

Prof.Dr. FİLİZ KURALAY

Kişisel Bilgiler

E-posta: filizkur@hacettepe.edu.tr

Diğer E-posta: kuralay.filiz@gmail.com

Web: <https://avesis.hacettepe.edu.tr/filizkur>

Eğitim Bilgileri

Doktora, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya, Türkiye 2003 - 2009

Yüksek Lisans, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya, Türkiye 2001 - 2003

Lisans, Hacettepe Üniversitesi, Fen Fakültesi, Kimya, Türkiye 1996 - 2001

Araştırma Alanları

Kimya, Analitik Kimya, Biyoanalitik Yöntemler, Elektroanalitik Yöntemler, Sensörler, Temel Bilimler

Akademik Unvanlar / Görevler

Prof.Dr., Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2021 - Devam Ediyor

Doç.Dr., Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2019 - 2021

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **A novel design thia-bilane structure-based molecular imprinted electrochemical sensor for sensitive and selective dopamine determination**
Kaya H. K. , Cinar S., Altundal G., Bayramli Y., ÜNALEROĞLU C., KURALAY F.
SENSORS AND ACTUATORS B-CHEMICAL, cilt.346, 2021 (SCI İndekslerine Giren Dergi)
- II. **Designing functional materials: DNA/Poly(3,4-ethylenedioxythiophene) interfaces for advanced DNA direct electrochemistry and DNA-Drug interaction detection**
KURALAY F., Dukar N., Bayramli Y.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, cilt.272, 2021 (SCI İndekslerine Giren Dergi)
- III. **Nucleic Acid Integrated Technologies for Electrochemical Point-of-Care Diagnostics: A Comprehensive Review**
SÜRÜCÜ Ö., ÖZTÜRK E., KURALAY F.
ELECTROANALYSIS, 2021 (SCI İndekslerine Giren Dergi)
- IV. **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, cilt.270, 2021 (SCI İndekslerine Giren Dergi)
- V. **Gold-Nickel Nanowires as Nanomotors for Cancer Marker Biodetection and Chemotherapeutic Drug Delivery**
Karaca G. Y. , KURALAY F., Uygun E., Ozaltin K., Demirbuken S. E. , GARİPCAN B., ÖKSÜZ L., ÖKSÜZ A.

ACS APPLIED NANO MATERIALS, cilt.4, sa.4, ss.3377-3388, 2021 (SCI İndekslerine Giren Dergi)

