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## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Evaluation of possible neuroprotective effects of virgin coconut oil on aluminum-induced neurotoxicity in an in vitro Alzheimer's disease model**  
Demirel G., Sanajou S., Yirün A., Özgündoğdu A. F., Berkkan A., Baydar T., Erkekoğlu Ü. P.  
Journal of Applied Toxicology, vol.44, no.4, pp.609-622, 2024 (SCI-Expanded)
- II. **A NEW DIRECT EXTRACTION BY GAS-CHROMATOGRAPHY WITH FLAME IONIZATION DETECTOR COUPLED TO HEAD SPACE METHOD FOR THE DETERMINATION OF ALCOHOL CONTENT OF HIGH MATRIX WINE PRODUCTS**  
ULUTAŞ O. K., BERKKAN A.  
Revue Roumaine de Chimie, vol.67, no.10-12, pp.569-577, 2022 (SCI-Expanded)
- III. **ANALYTICAL PERFORMANCE AND VALIDATION OF HEAD SPACE-GAS CHROMATOGRAPHY-FLAME IONIZATION DETECTOR (HS-GC-FID) METHOD FOR ALCOHOL CONTENT AND EVALUATION OF EFFICIENCY AND POSSIBLE TOXICITY OF HAND SANITIZERS AT THE TIME OF PANDEMIC**  
BERKKAN A., ULUTAŞ O. K.  
REVUE ROUMAINE DE CHIMIE, vol.66, no.6, pp.547-556, 2021 (SCI-Expanded)
- IV. **Starch-Based Membranes for Controlled Release of 5-Fluorouracil In Vitro**  
Berkkan A., Kondolot Solak E., Asman G.  
CHEMISTRYSELECT, vol.6, no.23, pp.5678-5684, 2021 (SCI-Expanded)
- V. **The Effect of Boron-Containing Nano-Hydroxyapatite on Bone Cells**  
Gizer M., Kose S., KARAOSMANOĞLU B., Taskiran E. Z., BERKKAN A., Timucin M., KORKUSUZ F., KORKUSUZ P.  
BIOLOGICAL TRACE ELEMENT RESEARCH, vol.193, no.2, pp.364-376, 2020 (SCI-Expanded)
- VI. **Genetic damage of operating and recovery room personnel occupationally exposed to waste anaesthetic gases**  
ÇAKMAK G., Eraydin D., Berkkan A., Yagar S., Burgaz S.  
HUMAN & EXPERIMENTAL TOXICOLOGY, vol.38, no.1, pp.3-10, 2019 (SCI-Expanded)
- VII. **Identification of milk fraud using laser-induced breakdown spectroscopy (LIBS)**  
Sezer B., Durna S., Bilge G., BERKKAN A., Yetisemiyen A., BOYACI İ. H.

