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Education Information

Doctorate, Universiteit Gent, Faculty Of Bioscience Engineering, Molecular Biotechnology, Belgium 2008 - 2014

Post Graduate, Universiteit Gent, Faculty Of Science, Molecular Biotechnology / Plant Biotechnology, Belgium 2006 - 2009

Under Graduate, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Biyoloji Bölümü, Turkey 2001 - 2006

Foreign Languages

English, C1 Advanced

Dutch, A1 Beginner

Certificates, Courses and Trainings

Education Management and Planning, 2237 Araştırma Projesi Hazırlama Eğitimi, TÜBİTAK / BİDEB, 2015

Education Management and Planning, Techniques for Characterization of Carbohydrate Structure of Polysaccharides, Complex Carbohydrate Research Center (CCRC) of The University of Georgia, 2012

Dissertations

Doctorate, Cell wall engineering for better conversion of lignocellulosic biomass, Universiteit Gent, Faculty Of Bioscience Engineering, Department Of Molecular Biotechnology, 2014

Post Graduate, Functional analysis of Arabidopsis genes that are the putative orthologs of tobacco genes implicated in the activation of alkaloid biosynthesis, Universiteit Gent, Faculty Of Science, Department Of Plant System Biology, 2007

Research Areas

Mechanical Engineering, Energy, Renewable Energy Systems, Life Sciences, Biochemistry, Plant Biochemistry, Biotechnology, Plant Biotechnology, Molecular Biology and Genetics, Plant Molecular Genetics, Genetic Engineering, Genomics, Chemistry, Analytical Chemistry, Chromatographic Analysis, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Karadeniz Technical University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2018 - Continues

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

- I. **Iron oxide nanoparticles translocate in pumpkin and alter the phloem sap metabolites related to oil metabolism**
TOMBULOGLU H., ANIL I., AKHTAR S., TURUMTAY H., Sabit H., Slimani Y., Almessiere M., Baykal A.
SCIENTIA HORTICULTURAE, vol.265, 2020 (Journal Indexed in SCI)
- II. **PIRIN2 suppresses S-type lignin accumulation in a noncell-autonomous manner in Arabidopsis xylem elements.**
ZHANG B., SZTOJKA B., ESCAMEZ S., VANHOLME R., HEDENSTRÖM M., WANG Y., Turumtay H., GORZSÁS A., BOERJAN W., TUOMINEN H.
The New phytologist, vol.225, pp.1923-1935, 2020 (Journal Indexed in SCI)
- III. **Paeoniflorigenone purified from Paeonia daurica roots potently inhibits viral and bacterial DNA polymerases: investigation by experimental validation and docking simulation**
DEMİR A., TURUMTAY H., Emirik M., Sandalli C., KANBOLAT Ş., ÖZGEN U., Turumtay E. A.
MEDICINAL CHEMISTRY RESEARCH, vol.28, pp.2232-2245, 2019 (Journal Indexed in SCI)
- IV. **beta-lactamase genes in carbapenem resistance Acinetobacter baumannii isolates from a Turkish university hospital**
Coskun U. S. S. , Caliskan E., CICEK A. C. , TURUMTAY H., Sandalli C.
JOURNAL OF INFECTION IN DEVELOPING COUNTRIES, vol.13, pp.50-55, 2019 (Journal Indexed in SCI)
- V. **Phytochemical Profiling and Evaluation of the Hepatoprotective Effect of Cuscuta Campestris by High-Performance Liquid Chromatography with Diode Array Detection**
KILIÇKAYA SELVİ E., TURUMTAY H., DEMİR A., AKYÜZ TURUMTAY E.
ANALYTICAL LETTERS, vol.51, pp.1464-1478, 2018 (Journal Indexed in SCI)
- VI. **Gram (-) microorganisms DNA polymerase inhibition, antibacterial and chemical properties of fruit and leaf extracts of Sorbus acuparia and Sorbus caucasica var. yaltirikii**
TURUMTAY H., MIDILLI A., TURUMTAY E. A. , DEMİR A., SELVİ E. K. , BUDAK E. E. , Er H., KOCAIMAMOĞLU F., BAYKAL H., BELDÜZ A. O. , et al.
BIOMEDICAL CHROMATOGRAPHY, vol.31, 2017 (Journal Indexed in SCI)
- VII. **Three seasonal comprehensive evaluation process of Digitalis trojana Ivan's phenolics**
TURUMTAY H., Turumtay E. A. , Selvi E. K. , ŞAHİN H., Sandalli C., Yazici Z. A.
INDUSTRIAL CROPS AND PRODUCTS, vol.94, pp.160-166, 2016 (Journal Indexed in SCI)
- VIII. **Anthocyanins profiling of Thymus praecox opiz subsp caucasicus var. caucasicus**
AKYÜZ TURUMTAY E., TURUMTAY H., DEMİR A., KILIÇKAYA SELVİ E., Yazici E., Sandalli C., YAZICI Z. A.
INDUSTRIAL CROPS AND PRODUCTS, vol.77, pp.748-753, 2015 (Journal Indexed in SCI)
- IX. **Cell Wall Engineering by Heterologous Expression of Cell Wall-Degrading Enzymes for Better Conversion of Lignocellulosic Biomass into Biofuels**
Turumtay H.
BIOENERGY RESEARCH, vol.8, pp.1574-1588, 2015 (Journal Indexed in SCI)
- X. **The Phenolic Composition and Antioxidant Activity of Tea with different Parts of Sideritis condensate at Different Steeping Conditions**
kara m., SAHIN H., TURUMTAY H., Dinç s., Gümüşçü a.
JOURNAL OF FOOD AND NUTRITION RESEARCH, no.5, pp.258-262, 2014 (Journal Indexed in SCI Expanded)
- XI. **Accumulation of N-Acetylglucosamine Oligomers in the Plant Cell Wall Affects Plant Architecture in a Dose-Dependent and Conditional Manner**
VANHOLME B., VANHOLME R., Turumtay H., GOEMINNE G., CESARINO I., GOUBET F., MORREEL K., RENCORET J., Bulone V., Hooijmaijers C., et al.
PLANT PHYSIOLOGY, vol.165, pp.290-308, 2014 (Journal Indexed in SCI)
- XII. **Correlation between phenolic compounds and antioxidant activity of Anzer tea (Thymus praecox**

