

Prof. HAKAN KARADENİZ

Personal Information

Birthyear: 1979

Place of birth: Bornova Izmir

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Education Information

Doctorate, Ege Üniversitesi, Sağlık Bilimleri Enstitüsü, Analitik Kimya Anabilim Dalı, Turkey 2004 - 2008

Post Graduate, Ege Üniversitesi, Sağlık Bilimleri Enstitüsü, Analitik Kimya Anabilim Dalı, Turkey 2002 - 2004

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Biyomoleküler Algılamaya Yönelik Elektrokimyasal Sensörlerin Tasarımı ve Uygulamaları, Ege Üniversitesi, Sağlık Bilimleri Fakültesi, Analitik Kimya, 2008

Post Graduate, DNA Analizlerine Yönelik Elektrokimyasal Genosensörün Tasarımı ve Uygulamaları, Ege Üniversitesi, Sağlık Bilimleri Fakültesi, Analitik Kimya, 2004

Research Areas

Chemistry, Analytical Chemistry, Electromagnetic Methods, Sensors, Natural Sciences

Academic Titles / Tasks

Professor, Ege University, Eczacılık Fakültesi, Temel Eczacılık Bölümü, 2020 - Continues

Associate Professor, Ege Üniversitesi, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2012 - Continues

Professional Experience

Vice Dean, Ege University, Eczacılık Fakültesi, Temel Eczacılık Bölümü, 2020 - Continues

Courses

Analitik Kimya, Under Graduate, 2016 - 2017, 2017 - 2018

Genel Kimya, Under Graduate, 2016 - 2017, 2017 - 2018

Jury Memberships

Post Graduate, Hakan Karadeniz, Ege Üniversitesi Fen Bilimleri, October, 2014

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

- I. **Label-Free Electrochemical Detection of DNA Hybridization Related to Anthrax Lethal Factor by Using Carbon Nanotube Modified Sensors**
Karadeniz H., Erdem A.
CURRENT ANALYTICAL CHEMISTRY, vol.15, is.4, pp.502-510, 2019 (Journal Indexed in SCI)
- II. **Electrochemical detection of DNA interaction with Mannich base derivatives by disposable graphite electrodes**
İSTANBULLU H., KARADENİZ H., ERCİYAS E., Erdem A.
TURKISH JOURNAL OF CHEMISTRY, vol.41, is.1, pp.40-47, 2017 (Journal Indexed in SCI)
- III. **Electrochemical Determination of Glutathione in Plasma at Carbon Nanotubes Based Screen Printed Electrodes**
TURUNC E., KARADENİZ H., ARMAGAN G., ERDEM A., YALÇIN A.
COMBINATORIAL CHEMISTRY & HIGH THROUGHPUT SCREENING, vol.16, is.9, pp.695-701, 2013 (Journal Indexed in SCI)
- IV. **Electrochemical sensing of label free DNA hybridization related to breast cancer 1 gene at disposable sensor platforms modified with single walled carbon nanotubes**
LÍ C., KARADENİZ H., CANAVAR E., Erdem A.
ELECTROCHIMICA ACTA, vol.82, pp.137-142, 2012 (Journal Indexed in SCI)
- V. **Synthesis and characterization of water-insoluble statistical copolymer and its application in the development of electrochemical DNA sensor**
Tuncer C., CANAVAR E., CONGUR G., KARADENİZ H., Erdem A., Butun V.
TALANTA, vol.100, pp.270-275, 2012 (Journal Indexed in SCI)
- VI. **Electrochemical monitoring of indicator-free DNA hybridization by carbon nanotubes-chitosan modified disposable graphite sensors**
Erdem A., MUTİ M., KARADENİZ H., CONGUR G., CANAVAR E.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.95, pp.222-228, 2012 (Journal Indexed in SCI)
- VII. **Single-Use Sensor Platforms Based on Carbon Nanotubes for Electrochemical Detection of DNA Hybridization Related to Microcystis spp.**
Erdem A., KARADENİZ H., CANAVAR P. E. , CONGUR G.
ELECTROANALYSIS, vol.24, is.3, pp.502-511, 2012 (Journal Indexed in SCI)
- VIII. **Label-free impedimetric aptasensor for lysozyme detection based on carbon nanotube-modified screen-printed electrodes**
ROHRBACH F., KARADENİZ H., Erdem A., Famulok M., Mayer G.
ANALYTICAL BIOCHEMISTRY, vol.421, is.2, pp.454-459, 2012 (Journal Indexed in SCI)
- IX. **Sensitive sepiolite-carbon nanotubes based disposable electrodes for direct detection of DNA and anticancer drug-DNA interactions**
Erdem A., KURALAY F., ÇUBUKÇU H. E. , CONGUR G., KARADENİZ H., CANAVAR E.
ANALYST, vol.137, is.17, pp.4001-4004, 2012 (Journal Indexed in SCI)
- X. **Graphene oxide integrated sensor for electrochemical monitoring of mitomycin C-DNA interaction**
Erdem A., MUTİ M., PAKONSTANTINO P., CANAVAR E., KARADENİZ H., CONGUR G., SHARMA S.
ANALYST, vol.137, is.9, pp.2129-2135, 2012 (Journal Indexed in SCI)
- XI. **Dendrimer modified graphite sensors for detection of anticancer drug Daunorubicin by voltammetry and electrochemical impedance spectroscopy**
Erdem A., KARADENİZ H., CALISKAN A.
ANALYST, vol.136, is.5, pp.1041-1045, 2011 (Journal Indexed in SCI)

