

Assoc. Prof. DERYA BAL ALTUNTAŞ

Personal Information

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Education Information

Doctorate, Ondokuz Mayıs University, Institute Of Science, Department Of Chemistry, Turkey 2009 - 2012

Postgraduate, Ondokuz Mayıs University, Institute Of Science, Department Of Chemistry, Turkey 2005 - 2008

Postgraduate, Ondokuz Mayıs University, Institute Of Science, Department Of Chemistry, Turkey 2005 - 2006

Undergraduate, Ondokuz Mayıs University, Faculty Of Arts And Sciences, Department Of Chemistry, Turkey 1999 - 2004

Dissertations

Doctorate, Geliştirilen Potansiyometrik Kistik Fibrozis Tanı Sisteminin Optimizasyonu ve Standardizasyonu, Sürekli Takip İçin Kullanımının Araştırılması ve Gerçek Örneklerle Uygulanması, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Kimya / Analitik Kimya, 2012

Postgraduate, Kistik Fibrozis ve Tanısı, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Kimya / Analitik Kimya, 2008

Research Areas

Health Sciences, Pharmacology and Therapeutics, Professional Sciences, Pharmaceutical Chemistry, Life Sciences, Biotechnology, Biomaterial, Biosensor, Chemistry, Analytical Chemistry, Bioanalytical Methods, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Biyomühendislik Bölümü, 2018 - Continues

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Biyomühendislik Bölümü, 2013 - 2018

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

- I. **MoS₂/Chitosan/GOx-Gelatin modified graphite surface: Preparation, characterization and its use for glucose determination**
BAL ALTUNTAŞ D., KURALAY F.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.270, 2021
(Journal Indexed in SCI)
- II. **Electrochemical Evaluation of Titanium (IV) Oxide/Polyacrylonitrile Electrospun Discharged Battery Coals as Supercapacitor Electrodes**
ASLAN S., BAL ALTUNTAŞ D., KOÇAK Ç., Kara Subasat H.
ELECTROANALYSIS, vol.33, no.1, pp.120-128, 2021 (Journal Indexed in SCI)
- III. **Synthesis of new carbon material produced from human hair and its evaluation as electrochemical supercapacitor**

Bal Altuntaş D., Aslan S., Akyol Y., Nevruzoğlu V.

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.42, pp.2346-2356, 2020
(Journal Indexed in SCI)

- IV. **Synthesis and characterization of activated carbon produced from waste human hair mass using chemical activation**