- VI. **Catalytic Au/PEDOT/Pt micromotors for cancer biomarker detection and potential breast cancer treatment**
Yurdabak Karaca G., KURALAY F., BİNGÖL ÖZAKPINAR Ö., Uygun E., Koc U., ULUSOY S., Bosgelmez Tinaz G., Oksuz L., Uygun Oksuz A.
APPLIED NANOSCIENCE, 2021 (SCI İndekslerine Giren Dergi)
- VII. **Fabrication of self-functionalized polymeric surfaces and their application in electrochemical acetaminophen detection**
KURALAY F., Caglayan T., İLHAN H., Dumangoz M., SÖNMEZ ÇELEBİ M.
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- VIII. **Ultrathin polypyrrole films on self-assembled monolayers as an efficient ultramicroelectrode assay**
BOLAT G., YAMAN Y. T. , KURALAY F., ABACI S.
JOURNAL OF APPLIED POLYMER SCIENCE, cilt.137, sa.43, 2020 (SCI İndekslerine Giren Dergi)
- IX. **Current status of micro/nanomotors in drug delivery**
Tezel G., TİMUR S. S. , KURALAY F., GÜRSOY R. N. , ULUBAYRAM K., ÖNER L., EROĞLU H.
JOURNAL OF DRUG TARGETING, 2020 (SCI İndekslerine Giren Dergi)
- X. **Electrochemical Determination of Mitomycin C and Its Interaction with Double-Stranded DNA Using a Poly(o-phenylenediamine)-Multi-Walled Carbon Nanotube Modified Pencil Graphite Electrode**
KURALAY F., Bayramli Y.
ANALYTICAL LETTERS, 2020 (SCI İndekslerine Giren Dergi)
- XI. **Direct Electrochemistry and Sensitive Detection of Guanosine on Nanopolymeric Surfaces Bearing Boronic Acid Groups**
KURALAY F., Gursoy T.
CHEMISTRYSELECT, cilt.5, sa.29, ss.9134-9142, 2020 (SCI İndekslerine Giren Dergi)
- XII. **Polypyrrole-Based Nanohybrid Electrodes: Their Preparation and Potential Use for DNA Recognition and Paclitaxel Quantification**
KURALAY F., Dukar N.
CHEMISTRYSELECT, cilt.5, sa.15, ss.4708-4714, 2020 (SCI İndekslerine Giren Dergi)
- XIII. **Electroactive polyglycine coatings for nanobiosensing applications: Label-free DNA hybridization, DNA-Antitumor agent interaction and antitumor agent determination**
Gursoy S., Dukar N., YAMAN Y. T. , Abaci S., Kuralay F.
ANALYTICA CHIMICA ACTA, cilt.1072, ss.15-24, 2019 (SCI İndekslerine Giren Dergi)
- XIV. **Highly sensitive and selective dopamine sensing in biological fluids with one-pot prepared graphene/poly(o-phenylenediamine) modified electrodes**
Dukar N., Tunc S., Ozturk K., Demirci S., Dumangoz M., Celebi M. S. , Kuralay F.
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- XV. **Determination of hydrogen peroxide with an enzymeless amperometric sensor based on poly(vinylferrocene)-supported Ag nanoparticles**
SÖNMEZ ÇELEBİ M., ÖZTÜRK K., DUMANGÖZ M., KURALAY F.
Turkish Journal Of Chemistry, cilt.42, ss.1755-1767, 2018 (SCI Expanded İndekslerine Giren Dergi)
- XVI. **Poly-L-lysine Coated Surfaces for Ultrasensitive Nucleic Acid Detection**
KURALAY F., DÜKAR N., BAYRAMLI D. Y.
ELECTROANALYSIS, cilt.30, sa.7, ss.1556-1565, 2018 (SCI İndekslerine Giren Dergi)
- XVII. **Preparation of self-propelled Cu-Pt micromotors and their application in miRNA monitoring**
ÖKSÜZ L., Karaca G. Y. , KURALAY F., UYGUN E., KOÇ İ. Ü. , ÖKSÜZ A.
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- XVIII. **Synergistic tungsten oxide/organic framework hybrid nanofibers for electrochromic device application**
Dulgerbaki C., Komur A. I. , Maslakci N. N. , Kuralay F., Oksuz A. U.
OPTICAL MATERIALS, cilt.70, ss.171-179, 2017 (SCI İndekslerine Giren Dergi)
- XIX. **Electrochemical bacterial detection using poly(3-aminophenylboronic acid)-based imprinted**