- INTERNATIONAL DAIRY JOURNAL, vol.81, pp.1-7, 2018 (SCI-Expanded)
- VIII. **Assessment of laser induced breakdown spectroscopy as a tool for analysis of butter adulteration**  
TEMİZ H. T., Sezer B., BERKKAN A., TAMER U., BOYACI İ. H.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.67, pp.48-54, 2018 (SCI-Expanded)
- IX. **A rapid tool for determination of titanium dioxide content in white chickpea samples**  
Sezer B., Bilge G., BERKKAN A., TAMER U., BOYACI İ. H.  
FOOD CHEMISTRY, vol.240, pp.84-89, 2018 (SCI-Expanded)
- X. **Detection and quantification of a toxic salt substitute (LiCl) by using laser induced breakdown spectroscopy (LISS)**  
Sezer B., VELİOĞLU H. M., Bilge G., BERKKAN A., Ozdinc N., TAMER U., BOYACI İ. H.  
MEAT SCIENCE, vol.135, pp.123-128, 2018 (SCI-Expanded)
- XI. **Synchronous fluorescence spectroscopy for determination of tahini adulteration**  
TEMİZ H. T., TAMER U., BERKKAN A., BOYACI İ. H.  
TALANTA, vol.167, pp.557-562, 2017 (SCI-Expanded)
- XII. **Subacute Effects of Standardized Fumaria Vaillantii Lois. Ethanol Extract on Trace Element Levels, Biochemical and Histopathological Parameters in Experimental Liver Toxicity**  
DELİORMAN ORHAN D., Hartevioglu A., Orhan N., BERKKAN A., GÖKBULUT A., Gunhan O., PEKCAN M.  
JOURNAL OF FOOD BIOCHEMISTRY, vol.40, no.2, pp.180-189, 2016 (SCI-Expanded)
- XIII. **Effects of Juniperus oxycedrus ssp oxycedrus on tissue lipid peroxidation, trace elements (Cu, Zn, Fe) and blood glucose levels in experimental diabetes**  
Orhan N., BERKKAN A., DELİORMAN ORHAN D., ASLAN M., Ergun F.  
JOURNAL OF ETHNOPHARMACOLOGY, vol.133, no.2, pp.759-764, 2011 (SCI-Expanded)
- XIV. **Amperometric enzyme electrode for glucose determination based on poly(pyrrole-2-aminobenzoic acid)**  
BERKKAN A., Seckin A. I., PEKMEZ K., TAMER U.  
JOURNAL OF SOLID STATE ELECTROCHEMISTRY, vol.14, no.6, pp.975-980, 2010 (SCI-Expanded)
- XV. **Renal safety and extrahepatic defluorination of sevoflurane in hepatic transplants**  
Kanbak M., Karagoz A. H., Erdem N., Oc B., Saricaoglu F., Ertas N., Berkkan A., Abbasoglu O., Aypar U.  
TRANSPLANTATION PROCEEDINGS, vol.39, no.5, pp.1544-1548, 2007 (SCI-Expanded)
- XVI. **Extrahepatic metabolism and renal effects of sevoflurane in a case of liver transplantation**  
Erdem N., Kanbak M., Saricaoglu F., Ocal T., Tanyel C., Ertas N., Berkkan A., Aypar U.  
TRANSPLANTATION PROCEEDINGS, vol.38, no.5, pp.1463-1466, 2006 (SCI-Expanded)
- XVII. **Simultaneous spectrophotometric determination of piroxicam and benzyl alcohol in gel forms**  
Goger N., Zahtep L., Berkkan A., Senturk Z.  
CHEMIA ANALITYCZNA, vol.50, no.6, pp.1059-1067, 2005 (SCI-Expanded)
- XVIII. **Determination of lead in dialysis concentrates using flow injection hydride generation atomic absorption spectrometry**  
Berkkan A., Ertas N.  
TALANTA, vol.64, no.2, pp.423-427, 2004 (SCI-Expanded)
- XIX. **The efficacy of a fluoride chewing gum on salivary fluoride concentration and plaque pH in children**  
Oztas N., Bodur H., Olmez A., Berkkan A., Cula S.  
JOURNAL OF DENTISTRY, vol.32, no.6, pp.471-477, 2004 (SCI-Expanded)
- XX. **Quantitative determination of azathioprine in tablets by H-1 NMR spectroscopy**  
Goger N., Parlatan H., Basan H., Berkkan A., Ozden T.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.21, no.3, pp.685-689, 1999 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Head Space Single Drop Micro Extraction Gas Chromatography Flame Ionization Detection (HS-SDME-GC-FID) Method for the Analysis of Common Fatty Acids**