BAL ALTUNTAŞ D., NEVRUZOĞLU V., Dokumacı M., Cam Ş.
Carbon Letters, vol.30, no.3, pp.307-313, 2020 (Journal Indexed in SCI)
- V. **Development of All-Solid-State Antidiabetic Drug Metformin-Selective Microsensor and Its Electrochemical Applications**
Altuntas D.
ELECTROANALYSIS, vol.32, no.6, pp.1280-1287, 2020 (Journal Indexed in SCI)
- VI. **Cold substrate method to prepare plasmonic Ag nanoparticle: deposition, characterization, application in solar cell**
NEVRUZOĞLU V., BAL ALTUNTAS D., Tomakin M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, no.4, 2020 (Journal Indexed in SCI)
- VII. **A biochar-modified carbon paste electrode**
Bal Altuntas D., Akgul G., YANIK J., ANIK Ü.
TURKISH JOURNAL OF CHEMISTRY, vol.41, no.3, pp.455-465, 2017 (Journal Indexed in SCI)
- VIII. **Graphene-metallic nanocomposites as modifiers in electrochemical glucose biosensor transducers**
Altuntas D., Tepeli Y., ANIK Ü.
2D MATERIALS, vol.3, no.3, 2016 (Journal Indexed in SCI)
- IX. **Centri-voltammetric detection of epinephrine**
Altuntas D., Oren T., Anik U.
ANALYTICAL METHODS, vol.8, no.38, pp.6872-6876, 2016 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Carbon Microrod Material Derived from Human Hair and Its Electrochemical Supercapacitor Application**
BAL ALTUNTAŞ D., Aslan S., NEVRUZOĞLU V.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.3, pp.695-708, 2021 (Journal Indexed in ESCI)
- II. **Evaluation of waste human hair as graphene oxide and examination of some characteristics properties**
BAL ALTUNTAŞ D., NEVRUZOĞLU V.
El-Cezerî Journal of Science and Engineering, vol.7, no.1, pp.104-110, 2020 (National Refreed University Journal)
- III. **Micro-Sized glucose biosensor based on composite pH sensor**
Bal Altuntas D., Tavukcuoglu O.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.24, no.7, pp.1355-1359, 2018 (Journal Indexed in ESCI)
- IV. **Determination of Acid Dissociation Constants of Some New 4-[(5-(Bromo/Chloro)-2-Hydroxyphenyl)Methylene]Amino}-5-Alkyl(Aryl)-2,4-Dihydro-3H-1,2,4-Triazol-3-One Derivatives and Evaluation of Their Antioxidant Activity**
İSLAMOĞLU F., MENTEŞE E., BAL ALTUNTAŞ D., Levent Z.
Azerbaijan Chemical Journal, vol.3, pp.75-82, 2015 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Voltammetric and potentiometric applications of antidiabetic drug Metformin-Selective sensor**
BAL ALTUNTAŞ D., YOLCU M., DERE N., KANBEROĞLU G.

