastoris* secretome for pharmaceutical protein production, Postgraduate, H.PINAR(Student), 2019
- Çalık P., Design and construction of double promoter systems and their use in pharmaceutical protein production in *P. pastoris*, Postgraduate, İ.DEMİR(Student), 2019
- ÇALIK P., Transcriptional engineering of *Pichia pastoris* Alcohol dehydrogenase 2 and Alcohol oxidase 1 promoters for recombinant protein production, Doctorate, B.GÜNDÜZ(Student), 2018
- Kalıpçılar H., Çalık P., Therapeutic protein production and its separation by zeolitic imidazolate framework-8 adsorbent, Postgraduate, Y.AKGÜN(Student), 2018
- ÇALIK P., Metabolic engineering with a novel promoter in *Pichia pastoris* for recombinant human growth hormone production: Effects of oxygen transfer conditions, Postgraduate, Ö.KALENDER(Student), 2018
- ÇALIK P., Recombinant human growth hormone production under double promoters by *Pichia pastoris*, Postgraduate, D.YALÇINKAYA(Student), 2017
- ÇALIK P., Effect of signal sequences and promoters in recombinant extracellular protein production by *Pichia pastoris*, Doctorate, A.MASSAHI(Student), 2017
- ÇULFAZ EMECEN P. Z., ÇALIK P., Separation and purification of recombinant proteins by using ultrafiltration membranes, Postgraduate, B.Akcan(Student), 2017
- ÇALIK P., Granulocyte-colony stimulating factor analog production by recombinant *Escherichia coli*, Postgraduate, O.ERSOY(Student), 2017
- ÇALIK P., ÇULFAZ EMECEN P. Z., Separation and purification of recombinant proteins by using ultrafiltration membranes, Postgraduate, B.AKCAN(Student), 2017
- ÇALIK P., Enhanced recombinant human growth hormone production by synchronous populations of two different strains of *Pichia pastoris* under GAP promoter, Postgraduate, D.HÜCCETOĞULLARI(Student), 2016
- ÇALIK P., Defined and complex medium based feeding strategy development for recombinant human growth hormone production by *P. pastoris* under gap promoter, Postgraduate, B.HOXHA(Student), 2016
- ÇALIK P., The effect of oxygen transfer conditions on recombinant glucose isomerase production by *Pichia pastoris* under glyceraldehyde-3-phosphate dehydrogenase promoter, Postgraduate, H.GÜNEŞ(Student), 2015
- ÇALIK P., A comparative study for the production of recombinant intracellular glucose isomerase by *Escherichia coli* and *Pichia pastoris*, Postgraduate, S.YAMAN(Student), 2014
- ÇALIK P., Glucose-based feeding strategy development in recombinant human growth hormone production by *Pichia pastoris* for semi-batch bioreactor operation, Postgraduate, A.KESKİN(Student), 2014
- ÇALIK P., Investigation of thermostable recombinant glucose isomerase production by sucrose utilizing *Escherichia coli*, Postgraduate, B.AKDAĞ(Student), 2013
- ÇALIK P., Effects of co-carbon sources in recombinant human erythropoietin production by *pichia pastoris*, Postgraduate, Ş.Melda(Student), 2013
- ÇALIK P., Effects of CO-carbon sources in recombinant human erythropoietin production by *pichia pastoris*, Postgraduate, Ş.MELDA(Student), 2013
- ÇALIK P., Human growth hormone production by metabolically engineered *B. subtilis*: Feeding strategy development, Postgraduate, B.GÖKBUDAK(Student), 2013
- ÇALIK P., Comparison of human growth hormone production performance of two different metabolically engineered *Pichia pastoris*, Postgraduate, H.Gül(Student), 2012
- ÇALIK P., Feeding strategy development for human growth hormone production by *Pichia pastoris*, Postgraduate, B.BOZKURT(Student), 2012
- ÇALIK P., Physiological and biochemical screening of different Turkish lentil cultivars under salt stress conditions, Postgraduate, F.Selin(Student), 2012
- ÇALIK P., Comparison of human growth hormone production performances of two different metabolically engineered *Pichia pastoris*, Postgraduate, H.GÜL(Student), 2012

