

Assoc. Prof. Mustafa BENER

Personal Information

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Address: İstanbul Üniversitesi, Fen Fakültesi, Kimya Bölümü, Analitik Kimya Anabilim Dalı, Fatih, 34116, İstanbul, Türkiye

Education Information

Doctorate, İstanbul Üniversitesi, Institute of Graduate Studies In Sciences, Kimya Bölümü Analitik Kimya Anabilim Dalı, Turkey 2009 - 2013

Post Graduate, İstanbul Üniversitesi, Institute of Graduate Studies In Sciences, Kimya Bölümü Analitik Kimya Anabilim Dalı, Turkey 2005 - 2009

Under Graduate, İstanbul Üniversitesi, Mühendislik Fakültesi, Kimya, Turkey 2001 - 2005

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Besin Özüleri ve Serumda Antioksidan Kapasite Ölçümü için Moleküler Spektroskopik Sensörler Geliştirilmesi, İstanbul University, Fen Bilimleri, Kimya/Analitik Kimya, 2013

Post Graduate, Bitki Özüleri ve Tekstil Boyalarındaki Flavonoidler için Spektrofotometrik Analiz Yöntemlerinin Geliştirilmesi, İstanbul University, Fen Bilimleri, Kimya Bölümü Analitik Kimya Anabilim Dalı, 2009

Research Areas

Chemistry, Analytical Chemistry, Separation Methods, Food Analysis, Chromatographic Analysis, Sample preparation, Sensors, Spectroscopical Methods, Natural Sciences

Academic Titles / Tasks

Assistant Professor, İstanbul University, Faculty Of Science, Department Of Chemistry, 2020 - Continues

Assistant Professor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemistry, 2018 - 2020

Assistant Professor, İstanbul University, Mühendislik Fakültesi, Kimya Bölümü, 2016 - 2018

Research Assistant, İstanbul Üniversitesi, Mühendislik Fakültesi, Kimya Bölümü, 2009 - 2016

Other, Louisiana State University And Agricultural And Mechanical College, Agricultural Center, Food Science, 2012 - 2012

Professional Experience

Head of Department, Istanbul University, Faculty Of Science, Department Of Chemistry, 2020 - Continues
Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, İstanbul University-Cerrahpaşa, 2019 - 2020
Fakülte Yönetim Kurulu Üyesi, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemistry, 2018 - 2020

Courses

General Chemistry Laboratory II, Under Graduate, 2020 - 2021
Chemistry of Antioxidant Capacity Assays, Post Graduate, 2020 - 2021
General Chemistry II, Under Graduate, 2020 - 2021
Chromatographic Methods in Instrumental Analysis, Post Graduate, 2020 - 2021
General Chemistry II, Under Graduate, 2020 - 2021
General Chemistry I, Under Graduate, 2020 - 2021
General Chemistry Laboratory I, Under Graduate, 2020 - 2021
General Chemistry I, Under Graduate, 2020 - 2021

Advising Theses

Bener M., Apak M. R. , Nitro- ve peroksit- tipi enerjetik malzemelerin tayini için yeni analitik yöntemlerinin geliştirilmesi, Doctorate, F.BURAK(Student), Continues
Bener M., Yeşil Nanoteknoloji ile Sentezlenen Soy Metal Nanoparçacık Esaslı Antioksidan Kapasite Ölçüm Yöntemi Geliştirilmesi, Post Graduate, İ.ÖZTÜRK(Student), Continues
Bener M., Bekdeşer B., Yağların Oksidasyon Ürünlerinin Belirlenmesi için Altın Nanopartikül Esaslı Kolorimetrik Nano-Sensör Geliştirilmesi, Post Graduate, N.ELİF(Student), Continues
Bener M., Zerdeçaldan Antioksidanların Doğal Derin Ötektik Çözücüler Kullanılarak Mikrodalga Destekli Ekstraksiyonunun Optimizasyonu ve Modellenmesi, Post Graduate, K.DOLDOLOVA(Student), 2020

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

- I. **Optimization and modeling of microwave-assisted extraction of curcumin and antioxidant compounds from turmeric by using natural deep eutectic solvents**
Doldolova K., BENER M., LALİKOĞLU M., AŞÇI Y. S. , Arat R., APAK M. R.
Food Chemistry, vol.353, 2021 (Journal Indexed in SCI Expanded)
- II. **Redox-based colorimetric sensing of H₂O₂ after removal of antioxidants with ABTS radical oxidation**
Sen F. B. , BENER M., BEKDEŞER B., APAK M. R.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.248, 2021 (Journal Indexed in SCI Expanded)
- III. **Iron(III) complexes based on tetradentate thiosemicarbazones: Synthesis, characterization, radical scavenging activity and in vitro cytotoxicity on K562, P3HR1 and JURKAT cells**
Kalindemirtas F. D. , KAYA B., Bener M., ŞAHİN O., Kuruca S. E. , BAL DEMİRCİ T., ÜLKÜSEVEN B.
APPLIED ORGANOMETALLIC CHEMISTRY, 2021 (Journal Indexed in SCI)
- IV. **Development of a green synthesized silver nanoparticle-based antioxidant capacity method using carob extract**
Begic N., BENER M., APAK M. R.
JOURNAL OF NANOSTRUCTURE IN CHEMISTRY, 2021 (Journal Indexed in SCI)
- V. **A Simple Determination of Trinitrotoluene (TNT) Based on Fluorescence Quenching of Rhodamine 110 with FRET Mechanism**
Şen F. B. , BENER M., APAK M. R.

