

Prof. PINAR ÇALIK

Personal Information

Office Phone: [+90 312 210 4359](tel:+903122104359)

Email: pcalik@metu.edu.tr

Web: <https://avesis.metu.edu.tr/pcalik>

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

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

Advising Theses

Çalık P., Determination of optimal bioreactor operational strategy and unstructured macrokinetic model for recombinant human growth hormone production on ethanol by a novel *Pichia pastoris* pADH2-cAT8-L2 based system, Postgraduate, O.WEHBE(Student), 2019

Çalık P., 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

Kalpçılar 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., ÇULFAZ EMECEN P. Z. , Separation and purification of recombinant proteins by using ultrafiltration membranes, Postgraduate, B.AKCAN(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., Effect of signal sequences and promoters in recombinant extracellular protein production by *Pichia pastoris*, Doctorate, A.MASSAHI(Student), 2017

ÇALIK P., Granulocyte-colony stimulating factor analog production by recombinant *Escherichia coli*, Postgraduate, O.ERSOY(Student), 2017

ÇALIK P., Transcriptional engineering of GAP promoter for improved recombinant protein production by *Pichia pastoris*, Doctorate, Ö.ATA(Student), 2017

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., 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., 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., 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., Semi-defined medium based feeding strategy development for human growth hormone production by recombinant *Bacillus subtilis*/, Postgraduate, S.Öztürk(Student), 2014

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.Keskin(Student), 2014

ÇALIK P., Semi-defined medium based feeding strategy development for human growth hormone production by recombinant *Bacillus subtilis*, Postgraduate, S.ÖZTÜRK(Student), 2014

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., Investigation of thermostable recombinant glucose isomerase production by sucrose utilizing *Escherichia coli*, Postgraduate, B.AKDAĞ(Student), 2013

ÇALIK P., Feeding strategy development for human growth hormone production by *Pichia pastoris*, Postgraduate, B.BOZKURT(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., Comparison of human growth hormone production performance of two different metabolically engineered *Pichia pastoris*, Postgraduate, H.Gül(Student), 2012

ÇALIK P., Physiological and biochemical screening of different Turkish lentil cultivars under salt stress conditions, Postgraduate, F.Selin(Student), 2012

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

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

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

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

ÇALIK P., Effect of pH on erythropoietin production by recombinant Pichia pastoris in fed-batch operation, Postgraduate, E.ŞÜKRAN(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., Regulatory Gene Effects on Recombinant Human Growth Hormone Production by Bacillus subtilis, Postgraduate, M.ŞAHİN(Student), 2010

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

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

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

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

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

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

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

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

ÇALIK P., Bioprocess operation parameters for recombinant benzaldehyde lyase production, Postgraduate,

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

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

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

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **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 (Journal Indexed in SCI)
- II. **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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **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 (Journal Indexed in SCI)
- VI. **Engineered Deregulation 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., Çalık P.
ADVANCED BIOSYSTEMS, vol.4, 2020 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)