ÇALIK P., Metabological engineering of Pichia Pastoris for extracellular thermostable glucose isomerase production, Postgraduate, Ö.Ata(Student), 2012

ÇALIK P., Metabological engineering of Pichia pastoris for extracellular thermostable glucose isomerase production, Postgraduate, Ö.ATA(Student), 2012

ÇALIK P., Recombinant transglutaminase production by metabolically engineered Pichia pastoris, Postgraduate, B.GÜNDÜZ(Student), 2012

ÇALIK P., Extracellular recombinant human growth hormone production by pichia pastoris, Postgraduate, E.Boy(Student), 2011

ÇALIK P., Bioprocess development for thermostable glucose isomerase production, Doctorate, V.ANGARDI(Student), 2011

ÇALIK P., Recombinant Pyrococcus furiosus extracellular alpha-amylase expression in Pichia pastoris, Postgraduate, E.BOY(Student), 2011

ÇALIK P., YILMAZ L., Enzyme enhanced ultrafiltration for the resolution of racemic mandelic acid, Postgraduate, Ü.BADE(Student), 2011

ÇALIK P., Effect of pH on erythropoietin production by recombinant Pichia pastoris in fed-batch operation, Postgraduate, E.ŞÜKRAN(Student), 2010

ÇALIK P., Regulatory Gene Effects on Recombinant Human Growth Hormone Production by Bacillus subtilis, Postgraduate, M.ŞAHİN(Student), 2010

ÇALIK P., Recombinant human growth hormone production by Pichia pastoris and determination of its interaction with peptide ligands, Postgraduate, B.İNANKUR(Student), 2010

ÇALIK P., Exponential feeding strategy development for benzaldehyde lyase production by recombinant "Escherichia coli", Postgraduate, H.TAŞPINAR(Student), 2010

ÇALIK P., Novel bioconversion reactions for the syntheses of α -hydroxy ketones, Doctorate, P.AYHAN(Student), 2009

ÇALIK P., Effects of carbon sources and feeding strategies on human growth hormone production by metabolically engineered Pichia pastoris, Postgraduate, E.AÇIK(Student), 2009

ÇALIK P., Effects of pH on human growth hormone production by Pichia pastoris considering the expression levels of regulatory genes, Postgraduate, E.BAYRAKTAR(Student), 2009

ÇALIK P., Feeding strategy development for benzaldehyde lyase production by recombinant Escherichia coli BL21, Postgraduate, H.LEVENT(Student), 2008

ÇALIK P., Affinity chromatographic purification of recombinant human growth hormone, Postgraduate, O.BALCI(Student), 2008

ÇALIK P., Bioprocess development for therapeutical protein production, Doctorate, E.ÇELİK(Student), 2008

ÇALIK P., KOCABIYIK S., Recombinant therapeutic protease production by Bacillus sp., Postgraduate, N.KORKMAZ(Student), 2007

ÇALIK P., Extracellular recombinant human growth hormone production by Pichia pastoris, Postgraduate, M.ALİ(Student), 2007

ÇALIK P., Investigation of bioprocess parameters for glucose isomerase production by Bacillus thermoantarcticus, Postgraduate, I.HAYKIR(Student), 2007

ÇALIK P., Influence of oxygen transfer on benzaldehyde lyase production by recombinant Escherichia coli BL21(DE3) pLySs, Postgraduate, V.ANGARDI(Student), 2007

ÇALIK P., Serin alkali proteaz sentezini kontrol eden aspartik asit grubu amino asitlerin proteaz üretimine etkisinin araştırılması, Postgraduate, B.TOSUN(Student), 2007

ÇALIK P., YILMAZ L., Chiral separations by enzyme enhanced ultrafiltration: Fractionation of racemic benzoin, Postgraduate, A.HANDE(Student), 2006