2nd International congress on analytical and bioanalytical chemistry, 11 - 14 March 2020

- II. **Graphene Oxide Synthesis with Active Carbon Obtained from Waste Human Hair and Its Characterization**
Akyol Y., Ekmekçi M. C. , NEVRUZOĞLU V., BAL ALTUNTAŞ D.
NanoTR-15, Antalya, Turkey, 3 - 06 November 2019, vol.77
- III. **Synthesis and characterization of activated carbon produced from waste human hair mass using chemical activation**
DOKUMACI M., CAM Ş., NEVRUZOĞLU V., BAL ALTUNTAŞ D.
4th International Energy Engineering Congress, Gaziantep, Turkey, 24 - 25 October 2019, pp.30-31
- IV. **Development of potentiometric chloride-selective PVC membrane microsensor for diagnosis of Cystic Fibrosis**
BAL ALTUNTAŞ D., YOLCU M., İŞILDAK İ.
Eurasian Congress on Molecular Biotechnology, Trabzon, Turkey, 19 - 21 September 2019, pp.184-188
- V. **The Growth of Silver Based Illuminated Layer for Solar Cells with Novel Method**
NEVRUZOĞLU V., Sıdar A., ÖZTÜRK G., BAL ALTUNTAŞ D., TOMAKİN M.
XI International Conference on Amorphous and Microcrystalline Semiconductors, 19 - 21 November 2018, pp.239
- VI. **Si- Based Solar Cell Recycling Study**
BAL ALTUNTAŞ D., Aktepe S., TOMAKİN M., NEVRUZOĞLU V.
International Conference on Energy Research (ENRES), Alanya, Turkey, 31 October - 02 November 2018
- VII. **Biofuel Cell Platforms**
BAL ALTUNTAŞ D.
3rd. International Energy Engineering Congress 2018, Gaziantep, Turkey, 18 - 19 October 2018
- VIII. **Biosensing Applications: A-lab on-Device for the precise Diabet follow up**
BAL ALTUNTAŞ D., KURALAY F.
4 th. International Turkic World Conference on Chemical Sciences and Technologies, Kyiv, Ukraine, Kiev, Ukraine, 7 - 10 September 2018
- IX. **Preparation, Characterization and Electrochemical Applications of Molybdenum (IV) Disulfide and Multi- Walled Carbon Nanotubes (MWCNT) Nanocomposite Modified Surfaces**
BAL ALTUNTAŞ D., KURALAY F.
2nd International Conference on Innovations in Naturel Science and Engineering, Kyiv, Ukraine, Kiev, Ukraine, 7 - 10 September 2018
- X. **Preparation, Characterization and Electrochemical Applications of Molybdenum (IV) Disulfide and Chitosan Nanocomposite Modified Surfaces**
BAL ALTUNTAŞ D., KURALAY F.
4 th International Turkic World Conference on chemical Sciences and Technologies, Kyiv, Ukraine, Kiev, Ukraine, 7 - 10 September 2018
- XI. **A New Approach For Fighting With Global Warming**
BAL ALTUNTAŞ D., NEVRUZOĞLU V.
2nd International Conference on Innovations in Natural Science and Engineering, Kyiv, Ukraine, Kiev, Ukraine, 7 - 10 September 2018
- XII. **Two-Dimensional Materials Beyond Graphene: Their Use in Electrochemistry**
BAL ALTUNTAŞ D., KURALAY F.
1. International Technological sciences and design symposium, 27 - 29 June 2018
- XIII. **A Development of New Generation Biosensors with 2D Materials Beyond Graphene**
BAL ALTUNTAŞ D.
1 st International Conference on Innovations in Natural Science and Engineering (ICINSE 2018), Turkish Republic of Northern Cyprus, Fagamusta, Fagamusta, Cyprus (Kkct), 3 - 06 January 2018
- XIV. **Practical Biomedical Applications Based on Molybdenum Disulfide**
BAL ALTUNTAŞ D., YELGEL Ö. C.
1st International Conference on Innovations in Natural Science and Engineering (ICINSE 2018) Turkish Republic of Northern Cyprus, Fagamusta, Cyprus (Kkct), 3 - 06 January 2018