- VIII. **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 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **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 (Journal Indexed in SCI)
- XI. **Naturally occurring novel promoters for recombinant protein production around pyruvate branch-point in Pichia pastoris**
ÇALIK P., Massahi A.
NEW BIOTECHNOLOGY, vol.44, 2018 (Journal Indexed in SCI)
- XII. **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 (Journal Indexed in SCI)
- XIII. **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 (Journal Indexed in SCI)
- XIV. **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 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **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 (Journal Indexed in SCI)
- XVII. **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 (Journal Indexed in SCI)
- XVIII. **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 (Journal Indexed in SCI)
- XIX. **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 (Journal Indexed in SCI)
- XX. **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 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **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 (Journal Indexed in SCI)
- XXIII. **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 (Journal Indexed in SCI)
- XXIV. **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 (Journal Indexed in SCI)
- XXV. **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 (Journal Indexed in SCI)
- XXVI. **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 (Journal Indexed in SCI)
- XXVII. **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 (Journal Indexed in SCI)
- XXVIII. **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 (Journal Indexed in SCI)
- XXIX. **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 (Journal Indexed in SCI)
- XXX. **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 (Journal Indexed in SCI)
- XXXI. **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 (Journal Indexed in SCI)
- XXXII. **Recombinant transglutaminase production by metabolically engineered pichia pastoris**
Gunduz B., Yilmaz R., ÇALIK P.
NEW BIOTECHNOLOGY, vol.29, 2012 (Journal Indexed in SCI)
- XXXIII. **Strategy development for therapeutic protein production by Pichia pastoris: human growth hormone**
Bozkurt B., ÇALIK P.
NEW BIOTECHNOLOGY, vol.29, 2012 (Journal Indexed in SCI)
- XXXIV. **Production of recombinant proteins by yeast cells**
Celik E., ÇALIK P.
BIOTECHNOLOGY ADVANCES, vol.30, no.5, pp.1108-1118, 2012 (Journal Indexed in SCI)
- XXXV. **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 (Journal Indexed in SCI)
- XXXVI. **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 (Journal Indexed in SCI)
- XXXVII. **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.
ENZYME AND MICROBIAL TECHNOLOGY, vol.48, no.3, pp.209-216, 2011 (Journal Indexed in SCI)
- XXXVIII. **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 (Journal Indexed in SCI)
- XXXIX. **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 (Journal Indexed in SCI)
- XL. **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 (Journal Indexed in SCI)
- XLI. **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 (Journal Indexed in SCI)
- XLII. **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 (Journal Indexed in SCI)
- XLIII. **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 (Journal Indexed in SCI)
- XLIV. **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 (Journal Indexed in SCI)
- XLV. **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 (Journal Indexed in SCI)
- XLVI. **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 (Journal Indexed in SCI Expanded)
- XLVII. **Biotech in Turkey**
GEÇKİL H., ÇALIK P.
Biotechnology Journal, vol.4, no.7, pp.951, 2009 (Journal Indexed in SCI Expanded)
- XLVIII. **Microarray studies in Bacillus subtilis**
Kocabaş P., ÇALIK P., Çalik G., Özdamar T. H.
Biotechnology Journal, vol.4, no.7, pp.1012-1027, 2009 (Journal Indexed in SCI Expanded)
- XLIX. **Effects of carbon sources and feeding strategies on human growth hormone production by metabolically engineered Pichia pastoris**
Acik E., ÇALIK P., Ozdamar T.
NEW BIOTECHNOLOGY, vol.25, 2009 (Journal Indexed in SCI)
- L. **Recombinant protein production by Mut(+) strain of Pichia pastoris using dual carbon sources: methanol and sorbitol**
ÇALIK P., ÖNAL ÇELİK E., Oliver S. G.
NEW BIOTECHNOLOGY, vol.25, 2009 (Journal Indexed in SCI)
- LI. **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.
YEAST, vol.26, no.9, pp.473-484, 2009 (Journal Indexed in SCI)
- LII. **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 (Journal Indexed in SCI)
- LIII. **The influence of carbon sources on recombinant-human-growth-hormone production by Pichia pastoris is dependent on phenotype: a comparison of Mut(s) and Mut(+) strains**
Orman M. A. , ÇALIK P., Ozdamar T. H.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.52, pp.245-255, 2009 (Journal Indexed in SCI)
- LIV. **Glucose isomerase production on a xylan-based medium by Bacillus thermoantarcticus**
ÇALIK P., Angardi V., Haykir N. I. , BOYACI İ. H.
BIOCHEMICAL ENGINEERING JOURNAL, vol.43, no.1, pp.8-15, 2009 (Journal Indexed in SCI)
- LV. **Expression System for Recombinant Human Growth Hormone Production from Bacillus subtilis**
ÖZDAMAR H. T. , Sentuerk B., Yilmaz O. D. , Calik G., Celik E., ÇALIK P.
BIOTECHNOLOGY PROGRESS, vol.25, no.1, pp.75-84, 2009 (Journal Indexed in SCI)
- LVI. **Development of enhanced ultrafiltration methodologies for the resolution of racemic benzoin**
Olceroglu A. H. , ÇALIK P., YILMAZ L.
JOURNAL OF MEMBRANE SCIENCE, vol.322, no.2, pp.446-452, 2008 (Journal Indexed in SCI)
- LVII. **Use of biodiesel byproduct crude glycerol as the carbon source for fermentation processes by recombinant Pichia pastoris**
Celik E., Ozbay N., OKTAR N., ÇALIK P.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.47, no.9, pp.2985-2990, 2008 (Journal Indexed in SCI)
- LVIII. **Expression system for synthesis and purification of recombinant human growth hormone in Pichia pastoris and structural analysis by MALDI-ToF mass spectrometry**
ÇALIK P., Orman M. A. , Celik E., Halloran S. M. , Calik G., Ozdamar T. H.