- XII. **The Recent Electrochemical Biosensor Technologies for Monitoring of Nucleic Acid Hybridization**
KARADENİZ H., KURALAY F., ABACI S., Erdem A.
CURRENT ANALYTICAL CHEMISTRY, vol.7, is.1, pp.63-70, 2011 (Journal Indexed in SCI)
- XIII. **Electrochemical Monitoring of the Interaction between 4-Nonylphenol and DNA by Graphite and Carbon Nanotube Modified Graphite Electrodes**
KARADENİZ H., Caliskan A., UĞUZ C.
ANALYTICAL SCIENCES, vol.26, is.10, pp.1065-1069, 2010 (Journal Indexed in SCI)
- XIV. **Electrochemical investigation of biomolecular interactions between platinum derivatives and DNA by carbon nanotubes modified sensors**
Yapasana E., CALISKAN A., KARADENİZ H., Erdem A.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.169, pp.169-173, 2010 (Journal Indexed in SCI)
- XV. **Streptavidin Modified Carbon Nanotube Based Graphite Electrode for Label-Free Sequence Specific DNA Detection**
Erdem A., PAPA KONSTANTINO U P., MURPHY H., MCMULLAN M., KARADENİZ H., Sharma S.
ELECTROANALYSIS, vol.22, is.6, pp.611-617, 2010 (Journal Indexed in SCI)
- XVI. **Electrochemical investigation of interactions between potential DNA targetted compounds 2,4-di and 2,3,4 trisubstituted benzimidazo 1,2-a pyrimidines and nucleic acid**
ÇALIŞKAN A., KARADENİZ H., MERİÇ A., ERDEM GÜRSAN K. A.
Analytical Sciences, pp.117-120, 2010 (Journal Indexed in SSCI)
- XVII. **Electrochemical Investigation of Interactions between Potential DNA Targeted Compounds, 2,4-Di- and 2,3,4-Trisubstituted Benzimidazo[1,2-a]pyrimidines and Nucleic Acid**
CALISKAN A., KARADENİZ H., Meric A., Erdem A.
ANALYTICAL SCIENCES, vol.26, is.1, pp.117-120, 2010 (Journal Indexed in SCI)
- XVIII. **The Comparison of Electrochemical Assay and Agarose Gel Electrophoresis for the Determination of DNA Damage Induced by Kainic Acid**
Karadeniz H., Armagan G., Erdem A., Turunc E., Çalışkan A., Kanit L., Yalçın A.
ELECTROANALYSIS, vol.21, pp.2468-2476, 2009 (Journal Indexed in SCI)
- XIX. **Direct DNA Hybridization on the Single-Walled Carbon Nanotubes Modified Sensors Detected by Voltammetry and Electrochemical Impedance Spectroscopy**
Caliskan A., Erdem A., KARADENİZ H.
ELECTROANALYSIS, vol.21, is.19, pp.2116-2124, 2009 (Journal Indexed in SCI)
- XX. **Electrochemical Sensing of Aptamer-Protein Interactions Using a Magnetic Particle Assay and Single-Use Sensor Technology**
Erdem A., KARADENİZ H., Mayer G., Famulok M., Caliskan A.
ELECTROANALYSIS, vol.21, is.11, pp.1278-1284, 2009 (Journal Indexed in SCI)
- XXI. **Indicator-based and indicator-free magnetic assays connected with disposable electrochemical nucleic acid sensor system**
KARADENİZ H., Erdem A., KURALAY F., Jelen F.
TALANTA, vol.78, is.1, pp.187-192, 2009 (Journal Indexed in SCI)
- XXII. **Single-Walled Carbon Nanotubes Modified Graphite Electrodes for Electrochemical Monitoring of Nucleic Acids and Biomolecular Interactions**
Erdem A., KARADENİZ H., CALISKAN A.
ELECTROANALYSIS, vol.21, pp.464-471, 2009 (Journal Indexed in SCI)
- XXIII. **Electrochemical monitoring of DNA hybridization by multiwalled carbon nanotube based screen printed electrodes**
KARADENİZ H., Erdem A., CALISKAN A.
ELECTROANALYSIS, vol.20, is.17, pp.1932-1938, 2008 (Journal Indexed in SCI)
- XXIV. **ELECTROCHEMICAL DNA SENSOR TECHNOLOGY FOR MONITORING OF DRUG-DNA INTERACTIONS**
Erdem A., KARADENİZ H., Caliskan A., Vaseashta A.
NANO, vol.3, is.4, pp.229-232, 2008 (Journal Indexed in SCI)