ÇALIK P., Cloning and expression of benzaldehyde lyase gene from pseudomonas fluorescens biovar i in Pichia pastoris, Postgraduate, A.BÜYÜKSUNGUR(Student), 2006

ÇALIK P., Comparison of benzaldehyde lyase production capacity in recombinant Escherichia coli and recombinant bacillus species, Postgraduate, H.KAYA(Student), 2006

ÇALIK P., Cloning and expression of benzaldehydelyase from Pseudomonas fluorescens Biovar I in Pichia pastoris, Postgraduate, A.Büyüksungur(Student), 2006

ÇALIK P., ULUDAĞ Y., Obtaining durable enzyme powder via spray drying, Postgraduate, A.NAMALDI(Student), 2005

ÇALIK P., Effects of pH and feeding strategy on metabolite profiling of beta-lactamase producing *Bacillus licheniformis*, Postgraduate, N.İLERİ(Student), 2005

ÇALIK P., Aromatic amino acid synthesis performance of *Bacillus acidocaldarius*, Postgraduate, P.KOCABAŞ(Student), 2004

ÇALIK P., Determination of metabolic bottlenecks using reaction engineering principles in serine alkaline protease production by recombinant *Bacillus sp.*, Postgraduate, İ.ECE(Student), 2004

ÇALIK P., Effects of bioreactor operation parameters on intracellular reaction rate distribution in beta-lactamase production by *Bacillus* species, Postgraduate, M.ARİFOĞLU(Student), 2004

ÇALIK P., Bioprocess operation parameters for recombinant benzaldehyde lyase production, Postgraduate, P.YILGÖR(Student), 2004

ÇALIK P., Comparative analysis of product and by-product distributions in defined and complex media in serine alkaline protease production by recombinant *Bacillus subtilis*, Postgraduate, C.OKTAR(Student), 2003

ÇALIK P., Bioprocess desing parameters for beta-lactamase production by *Bacillus* species, Postgraduate, E.ÇELİK(Student), 2003

ÇALIK P., Comparative analysis of product and by-product distributions in defined and complex media in serine alkaline protease production by recombinant *Basillus subtilis*, Postgraduate, C.Oktar(Student), 2003

ÇALIK P., Fed-batch strategy development for serine alkaline protease production, Postgraduate, A.SİNEM(Student), 2003

ÇALIK P., Bioprocess design parameters for beta-lactamase production by *Bacillus* species, Postgraduate, E.Çelik(Student), 2003

ÇALIK P., Investigation of bioreactor operation conditions for serine alkaline protease production by *Bacillus subtilis*, Postgraduate, E.ÖZDEMİR(Student), 2003

ÇALIK P., Rekombinant proteaz üretiminde biyoreaktör işletim parametrelerinin hücreiçi tepkime hızlarına ve verime etkisi, Postgraduate, E.BİLİR(Student), 2002

ÇALIK P., Rekombinant bacillus türleri ile serin alkali proteaz üretimi için kompleks ortamda oksijen aktarımı etkilerinin araştırılması, Postgraduate, N.PEHLİVAN(Student), 2001

ÇALIK P., Serin alkali proteaz geni SubC bacillus plasmidlerine klonlanarak rekombinant biyokatalizör ile alkali proteaz üretimi, Postgraduate, N.KALENDER(Student), 2000