Opiz subsp caucasicus var. caucasicus)

TURUMTAY E. A. , ISLAMOGLU F., CAVUS D., SAHIN H., Turumtay H., VANHOLME B.

INDUSTRIAL CROPS AND PRODUCTS, vol.52, pp.687-694, 2014 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Çay budama atık biyokütlesinin linyit kömür ile karıştırılarak beraber yanma potansiyelinin araştırılması**

TURUMTAY H.

Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi, vol.21, pp.1-8, 2020 (National Refreed University Journal)

Books & Book Chapters

- I. **Fenilpropanoidler çok sayıda bitki sekonder metabolitlerini ve hücre çeperi bileşenlerini kapsar**

TURUMTAY H.

in: Bitki Biyokimyası, Ayaz FA, Sökmen A, Editor, Nobel Yayınevi, Ankara, pp.431-449, 2015

- II. **Protein biyosentezi bir hücrenin üç farklı yerinde gerçekleşir**

SAĞLAM ERTUNGA N., Cenkeci S., SÖKMEN A., ünyayar s., ÇOLAK A., AYAZ F. A. , atıcı ö., yıldız m., çolak n., özen h. ç. , et al.

in: Bitki Biyokimyası, Ayaz FA., Sökmen A., Editor, Nobel Akademik Yayıncılık, Ankara, pp.527-549, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **Heterologous expression of Thermophilic xylanase deacetylase in Arabidopsis thaliana**

TURUMTAY H.

International Green Biotechnology Congress, İstanbul, Turkey, 11 - 13 September 2017, pp.35

- II. **CHROMATOGRAPHIC AND SPECTROSCOPIC DETERMINATION OF PHENOLIC ACID AND FLAVONOID CONTENTS WITH RADICAL SCAVENGING ACTIVITY OF CUSCUTA CAMPESTRIS**

Akyuz Turumtay E., Kılıçkaya Selvi E., TURUMTAY H., Demir A.

1. Uluslararası Tıbbi ve Aromatik Bitkiler Kongresi, Konya, Turkey, 9 May - 12 June 2017, pp.1182

- III. **CHARACTERIZATION OF PHENOLIC COMPOUNDS AND THEIR INHIBITORY EFFECT OF ROSA CANINA ON BACTERIAL DNA POLYMERASES**

TURUMTAY H., TURUMTAY E. A. , Demir A., Budak E. E. , Sandallı C.

I. Uluslararası Tıbbi ve Aromatik Bitkiler Kongresi, Konya, Turkey, 9 - 12 May 2017, pp.1184

- IV. **Chromatographic Determination of Phenolic Compounds of Camellia sinensis Flowers Exhibited Strong Inhibition Effect on the two Replicative DNA Polymerases**

Kılıçkaya Selvi E., Er H., Akyuz Turumtay E., TURUMTAY H.

3. Uluslararası İlaç ve Eczacılık Kongresi, İstanbul, Turkey, 26 - 29 April 2017, pp.294

- V. **Chromatographic and Spectroscopic Determination of Phenolic Compounds of {Pyhtolacca americana L.} fruits**

Kılıçkaya Selvi E., Kalkan Ü., Akyuz Turumtay E., TURUMTAY H.