- Ekici A., ULUTAŞ O. K., BERKKAN A.  
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.20, no.6, pp.397-404, 2023 (ESCI)
- II. **Assessment of Commercially Safflower Oils (*Carthami Oleum Raffinatum*) in Terms of European Pharmacopoeia Criteria and Their Weight Control Potentials**  
ULUTAŞ O. K., BERKKAN A., DELİORMAN ORHAN D., PEKACAR S., Özüpek B., Sümmeoğlu D.  
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.19, no.3, pp.273-279, 2022 (ESCI)
- III. **Evaluation of Marketed Almond Oils [*Prunus dulcis* (Mill.) D.A. Webb] in Terms of European Pharmacopoeia Criteria**  
Berkkan A., Dede Türk B. N., Pekacar S., Ulutaş O. K., Deliorman Orhan D.  
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.19, no.3, pp.322-329, 2022 (ESCI)
- IV. **Evaluation of Arsenic Concentration in Poultry and Calf Meat Samples by Hydride Generation Atomic Fluorescence Spectrometry**  
Ertaş N., Burgaz S., Berkkan A., Alp O.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.2, pp.396-404, 2021 (ESCI)
- V. **Evaluation of Alcohol Content of Cologne Products in the Turkish Market Amid the COVID-19 Pandemic**  
BERKKAN A., ULUTAŞ O. K.  
GAZI MEDICAL JOURNAL, vol.31, pp.513-517, 2020 (ESCI)
- VI. **Evaluation of fluoride uptake from four different fluoride releasing restorative materials by bovine enamel In vitro study**  
BANI M., ATABEK D., BERKKAN A., ÖZTAŞ N.  
Atatürk Üniv. Diş Hek. Fak. Derg., vol.24, no.2, pp.226-231, 2014 (Peer-Reviewed Journal)
- VII. **DÖRT FARKLI FLUORİD SALINIMI YAPAN RESTORATİF MATERYALDEN FLUORİD EMİLİMİNİN SİĞİR MİNESİNDE DEĞERLENDİRİLMESİ İN VİTRO ÇALIŞMA**  
BANI M., ÖZTAŞ N., BERKKAN A., ATABEK D.  
Atatürk Üniversitesi Diş Hekimliği Fakültesi Dergisi, vol.24, no.2, pp.226-231, 2014 (Peer-Reviewed Journal)
- VIII. **The Effect of Temperature on Bisphenol: An Elution from Dental Resins**  
Atabek D., Aydintuğ I., Alaçam A., Berkkan A.  
The Journal of Contemporary Dental Practice, vol.15, no.5, pp.576-580, 2014 (Scopus)
- IX. **Effects of Er YAG Laser Irradiation and Topical Fluoride Application on Inhibition of Enamel Demineralization**  
ALTAN A. B., BAYSAL A., BERKKAN A., GÖKTOLGA AKIN E. G.  
Turkish Journal of Orthodontics, vol.26, no.1, pp.30-35, 2013 (ESCI)
- X. **A comparative study of fluoride containing chlorhexidine and non chlorhexidine mouthrinses in a teenage group**  
ATABEK D., ALAÇAM A., çakılıcı b., BERKKAN A.  
Int Dent Res, vol.2, no.1, pp.1-7, 2012 (Peer-Reviewed Journal)
- XI. **A Comparative Study of Fluoride Containing Chx Non Chx Mouthrinses on Plaque Gingivitis And Salivary Fluoride Levels in the Group of 13 16 Years**  
ATABEK D., ALAÇAM A., ÇAKILCI B., BERKKAN A.  
International Dental Research, vol.2, no.1, pp.1-7, 2012 (Peer-Reviewed Journal)
- XII. **Development of method for the determination of lead in teeth samples by flow injection hydride generation atomic absorption spectrometry in the presence of K<sub>3</sub>Fe CN 6 HNO<sub>3</sub> and NaBH<sub>4</sub>**  
BERKKAN A., bingül d. f., ORBEY M. T.  
FABAD J. Pharm. Sci, vol.36, no.4, pp.181-188, 2011 (Scopus)

## Books & Book Chapters

I. **Analitik Kimya Pratikleri**

Orbey M. T., Günden Göger N., Ertaş N., Yılmaz Ş., Berkkan A., Basan H., Şatana Kara H. E., Alp O.