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **MachineTFBS: Motif-based method to predict transcription factor binding sites with first-best models from machine learning library**
YAMAN O. U., ÇALIK P.
Biochemical Engineering Journal, vol.198, 2023 (SCI-Expanded)
- II. **Saccharomyces cerevisiae cis-acting DNA sequences curation pipeline (Sc-cADSS-CP): Master transcription factors prediction in yeasts**
Yaman O. U., Avcı B., Çalık P.
BIOCHEMICAL ENGINEERING JOURNAL, vol.188, 2022 (SCI-Expanded)
- III. **Hybrid-architected promoter design to engineer expression in yeast**
Ergun B. G., ÇALIK P.
RECOMBINANT PROTEIN EXPRESSION: EUKARYOTIC HOSTS, vol.660, pp.81-104, 2021 (SCI-Expanded)
- IV. **Hybrid-architected promoter design to deregulate expression in yeast**
Ergun B. G., ÇALIK P.
RECOMBINANT PROTEIN EXPRESSION: EUKARYOTIC HOSTS, vol.660, pp.105-125, 2021 (SCI-Expanded)
- V. **Ethanol fed-batch bioreactor operation to enhance therapeutic protein production in *Pichia pastoris* under hybrid-architected ADH2 promoter**
Wehbe O., Yaman O. U., Çalık P.
BIOCHEMICAL ENGINEERING JOURNAL, vol.164, 2020 (SCI-Expanded)
- VI. **Hybrid-architected double-promoter expression systems enhance and upregulate-deregulated**

gene expressions in *Pichia pastoris* in methanol-free media

Demir I, ÇALIK P.

APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.104, no.19, pp.8381-8397, 2020 (SCI-Expanded)

- VII. **Transcriptional regulatory proteins in central carbon metabolism of *Pichia pastoris* and *Saccharomyces cerevisiae***
Kalender O, ÇALIK P.
APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.104, no.17, pp.7273-7311, 2020 (SCI-Expanded)
- VIII. **Engineered Dereglulation of Expression in Yeast with Designed Hybrid-Promoter Architectures in Coordination with Discovered Master Regulator Transcription Factor**
Ergun B. G., Demir I., Ozdamar T. H., Gasser B., Mattanovich D., Çalik P.
ADVANCED BIOSYSTEMS, vol.4, 2020 (SCI-Expanded)
- IX. **Engineering of alcohol dehydrogenase 2 hybrid-promoter architectures in *Pichia pastoris* to enhance recombinant protein expression on ethanol**
Ergun B. G., Gasser B., Mattanovich D., Calik P.
BIOTECHNOLOGY AND BIOENGINEERING, vol.116, no.10, pp.2674-2686, 2019 (SCI-Expanded)
- X. **A single Gal4-like transcription factor activates the Crabtree effect in *Komagataella phaffii***
Ata O., Rebnegger C., Tatto N. E., Valli M., Mairinger T., Hann S., Steiger M. G., ÇALIK P., Mattanovich D.
NATURE COMMUNICATIONS, vol.9, 2018 (SCI-Expanded)
- XI. **Hybrid fed-batch bioreactor operation design: control of substrate uptake enhances recombinant protein production in high-cell-density fermentations**
ÇALIK P., Hoxha B., ÇALIK GARCÍA G., Ozdamar T. H.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.93, no.11, pp.3326-3335, 2018 (SCI-Expanded)
- XII. **Naturally occurring novel promoters around pyruvate branch-point for recombinant protein production in *Pichia pastoris* (*Komagataella phaffii*): Pyruvate decarboxylase- and pyruvate kinase-promoters**
Massahi A., ÇALIK P.
BIOCHEMICAL ENGINEERING JOURNAL, vol.138, pp.111-120, 2018 (SCI-Expanded)
- XIII. **Naturally occurring novel promoters for recombinant protein production around pyruvate branch-point in *Pichia pastoris***
ÇALIK P., Massahi A.
NEW BIOTECHNOLOGY, vol.44, 2018 (SCI-Expanded)
- XIV. **Analyses of extracellular protein production in *Bacillus subtilis* - II: Responses of reaction network to oxygen transfer at transcriptional level**
KOCABAŞ P., ÇALIK GARCÍA G., ÇALIK P., Ozdamar T. H.
BIOCHEMICAL ENGINEERING JOURNAL, vol.127, pp.242-261, 2017 (SCI-Expanded)
- XV. **Analyses of extracellular protein production in *Bacillus subtilis* - I: Genome-scale metabolic model reconstruction based on updated gene-enzyme-reaction data**
KOCABAŞ P., ÇALIK P., ÇALIK GARCÍA G., Ozdamar T. H.
BIOCHEMICAL ENGINEERING JOURNAL, vol.127, pp.229-241, 2017 (SCI-Expanded)
- XVI. **Beet molasses-based feeding strategy enhances recombinant thermostable glucose isomerase production by *Escherichia coli* BL21 (DE3)**
Yaman S., ÇALIK P.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.64, no.6, pp.944-954, 2017 (SCI-Expanded)
- XVII. **Transcriptional engineering of the glyceraldehyde-3-phosphate dehydrogenase promoter for improved heterologous protein production in *Pichia pastoris***
Ata O., Prielhofer R., Gasser B., Mattanovich D., ÇALIK P.
BIOTECHNOLOGY AND BIOENGINEERING, vol.114, no.10, pp.2319-2327, 2017 (SCI-Expanded)
- XVIII. **Double promoter expression systems for recombinant protein production by industrial microorganisms**
Ozturk S., Ergun B. G., ÇALIK P.
APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.101, no.20, pp.7459-7475, 2017 (SCI-Expanded)