- XV. **A novel amperometric glucose biosensor based on biochar –copper metallic composite**
BAL ALTUNTAŞ D., AKGÜL G.
13th Nanoscience and Nanotechnology Conference, 22 - 25 October 2017, pp.366
- XVI. **Biochar Metallic Nanocomposite Based Glassy Carbon Paste Electrode Glucose Biosensors**
BAL ALTUNTAŞ D., AKGÜL G., MORENO JIMENEZ E., Diaz E.
3rd International Congress on Biosensors, 5 - 07 October 2016
- XVII. **Çay Atıklarından Üretilen Biyokömürlerin Organik Ve İnorganik Kirleticileri Uzaklaştırma Kapasitesi**
AKGÜL G., BAL ALTUNTAŞ D., Bolat Maden T., Yanık J.
Ulusal Biyoyakıtlar Sempozyumu, Samsun, Turkey, 27 - 30 September 2016, pp.237-246
- XVIII. **Biochar Modified Carbon Paste Electrode**
BAL ALTUNTAŞ D., AKGÜL G., YANIK J., ANIK Ü.
12th Nanoscience and Nanotechnology Conference, 3 - 05 June 2016
- XIX. **Determination of Biological Activities such as Antibacterial, Antiviral and Antifungal with Acidity at Drug Active Substance in Some Benzimidazole Derivatives**
İSLAMOĞLU F., MENTEŞE E., Erdoğan N., BAL ALTUNTAŞ D.
2.International Convention of Pharmaceuticals and Pharmacies, İstanbul, Turkey, 27 - 29 November 2015, pp.33
- XX. **Bazı Fenil[2(Sübstitüe Klorobenzil)-1H-1,3-Benzimidazol-5-İl] Metanon Türevi Bileşiklerinin Asidik İyonlaşma Sabitlerinin Potansiyometrik Titrasyon Yöntemi ve Teorik Olarak Belirlenmesi**
İSLAMOĞLU F., BAL ALTUNTAŞ D.
7. Ulusal Analitik Kimya Kongresi, Turkey, 1 - 05 September 2014
- XXI. **Bazı Fenil[2-(Sübstitüe Florobenzil)-1H-1,3-Benzimidazol-5-il]Metanon Türevi Bileşiklerinin pKa Değerlerinin Potansiyometrik Metot ve Teorik Yöntem ile Hesaplanması**
İSLAMOĞLU F., BAL ALTUNTAŞ D.
VII. Ulusal Analitik Kimya Kongresi, Kahramanmaraş, Turkey, 1 - 05 September 2014, pp.99
- XXII. **Determination of Sodium and Potassium İons Via Microcolumn Chromatography-Potentiometric Detection in Saliva Samples**
Dumanlı R., BAL ALTUNTAŞ D., İŞILDAK İ.
9th International Electrochemistry Meeting in Turkey, 25 - 29 September 2011
- XXIII. **Emerging Sensing Tecnology : A-Lab-on-Device for the Pricise Detection Cystic Fibrosis Disease**
BAL ALTUNTAŞ D., Dumanlı R., Öztürk S., ALTIKATOĞLU YAPAÖZ M., Bal E., İŞILDAK İ.
9th International Electrochemistry Meeting in Turkey, 25 - 29 September 2011
- XXIV. **Monolitik Kapiler Kolon İyon Kromatografi ve Potansiyometrik Deteksiyon Sistemi ile Yaygın Anyonların Hızlı ve Hassas Tayini**
Dumanlı R., BAL ALTUNTAŞ D., KONANÇ M. U. , İŞILDAK İ.
5. Ulusal Analitik Kimya Kongresi, Turkey, 21 - 25 June 2010
- XXV. **A Micro-Sized NO₃ - Selective Potentiometric Sensor for Nitrate Determination in Environmental Samples**
Eren H., ANDAÇ M., BAL ALTUNTAŞ D.
8. International Electrochemistry Meeting, 8 - 11 October 2009
- XXVI. **Dopamin, Askorbik Asit ve Ürik Asitin Eş Zamanlı Voltametrık Tayinine Sodyumdodesilsülfat ve 1 - Butyl -3-metilimidazolyum tetrafloroborat'ın Etkisi**
ŞAKA T., BAL ALTUNTAŞ D., İŞILDAK İ.
23.Ulusal Kimya Kongresi, Turkey, 16 - 20 June 2009
- XXVII. **Kistik Fibrozis Tanı Saati**
BAL ALTUNTAŞ D., KARSLI SEMİZ D., AYDIN R., Tinkılıç N., İŞILDAK İ.
IV. Ulusal Analitik Kimya Kongresi, Turkey, 25 - 27 June 2008
- XXVIII. **Minyatürize Kapiler Elektforez Sistem ve Potansiyometrik Tayin**
ÇETİNKAYA E., BAL ALTUNTAŞ D., ŞAKA T., ASAN A., İŞILDAK İ.
IV. Ulusal Analitik Kimya Kongresi, Turkey, 25 - 27 June 2008
- XXIX. **İyon Seçici Elektrotlarla Su Sertliğinin Belirlenmesi**
SARIBOĞA N., ÇOLDUR F., BAL ALTUNTAŞ D., ŞAKA T., ASAN A., ANDAÇ M.