- BIOTECHNOLOGY PROGRESS, vol.24, no.1, pp.221-226, 2008 (Journal Indexed in SCI)
- LIX. **Production of recombinant human erythropoietin from *Pichia pastoris* and its structural analysis**
Celik E., Calik P., Halloran S. M. , Oliver S. G.
JOURNAL OF APPLIED MICROBIOLOGY, vol.103, no.6, pp.2084-2094, 2007 (Journal Indexed in SCI)
- LX. **pH influences intracellular reaction network of beta-lactamase producing *Bacillus licheniformis***
Calik P., Ileri N.
CHEMICAL ENGINEERING SCIENCE, vol.62, pp.5206-5211, 2007 (Journal Indexed in SCI)
- LXI. **Phosphate enrichment and fed-batch operation for prolonged beta-lactamase production by *Bacillus licheniformis***
Ileri N., Calik P., Sengul A.
JOURNAL OF APPLIED MICROBIOLOGY, vol.102, no.5, pp.1418-1426, 2007 (Journal Indexed in SCI)
- LXII. **Chiral separation of racemic benzoin via enzyme enhanced ultrafiltration**
Olceroglu A. H. , Calik P., Yilmaz L.
DESALINATION, vol.200, pp.464-465, 2006 (Journal Indexed in SCI)
- LXIII. **Fermentation characteristics of L-tryptophan production by thermoacidophilic *Bacillus acidocaldarius* in a defined medium**
Kocabas P., Calik P., Ozdamar T. H.
ENZYME AND MICROBIAL TECHNOLOGY, vol.39, no.5, pp.1077-1088, 2006 (Journal Indexed in SCI)
- LXIV. **Influence of controlled-pH and uncontrolled-pH operations on recombinant benzaldehyde lyase production by *Escherichia coli***
Calik P., Yilgor P., Demir A.
ENZYME AND MICROBIAL TECHNOLOGY, vol.38, no.5, pp.617-627, 2006 (Journal Indexed in SCI)
- LXV. **Effects of pH strategy on endo- and exo-metabolome profiles and sodium potassium hydrogen ports of beta-lactamase-producing *Bacillus licheniformis***
Ileri N., Calik P.
BIOTECHNOLOGY PROGRESS, vol.22, no.2, pp.411-419, 2006 (Journal Indexed in SCI)
- LXVI. **Effects of spray drying temperature and additives on the stability of serine alkaline protease powders**
Namaldi A., Calik P., Uludag Y.
DRYING TECHNOLOGY, vol.24, no.11, pp.1495-1500, 2006 (Journal Indexed in SCI)
- LXVII. **Novel antifoam for fermentation processes: Fluorocarbon-hydrocarbon hybrid unsymmetrical bolaform surfactant**
Calik P., Ileri N., Erdinc B., Aydogan N., Argun M.
LANGMUIR, vol.21, no.19, pp.8613-8619, 2005 (Journal Indexed in SCI)
- LXVIII. **Oxygen transfer effects in beta-lactamase fermentation by *Bacillus licheniformis* in a glucose-based defined medium**
Calik P., Arifoglu M., Calik G.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.80, no.9, pp.1062-1071, 2005 (Journal Indexed in SCI)
- LXIX. **Metabolic engineering of aromatic group amino acid pathway in *Bacillus subtilis* for L-phenylalanine production**
Ozcelik I., Calik P., Calik G., Ozdamar T.
CHEMICAL ENGINEERING SCIENCE, vol.59, pp.5019-5026, 2004 (Journal Indexed in SCI)
- LXX. **Fermentation and oxygen transfer characteristics in serine alkaline protease production by recombinant *Bacillus subtilis* in molasses-based complex medium**
Calik G., Pehlivan N., Ozcelik I., Calik P., Ozdamar T.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.79, no.11, pp.1243-1250, 2004 (Journal Indexed in SCI)
- LXXI. **Oxygen transfer effects on recombinant benzaldehyde lyase production**
Calik P., Yilgor P., Ayhan P., Demir A.
CHEMICAL ENGINEERING SCIENCE, vol.59, pp.5075-5083, 2004 (Journal Indexed in SCI)