## Refereed Congress / Symposium Publications in Proceedings

- I. **Analysis of Residue Solvent and Alcohol in Herbal Extracts by Headspace Gas Chromatography-Flame Ionization Detector**  
Üvez D., ULUTAŞ O. K., BERKKAN A.  
33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 02 July 2023
- II. **Investigation of Presence of Volatile Organic Pollutants (VOCs) in Top Water in Ankara Provincial Districts**  
Berkkan A.  
11th International Congress the Turkish Society of Toxicology, Antalya, Turkey, 2 - 05 November 2022, pp.80
- III. **Tıbbi ve Adli Açıdan Uyuşturucu ve Psikotrop Maddeler**  
Berkkan A.  
1. Ulusal Adli Eczacılık Sempozyumu, Ankara, Turkey, 26 - 27 March 2022
- IV. **Determination of alcohols in beverages based on direct extraction by head space gas chromatography-flame ionisation detection.**  
Berkkan A., Ulutaş O. K.  
3rd International Gazi Pharma Symposium Series (GPSS-2021), Ankara, Turkey, 08 September 2021, pp.180
- V. **Evaluation of Almond Oils Sold in the Market in Terms of European Pharmacopoeia Monograph Criteria**  
BERKKAN A., Dede B. N., PEKACAR S., ULUTAŞ O. K., DELİORMAN ORHAN D.  
4th International Symposium on Phytochemicals in Medicine and Food, Xian, China, 30 November - 04 December 2020
- VI. **An alternative agent against dental plaque formation Quality control analysis of safflower oil samples**  
Sümmeoğlu D., BERKKAN A., ULUTAŞ O. K., Özipek B., ÜSTÜN O., DELİORMAN ORHAN D.  
1. GENÇ AKADEMİSYENLER KONGRESİ, Turkey, 20 - 21 February 2020
- VII. **DOES LEAD (Pb) CONTENT OF LIPSTICKSPOSE A HEALTH RISK TO CHILDREN? AN EXPOSURE AND RISK ASSESSMENT IN TURKISH COSMETIC MARKET**  
BERKKAN A., Öztaş D. M., ULUTAŞ O. K.  
15th International Work shop on Neonatology and the 40th Congress UMEMPS (Union of Middle-Eastern and Mediterranean Pediatric Societies), Cagliari, SARDINIA, Italy, 24 - 26 October 2019, vol.8, pp.54
- VIII. **Lead Content of Lipsticks in Turkish Cosmetic Market and Assessment of Their Health Risks**  
BERKKAN A., öztaş m. d., ULUTAŞ O. K.  
10th International Congress of the Turkish Society of Toxicology (TST), Antalya, Turkey, 16 - 19 October 2019, pp.92
- IX. **Boron-Containing Nano-Hydroxyapatite Composites Alters Mesenchymal Stem Cell Proliferation and Osteogenic Differentiation**  
GİZER M., KÖSE S., KARAOSMANOĞLU B., TAŞKIRAN Z. E., BERKKAN A., TİMÜÇİN M., KORKUSUZ F., KORKUSUZ P.  
European Orthopedic Research Society 27th Annual Anniversary Meeting, 2 - 05 October 2019
- X. **Kemik hücrelerine bor içeren nano-hidroksiapatit kompozitlerin moleküller etki mekanizması**  
Gizer M., KÖSE S., KARAOSMANOĞLU B., TAŞKIRAN Z. E., BERKKAN A., TİMÜÇİN M., KORKUSUZ F., KORKUSUZ P.  
24. Ulusal Elektron Mikroskopi Kongresi, Edirne, Turkey, 24 - 26 April 2019
- XI. **Bor Kataklı Nano-Hidroksiapatit (B-nHAp) Kompozitlerin Mezenkimal Kök Hücrelerinin ve Kemik Hücrelerinin Proliferasyonuna Etkisinin Salımla İlişkili Araştırılması**  
gizer m., dede e. ç., BERKKAN A., KORKUSUZ F., timuçin m., KORKUSUZ P.  
14. Ulusal Histoloji ve Embriyoloji Kongresi, Antalya, Turkey, 10 - 13 May 2018, vol.6, pp.283
- XII. **Piyasada Satılan Badem Yağlarının Avrupa Farmakopesi Monograf Kriterleri Yönünden Değerlendirilmesi**