- XXV. **New tetracyclic heteroaromatic compounds based on dehydroamino acids: photophysical and electrochemical studies of interaction with DNA**
Queiroz M. R. P. , Castanheira E. M. S. , Carvalho M. S. D. , Abreu A. S. , Ferreira P. M. T. , KARADENİZ H., Erdem A.
TETRAHEDRON, vol.64, is.2, pp.382-391, 2008 (Journal Indexed in SCI)
- XXVI. **Electrochemical investigation of interaction between mitomycin C and DNA in a novel drug-delivery system**
Karadeniz H., ALPARSLAN L., ERDEM A., Karasulu E.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.45, is.2, pp.322-326, 2007 (Journal Indexed in SCI)
- XXVII. **Electrochemical sensing of silver tags labelled DNA immobilized onto disposable graphite electrodes**
Karadeniz H., Erdem A., Caliskan A., Pereira C. M. , Pereira E. M. , Ribeiro J. A.
ELECTROCHEMISTRY COMMUNICATIONS, vol.9, is.9, pp.2167-2173, 2007 (Journal Indexed in SCI)
- XXVIII. **Development of streptavidin carrying magnetic nanoparticles and their applications in electrochemical nucleic acid sensor systems**
Erdem A., SAYAR F., Karadeniz H., Guven G., OZSOZ M., Piskin E.
ELECTROANALYSIS, vol.19, pp.798-804, 2007 (Journal Indexed in SCI)
- XXIX. **Allele-specific genotyping by using guanine and gold electrochemical oxidation signals**
OZSOZ M., ERDEM A., OZKAN D., Kara P., KARADENİZ H., MERIC B., KERMEN K., GIROUSI S.
BIOELECTROCHEMISTRY, vol.67, is.2, pp.199-203, 2005 (Journal Indexed in SCI)
- XXX. **Label-free electrochemical hybridization genosensor for the detection of hepatitis B virus genotype on the development of lamivudine resistance**
Ariksoysal D., Karadeniz H., ERDEM A., SENGONUL A., SAYINER A., OZSOZ M.
ANALYTICAL CHEMISTRY, vol.77, is.15, pp.4908-4917, 2005 (Journal Indexed in SCI)
- XXXI. **Electrochemical genomagnetic assay for the detection of hepatitis B virus DNA in polymerase chain reaction amplicons by using disposable sensor technology**
ERDEM A., ARIKSOYSAL D., KARADENİZ H., Kara P., SENGONUL A., SAYINER A., OZSOZ M.
ELECTROCHEMISTRY COMMUNICATIONS, vol.7, is.8, pp.815-820, 2005 (Journal Indexed in SCI)
- XXXII. **Electrochemical genosensor for Mitomycin C-DNA interaction based on guanine signal**
Ozkan D., Karadeniz H., Erdem A., MASCINI M., OZSOZ M.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.35, is.4, pp.905-912, 2004 (Journal Indexed in SCI)
- XXXIII. **Electrochemical detection of specific DNA sequences from PCR amplicons on carbon and mercury electrodes using Meldola's Blue as an intercalator**
KERMEN K., OZKAN D., Kara P., KARADENİZ H., OZKAN Z., ERDEM A., JELEN F., OZSOZ M.
TURKISH JOURNAL OF CHEMISTRY, vol.28, is.5, pp.523-533, 2004 (Journal Indexed in SCI)
- XXXIV. **Electrochemical detection of specific DNA sequences from PCR ampliconson carbon and mercury electrodes using Meldola s Blue as an intercalator**
Kerman K., Ariksoysal D., Kara Kadayıfcılar P., Karadeniz H., Özkan Z., Erdem Gürsan K. A. , Jelen F., Özsöz M. E. Ş.
Turkish Journal Of Chemistry, vol.28, pp.523-533, 2004 (Journal Indexed in SCI Expanded)
- XXXV. **Disposable electrochemical biosensor for the detection of the interaction between DNA and lycorine based on guanine and adenine signals**
KARADENİZ H., GULMEZ B., SAHINCI F., Erdem A., Kaya G. İ. , Unver N., Kivcak B., OZSOZ M.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.33, is.2, pp.295-302, 2003 (Journal Indexed in SCI)
- XXXVI. **Disposable electrochemical biosensor for the detection between DNA and Lycorine based on guanine and adenine signals**
Karadeniz H., Beste G., Ferit Ş., Erdem Gürsan K. A. , Unver N., Kivçak B., Özsöz M. E. Ş.
Journal Of Pharmaceutical And Biomedical Analysis, vol.33, is.2, pp.295-302, 2003 (Journal Indexed in SSCI)