Journal of Fluorescence, 2021 (Journal Indexed in SCI Expanded)

- VI. **Colorimetric sensors and nanoprobe for characterizing antioxidant and energetic substances**
APAK M. R. , DEMİRCİ ÇEKİÇ S., Uzer A., Çapanoğlu Güven E., ÇELİK S. E. , BENER M., CAN Z., Durmazel S.
ANALYTICAL METHODS, vol.12, no.44, pp.5266-5321, 2020 (Journal Indexed in SCI)
- VII. **ABTS radical-based single reagent assay for simultaneous determination of biologically important thiols and disulfides.**
Gorusuk E. M. , BEKDEŞER B., BENER M., APAK M. R.
Talanta, vol.218, pp.121212, 2020 (Journal Indexed in SCI Expanded)
- VIII. **A novel gold nanocluster-based fluorometric biosensor for measuring prooxidant activity with a large Stokes shift**
AKYÜZ E., Sen F. B. , BENER M., Bakan K. S. , Apak R.
TALANTA, vol.208, 2020 (Journal Indexed in SCI)
- IX. **Novel pararosaniline based optical sensor for the determination of sulfite in food extracts**
BENER M., Sen F. B. , APAK M. R.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.226, 2020 (Journal Indexed in SCI)
- X. **Modeling and optimizing microwave-assisted extraction of antioxidants from Thymbra Spicata L. and characterization of their phenolic constituents**
BENER M.
FOOD SCIENCE AND BIOTECHNOLOGY, vol.28, no.6, pp.1733-1745, 2019 (Journal Indexed in SCI)
- XI. **Optimization of Microwave-Assisted Extraction (MAE) for the Isolation of Antioxidants from Basil (Ocimum basilicum L.) by Response Surface Methodology (RSM)**
SEN F. B. , Asci Y. S. , Bekdeser B., Bener M., Apak R.
ANALYTICAL LETTERS, vol.52, no.17, pp.2751-2763, 2019 (Journal Indexed in SCI)
- XII. **Protein-Protected Gold Nanocluster-Based Biosensor for Determining the Prooxidant Activity of Natural Antioxidant Compounds**
Akyuz E., SEN F. B. , Bener M., Baskan K., Tutem E., APAK R.
ACS OMEGA, vol.4, no.1, pp.2455-2462, 2019 (Journal Indexed in SCI)
- XIII. **Carrageenan-based colorimetric sensor for total antioxidant capacity measurement**
Bener M., Sen F. B. , Kasgoz A., Apak R.
SENSORS AND ACTUATORS B-CHEMICAL, vol.273, pp.439-447, 2018 (Journal Indexed in SCI)
- XIV. **Iron(III) and nickel(II) complexes with S-alkyl (n-C1-6)-thiosemicarbazidato ligands: Synthesis, structural characterization, and antioxidant features**
Kaya B., ŞAHİN O., Bener M., Ulkuseven B.
JOURNAL OF MOLECULAR STRUCTURE, vol.1167, pp.16-22, 2018 (Journal Indexed in SCI)
- XV. **Heparin-stabilized gold nanoparticles-based CUPRAC colorimetric sensor for antioxidant capacity measurement**
Bener M., Sen F. B. , Apak R.
TALANTA, vol.187, pp.148-155, 2018 (Journal Indexed in SCI)
- XVI. **Novel optical sensor-based method for determining total tocopherol content in serum**
BENER M., APAK M. R.
TURKISH JOURNAL OF CHEMISTRY, vol.42, no.6, pp.1687-1694, 2018 (Journal Indexed in SCI)
- XVII. **A simple automated microplate method for determining reducing sugars in food extracts and synthetic serum using cupric-neocuproine as reductant**
Bener M., Akyuz E., Sen F. B. , Baskan K. S. , Tutem E., Apak R.
TURKISH JOURNAL OF CHEMISTRY, vol.42, no.3, pp.794-807, 2018 (Journal Indexed in SCI)
- XVIII. **Novel Spectroscopic and Electrochemical Sensors and Nanoprobes for the Characterization of Food and Biological Antioxidants**
Apak R., Cekiç S. D. , Uzer A., Celik S. E. , Bener M., Bekdeser B., Can Z., Saglam S., Onem A. N. , Erçağ E.
SENSORS, vol.18, no.1, 2018 (Journal Indexed in SCI)
- XIX. **Ferric-o-phenanthroline adsorbed on a Nafion membrane: A novel optical sensor for antioxidant**

capacity measurement of food extracts

Bener M., Apak R.