- LXXII. **Bioprocess parameters and oxygen transfer characteristics in beta-lactamase production by Bacillus species**
Celik E., Calik P.
BIOTECHNOLOGY PROGRESS, vol.20, no.2, pp.491-499, 2004 (Journal Indexed in SCI)
- LXXIII. **Inorganic compounds have dual effect on recombinant protein production: influence of anions and cations on serine alkaline protease production**
Calik P., Bilir E., Ozcelik I., Calik G., Ozdamar T.
JOURNAL OF APPLIED MICROBIOLOGY, vol.96, no.1, pp.194-200, 2004 (Journal Indexed in SCI)
- LXXIV. **Overexpression of serine alkaline protease encoding gene in Bacillus species: performance analyses**
Calik P., Kalender N., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.33, no.7, pp.967-974, 2003 (Journal Indexed in SCI)
- LXXV. **Protein-based complex medium design for recombinant serine alkaline protease production**
Calik P., Celik E., Telli I., Oktar C., Ozdemir E.
ENZYME AND MICROBIAL TECHNOLOGY, vol.33, no.7, pp.975-986, 2003 (Journal Indexed in SCI)
- LXXVI. **Overexpression of a serine alkaline protease gene in Bacillus licheniformis and its impact on the metabolic reaction network**
Calik P., Tomlin G., Oliver S., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.32, no.6, pp.706-720, 2003 (Journal Indexed in SCI)
- LXXVII. **Utilization of pretreated molasses for serine alkaline protease production with recombinant Bacillus species**
Calik G., Pehlivan N., Kalender N., Ozdamar T., Calik P.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.190, pp.630-644, 2003 (Journal Indexed in SCI)
- LXXVIII. **Regulatory effects of alanine-group amino acids on serine alkaline protease production by recombinant Bacillus licheniformis**
ÇALIK P., Bayram A., Ozdamar T.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.37, pp.165-171, 2003 (Journal Indexed in SCI)
- LXXIX. **Bioreactor operation parameters as tools for metabolic regulations in fermentation processes: influence of pH conditions**
Calik P., Bilir E., Calik G., Ozdamar T.
CHEMICAL ENGINEERING SCIENCE, vol.58, pp.759-766, 2003 (Journal Indexed in SCI)
- LXXX. **Enzyme-ion exchanger interactions in serine alkaline protease separation: theory, equilibria and kinetics**
Calik P., Ozcelik I., Calik G., Ozdamar T.
BIOCHEMICAL ENGINEERING JOURNAL, vol.12, no.3, pp.193-204, 2002 (Journal Indexed in SCI)
- LXXXI. **Influence of pH conditions on metabolic regulations in serine alkaline protease production by Bacillus licheniformis**
Calik P., Bilir E., Calik G., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.31, no.5, pp.685-697, 2002 (Journal Indexed in SCI)
- LXXXII. **Metabolic flux analysis for human therapeutic protein productions and hypothesis for new therapeutical strategies in medicine**
Calik P., Ozdamar T.
BIOCHEMICAL ENGINEERING JOURNAL, vol.11, no.1, pp.49-68, 2002 (Journal Indexed in SCI)
- LXXXIII. **Bioreaction network flux analysis for industrial microorganisms: A review**
Calik P., Ozdamar T.
REVIEWS IN CHEMICAL ENGINEERING, vol.18, no.6, pp.553-596, 2002 (Journal Indexed in SCI)
- LXXXIV. **Carbon sources affect metabolic capacities of Bacillus species for the production of industrial enzymes: theoretical analyses for serine and neutral proteases and alpha-amylase**
Calik P., Ozdamar T.
BIOCHEMICAL ENGINEERING JOURNAL, vol.8, no.1, pp.61-81, 2001 (Journal Indexed in SCI)
- LXXXV. **Bioprocess development for serine alkaline protease production: A review**
Calik P., Calik G., Ozdamar T.