- XIX. **Endogenous signal peptides in recombinant protein production by *Pichia pastoris*: From in-silico analysis to fermentation**
Massahi A., ÇALIK P.
JOURNAL OF THEORETICAL BIOLOGY, vol.408, pp.22-33, 2016 (SCI-Expanded)
- XX. **Parametric continuous feed stream design to fine-tune fed-batch bioreactor performance: recombinant human growth hormone production in *Bacillus subtilis***
ÇALIK GARCÍA G., KOCABAŞ P., Afsar H., ÇALIK P., Ozdamar T. H.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.91, no.11, pp.2740-2750, 2016 (SCI-Expanded)
- XXI. **Oxygen transfer as a tool for fine-tuning recombinant protein production by *Pichia pastoris* under glyceraldehyde-3-phosphate dehydrogenase promoter**
Gunes H., ÇALIK P.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.39, no.7, pp.1061-1072, 2016 (SCI-Expanded)
- XXII. **Fed-Batch Biomolecule Production by *Bacillus subtilis*: A State of the Art Review**
Ozturk S., ÇALIK P., Ozdamar T. H.
TRENDS IN BIOTECHNOLOGY, vol.34, no.4, pp.329-345, 2016 (SCI-Expanded)
- XXIII. **Methanol feeding strategy design enhances recombinant human growth hormone production by *Pichia pastoris***
Gunes H., BOY E., Ata O., Zerze G. H., ÇALIK P., Ozdamar T. H.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.91, no.3, pp.664-671, 2016 (SCI-Expanded)
- XXIV. **Lignocellulose degrading extremozymes produced by *Pichia pastoris*: current status and future prospects**
Ergun B. G., ÇALIK P.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.39, no.1, pp.1-36, 2016 (SCI-Expanded)
- XXV. **Feeding strategy design for recombinant human growth hormone production by *Bacillus subtilis***
Sahin B., Ozturk S., ÇALIK P., Ozdamar T. H.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.38, no.10, pp.1855-1865, 2015 (SCI-Expanded)
- XXVI. **Recombinant protein production by sucrose-utilizing *Escherichia coli* W: untreated beet molasses-based feeding strategy development**
Akdag B., ÇALIK P.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.90, no.6, pp.1070-1076, 2015 (SCI-Expanded)
- XXVII. **Codon optimization of *xylA* gene for recombinant glucose isomerase production in *Pichia pastoris* and fed-batch feeding strategies to fine-tune bioreactor performance**
Ata O., BOY E., Gunes H., ÇALIK P.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.38, no.5, pp.889-903, 2015 (SCI-Expanded)
- XXVIII. **Recombinant protein production in *Pichia pastoris* under glyceraldehyde-3-phosphate dehydrogenase promoter: From carbon source metabolism to bioreactor operation parameters**
ÇALIK P., Ata O., Gunes H., Massahi A., BOY E., KESKİN A., Ozturk S., Zerze G. H., Ozdamar T. H.
BIOCHEMICAL ENGINEERING JOURNAL, vol.95, pp.20-36, 2015 (SCI-Expanded)
- XXIX. **In-silico determination of *Pichia pastoris* signal peptides for extracellular recombinant protein production**
Massahi A., ÇALIK P.
JOURNAL OF THEORETICAL BIOLOGY, vol.364, pp.179-188, 2015 (SCI-Expanded)
- XXX. **Metabolic reaction network of *Pichia pastoris* with glycosylation reactions: Flux analysis for erythropoietin production**
Eskitoros M. S., Ata O., ÇALIK P.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.89, no.11, pp.1675-1685, 2014 (SCI-Expanded)
- XXXI. **Co-substrate mannitol feeding strategy design in semi-batch production of recombinant human erythropoietin production by *Pichia pastoris***
Eskitoros M. S., ÇALIK P.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.89, no.5, pp.644-651, 2014 (SCI-Expanded)
- XXXII. **Effect of co-substrate sorbitol different feeding strategies on human growth hormone production by**