SENSORS AND ACTUATORS B-CHEMICAL, vol.247, pp.155-162, 2017 (Journal Indexed in SCI)

- XX. **Rapid adsorptive removal of naphthalene from water using graphene nanoplatelet/MIL-101 (Cr) nanocomposite**
Bayazit S. S. , Yildiz M., Asci Y. S. , Sahin M., Bener M., Eglence S., SALAM M. A.
Journal of Alloys and Compounds, vol.701, pp.740-749, 2017 (Journal Indexed in SCI Expanded)
- XXI. **Optimization of Microwave-Assisted Extraction of Curcumin from Curcuma longa L. (Turmeric) and Evaluation of Antioxidant Activity in Multi-Test Systems**
Bener M., Ozyurek M., Guclu K., Apak R.
RECORDS OF NATURAL PRODUCTS, vol.10, no.5, pp.542-554, 2016 (Journal Indexed in SCI)
- XXII. **Changes of the Anthocyanins and Antioxidant properties of Concord Grape (Vitis labrusca) Pomace After Acid Hydrolysis**
Bener M., Shen Y., Xu Z., Apak R.
RECORDS OF NATURAL PRODUCTS, vol.10, no.6, pp.794-799, 2016 (Journal Indexed in SCI)
- XXIII. **Antioxidant/antiradical properties of microwave-assisted extracts of three wild edible mushrooms**
Ozyurek M., Bener M., Guclu K., Apak R.
FOOD CHEMISTRY, vol.157, pp.323-331, 2014 (Journal Indexed in SCI)
- XXIV. **Novel oxime based flavanone, naringin-oxime: Synthesis, characterization and screening for antioxidant activity**
Ozyurek M., Akpinar D., Bener M., Turkkan B., Guclu K., Apak R.
CHEMICO-BIOLOGICAL INTERACTIONS, vol.212, pp.40-46, 2014 (Journal Indexed in SCI)
- XXV. **Novel Optical Fiber Reflectometric CUPRAC Sensor for Total Antioxidant Capacity Measurement of Food Extracts and Biological Samples**
Bener M., Ozyurek M., Guclu K., Apak R.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.61, no.35, pp.8381-8388, 2013 (Journal Indexed in SCI)
- XXVI. **Release and Degradation of Anthocyanins and Phenolics from Blueberry Pomace during Thermal Acid Hydrolysis and Dry Heating**
Bener M., Shen Y., Apak R., Finley J. W. , Xu Z.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.61, no.27, pp.6643-6649, 2013 (Journal Indexed in SCI)
- XXVII. **Evaluation of antioxidant activity of crataegus species collected from different regions of Turkey**
Ozyurek M., Bener M., Guclu K., DÖNMEZ A., Suzgec-Selcuk S., Pirildar S., Mericli A. H. , Apak R.
Records of Natural Products, vol.6, no.3, pp.263-277, 2012 (Journal Indexed in SCI Expanded)
- XXVIII. **Synthesis, characterization and antioxidant capacity of naringenin-oxime**
Turkkan B., Ozyurek M., Bener M., Guclu K., Apak R.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.85, no.1, pp.235-240, 2012 (Journal Indexed in SCI)
- XXIX. **Polyphenolic contents of natural dyes produced from industrial plants assayed by HPLC and novel spectrophotometric methods**
Bener M., Ozyurek M., Guclu K., Apak R.
INDUSTRIAL CROPS AND PRODUCTS, vol.32, no.3, pp.499-506, 2010 (Journal Indexed in SCI)
- XXX. **Development of a Low-Cost Optical Sensor for Cupric Reducing Antioxidant Capacity Measurement of Food Extracts**
Bener M., Ozyurek M., Guclu K., Apak R.
ANALYTICAL CHEMISTRY, vol.82, no.10, pp.4252-4258, 2010 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Modeling and Optimizing of Microwave-Assisted Extraction of Antioxidants and Phenolics from Wormwood (Artemisia absinthium L.) Using Response Surface Methodology**

Bener M.

Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.1, pp.357-367, 2020 (National Refreed University Journal)

II. Antioksidanları Belirlemede Yeni Bir Yöntem: CUPRAC

APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., BENER M.

Tübitak Bilim ve Teknik Dergisi, pp.56-59, 2011 (National Non-Refereed Journal)

Books & Book Chapters

I. The Cuprac Methods Of Antioxidant Measurement For Beverages

APAK M. R. , ÖZYÜREK M., GÜÇLÜ K., BEKDEŞER B., BENER M.

in: Processing and Impact on Antioxidants in Beverages, Victor R. Preedy, Editor, Elsevier Inc., Waltham-Ma, pp.233-244, 2014

II. CUPRAC (cupric ion reducing antioxidant capacity) assay for antioxidants in human serum, and for hydroxyl radical scavengers

APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., BENER M.

in: Methods in Molecular Biology: Advanced Protocols in Oxidative Stress II, Armstrong D. , Editor, Humana Press, Inc. , New York, pp.215-239, 2010

III. CUPRAC (cupric ion reducing antioxidant capacity) assay for food antioxidants: vitamins, polyphenolics, and flavonoids in food extracts

APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., BENER M.

in: Methods in Molecular Biology, Advanced Protocols in Oxidative Stress I, Armstrong D. , Editor, Humana Press, Inc. , New York, pp.163-193, 2009

Refereed Congress / Symposium Publications in Proceedings

I. Comparison of CUPRAC Based Optical Sensors with the Solution Based CUPRAC Method

Bener M.