- REVIEWS IN CHEMICAL ENGINEERING, vol.17, pp.1-62, 2001 (Journal Indexed in SCI)
- LXXXVI. **Metabolic flux analyses for serine alkaline protease production**
ÇALIK P., ÇALIK P., Takac S., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.27, no.10, pp.793-805, 2000 (Journal Indexed in SCI)
- LXXXVII. **Oxygen-transfer strategy and its regulation effects in serine alkaline protease production by Bacillus licheniformis**
Calik P., Calik G., Ozdamar T.
BIOTECHNOLOGY AND BIOENGINEERING, vol.69, no.3, pp.301-311, 2000 (Journal Indexed in SCI)
- LXXXVIII. **Mass flux balance-based model and metabolic flux analysis for collagen synthesis in the fibrogenesis process of human liver**
ÇALIK P., Akbay A.
MEDICAL HYPOTHESES, vol.55, no.1, pp.5-14, 2000 (Journal Indexed in SCI)
- LXXXIX. **Separation of the protease enzymes of Bacillus licheniformis from the fermentation medium by crossflow ultrafiltration**
Takac S., Elmas S., ÇALIK P., Ozdamar T.
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.75, no.6, pp.491-499, 2000 (Journal Indexed in SCI)
- XC. **Serine alkaline protease overproduction capacity of Bacillus licheniformis**
ÇALIK P., Takac S., ÇALIK P., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.26, no.1, pp.45-60, 2000 (Journal Indexed in SCI)
- XCII. **Metabolic flux analysis for serine alkaline protease fermentation by Bacillus licheniformis in a defined medium: Effects of the oxygen transfer rate**
Calik P., Calik G., Takac S., Ozdamar T.
BIOTECHNOLOGY AND BIOENGINEERING, vol.64, no.2, pp.151-167, 1999 (Journal Indexed in SCI)
- XCIII. **Mass flux balance-based model and metabolic pathway engineering analysis for serine alkaline protease synthesis by Bacillus licheniformis**
Çalik P., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.24, no.10, pp.621-635, 1999 (Journal Indexed in SCI)
- XCIII. **Growth and kappa-carrageenan immobilization of Pseudomonas dacunhae cells for L-alanine production**
Calik G., Savasci H., Calik P., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.24, no.1-2, pp.67-74, 1999 (Journal Indexed in SCI)
- XCIV. **Oxygen transfer effects in serine alkaline protease fermentation by Bacillus licheniformis: Use of citric acid as the carbon source**
Calik P., Calik G., Ozdamar T.
ENZYME AND MICROBIAL TECHNOLOGY, vol.23, no.7-8, pp.451-461, 1998 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Isolation of High-Quality RNA from Pichia pastoris**
Öztürk S., Demir İ., ÇALIK P.
Current Protocols in Protein Science, vol.98, no.1, 2019 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Hybrid-architected promoter design to engineer expression in yeast**
ÇALIK P., Gündüz Ergün B.
in: Methods in Enzymology, O'Dell W.B., Kelman Z, Editor, Academic Press Inc., pp.81-104, 2021
- II. **Hybrid-architected promoter design to deregulate expression in yeast**

ÇALIK P., Gündüz Ergün B.

in: Methods in Enzymology, O'Dell W.B., Kelman Z, Editor, Academic Press Inc., pp.105-125, 2021

III. **Established and Upcoming Yeast Expression Systems.**

Ergün B. G. , Hücetoğulları D., Öztürk S., ÇELİK AKDUR E., ÇALIK P.

in: Recombinant Protein Production in Yeast, Brigitte Gasser and Diethard Mattanovich, Editor, Springer Nature Switzerland, pp.1-74, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **Rekombinant Protein Üretimi**
ÇALIK P.
TAGEM GIDA ARAŞTIRMALARIPROGRAM DEĞERLENDİRME TOPLANTISI, Antalya, Turkey, 20 - 24 February 2017
- II. **The Effect of Cell Cycle Synchronization on Recombinant Protein Production by Pichia pastoris**
Hücetoğulları D., ÇALIK P.
Pichia 2016 Conference, 3 April - 06 June 2016
- III. **Effect of oxygen transfer conditions on recombinant protein production by Pichia pastoris under glyceraldehyde 3 phosphate dehydrogenase promoter**
GÜNEŞ H., ÇALIK P.
Pichia 2016 Conference, 3 - 06 April 2016
- IV. **Effect of glucose fructose mixed feeding on human growth hormone production under GAP promoter by Pichia pastoris**
Duygu Y., Hoxha B., ÇALIK P.
Pichia 2016 Conference, 3 - 06 April 2016
- V. **Extracellular Microbial Pro transglutaminase Production by Recombinant Pichia pastoris**
Gündüz Ergün B., ÇALIK P.
Pichia 2016 Conference, 3 - 06 April 2016
- VI. **Challenges in Pichia pastoris promoters for recombinant protein production AOX1 promoter versus GAP promoter**
ÇALIK P., GÜNEŞ H., KESKİN A., Ata Ö., BOY E., Özdamar H. T.
Pichia 2016 Conference, 3 - 06 April 2016
- VII. **Effects of exponential feeding strategy on benzaldehyde lyase production by recombinant Escherichia coli**
Taspınar H., ÇALIK P.
14th International Biotechnology Symposium and Exhibition (IBS-2008), Rimini, Italy, 14 - 18 September 2010, vol.150
- VIII. **Extracellular benzaldehyde lyase production by Pichia pastoris**
Buyuksungur A., Calik P.
13th European Congress on Biotechnology (ECB 13), Barcelona, Spain, 16 - 19 September 2007, vol.131
- IX. **Fed-batch operation for benzaldehyde lyase production by recombinant Escherichia coli**
Levent H., Buyuksungur A., Calik P.
13th European Congress on Biotechnology (ECB 13), Barcelona, Spain, 16 - 19 September 2007, vol.131
- X. **Expression and structural characterization of recombinant human erythropoietin from Pichia pastoris**
Celik E., Calik P., Halloran S. M. , Oliver S. G.
13th European Congress on Biotechnology (ECB 13), Barcelona, Spain, 16 - 19 September 2007, vol.131
- XI. **Effect of fed batch operation on intracellular reaction network of beta-lactamase producing Bacillus licheniformis**
Calik P., Ileri N.
13th European Congress on Biotechnology (ECB 13), Barcelona, Spain, 16 - 19 September 2007, vol.131
- XII. **Metabolic engineering design of an extracellular hGH synthesis system**