Articles Published in Other Journals

- I. **Electrochemical detection of anticancer drug lumazine and DNA interaction by using carbon nanotube modified electrodes**
Karadeniz H., Erdem Gürsan K. A.
Marmara Pharmaceutical Journal, vol.23, is.4, pp.682-688, 2019 (National Refreed University Journal)
- II. **Voltammetric and Impidimetric Detection of Anticancer Drug Mitomycin C and DNA Interaction by Using Carbon Nanotubes Modified Electrodes**
ECE E., KARADENİZ H., ERDEM GÜRSAN K. A.
Current Bionanotechnology, pp.32-36, 2015 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Majistral Ürünler**
ÖZKAN Y., AYDIN A., BEŞİKCİ A., SAVAŞER A., KARATAŞ A., ARICA YEGİN B., USLU B., SEVER YILMAZ B., PALASKA E., SALTAN H. G. , et al.
in: Türk Farmakopesi 2017, , Editor, T.C. Sağlık Bakanlığı Türkiye İlaç ve Tıbbi Cihaz Kurumu Artı 6 Reklam Matbaa Ltd. Şti., 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Electrochemical Detection of Interaction of Anticancer Drug Lumazine with DNA Using Carbon Nanotubes Modified Sensors**
KARADENİZ H., EKŞİN E., ERDEM GÜRSAN K. A.
UK-Turkey Researcher Links Workshop, 5 - 08 September 2016
- II. **In vitro and in vivo determination of DNA damage induced by kainic acid using electrochemical assay and agarose gel electrophoresis**
ARMAGAN G., KARADENİZ H., ERDEM GÜRSAN K. A. , TURUNÇ BAYRAKDAR S. E. , ÇALIŞKAN A., KANIT L., YALÇIN A.
The International Congress on Bioinformatics and Biomics, Kuşadası-Aydın, Turkey, 18 - 22 May 2011
- III. **Electrochemical DNA biosensors**
ÖZSÖZ M. E. Ş. , ERDEM GÜRSAN K. A. , ARIKSOYSAL D., KARA KADAYIFCILAR P., KARADENİZ H., YALÇIN G., Cavdar S., Meric B.
ISOPS 8th International Symposium on Pharmaceutical Sciences, 13 - 16 June 2006
- IV. **Electrochemical DNA Biosensors**
ÖZSÖZ M. E. Ş. , ERDEM GÜRSAN K. A. , ARIKSOYSAL D., KARA KADAYIFCILAR P., KARADENİZ H.
4th International Conference on Instrumental Methods of Analysis Modern Trends and Applications, IMA 2005, 2 - 06 October 2005
- V. **Elektrokimyasal DNA Biyosensörleri**
ÖZSÖZ M. E. Ş. , ERDEM GÜRSAN K. A. , ARIKSOYSAL D., KARA KADAYIFCILAR P., KARADENİZ H.
XIV Ulusal Biyoteknoloji Kongresi, Biyoteknoloji Derneği ve Osmangazi Üniversitesi, Turkey, 31 August - 02 September 2005
- VI. **An overview to electrochemical genosensors combined with particles**
ERDEM GÜRSAN K. A. , KARADENİZ H., ARIKSOYSAL D., KARA KADAYIFCILAR P., ÖZSÖZ M.
FEBS Summer School Chemistry meets Biology, International Summer School for Postdoctoral Scientists and Advanced Students, Sepetses, Greece, 17 July 2005
- VII. **Elektrokimyasal DNA Biyosensörleri**
ÖZSÖZ M., ERDEM GÜRSAN K. A. , ARIKSOYSAL D., KARA KADAYIFCILAR P., KARADENİZ H.
6.Elektrokimya Günleri, Eskişehir, Turkey, 29 June 2005, pp.16