3rd International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 19 - 20 March 2020, pp.68

II. Issues and Trends in Antioxidant Activity Measurement

Apak M. R. , Sözgen Başkan K, Demirci Çekiç S., Arda A., Çelik S. E. , Bekdeşer B., Bener M.

2nd International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 11 - 14 March 2020, pp.40

III. A simple Determination of Sulfite in Food Extracts using a Solid Sensors

Bener M., Şen F. B. , Apak M. R.

XX. Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.280

IV. Mechanisms of colorimetric sensors and nanoprobe for characterizing antioxidant and nitroenergetic substances

APAK M. R. , SÖZGEN BAŞKAN K, CEKIC S. D. , ARDA A., ÇELİK S. E. , BEKDEŞER B., BENER M.

Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.34

V. Determining the prooxidant activity of food and biological samples using spectrophotometric gold nanocluster-based biosensor

AKYÜZ E., ŞEN F. B. , BENER M., SÖZGEN BAŞKAN K, APAK M. R.

Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.344

VI. Criteria for Selection of Antioxidant Capacity Assays for Food Antioxidants: Evaluation of CUPRAC, FRAP, Folin-Ciocalteu, ORAC, ABTS and DPPH assays

Apak M. R. , Sözgen Başkan K, Demirci Çekiç S., Arda A., Çelik S. E. , Bekdeşer B., Bener M.

XX. EuroFoodChem, Porto, Portugal, 17 - 19 June 2019, pp.41

VII. Preparation of a novel gold nanocluster-based biosensor using egg white protein and its application

for measuring prooxidant activity

AKYÜZ E., ŞEN F. B. , BENER M., SÖZGEN BAŞKAN K., TÜTEM E., APAK M. R.

5th International Conference on New Trends in Chemistry, Atina, Greece, 22 - 24 April 2019, pp.46-49

- VIII. **Antioksidanların ve Enerjetik Bileşiklerin Tayini için Optik Algılayıcı/nanoprob Tasarımının Esasları**
DONDURMACIOĞLU F., APAK M. R. , ARDA A., BEKDEŞER B., TÜTEM E., BENER M., ÇELİK S. E. , DEMİRCİ ÇEKİÇ S., SAĞLAM Ş., CAN Z., et al.
30. Ulusal Kimya Kongresi, Gazimğusa, Cyprus (Kkct), 5 November - 08 December 2018, pp.31
- IX. **OPTICAL SENSORS FOR TOTAL ANTIOXIDANT CAPACITY MEASUREMENT**
BENER M., APAK M. R.
11th Aegean Analytical Chemistry Days, Girit, Greece, 25 - 29 September 2018, pp.31
- X. **Nanomaterials for Preconcentration, Pretreatment and Sensitivity Enhancement in Analytical Chemistry (with Specific Applications for Reactive Species, Antioxidants and Energetic Substances)**
APAK M. R. , BEKDEŞER B., ÇELİK S. E. , ARDA A., BENER M.
Uluslararası Eser Analiz Kongresi, Sivas, Turkey, 20 - 23 June 2018
- XI. **A novel gold nanoparticles based colorimetric sensor for natioxidant capacity measurement**
Şen F. B. , Bener M., Apak M. R.
8th Bleack Sea Basin Conference on Analytical Chemistry (8th BBAC), İstanbul, Turkey, 9 - 11 May 2018, pp.117
- XII. **Design Principles of optical and electrochemical sensors for the determination od antioxidant ability and reactive species**
APAK M. R. , DEMİRCİ ÇEKİÇ S., BENER M., BEKDEŞER B., ARDA A., ÇELİK S. E. , CAN Z., SAĞLAM Ş., Uzunboy S., AVAN A. N. , et al.
"8th Black Sea Basin Conference on Analytical Chemistry (8th BBCAC), İstanbul, Turkey, 9 - 11 May 2018, pp.26
- XIII. **Colorimetric Sensors for Measuring Oxidative Status and Antioxidant Activity**
APAK M. R. , DEMİRCİ ÇEKİÇ S., BENER M., BEKDEŞER B., ARDA A., ÇELİK S. E. , Uzunboy S., AVAN A. N. , DONDURMACIOĞLU F.
Europtrode 2018, Napoli, Italy, 25 - 28 March 2018, pp.0-87
- XIV. **Recent Developments in the CUPRAC Antioxidant Assay Applied to Food Antioxidants**
APAK M. R. , DEMİRCİ ÇEKİÇ S., ÇELİK S. E. , BEKDEŞER B., BENER M., ÖZYÜREK M., GÜÇLÜ K., Hızal Yücesoy J., ÖNEM A. N. , ARDA A.
EuroFoodChem XIX Conference, Budapeşte, Hungary, 4 - 06 October 2017, pp.105
- XV. **Natural Polymer Film-Based Optical Sensor for Food Antioxidants**
BENER M., Şen F. B. , Kaşgöz A., APAK M. R.
19th International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants, Paris, France, 26 - 27 June 2017, pp.69
- XVI. **Antioksidan Kapasite ve Aktivite Tayinlerinde Kullanılan Moleküler Spektroskopik Yöntemler ve Sensörler; Tasarım İlkeleri ve Nanoteknolojik Uygulamalar**
APAK M. R. , DEMİRCİ ÇEKİÇ S., ARDA A., ÇELİK S. E. , BEKDEŞER B., BENER M., TÜTEM E., SÖZGEN BAŞKAN K., ÖZYÜREK M., GÜÇLÜ K., et al.
XV. Ulusal Spektroskopi Kongresi, Yalova, Turkey, 17 - 19 May 2017, pp.0-3
- XVII. **Optical Sensors and Nanoprobes for Antioxidant Assessment**
APAK M. R. , Erçağ E., DEMİRCİ ÇEKİÇ S., ARDA A., ÇELİK S. E. , BENER M., BEKDEŞER B., CAN Z., SAĞLAM Ş., ÖNEM A. N.
Pittcon 2017 Expo&Conference, Chicago Illinois, United States Of America, 5 - 09 March 2017, pp.1680-4
- XVIII. **Development of Ferric Ion-Based Optical Sensors for Measurement of Antioxidant Capacity in Food Extracts**
BENER M., APAK M. R.
10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016, pp.276
- XIX. **A Low-cost Natural Polymer Film-Based Optical Sensor for Food Antioxidants**
BENER M., KAŞGÖZ A., ALİM Ç., APAK M. R.
6th EuCheMS Chemistry Congress, Sevilla, Spain, 11 - 15 September 2016, pp.350
- XX. **Antioksidan Aktivite Tayinlerine Farklı Yaklaşımlar ve Kolorimetrik Nanosensörler**