- Senturk B., Calik P., Calik G., Ozdamar T.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XIII. **pH influences metabolite profiling of beta-lactamase producing B-licheniformis**
Ileri N., Calik P., Sengul A.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XIV. **Recombinant microorganism development for extracellular benzaldehyde lyase production**
Kaya H., Calik P., Ozdamar T.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XV. **Metabolic engineering of L-phenylalanine pathway in Bacillus subtilis**
Demirci Y., Calik P., Calik G., Ozdamar T.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XVI. **Carbon sources create fingerprint fermentation characteristics**
Calik P., Calik G., Ozdamar T.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XVII. **Oxygen transfer regulates benzaldehyde lyase production in E-coli**
Calik P.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118
- XVIII. **Crossflow ultrafiltration of Bacillus licheniformis fermentation medium to separate protease enzymes**
Takac S., Elmas S., ÇALIK P., Ozdamar T.
9th European Congress on Biotechnology (ECB9), Brussels, Belgium, 11 - 15 July 1999, vol.4, pp.171-179
- XIX. **Pretreatment processes of molasses for the utilization in fermentation processes**
ÇALIK P., Berk M., Boyaci F., ÇALIK P., Takac S., Ozdamar T.
9th European Congress on Biotechnology (ECB9), Brussels, Belgium, 11 - 15 July 1999, vol.4, pp.21-28
- XX. **Protease secretion capacity and performance analysis of recombinant Bacillus species**
Calik P., Kalender N., Ozdamar T.
Conference of the Microbial Physiology Section of the European-Federation-of-Biotechnology, SEMMERING, Austria, 5 - 08 October 2000, pp.383-392
- XXI. **Metabolic network analysis for human therapeutic protein productions: Effects of the P/O ratio**
Calik P., Ozdamar T.
Conference of the Microbial Physiology Section of the European-Federation-of-Biotechnology, SEMMERING, Austria, 5 - 08 October 2000, pp.277-288

Supported Projects

ÇALIK P., DAYANKAÇ İ., Project Supported by Higher Education Institutions, EFFECTS OF METABOLIC ENGINEERING OF ETHANOL UTILIZATION PATHWAY IN Pichia pastoris ON RECOMBINANT PROTEIN PRODUCTION AND TRANSCRIPTION LEVELS IN CENTRAL METABOLISM, 2020 - Continues

Çalik P., TUBITAK Project, Pichia pastoris ALKOL DEHİDROJENAZ-1 PROMOTORUNUN GELİŞTİRİLMESİ VE TASARLANMIŞ PROMOTOR İLE TERAPÖTİK PROTEİN ÜRETİMİNİN ARTIRILMASI, 2017 - 2020

ÇALIK P., WEHBE AL MASRI O., Project Supported by Higher Education Institutions, TEDAVİ KULLANIMI İÇİN PEPTİDLERİN METABOLİK MÜHENDİSLİĞİ TASARIMI, 2018 - 2019