recombinant Pichia pastoris

ÇALIK P., Bozkurt B., Zerze G. H., Inankur B., Bayraktar E., BOY E., Orman M. A., Acik E., Ozdamar T. H.

JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.88, no.9, pp.1631-1640, 2013 (SCI-Expanded)

- XXXIII. **Beet molasses based exponential feeding strategy for thermostable glucose isomerase production by recombinant Escherichia coli BL21 (DE3)**
Angardi V., ÇALIK P.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.88, no.5, pp.845-852, 2013 (SCI-Expanded)
- XXXIV. **Recombinant transglutaminase production by metabolically engineered pichia pastoris**
Gunduz B., Yilmaz R., ÇALIK P.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XXXV. **Strategy development for therapeutic protein production by Pichia pastoris: human growth hormone**
Bozkurt B., ÇALIK P.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XXXVI. **Production of recombinant proteins by yeast cells**
Celik E., ÇALIK P.
BIOTECHNOLOGY ADVANCES, vol.30, no.5, pp.1108-1118, 2012 (SCI-Expanded)
- XXXVII. **A rapid method for detection of genetically modified organisms based on magnetic separation and surface-enhanced Raman scattering**
GÜVEN B., BOYACI İ. H., TAMER U., ÇALIK P.
ANALYST, vol.137, no.1, pp.202-208, 2012 (SCI-Expanded)
- XXXVIII. **Enhanced recombinant human erythropoietin production by Pichia pastoris in methanol fed-batch/sorbitol batch fermentation through pH optimization**
Soyaslan E. S., ÇALIK P.
BIOCHEMICAL ENGINEERING JOURNAL, vol.55, no.1, pp.59-65, 2011 (SCI-Expanded)
- XXXIX. **Dynamic flux balance analysis for pharmaceutical protein production by Pichia pastoris: Human growth hormone**
ÇALIK P., Sahin M., Taspinar H., Soyaslan E. S., Inankur B.
ENZYLE AND MICROBIAL TECHNOLOGY, vol.48, no.3, pp.209-216, 2011 (SCI-Expanded)
- XL. **Influence of pH on recombinant human growth hormone production by Pichia pastoris**
ÇALIK P., Bayraktar E., Inankur B., Soyaslan E. S., Sahin M., Taspinar H., Acik E., Yilmaz R., Ozdamar T. H.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.85, no.12, pp.1628-1635, 2010 (SCI-Expanded)
- XLI. **Metabolic Flux Analysis for Recombinant Protein Production by Pichia pastoris Using Dual Carbon Sources: Effects of Methanol Feeding Rate**
Celik E., ÇALIK P., Oliver S. G.
BIOTECHNOLOGY AND BIOENGINEERING, vol.105, no.2, pp.317-329, 2010 (SCI-Expanded)
- XLII. **Fermentation and oxygen transfer characteristics in recombinant human growth hormone production by Pichia pastoris in sorbitol batch and methanol fed-batch operation**
ÇALIK P., Inankur B., Soyaslan E. S., Sahin M., Taspinar H., Acik E., Bayraktar E.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.85, no.2, pp.226-233, 2010 (SCI-Expanded)
- XLIII. **Human growth hormone-specific aptamer identification using improved oligonucleotide ligand evolution method**
ÇALIK P., Balci O., Ozdamar T. H.
PROTEIN EXPRESSION AND PURIFICATION, vol.69, no.1, pp.21-28, 2010 (SCI-Expanded)
- XLIV. **Bioreaction network flux analysis for human protein producing Bacillus subtilis based on genome-scale model**
ÖZDAMAR H. T., Senturk B., YILMAZ O., KOCABAŞ P., Calik G., ÇALIK P.
CHEMICAL ENGINEERING SCIENCE, vol.65, no.1, pp.574-580, 2010 (SCI-Expanded)
- XLV. **A structured kinetic model for recombinant protein production by Mut(+) strain of Pichia pastoris**
Celik E., ÇALIK P., Oliver S. G.
CHEMICAL ENGINEERING SCIENCE, vol.64, no.23, pp.5028-5035, 2009 (SCI-Expanded)