APAK M. R. , ERÇAĞ E., ÖZYÜREK M., GÜÇLÜ K., DEMİRCİ ÇEKİÇ S., TÜTEM E., SÖZGEN BAŞKAN K., ÇELİK S. E. , BEKDEŞER B., ARDA A., et al.

8. Ulusal Analitik Kimya Kongresi, Isparta, Turkey, 30 May - 03 June 2016, pp.7

- XXI. **ANTİOKSİDAN VE PATLAYICI TAYİNLERİNDE KULLANILAN SPEKTROSKOPİK SENSÖR VE NANO-PROBLARIN TASARIM İLKELERİ**
APAK M. R. , ERÇAĞ E., ARDA A., ÖZYÜREK M., GÜÇLÜ K., DEMİRCİ ÇEKİÇ S., ÇELİK S. E. , BEKDEŞER B., SAĞLAM Ş., BENER M., et al.
Es-An 2016, Sakarya, Turkey, 19 - 22 May 2016, pp.5
- XXII. **Colorimetric Antioxidant-Prooxidant Sensors and Recent Developments in the CUPRAC Antioxidant Capacity Assay**
APAK M. R. , DEMİRCİ ÇEKİÇ S., BENER M., ÖZYÜREK M., GÜÇLÜ K., ÇELİK S. E. , BEKDEŞER B.
Eurotrode XIII, Graz, Austria, 20 - 23 March 2016, pp.126
- XXIII. **Comparison of the Antioxidant Properties of Concord Grape (Vitis Labrusca) Pomace During Acid hydrolysis**
BENER M.
International Conference on Applied Chemistry and Technology (ICACT 2015), Guilin, China, 18 - 20 December 2015, pp.35-36
- XXIV. **Novel colorimetric sensors and nanoprobes for the characterization of food antioxidants**
APAK M. R. , ERÇAĞ E., ÖZYÜREK M., GÜÇLÜ K., DEMİRCİ ÇEKİÇ S., ARDA A., ÇELİK S. E. , BENER M., BEKDEŞER B., CAN Z.
29 th EFFoS T International Conference 2015, Atina, Greece, 10 - 12 November 2015, pp.77
- XXV. **Fiber Optik Reflektometrik CUPRAC Sensörü Kullanılarak Şifalı Bitki Özütlerinin Toplam Antioksidan Kapasitelerinin Tayini**
BENER M., ÖZYÜREK M., GÜÇLÜ K., APAK M. R.
3. Ulusal Kimya Mühendisliği Öğrenci Kongresi, İstanbul, Turkey, 2 - 04 May 2015, pp.96-97
- XXVI. **Optik Sensör Esaslı CUPRAC Yöntemi Kullanılarak Gıda Özütleri ve Biyolojik Örneklerde Toplam Antioksidan Kapasite Tayini**
BENER M., ÖZYÜREK M., GÜÇLÜ K., APAK M. R.
3. Ulusal Kimya Mühendisliği Öğrenci Kongresi, İstanbul, Turkey, 2 - 04 May 2015, pp.94-95
- XXVII. **COMPARATIVE EVALUATION OF SELECTED ANTIOXIDANT CAPACITY/ACTIVITY ASSAYS WITH SPECIAL REFERENCE TO CUPRAC, CERAC AND FERRICYANIDE METHODS**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., demirata öztürk b., DEMİRCİ ÇEKİÇ S., berker çetin l., Özyurt D., ERÇAĞ E., et al.
Workshop on Determining Antioxidants as Reactive Species Scavengers, İstanbul, Turkey, 27 - 28 October 2014, pp.19
- XXVIII. **Comparative evaluation of antioxidant activity/capacity assays with special reference to CUPRAC, CERAC, and ferricyanide methods**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., Berker K. I. , Özyurt D., BENER M.
ISNFF-2014 Annual Conference & Exhibition Functional Foods, Nutraceuticals, Natural Health Products and Dietary Supplements, İstanbul, Turkey, 14 - 17 October 2014
- XXIX. **Important Milestones in the development of the CUPRAC, CERAC, and ferricyanide assays for antioxidant characterization (2004-2014)**
APAK M. R. , TÜTEM E., ERÇAĞ E., Demirata Öztürk B., GÜÇLÜ K., ÖZYÜREK M., DEMİRCİ ÇEKİÇ S., SÖZGEN BAŞKAN K., ÇELİK S. E. , Bektaşoğlu B., et al.
9th Aegean Analytical Chemistry Days AACD 2014, Chios, Greece, 29 September - 03 October 2014, pp.51
- XXX. **Cuprac methods of antioxidant capacity/activity measurement applicable to food & pharmaceuticals and biological fluids.**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., DEMİRCİ ÇEKİÇ S., BENER M.
4th Int. Meeting on Pharmacy & Pharm. Sci, IMPPS-4, İstanbul, Turkey, 18 - 21 September 2014, pp.10
- XXXI. **Antioksidan Tayin Yöntemleri ve CUPRAC Yöntemindeki Gelişmeler**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., DEMİRCİ ÇEKİÇ S., BENER M.