ÇALIK P., ERSOY O., Project Supported by Higher Education Institutions, REKOMBİNANT ESCHERİCHİA COLİ İLE GRANÜLOSİT KOLONİ STİMÜLAN FAKTÖR TÜREVLERİ ÜRETİMİ, 2018 - 2019

ÇALIK P., ÖZTÜRK S., Project Supported by Higher Education Institutions, BACİLLUS SUBTİLUS HÜCRE İÇİ TEPKİME AĞININ REKOMBİNANT İNSAN BÜYÜME HORMONU ÜRETİMİ İÇİN GEN EKSPRESYON SEVİYELERİ İLE BİRLİKTE MODELLENMESİ, 2018 - 2019

ÇALIK P., KESKİN A., Project Supported by Higher Education Institutions, REKOMBİNANT PROTEİN ÜRETİMİNİ ARTIRMAK İÇİN METALİK AKILARIN YÖNLENDİRİLMESİ İÇİN METABOLİZMA MÜHENDİSLİĞİ TASARIMI, 2018 - 2019

ÇALIK P., DEMİR İ., Project Supported by Higher Education Institutions, ÇİFT PROMOTER İLE REKOMBİNANT PROTEİN

İRETİMİ İÇİN HYBRİD YARI KESİKLİ ÜRETİM STRATEJİSİ GELİŞTİRİLMESİ, 2018 - 2019

ÇALIK P., ÖZTÜRK S., Project Supported by Higher Education Institutions, Bacillus subtilis ile 43 PROMOTÖRÜ (P43)

KONTROLÜ ALTINDA HÜCRE DIŞI REKOMBİNANT İNSAN BÜYÜME HORMONU ÜRETİMİ, 2018 - 2019

Çalık P., TUBITAK Project, Metabolik mühendislik ve reaksiyon mühendisliği prensipleriyle insan büyüme hormonu üretimi için yeni biyoteknolojik proses geliştirilmesi, 2015 - 2018

ÇALIK P., Project Supported by Higher Education Institutions, P.FURİOSUS ?-AMİLAZİNİN MODİFİYE BAKTERİYEL PROMOTER KULLANILARAK B.LİCHENİFORMİS İLE YÜKSEK MİKTARDA EKSPRESYONU, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, REKOMBİNANT PROTEİN ÜRETİMİNİ ARTIRMAK İÇİN METALİK AKILARIN YÖNLENDİRİLMESİ İÇİN METABOLİZMA MÜHENDİSLİĞİ TASARIMI, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, ÇİFT PROMOTER ALTINDA REKOMBİNANT İNSAN BÜYÜME HORMONU ÜRETİMİ İÇİN PİCHİA PASTORIS'İN METABOLİK MÜHENDİSLİK TASARIMI, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, PİCHİA PASTORIS İLE MODİFİYE GAP PROMOTÖRÜNÜN KONTROLÜ ALTINDA İNSAN BÜYÜME HORMONU, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, SİGNAL DİZİNLERİN VE PROMOTERLERİN PİCHİA PASTORIS İLE HÜCRE DIŞI REKOMBİNANT PROTEİN ÜRETİMİNE ETKİSİ, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, REKOMBİNANT PROTEİN ÜRETİMİNİ İÇİN P. PASTORIS HÜCRE İÇİN TEPKİME AĞININ MODİFİKASYONU, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, PİCHİA PASTORIS İLE REKOMBİNANT BÜYÜME HORMONUNUN ÖZGÜN BİR PROMOTER KULLANILARAK ÜRETİMİ, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, GAP PROMOTER TASARIMI VE TASARLANAN GAP PROMOTERİ ALTINDA PİCHİA PASTORIS İLE REKOMBİNANT PROTEİN ÜRETİMİ İÇİN BİYOPROSES GELİŞTİRİLMESİ, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, REKOMBİNANT ESCHERİCHİA COLİ İLE GRANÜLOSİT KOLONİ STİMÜLAN FAKTÖR ÜRETİMİ, 2017 - 2017

ÇALIK P., GÜNDÜZ ERGÜN B., Project Supported by Higher Education Institutions, Pichia pastoris ile ALKOL DEHİDROJENAZ 1 PROMOTER KONTROLÜ ALTINDA REKOMBİNANT PROTEİN ÜRETİMİ, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, BACİLLUS SUBTİLUS HÜCRE İÇİ TEPKİME AĞININ REKOMBİNANT İNSAN BÜYÜME HORMONU ÜRETİMİ İÇİN GEN EKSPRESYON SEVİYELERİ İLE BİRLİKTE MODELLENMESİ, 2017 - 2017