- DEDE B. N., PEKACAR S., BERKKAN A., DELİORMAN ORHAN D.  
23. Bitkisel İlaç Hammadeleri Toplantısı, Antalya, Turkey, 9 - 12 April 2018
- XIII. **Simultaneous Determination of Active Substances, Impurities and Fatty acid esters in cream formulation pharmaceutical products by High Performance Liquid Chromatography**  
Çalikoğlu M., BERKKAN A.  
2nd International Gazi Pharma Symposium, 11 - 13 October 2017
- XIV. **Controlled Release of Vancomycin at In-vitro**  
ASMAN G., KONDOLOT SOLAK E., BERKKAN A.  
ISEEP-2017 VIII. International Symposium on ecology and environmental problems, Çanakkale, Turkey, 4 - 07 October 2017
- XV. **The Use of Starch/PVA/Graphene Oxide Membranes for the Separation of Aceton Water Mixtures by Evaporation**  
GÜLER E., ASMAN G., BERKKAN A.  
International Congress of the New Approaches and Technologies for Sustainable Development, Isparta, Turkey, 21 - 24 September 2017
- XVI. **Laser Induced Breakdown Spectroscopy for Determination of Butter Adulteration**  
TEMİZ H. T., Sezer B., BERKKAN A., BOYACI İ. H.  
Colloquium Spectroscopicum Internationale XL-IX Euro-Mediterranean Symposium on LIBS, Pisa, 11 - 16 June 2017
- XVII. **ANALYSIS OF SOME FATTY ACIDS BY USING HEAD SPACE GASCHROMATOGRAPHY**  
aslıhan e., BERKKAN A.  
Gazi Pharma Symposium Series-GPSS, Antalya, Turkey, 12 - 15 November 2015, pp.117
- XVIII. **DETERMINATION OF LEAD IN SOME COSMETIC PRODUCTS BY HYDROGENATION ATOMIC ABSORPTION SPECTROMETRY**  
Demir Mesut Ö., BERKKAN A.  
Gazi Pharma Symposium Series-GPSS, Antalya, Turkey, 12 - 15 November 2015, pp.116
- XIX. **DETERMINATION OF TOTAL ARSENIC IN MEAT SAMPLES BY ATOMIC FLUORESCENCE SPECTROMETRY**  
Emine S. D., BERKKAN A., BURGAZ S., ERTAŞ N.  
Gazi Pharma Symposium Series-GPSS, Antalya, Turkey, 12 - 15 November 2015, pp.111
- XX. **Detection of Urinary Fluoride and Sevoflurane levels in operating room personnel**  
BERKKAN A., ÇAKMAK DEMİRCİĞİL G., Eraydin D., Yağar S., BURGAZ S.  
IMA2011, Girit, Greece, 18 - 22 September 2011
- XXI. **Aluminum III selective potentiometric sensor based on poly 3 octylthiophene doped with dihydroxyanthraquinone**  
BERKKAN A., PEKMEZ K., TAMER U.  
8th International Electrochemistry Meeting, 8 - 11 October 2009
- XXII. **Amperometric enzyme electrode for Glucose determination based on poly(pyrrrole-2-aminobenzoic acid)**  
Berkkan A., Seçkin A. İ., Şatana Kara H. E., Pekmez K., Tamer U.  
9th Int. Symp. on Pharm. Sciences, Ankara, Turkey, 23 - 26 June 2009
- XXIII. **Fluoride uptake from various fluoride releasing restorative materials by bovine enamel in vitro**  
BANI M., ATABEK D., BERKKAN A., ÖZTAŞ N.  
International Journal of Paediatric Dentistry, 17 June 2009
- XXIV. **Simultaneous Determination of Piroxicam and Benzyl Alcohol in Gel Forms by Second Order Derivative Spectroscopy**  
Günden Göger N., Zahteb L. M., Berkkan A., Şentürk Z.  
6th Int. Symp. on Pharm. Sciences, Ankara, Turkey, 27 - 29 June 2000
- XXV. **Determination of Piroxicam in Gel Forms by Second Order Derivative Ultraviolet Spectrophotometry**  
Günden Göger N., Pehlivan Berkkan A., Orbey M. T.  
Kimya 98, 12. Ulusal Kimya Kongresi, Edirne, Turkey, 7 - 11 September 1998
- XXVI. **Voltammetric Determination of Secnidazole in Tablets**

Şentürk Z., Özkan S. A., Günden Göger N., Pehlivan Berkkan A.