- XIII. Ulusal Spektroskopi Kongresi, Burdur, Turkey, 15 - 18 May 2013, pp.6
- XXXII. **Polifenolik Bileşiklerin Antioksidan Kapasitelerinin Belirlenmesinde Fiber Optik Sensör Esaslı CUPRAC Yönteminin Geliştirilmesi**
KONDAKÇI E., BENER M., ÖZYÜREK M., GÜÇLÜ K., APAK M. R.
26. Ulusal Kimya Kongresi, Muğla, Turkey, 1 - 04 October 2012, pp.80
- XXXIII. **Antioksidan Aktivite/Kapasite Tayin Yöntemleri, CUPRAC Yöntemi ve İnsan Sağlığındaki Önemi**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., DEMİRCİ ÇEKİÇ S., BENER M., ÇELİK S. E.
XXIV. Ulusal Biyokimya Kongresi, Konya, Turkey, 25 - 28 September 2012, pp.68
- XXXIV. **Antioksidan Kapasite Tayin Yöntemleri, Cuprac Yöntemi ve Çeşitlemeleri**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., DEMİRCİ ÇEKİÇ S., ÇELİK S. E. , BENER M.
6. Ulusal Analitik Kimya Kongresi, Hatay, Turkey, 1 - 04 September 2012, pp.2
- XXXV. **Eser Analiz Bağlamında Antioksidan Tayinlerine Ve Oksidatif Stres Biyomarkelerine Toplu Bir Bakış**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BEKDEŞER B., BENER M.
II. Eser Analiz Çalıştayı (EsAn-2012), Trabzon, Turkey, 1 - 04 June 2012
- XXXVI. **CUPRAC method of antioxidant determination**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., ÇELİK S. E. , BENER M.
Conference on Oxidative Stress & Mitochondrial Dysfunctions, İstanbul, Turkey, 10 February 2012, pp.10
- XXXVII. **Seven years of the CUPRAC method for the evaluation of antioxidant capacity of food plants**
APAK M. R. , GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., ÇELİK S. E. , BENER M.
New Challenges in Natural Products Chemistry (International Conference in Honour of Prof. Dr. Ayhan Ulubelen), İstanbul, Turkey, 12 - 13 October 2011, pp.10
- XXXVIII. **CUPRAC (cupric reducing antioxidant capacity) Antioxidant Sensor**
APAK M. R. , ÖZYÜREK M., BENER M., GÜÇLÜ K.
2nd International Conference on Bio-Sensing Technology, Amsterdam, Netherlands, 10 - 12 October 2011, pp.10
- XXXIX. **Recent Developments in CUPRAC (Cupric Reducing Antioxidant Capacity) Assay Methodology**
APAK M. R. , ÖZYÜREK M., GÜÇLÜ K., BEKDEŞER B., ÇELİK S. E. , BENER M.
7th Aegean Analytical Chemistry Days- AACD 2010, Greece, 1 - 04 September 2010, pp.12
- XL. **Antioxidant Capacity of Anthocyanins**
BENER M., ÖZYÜREK M., SÖZGEN BAŞKAN K., TÜTEM E., Bektaşoğlu B., GÜÇLÜ K., APAK M. R. , BEKDEŞER B.
5th Black Sea Basin International Conference on Analytical Chemistry, Ordu, Turkey, 23 - 26 September 2009, pp.0-190
- XLI. **Doğal Boyalardaki Fenoliklerin CUPRAC ve AlCl₃/Potasyum Asetat Spektrofotometrik Yöntemleriyle Karşılaştırmalı Olarak Tayini**
BENER M., ÖZYÜREK M., APAK M. R. , GÜÇLÜ K.
XI. Ulusal Spektroskopi Kongresi, Ankara, Turkey, 1 - 04 June 2009, pp.17
- XLII. **Assay of Flavonoid-Based Dyes with CUPRAC and Aluminum Chloride/Potassium Acetate Spectrophotometric Methods**
BENER M., ÖZYÜREK M., GÜÇLÜ K., APAK M. R.
6th Aegean Analytical Chemistry Days, Denizli, Turkey, 9 - 12 October 2008
- XLIII. **CUPRAC Antioksidan Ölçüm Yönteminin Bazı Modifikasyonları ve Uygulamaları**
GÜÇLÜ K., ÖZYÜREK M., BEKDEŞER B., BENER M., GÜNGÖR N., BAKI S., APAK M. R.
20. Ulusal Biyokimya Kongresi, Nevşehir, Turkey, 1 - 04 October 2008, pp.86
- XLIV. **Flavonoid Esaslı Boyaların CUPRAC Yöntemiyle Spektrofotometrik Tayini**
BENER M., ÖZYÜREK M., GÜÇLÜ K., APAK M. R.
X. Ulusal Spektroskopi Kongresi, İzmir, Turkey, 1 - 04 July 2007, pp.40
- XLV. **Quantitation of flavonoid dyes with copper(II)-neocuproine spectrophotometry in relation to dye identification in historical textiles**
GÜÇLÜ K., ÖZYÜREK M., ÇELİK S. E. , BENER M., ERÇAĞ E., APAK M. R.
ICCULHER 2007 International Congress on Spectroscopic Methods for Conservation of Cultural Heritage, İstanbul, Turkey, 5 - 07 April 2007, pp.51