3. Uluslararası İlaç ve Eczacılık Kongresi, İstanbul, Turkey, 26 - 29 April 2017, pp.297

- VI. **Kızılağaç (Alnus orientalis)'ın Biyoyakıt Olarak Kullanılabilirliğinin Araştırılması ve Kalite Özelliklerinin Belirlenmesi ?**

TURUMTAY H., TURNA İ., Mortimer J.

2. Ulusal Biyoyakıtlar Sempozyumu, Samsun, Turkey, 27 - 30 September 2016, pp.258

- VII. **High-throughput screening of inhibitory effect of medicinal plants on bacterial DNA polymerases**

Sandallı C., TURUMTAY E. A. , TURUMTAY H.

European Biotechnology Conference, Latvia, 5 - 07 May 2016, vol.231

- VIII. **Serratia marcescens'e ait Kitinaz-A enzimini kodlayan genin Arabidopsis'te ifade edilmesi**
TURUMTAY H., Sandallı C., NALÇACIOĞLU R., Akyuz Turumtay E., DEMİRBAĞ Z.
4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Konya, Turkey, 18 - 21 July 2016, pp.99-100
- IX. **Screening of Natural Compounds as a potential source to prepare anti-viral herbal composition targeting viral reverse transcriptase**
Sandallı C., Ardiç G., Akyuz Turumtay E., TURUMTAY H.
26th ECCMID, Amsterdam, Netherlands, 9 - 12 April 2016, pp.199
- X. **Leaf extract of Diospyrus kaki May Inhibit the Growth of Gram (-) and Gram (+) Microorganisms by Blocking Their DNA Polymerases**
Sandallı C., TURUMTAY E. A. , Midilli A., Budak E. E. , BELDÜZ A. O. , Er H., TURUMTAY H., Baykal H.
The 7th Eurasia Congress of Infectious Diseases, Tiflis, Georgia, 30 September - 03 October 2015, pp.122
- XI. **Lignoselülozik Biyokütlenin Daha İyi Verimde Biyoyakıt Dönüştürülmesi İçin Hücre Çeperi Mühendisliği Uygulamaları**
TURUMTAY H.
1. Ulusal Bitki Fizyoloji Sempozyumu, Erzurum, Turkey, 1 - 04 September 2015, pp.106
- XII. **Bitkilerde hücre çeperi mühendisliği yöntemiyle hücre duvarlarının yeniden dizayn edilmesi: pektin modifikasyonu**
TURUMTAY H.
Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongre, Afyon, Turkey, 21 - 24 August 2015, pp.23
- XIII. **Modifying the plant cell wall to improve the conversion of cell wall polysaccharides**
TURUMTAY H., Van De Wouwer D., GHEYSEN G., Boerjan W., VANHOLME B.
9th International Conference on Renewable Resources & Biorefineries, Antwerpen, Belgium, 5 - 07 June 2013, pp.233
- XIV. **Expression of xylanase in lignin mutants**
Harholt J., TURUMTAY H., Lebris P., Lapiere C., Jouanin L., Sibout R., Ulvskov P., Jorgensen B., VANHOLME B., Boerjan W.
XIII Cell Wall Meeting, Nantes, France, 7 - 12 July 2012, pp.55
- XV. **Modifying plant cell walls by expression of cell wall degrading enzymes**
TURUMTAY H., Van De Wouwer D., GHEYSEN G., Boerjan W., VANHOLME B.
XIII Cell Wall Meeting, Nantes, France, 7 - 12 July 2012, pp.255
- XVI. **Characterization and Identification of the new genes involved in lignin biosynthesis**
TURUMTAY H., Zhang B., VANHOLME R., GOEMINNE G., Tuominen H., BOERJAN W.
SYMBIOSE 2011, Basel, Switzerland, 27 July - 06 August 2011, pp.51-56
- XVII. **Biyo-Enerji çalışmalarında lignin biyosentezi**
TURUMTAY H., VANHOLME R., BOERJAN W.
1. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Antalya, Turkey, 26 - 29 October 2010, pp.142
- XVIII. **Bitki Hücre çeperi oluşumundaki yeni genlerin keşfedilmesi ve bu genleri modifiye ederek daha iyi verimde biyo-yakıt elde edilmesi**
TURUMTAY H., VANHOLME R., BOERJAN W.
20. Ulusal Biyoloji Kongresi, Denizli, Turkey, 21 - 25 June 2010, pp.423

Other Publications

- I. **GENETICALLY MODIFIED PLANTS HAVING ALTERED LIGNIN CONTENT**
Boerjan W., VANHOLME R., TURUMTAY H., TUOMINEN H., ESCAMEZ S., Zhang B.
Other, pp.53, 2016

Citations

Total Citations (WOS):57

h-index (WOS):4

Scholarships

Yurt dıřı doktora bursu, TUBITAK, 2008 - Continues