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Personal Information

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Education Information

Doctorate, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Analitik Kimya Anabilim Dalı, Turkey 2003 - 2008

Postgraduate, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Analitik Kimya Anabilim Dalı, Turkey 1999 - 2003

Undergraduate, Hacettepe Üniversitesi, Eczacılık Fakültesi, Turkey 1994 - 1998

Foreign Languages

English, C1 Advanced

Research Areas

Basic Pharmaceutics Sciences, Health Sciences, Pharmacology and Therapeutics, Analytical Chemistry

Academic Titles / Tasks

Professor, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2020 - Continues

Associate Professor, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2013 - 2020

Research Assistant, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 1999 - 2013

Courses

ECF 235 ANALİTİK KİMYA II, Undergraduate, 2016 - 2017, 2017 - 2018

EAK 631 TEMEL ANALİTİK KİMYA, Postgraduate, 2017 - 2018

ECF 132 ANALİTİK KİMYA 1, Undergraduate, 2017 - 2018

EAK742 KOMBİNE ANALİTİK YÖNTEMLER, Doctorate, 2017 - 2018

EAK740 OMIKS ANALİZLER İÇİN ANALİTİK TEKNİKLER, Doctorate, 2017 - 2018

ECF134 ANALİTİK KİMYA I LABORATUVARI, Undergraduate, 2017 - 2018

ECF258 ECZACILIKTA İLERİ ANALİTİK KİMYA, Undergraduate, 2017 - 2018

ECF 237 ANALİTİK KİMYA II LABORATUVARI, Undergraduate, 2017 - 2018

TLA113 LABORATUVAR KİMYASI, Undergraduate, 2016 - 2017

ECF 132 ANALİTİK KİMYA 1, Doctorate, 2016 - 2017

EAK799 DOKTORA YETERLİLİK SINAVINA HAZIRLIK, Doctorate, 2016 - 2017

ECF508 MEZUNİYET PROJESİ DERSİ II, Undergraduate, 2016 - 2017

ECF134 ANALİTİK KİMYA I LABORATUVARI, Doctorate, 2016 - 2017

NNT709 NANOPARTİKÜLLERİN ANALİZ YÖNTEMLERİ, Doctorate, 2016 - 2017

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

- I. **Metabolomic profiling of active and inactive liver cystic echinococcosis**
ÇİFTÇİ T. T. , YABANOĞLU ÇİFTÇİ S., ÜNAL E., AKINCI D., BAYSAL İ., Yuce G., DOĞRUL A. B. , ÖRSTEN S., AKHAN O., NEMUTLU E.
ACTA TROPICA, vol.221, 2021 (Journal Indexed in SCI)
- II. **Salbutamol Delivered by Jet Nebulizer: Closed System Design and Impact of a Model Biofilm**
ÖCAL S., ÖZEN S., NEMUTLU E., KART D., Eylem C. C. , TOPELİ İSKİT A.
RESPIRATORY CARE, vol.66, no.9, pp.1440-1445, 2021 (Journal Indexed in SCI)
- III. **Reduced mitochondrial fission and impaired energy metabolism in human primary skeletal muscle cells of Megaconial Congenital Muscular Dystrophy**
AKSU MENGEŞ E., Eylem C. C. , NEMUTLU E., Gizer M., KORKUSUZ P., Topaloglu H., TALİM B., Balci-Hayta B.