Supported Projects

Apak M. R. , Arda A., Demirci Çekiç S., Sözgen Başkan K., Çelik S. E. , Bener M., Dondurmacioğlu F., Bekdeşer B., TUBITAK Project, Lipid hidroperoksitler, peroksit-esaslı patlayıcılar ve organofosfor pestisitlerden doğrudan ve dolaylı yöntemlerle türetilen peroksitlerin tayini için optik, elektrokimyasal ve nano-kolorimetrik sensörler geliştirilmesi , 2020 - 2022

Bener M., Öztürk İ., Project Supported by Higher Education Institutions, Yeşil Nanoteknoloji ile Sentezlenen Soy Metal Nanoparçacık Esaslı Antioksidan Kapasite Ölçüm Yöntemi Geliştirilmesi, 2020 - 2021

Bekdeşer B., Bener M., Apak M. R. , Demir Sağlam S., TUBITAK Project, Toplam tiyol tayini için yeni bir spektrofotometrik yöntem geliştirilmesi, 2019 - 2021

Sözgen Başkan K., Apak M. R. , Demirci Çekiç S., Çelik S. E. , Bekdeşer B., Bener M., Akyüz E., TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, Endüstriyel atıklardan kazanılan antosiyaninlerin mikrokapsülasyonu ve işlenmiş gıdalarda kullanımı, 2018 - 2021

Apak M. R. , Sözgen Başkan K., Çelik S. E. , Demirci Çekiç S., Bekdeşer B., Bener M., Dondurmacioğlu F., Önem A. N. , TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, Türkiye’de yetişen bazı tıbbi ve aromatik bitkilerden hazırlanmış ticari ürünlerin karakterizasyonu ve karşılaştırılması, 2016 - 2020

BENER M., APAK M. R. , Project Supported by Higher Education Institutions, Demir o-fenantrolin Esaslı Optik Sensör Kullanılarak Gıda Özütlerinde Antioksidan Kapasite Tayini, 2018 - 2018

APAK M. R. , BENER M., TUBITAK Project, Gıda Özütlerinde Antioksidan Kapasite Tayini için Düşük Maliyetli Doğal Polimer Film Esaslı Optik Sensör Geliştirilmesi, 2016 - 2018

APAK M. R. , SAĞLAM Ş., DEMİRCİ ÇEKİÇ S., ÇELİK S. E. , BENER M., BEKDEŞER B., CAN Z., ÖNEM A. N. , Project Supported by Higher Education Institutions, Optical Sensors and Nanoprobes for Antioxidant Assessment, 2017 - 2017

ÖZYÜREK M., APAK M. R. , GÜÇLÜ K., BEKDEŞER B., BENER M., KIBRISLIOĞLU G., DURUSOY N., Project Supported by Higher Education Institutions, Hypericum Scabrum L., Papaver fugax var. Poiret platydiscus cullen ve Achillea Vermicularis Trin. şifalı bitkilerinin antioksidan özelliklerinin incelenmesi, 2016 - 2017