- VIII. **Elektrokimyasal DNA biyosensörleri ve yeni gelişmeler**
ÖZSÖZ M., ERDEM GÜRSAN K. A. , ARIKSOYSAL D., KARA KADAYIFCILAR P., KARADENİZ H., Kardeşin B.
II. Uluslararası Moleküler Tanı ve Uygulamaları Sempozyumu, İzmir, Turkey, 10 May 2004, pp.12
- IX. **Disposable electrochemical DNA biosensor based on colloidal gold nanoparticles for the detection of short DNA sequences related to the hepatitis B virus using synthetic PCR and sandwich assay model**
ARIKSOYSAL D., ERDEM GÜRSAN K. A. , KARA KADAYIFCILAR P., Şahinci F., Gülmez B., KARADENİZ H., ÖZSÖZ M.
7th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 24 June 2003, pp.162
- X. **Novel approaches for electrochemical DNA biosensors**
ÖZSÖZ M., ERDEM GÜRSAN K. A. , Kerman K., ARIKSOYSAL D., KARA KADAYIFCILAR P., Meric B., ŞAHİNCİ F., GÜLMEZ B., KARADENİZ H.
7th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 24 June 2003, pp.125
- XI. **Polifenol Oksidaz İçeren Mantar Dokusunu Enzim Kaynağı Olarak Kullanan Biyosensör ile Amperometrik Fenol Tayini ve Metal İnhibisyonunun EDTA ile Eliminasyonu**
Erdem Gürsan K. A. , Kerman K., Meriç B., Arıksoysal D., Özsöz M., Armağan V., Gür S., Gür S., Karadeniz H.
Biomed-6 – 6. Uluslar arası Katılımlı Biyomedikal Bilim ve Teknoloji Sempozyumu, İzmir, Turkey, 06 October 1999, pp.47

Supported Projects

KARADENİZ H., Project Supported by Higher Education Institutions, DİZİ SEÇİMLİ DNA HİBRİDİZASYONUN KARBON NANOTÜP MODİFİYE GENOSENSÖRLER İLE ELEKTROKİMYASAL TAYİNİ, 2013 - 2016

KARADENİZ H., Project Supported by Higher Education Institutions, KARBON NANOTÜP MODİFİYE SENSÖRLER İLE ANTİKANSER İLAÇ-DNA ETKİLEŞMESİNİN ELEKTROKİMYASAL TAYİNİ, 2010 - 2013

Citations

Total Citations (WOS):1188

h-index (WOS):22