ÇALIK P., Project Supported by Higher Education Institutions, PROMOTER MÜHENDİSLİĞİ İLE PİCHİA PASTORIS ALKOL DEHİDROJENAZ 1 PROMOTERİNİN EKSPRESYON ETKİNLİĞİNİN ARTIRILMASI, 2017 - 2017

ÇALIK P., AKCAN B., ÇULFAZ EMECEN P. Z. , Project Supported by Higher Education Institutions, Rekombinant İnsan Büyüme Hormonunun Ultrafiltrasyon ile Üretim Ortamından Ayırılması, 2016 - 2017

ÇALIK P., MASSAHI A., Project Supported by Higher Education Institutions, Pichia pastoris ile Hücre dışı Rekombinant Hormon Üretimine Signal Peptid Dizininin Etkisinin Araştırılması, 2015 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., KESKİN A., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

ÇALIK P., Project Supported by Higher Education Institutions, Pichia pastoris ile Rekombinant Hormone Üretimi için Strateji Geliştirilmesi, 2013 - 2014

ÇALIK P., RAHİMİ R., Project Supported by Higher Education Institutions, REKOMBİNANT PROTEİN ÜRETİMİ VE KİNETİK MODELLEMESİ, 2013 - 2013

ÇALIK P., GÖKBUDAK B., Project Supported by Higher Education Institutions, METABOLİK MÜHENDİSLİK B. SUBTİLİS İLE İNSAN BÜYÜME HORMONU ÜRETİMİ: BESLEME STRATEJİSİ GELİŞTİRİLMESİ, 2013 - 2013

ÇALIK P., YAMAN S., Project Supported by Higher Education Institutions, ISIYA DAYANIKLI GLUKOZ İZOMERAZ ENZİMİNİN REKOMBİNANT BACİLLUS SUBTİLİS İLE ÜRETİMİ, 2013 - 2013

ÇALIK P., BOY E., Project Supported by Higher Education Institutions, P. PASTORİS İLE HİPERTERMOFİLİK PROTEİN EKSPRESYONUNDA KARŞILAŞILAN SORUNLARIN BELİRLENMESİ VE REKOMBİNANT PYROCOCCUS FURIOUSUS ALFA - AMİLAZ ÜRETİM PROSESİNİN İYİLEŞTİRİLMESİ, 2013 - 2013

ÇALIK P., KESKİN A., Project Supported by Higher Education Institutions, PİCHIA PASTORİS VE İNSAN BÜYÜME HORMONUNUN ÜRETİMİ İÇİN BESLEME STRATEJİLERİNİN GELİŞTİRİLMESİ, 2013 - 2013

ÇALIK P., MASSAHI A., Project Supported by Higher Education Institutions, SİGNAL DİZİNLERİN VE PROMOTERLARIN PİCHIA PASTORIS İLE HÜCRE DIŞI REKOMBİNANT PROTEİN ÜRETİMİNE ETKİSİ, 2013 - 2013

ÇALIK P., Project Supported by Higher Education Institutions, Glukoz İsomeras Enzim Üretiminin Kinetik Modellenmesi, 2011 - 2011

ÇALIK P., Project Supported by Higher Education Institutions, Biyokimyasal Reaksiyon Mühendisliği Prensipleriyle Rekombinant Pichia Pastoris İle Terapik Peotein Üresiminde Hücreiçi Tepkime Hızlarının Stratejik Analizi, 2009 - 2010

Activities in Scientific Journals

Journal Of Applied Microbiology, Editor, 2007 - Continues

Letters In Applied Microbiology, Editor, 2007 - Continues

Memberships / Tasks in Scientific Organizations

Biyoenerji, Member of Advisory Board, 2018 - 2019

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

Çalık P., EMCC9 9th Eastern Mediterranean Chemical Engineering Conference, Scientific Congress, Ankara, Turkey, Eylül 2018

Edit Congress and Symposium Activities

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

Naturally occurring novel promoters for recombinant protein production around pyruvate branch-point in Pichia pastoris, Working Group, Geneve, Switzerland, 2018

Citations

Total Citations (WOS):1820

h-index (WOS):24