IV. Ulusal Analitik Kimya Kongresi, Turkey, 25 - 27 June 2008

XXX. **Biomass Dumanındaki Aerosollerde Metallerin Örnekleme ve Tayini**

İŞILDAK Ö., ASAN A., BAL ALTUNTAŞ D., GÜRSOY E.

IV. Ulusal Analitik Kimya Kongresi, Turkey, 25 - 27 June 2008

XXXI. **İnorganik Membran Amonyak Gaz Sensör**

VARAN S., BAL ALTUNTAŞ D., ANDAÇ M., İŞILDAK İ.

6. ELEKTROKİMYA GÜNLERİ, Turkey, 29 June - 01 July 2005

Supported Projects

BAL ALTUNTAŞ D., YOLCU M., ASLAN S., Project Supported by Higher Education Institutions, Kanserin erken tanısına yönelik pratik ve tek kullanımlık nanobiyosensörlerin uygulamaları, 2020 - Continues

BAL ALTUNTAŞ D., TUBITAK Project, Nanoyapı temelli immüno-sitosensör platformlarının geliştirilmesi, 2019 - Continues

BAL ALTUNTAŞ D., TUBITAK Project, Atık saçlardan elde edilmiş aktif karbon ile grafen sentezi, 2019 - Continues

BAL ALTUNTAŞ D., TUBITAK Project, Biyoyakıt hücre platformlarının oluşturulması, 2018 - 2019

BAL ALTUNTAŞ D., YELGEL Ö. C. , Project Supported by Higher Education Institutions, Dikalkojen nanoyapılar kullanılarak yeni nesil biyosensörlerin geliştirilmesi, 2017 - 2019

AKGÜL G., BAL ALTUNTAŞ D., Project Supported by Higher Education Institutions, Çay atıklarından üretilen biyokömürlerin organik-inorganik kirleticileri adsorpsiyon kapasitesinin belirlenmesi, 2014 - 2017

BAL ALTUNTAŞ D., TUBITAK Project, Yeni bir kistik Fibrozis tanı cihazının geliştirilmesi ve ticarileştirilmesi 3140048, 2014- halen, 2014 - 2017

BAL ALTUNTAŞ D., AKGÜL G., İSLAMOĞLU F., Erdoğan N., YOLCU M., Project Supported by Higher Education Institutions, Mikro Büyüklükte Potansiyometrik Glikoz Biyosensör Geliştirilmesi., 2015 - 2016

BAL ALTUNTAŞ D., TUBITAK Project, Yaygın Anyon ve Katyonlar İçin Potansiyometrik Mikro Sensor Dizilerinin Tasarımı, Uygulamaları ve Kemometrik Yaklaşımlar, 2007 - 2010

BAL ALTUNTAŞ D., TUBITAK Project, Isınma ve Pişirme Amaçlı Kullanılan Biomass Dumanındaki Aerosollerde Yaygın Anyon ve Katyonların ve Ağır Metallerin Geliştirilecek Metotla Örnekleme ve İncelenmesi., 2006 - 2008

BAL ALTUNTAŞ D., Project Supported by Other Official Institutions, Kistik Fibrozis Tanı Saati, 2005 - 2008

Patent

Tomakin M., Nevruzoğlu V., Bal Altuntaş D., Güneş pillerinde geri dönüşüm uygulamaları., Patent, CHAPTER G Physics, The Invention Registration Number: TR 2018 03808 B , Initial Registration, 2020

Edit Congress and Symposium Activities

Graphene oxide synthesis with active carbon obtained from waste human hair and its characterization,NanoTR-15,2019, Attendee, Antalya, Turkey, 2019

Synthesis and characterization of activated carbon produced from waste human hair mass using chemical activation,4th International Energy & Engineering Congress, Attendee, Gaziantep, Turkey, 2019

Two-Dimensional Materials Beyond Graphene: Their Use in Electrochemistry " 1st International Technology Sciences and Design Symposium,2018, Giresun.Turkey, Attendee, Giresun, Turkey, 2018

Practical Biomedical Applications based on molybdenum disulfide. 1.International Conference on Innovations in Natural Science and Engineering ICINSE 2018, Famagusta, Turkish Republic of Northern Cyprus, Attendee, Gazimagusa, Cyprus (Kktc), 2018

A Development of New Generation Biosensors with 2D Materials Beyond Graphene.1.International Conference on Innovations in Natural Science and Engineering ICINSE 2018, Famagusta, Turkish Republic of Northern Cyprus,