Patent

Apak M. R. , Güçlü K., Özyürek M., Bener M., OPTICAL SENSOR-BASED CUPRIC REDUCING ANTIOXIDANT CAPACITY (CUPRAC) ASSAY, Patent, CHAPTER C Chemistry; Metallurgy, Registration in Multiple Countries, 2014

Memberships / Tasks in Scientific Organizations

Türkiye Kimya Derneği, Member, 2009 - Continues

Scientific Refereeing

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, May 2021

JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, April 2021

ANALYTICAL LETTERS, Journal Indexed in SCI-E, April 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, March 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, March 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, March 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, March 2021

FOOD CHEMISTRY, Journal Indexed in SCI-E, February 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, February 2021

NATURAL PRODUCT RESEARCH, Journal Indexed in SCI-E, February 2021

JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, February 2021

LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, January 2021
FOOD CHEMISTRY, Journal Indexed in SCI-E, January 2021
LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, January 2021
LWT-FOOD SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, December 2020
FOOD CHEMISTRY, Journal Indexed in SCI-E, November 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, November 2020
Journal of Chemical Metrology, Journal Indexed in ESCI, October 2020
PLANT FOODS FOR HUMAN NUTRITION, Journal Indexed in SCI-E, October 2020
DESALINATION AND WATER TREATMENT, Journal Indexed in SCI-E, October 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, October 2020
CHEMICAL PAPERS, Journal Indexed in SCI-E, October 2020
BMC Research Notes, Other Indexed Journal, October 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, September 2020
ANALYTICAL LETTERS, Journal Indexed in SCI-E, August 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, August 2020
ACS APPLIED NANO MATERIALS, Journal Indexed in ESCI, August 2020
Journal of Chemical Metrology, Journal Indexed in ESCI, August 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, August 2020
TALANTA, Journal Indexed in SCI-E, June 2020
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, Journal Indexed in SCI-E, June 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, May 2020
JOURNAL OF ANALYTICAL METHODS IN CHEMISTRY, Journal Indexed in SCI-E, May 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, May 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, May 2020
TALANTA, Journal Indexed in SCI-E, April 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, April 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, April 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, April 2020
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, Journal Indexed in SCI-E, April 2020
GREEN PROCESSING AND SYNTHESIS, Journal Indexed in SCI-E, March 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, February 2020
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, February 2020
MEASUREMENT, Journal Indexed in SCI-E, January 2020
MONATSHEFTE FÜR CHEMIE, Journal Indexed in SCI-E, January 2020
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, January 2020
TALANTA, Journal Indexed in SCI-E, December 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, December 2019
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, November 2019
FOOD ANALYTICAL METHODS, Journal Indexed in SCI-E, November 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, November 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, October 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, October 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, October 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, September 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, September 2019
ENVIRONMENTAL POLLUTION, Journal Indexed in SCI-E, August 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, July 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, June 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, June 2019

JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, May 2019
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, April 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, April 2019
TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, Journal Indexed in SCI-E, April 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, March 2019
JOURNAL OF MOLECULAR STRUCTURE, Journal Indexed in SCI-E, February 2019
Journal of Molecular Structure, SCI Journal, August 2018
Talanta, SCI Journal, June 2018
Natural Product Research, SCI Journal, March 2018
Journal of Analytical Methods in Chemistry, SCI Journal, December 2016
Journal of Food Science, SCI Journal, November 2016
Journal of Analytical Methods in Chemistry, SCI Journal, October 2016
Journal of Analytical Methods in Chemistry, SCI Journal, September 2016
Natural Product Research, SCI Journal, March 2012
Natural Product Research, SCI Journal, September 2011
Natural Product Research, SCI Journal, September 2011
Natural Product Research, SCI Journal, August 2011

Edit Congress and Symposium Activities

11th Aegean Analytical Chemistry Days (AACD2018), Attendee, Hania, Greece, 2018
19th International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants, Attendee, Paris, France, 2017
6th EuCheMS Chemistry Congress, Attendee, Sevilla, Spain, 2016
10th Aegean Analytical Chemistry Days (AACD2016), Attendee, Çanakkale, Turkey, 2016
International Conference on Applied Chemistry and Technology (ICACT 2015), Attendee, Guilin, China, 2015
3. Ulusal Kimya Mühendisliği Öğrenci Kongresi, Attendee, İstanbul, Turkey, 2015
Workshop on Determining Antioxidants as Reactive Species Scavengers, Attendee, İstanbul, Turkey, 2014
5th Black Sea Basin Conference on Analytical Chemistry, Attendee, Ordu, Turkey, 2009
XI. Ulusal Spektroskopi Kongresi, Attendee, Ankara, Turkey, 2009
6th Aegean Analytical Chemistry Days, Attendee, Denizli, Turkey, 2008
X. Ulusal Spektroskopi Kongresi, Attendee, İzmir, Turkey, 2007
ICCULHER-2007, The International Congress on Spectroscopic Methods for Conservation of Cultural Heritage, Attendee, İstanbul, Turkey, 2007

Citations

Total Citations (WOS):308
h-index (WOS):11

Scholarships

2214-Yurtdışı Araştırma Bursu, TUBITAK, 2011 - Continues