2nd Mediterranean Basin Conference on Analytical Chemistry, Rabat, Morocco, 23 - 28 November 1997

#### XXVII. Voltammetric Determination of Secnidazole in Tablets

Şentürk Z., Özkan S. A., Günden Göger N., Pehlivan Berkkan A.

Kimya 97, XI. Kimya Kongresi, Van, Turkey, 16 - 20 June 1997

### Supported Projects

Berkkan A., TUBITAK Project, Atmosferik Katı Analiz Probu- Kütle Spektroskopisi (ASAP-MS) ve NMR Spektroskopı kullanılarak hedeflenmemiş analiz ile diyet takviyelerindeki bitki materyallerinin kimlik doğrulaması ve tanımlanması için yeni bir yöntem ve kemometrik model geliştirilmesi, 2023 - 2024

Berkkan A., TUBITAK Project, Head-Space -Gaz Kromatografi -Alev İyonlaşma Dedektörü (HS-GC-FID) İle Klimakterik Meyvelerde Alkol Analizi, 2022 - 2024

Berkkan A., TUBITAK Project, Tam Yağlı Ve Yarım Yağlı Süterdeki Yağ Asitlerinin Gaz Kromatografi- Alev İyonlaşma Dedektörü (GC-FID) İle Analizi, 2022 - 2024

ALTINIŞIK H., ERTEN CAN S. H., BERKKAN A., MUTLU AĞARDAN N. B., GÜNEY M., Project Supported by Higher Education Institutions, Florür Yüklü Kitosan Nanopartikülleri İle Modifiye Cam İyonomer Simanın Sekonder Çürükleri Önleme Etkinliğinin İn Vitro Değerlendirilmesi, 2020 - 2023

AKDEVELİOĞLU Y., ULUTAŞ O. K., BERKKAN A., CEMALİ Ö., KARABACAK R. O., GÜMÜŞLÜ S., Project Supported by Higher Education Institutions, İnfertilite Tedavisine Başvuran Kadınlarda Akdeniz Diyetine Uyumlu Beslenme Müdahalesinin Kan ve Foliküler Sıvı Örneklerinde Yağ Asidi Parametrelerine ve İmplantasyon Başarısı Üzerine Etkisi, 2020 - 2023

Berkkan A., Atabek D., Deliorman Orhan D., Peker İ., Gündüz T., Bodur C. H., TUBITAK Project, Doğadan İlham Aldım; Ham Maddemi Kendim Yaptım, 2020 - 2021

BERKKAN A., Project Supported by Higher Education Institutions, Head space gaz kromatografi kütle spektrometri ile yağ asitlerinin analizi, 2012 - 2015

Torul H., Berkkan A., Project Supported by Higher Education Institutions, "Yüzeyde güçlendirilmiş Raman spektroskopisi ile glikoz tayini için yeni bir platformun hazırlanması ve glikoz ölçümelerinde kullanılabilirliğinin araştırılması, 2012 - 2014

BERKKAN A., Project Supported by Higher Education Institutions, Elektrokimyasal Biyosensör Tasarımı, 2007 - 2009

BERKKAN A., Project Supported by Higher Education Institutions, Sitalopram ve Desmetilsitalopramın kapiller elektroforez yöntemiyle steriospesifik tayinleri, 2004 - 2008

BERKKAN A., Project Supported by Higher Education Institutions, Hemodializ çözeltisi ve kalsiyum karbonat destekleyicilerinde hidrür oluşturmali AAS ile kurşun tayini, 2001 - 2004

BERKKAN A., Project Supported by Higher Education Institutions, Türev Spektroskopisi Yöntemiyle Piroksikam İçeren Jel Präparatlarda Etken madde ve koruyucu tayin çalışmaları, 1999 - 2002

### Student Project

R & D Project, Head Space- Gaz Kromatografi- Alev İyonlaşma Dedektörü (HS GC- FID) İle Klimakterik Meyvelerde Alkol Analizi, Gazi University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri, Turkey, 2022 - Continues

R & D Project, Tam yağı ve yarıya yağı süterdeki yağ asitlerinin Gaz Kromatografi- Alev İyonlaşma Dedektörü (GC-FID) İle analizi, Gazi University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri, Turkey, 2022 - Continues

### Metrics

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