Attendee, Gazimagusa, Cyprus (Kkctc), 2018

A novel amperometric glucose biosensor based on biochar -copper metallic composite13th Nanoscience and Nanotechnology Conference, Antalya, TÜRKİYE, 22-25 Ekim 2017, pp.366-366, Attendee, Antalya, Turkey, 2017

3rd International Congress on Biosensors, 5-7 October 2016, Ankara 'Biochar-Metalic Nanocomposite Based Glassy Carbon Paste Electrode Glucose Biosensors', Attendee, Ankara, Turkey, 2016

12th International Nanoscience and Nanotechnology Conference NANO TR-12 03-05 June 2016, Kocaeli/Turkey, Attendee, Kocaeli, Turkey, 2016

Emerging sensing technology : A-lab-on-device for the precise detection Cystic Fibrosis Disease", ECM9 9th International Electrochemistry Meeting in Turkey 25-29 September, 2011 - Ege Üniversitesi İzmir ,Çeşme., Attendee, İzmir, Turkey, 2011

Determination of sodium and potassium ions via microcolumn chromatography- potentiometric detection in saliva samples" ECM9 9th International Electrochemistry Meeting in Turkey, 25-29 September, 2011- Ege Üniversitesi İzmir ,Çeşme., Attendee, İzmir, Turkey, 2011

Monolitik Kapiler Kolon İyon Kromatografi ve Potansiyometrik Deteksiyon Sistemi ile Yaygın Anyonların Hızlı ve Hassas Tayini" , 5. Ulusal Analitik Kimya Kongresi, Atatürk Üniversitesi, 21-25 Haziran 2010, Erzurum., Attendee, Erzurum, Turkey, 2010

A micro-sized NO3 - -selective potentiometric sensor for nitrate determination in environmental samples", 8 th International Electrochemistry Meeting in Turkey 8-11 October 2009 - Ankara Üniversitesi ,Antalya, Attendee, Antalya, Turkey, 2009

Dopamin Askorbik Asit ve Ürik Asitin Eş Zamanlı Voltametrik Tayinine Sodyumdodesilsülfat ve 1-Bütül-3-metilimidazolium tetrafloroborat'ın Etkisi", 23.Ulusal Kimya Kongresi, Cumhuriyet Üniversitesi, 16-20 Haziran 2009, Sivas., Attendee, Sivas, Turkey, 2009

Biomass Dumanındaki Aerosollerde İnorganik İyonların İyon Kromatografik Analizi", IV. Ulusal Analitik Kimya Kongresi, Fırat Üniversitesi, 25-27 Haziran 2008, Elazığ., Attendee, Elazığ, Turkey, 2009

Kistik Fibrozis Tanı Saati", IV. Ulusal Analitik Kimya Kongresi, Fırat Üniversitesi, 25-27 Haziran 2008, Elazığ., Attendee, Elazığ, Turkey, 2009

Biomass Dumanındaki Aerosollerde Metallerin Örneklenmesi ve Tayini", IV. Ulusal Analitik Kimya Kongresi, Fırat Üniversitesi, 25-27 Haziran 2008, Elazığ., Attendee, Elazığ, Turkey, 2008

İyon Seçici Elektrotlarla Su Sertliğinin Belirlenmesi" IV. Ulusal Analitik Kimya Kongresi, Fırat Üniversitesi, 25-27 Haziran 2008, Elazığ., Attendee, Elazığ, Turkey, 2008

Minyatürize Kapiler Elektforez Sistem ve Potansiyometrik Tayin" IV. Ulusal Analitik Kimya Kongresi, Fırat Üniversitesi, 25-27 Haziran 2008, Elazığ., Attendee, Elazığ, Turkey, 2008

İnorganik Membran Amonyak Gaz Sensör", 6. Elektrokimya Günleri, Anadolu Üniversitesi, 29-Haziran-01 Temmuz 2005, Eskişehir., Attendee, Eskişehir, Turkey, 2005

Citations

Total Citations (WOS):35

h-index (WOS):3