SCIENTIFIC REPORTS, vol.11, no.1, 2021 (Journal Indexed in SCI)
- IV. **The effects of systemic and local fatty acid amide hydrolase and monoacylglycerol lipase inhibitor treatments on the metabolomic profile of lungs**
Abohalaka R., BOZKURT T. E. , REÇBER T., ÖNDER S. Ç. , NEMUTLU E., KIR S., Sahin-Erdemli I.
BIOMEDICAL CHROMATOGRAPHY, 2021 (Journal Indexed in SCI)
- V. **Decellularized spinal cord meninges extracellular matrix hydrogel that supports neurogenic differentiation and vascular structure formation**
ÖZÜDOĞRU E., Isik M., Eylem C. C. , NEMUTLU E., ARSLAN Y. E. , Derkus B.
JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE, 2021 (Journal Indexed in SCI)
- VI. **Simultaneous Quantification of Paclitaxel and Vinorelbine Encapsulated in Theranostic Nanosized Liposomes**
KARPUZ M., DOĞAN A., NEMUTLU E., SİLİNDİR GÜNAY M., Ozer A. Y.
JOURNAL OF ANALYTICAL CHEMISTRY, vol.76, no.6, pp.742-748, 2021 (Journal Indexed in SCI)
- VII. **Integrative proteomics and metabolomics approach to elucidate the antimicrobial effect of simvastatin on Escherichia coli**
Kocak E., NEMUTLU E., KIR S., SAĞIROĞLU M., ÖZKUL KOÇAK C.
BIOMEDICAL CHROMATOGRAPHY, 2021 (Journal Indexed in SCI)
- VIII. **Development of oral aprepitant-loaded chitosan-polyethylene glycol-coated cyclodextrin nanocapsules: formulation, characterization, and pharmacokinetic evaluation**
Erdogru N., Akkin S., Nielsen T. T. , Ozcebe E., Erdogru B., NEMUTLU E., Iskit A. B. , BİLENSOY E.
JOURNAL OF PHARMACEUTICAL INVESTIGATION, vol.51, no.3, pp.297-310, 2021 (Journal Indexed in SCI)
- IX. **Human laryngeal squamous cell carcinoma cell line release of endogenous anandamide and 2-arachidonoylglycerol, and their antiproliferative effect via exogenous supplementation: an in vitro study**
Onay O., Kose S., SÜTAY SÜSLÜ N., KORKUSUZ P., NEMUTLU E., Aydın C., Hosal S.
CELL AND TISSUE BANKING, 2021 (Journal Indexed in SCI)
- X. **Gas chromatography-mass spectrometry based O-18 stable isotope labeling of Krebs cycle intermediates**
Eylem C. C. , BAYSAL İ., Erikci A., YABANOĞLU ÇİFTÇİ S., Zhang S., KIR S., Terzic A., Dzeja P., NEMUTLU E.
ANALYTICA CHIMICA ACTA, vol.1154, 2021 (Journal Indexed in SCI)
- XI. **Sub-Inhibitory Concentrations of Ciprofloxacin Alone and Combinations with Plant-Derived Compounds against P. aeruginosa Biofilms and Their Effects on the Metabolomic Profile of P. aeruginosa Biofilms**
KART D., REÇBER T., NEMUTLU E., SAĞIROĞLU M.
ANTIBIOTICS-BASEL, vol.10, no.4, 2021 (Journal Indexed in SCI)