- XLVI. **Effects of pulse feeding of beet molasses on recombinant benzaldehyde lyase production by *Escherichia coli* BL21(DE3)**
ÇALIK P., Levent H.
APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.85, no.1, pp.65-73, 2009 (SCI-Expanded)
- XLVII. **Effects of pretreated beet molasses on benzaldehyde lyase production by recombinant *Escherichia coli* BL21(DE3)pLySs**
ÇALIK P., Levent H.
JOURNAL OF APPLIED MICROBIOLOGY, vol.107, no.5, pp.1536-1541, 2009 (SCI-Expanded)
- XLVIII. **Biotech in Turkey**
GEÇKİL H., ÇALIK P.
Biotechnology Journal, vol.4, no.7, pp.951, 2009 (SCI-Expanded)
- XLIX. **Microarray studies in *Bacillus subtilis***
Kocabaş P., ÇALIK P., Çalik G., Özdamar T. H.
Biotechnology Journal, vol.4, no.7, pp.1012-1027, 2009 (SCI-Expanded)
- L. **Regulatory effects of oxygen transfer on overexpression of recombinant benzaldehyde lyase production by *Escherichia coli* BL21 (DE3)**
Kaya-Çeliker H., Angardi V., ÇALIK P.
Biotechnology Journal, vol.4, no.7, pp.1066-1076, 2009 (SCI-Expanded)
- L.I. **Effects of methanol plus sorbitol on recombinant human growth hormone production by *Pichia pastoris* Mut**
Bayraktar E., ÇALIK P., Yilmaz R., Ozdamar T.
NEW BIOTECHNOLOGY, vol.25, 2009 (SCI-Expanded)
- L.II. **Fed-batch methanol feeding strategy for recombinant protein production by *Pichia pastoris* in the presence of co-substrate sorbitol**
Celik E., ÇALIK P., Oliver S. G.
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Activities in Scientific Journals

Letters In Applied Microbiology, Editor, 2007 - Continues

Journal Of Applied Microbiology, Editor, 2007 - Continues

Memberships / Tasks in Scientific Organizations

Biyoenerji, Member of Advisory Board, 2018 - 2019

Scientific Refereeing

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Middle East Technical University, Turkey, November 2022

BIOTECHNOLOGY AND BIOENGINEERING, SCI Journal, October 2021

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Scientific Consultations

TÜBİTAK, Scientific Consultancy, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, Turkey, 2018 - 2019

Tasks In Event Organizations

Çalık P., Ayrancı Tansık İ., Büküşoğlu E., Bat E., İpek Torun B., ÜNER D., 9th Eastern Mediterranean Chemical Engineering Conference, Scientific Congress, Ankara, Turkey, Eylül 2018

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Metrics

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Congress and Symposium Activities

9th EASTERN MEDITERRANEAN CHEMICAL ENGINEERING CONFERENCE (EMCC 9), Invited Speaker, Ankara, Turkey, 2019

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Non Academic Experience

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