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- XX. **Biosensing applications of titanium dioxide coated graphene modified disposable electrodes**
Kuralay F., Tunc S., Bozduman F., ÖKSÜZ L., Oksuz A. U.
TALANTA, cilt.160, ss.325-331, 2016 (SCI İndekslerine Giren Dergi)
- XXI. **Polymer/carbon nanotubes coated graphite surfaces for highly sensitive nitrite detection**
Kuralay F., Dumangoz M., Tunc S.
TALANTA, cilt.144, ss.1133-1138, 2015 (SCI İndekslerine Giren Dergi)
- XXII. **Ultrasound-Propelled Nanoporous Gold Wire for Efficient Drug Loading and Release**
GARCIA-GRADILLA V., SATTAYASAMITSATHIT S., SOTO F., KURALAY F., Yardimci C., WIITALA D., GALARNYK M., WANG J.
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- XXIII. **Functionalized Ultrasound-Propelled Magnetically Guided Nanomotors: Toward Practical Biomedical Applications**
Garcia-Gradilla V., Orozco J., Sattayasamitsathit S., Soto F., Kuralay F., Pourazary A., Katzenberg A., Gao W., SHEN Y., Wang J.
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- XXIV. **Self-Propelled Carbohydrate-Sensitive Microtransporters with Built-In Boronic Acid Recognition for Isolating Sugars and Cells**
Kuralay F., SATTAYASAMITSATHIT S., GAO W., UYGUN A., KATZENBERG A., WANG J.
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- XXV. **Ternary Monolayer Interfaces for Ultrasensitive and Direct Bioelectronic Detection of Nucleic Acids in Complex Matrices**
CAMPUZANO S., Kuralay F., WANG J.
ELECTROANALYSIS, cilt.24, sa.3, ss.483-493, 2012 (SCI İndekslerine Giren Dergi)
- XXVI. **Single-walled carbon nanotubes-polymer modified graphite electrodes for DNA hybridization**
Muti M., Kuralay F., ERDEM GÜRSAN K. A.
COLLOIDS AND SURFACES B-BIOINTERFACES, cilt.91, ss.77-83, 2012 (SCI İndekslerine Giren Dergi)
- XXVII. **Multiplexed and switchable release of distinct fluids from microneedle platforms via conducting polymer nanoactuators for potential drug delivery**
Valdes-Ramirez G., Windmiller J. R. , Claussen J. C. , Martinez A. G. , Kuralay F., Zhou M., Zhou N., Polsky R., Miller P. R. , Narayan R., et al.
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- XXVIII. **A novel polypyrrole-phenylboronic acid based electrochemical saccharide sensor**
Aytac S., Kuralay F., BOYACI İ. H. , ÜNALEROĞLU C.
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- XXIX. **Carbon nanotube-chitosan modified disposable pencil graphite electrode for Vitamin B-12 analysis**
KURALAY F., VURAL T., BAYRAM C., DENKBAŞ E. B. , ABACI S.
COLLOIDS AND SURFACES B-BIOINTERFACES, cilt.87, sa.1, ss.18-22, 2011 (SCI İndekslerine Giren Dergi)
- XXX. **Interaction of Mitomycin C with DNA Immobilized onto Single-walled Carbon Nanotube/Polymer Modified Pencil Graphite Electrode**
Canavar E., KURALAY F., ERDEM GÜRSAN K. A.
ELECTROANALYSIS, cilt.23, sa.10, ss.2343-2349, 2011 (SCI İndekslerine Giren Dergi)
- XXXI. **Functionalized Micromachines for Selective and Rapid Isolation of Nucleic Acid Targets from Complex Samples**
Kagan D., Campuzano S., Balasubramanian S., Kuralay F., Flechsig G., Wang J.
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- XXXII. **The Recent Electrochemical Biosensor Technologies for Monitoring of Nucleic Acid Hybridization**
KARADENİZ H., KURALAY F., ABACI S., ERDEM GÜRSAN K. A.

- CURRENT ANALYTICAL CHEMISTRY, cilt.7, sa.1, ss.63-70, 2011 (SCI İndekslerine Giren Dergi)
- XXXIII. **Characterization of poly(vinylferrocenium) coated surfaces and their applications in DNA sensor technology**
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JOURNAL OF APPLIED ELECTROCHEMISTRY, cilt.40, sa.11, ss.2039-2050, 2010 (SCI İndekslerine Giren Dergi)
- XXXIV. **Preparation and physical/electrochemical characterization of carbon nanotube-chitosan modified pencil graphite electrode**
VURAL T., KURALAY F., BAYRAM C., ABACI S., DENKBAŞ E. B.
APPLIED SURFACE SCIENCE, cilt.257, sa.2, ss.622-627, 2010 (SCI İndekslerine Giren Dergi)
- XXXV. **Tin oxide nanoparticles-polymer modified single-use sensors for electrochemical monitoring of label-free DNA hybridization**
Mutl M., KURALAY F., ERDEM GÜRSAN K. A. , ABACI S., Yumak T., SINAĞ A.
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- XXXVI. **Characterization of redox polymer based electrode and electrochemical behavior for DNA detection**
KURALAY F., ERDEM GÜRSAN K. A. , ABACI S., Ozyoruk H., Yildiz A.
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- XXXVII. **Poly(vinylferrocenium) coated disposable pencil graphite electrode for DNA hybridization**
KURALAY F., ERDEM GÜRSAN K. A. , ABACI S., Ozyoruk H., Yildiz A.
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- XXXVIII. **Indicator-based and indicator-free magnetic assays connected with disposable electrochemical nucleic acid sensor system**
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- XXXIX. **Electrochemical Biosensing of DNA Immobilized Poly(Vinylferrocenium) Modified Electrode**
KURALAY F., ERDEM GÜRSAN K. A. , Abacı S., Ozyoruk H., Yildiz A.
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- XL. **Constant current chronopotentiometry and voltammetry of native and denatured serum albumin at mercury and carbon electrodes**
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- XLI. **Inhibitive determination of Hg²⁺ ion by an amperometric urea biosensor using poly(vinylferrocenium) film**
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Atıflar

Toplam Atıf Sayısı (WOS):986

h-indeksi (WOS):17

Ödüller

Kuralay F., TÜBİTAK Teşvik Ödülü-2017, Tübitak, Aralık 2018