- XII. **Characterization of human bone marrow niches with metabolome and transcriptome profiling**
AYHAN S., NEMUTLU E., Cetinkaya D. U. , KIR S., ÖZGÜL R. K.
JOURNAL OF CELL SCIENCE, vol.134, no.6, 2021 (Journal Indexed in SCI)
- XIII. **Determination and validation of aprepitant in rat plasma using LC-MS/MS**
Erdoglar N., REÇBER T., B İskit A., BİLENSOY E., KIR S., NEMUTLU E.
BIOANALYSIS, vol.13, pp.363-372, 2021 (Journal Indexed in SCI)
- XIV. **Simultaneous Determination of Cefixime, Cefdinir and Clavulanic Acid by High Performance Liquid Chromatography**
REÇBER T., ÖZKAN E., NEMUTLU E., KIR S.
PHARMACEUTICAL CHEMISTRY JOURNAL, 2021 (Journal Indexed in SCI)
- XV. **Electrospun Nanofibers for Dual and Local Delivery of Neuroprotective Drugs**
Haidar M. K. , TİMUR S. S. , Demirbolat G. M. , NEMUTLU E., GÜRSOY R. N. , ULUBAYRAM K., ÖNER L., EROĞLU H.
FIBERS AND POLYMERS, vol.22, no.2, pp.334-344, 2021 (Journal Indexed in SCI)
- XVI. **ACPA decreases non-small cell lung cancer line growth through Akt/PI3K and JNK pathways in vitro**
Boyacioglu O., BİLGİÇ E., VARAN C., BİLENSOY E., NEMUTLU E., GÜLMEZ SEVİM D., Kocaefe C., KORKUSUZ P.
CELL DEATH & DISEASE, vol.12, no.1, 2021 (Journal Indexed in SCI)
- XVII. **Investigation of the relationship between chronic montelukast treatment, asthma and depression-like behavior in mice**
Tel B. C. , Telli G., Onder S., Nemutlu E., Bozkurt T. E.
EXPERIMENTAL AND THERAPEUTIC MEDICINE, vol.21, no.1, 2021 (Journal Indexed in SCI)
- XVIII. **Ultrafiltration-based Extraction and LC-MS/MS Quantification of Phenylalanine in Human Blood Sample for Metabolite Target Analysis**
ÇELEBİER M., REÇBER T., NEMUTLU E., KIR S.
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- XIX. **Partial inhibition of mitochondrial complex I ameliorates Alzheimer's disease pathology and cognition in APP/PS1 female mice**
Stojakovic A., Trushin S., Sheu A., Khalili L., Chang S., Li X., Christensen T., Salisbury J. L. , Geroux R. E. , Gateno B., et al.
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- XX. **Optimization and validation of a HILIC-LC-ESI-MS/MS method for the simultaneous analysis of targeted metabolites: Cross validation of untargeted metabolomic studies for early diagnosis of breast cancer**
REÇBER T., NEMUTLU E., Beksac K., AKSOY S., KIR S.
MICROCHEMICAL JOURNAL, vol.159, 2020 (Journal Indexed in SCI)
- XXI. **Polymeric Nanoparticle Versus Liposome Formulations: Comparative Physicochemical and Metabolomic Studies as l-Carnitine Delivery Systems**
Yasacan M., Erikci A., Eylem C. C. , Ciftci S. Y. , NEMUTLU E., ULUBAYRAM K., EROĞLU İ.
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- XXII. **Phosphate Anion Imprinted Cryogel Cartridges for Selective Preconcentration of Phosphorylated Amino Acids from Protein Lysate: An Alternative Sorbent for Proteome Analyses**
ARMUTCU ÇORMAN C., Tartan C., ÖZGÜR E., NEMUTLU E., UZUN L.
CHEMISTRYSELECT, vol.5, no.38, pp.11730-11736, 2020 (Journal Indexed in SCI)
- XXIII. **Neuroactivity of the naturally occurring aporphine alkaloid, roemerine**
Bayazeid O., NEMUTLU E., Eylem C. C. , İlhan M., Kupeli-Akkol E., KARAHAN H., Kelicen-Ugur P., Ersoz T., Yalcin F. N.
NATURAL PRODUCT RESEARCH, 2020 (Journal Indexed in SCI)
- XXIV. **Integration of GC-MS and LC-MS for untargeted metabolomics profiling**
Zeki O. C. , Eylem C. C. , REÇBER T., KIR S., NEMUTLU E.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.190, 2020 (Journal Indexed in SCI)
- XXV. **From nutrition to medicine: Assessing hemorrhoid healing activity of Solanum melongena L. via in vivo experimental models and its major chemicals**
Donmez C., YALÇIN F. N. , Boyacioglu O., KORKUSUZ P., Akkol E. K. , NEMUTLU E., Balaban Y. H. , Caliskan U. K.

JOURNAL OF ETHNOPHARMACOLOGY, vol.261, 2020 (Journal Indexed in SCI)

- XXVI. **GC-MS analysis of seven metabolites for the screening of pregnant women with Down Syndrome fetuses**
ÖZKAN E., NEMUTLU E., BEKSAÇ M. S. , KIR S.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.188, 2020 (Journal Indexed in SCI)
- XXVII. **Composite nanofibers incorporating alpha lipoic acid and atorvastatin provide neuroprotection after peripheral nerve injury in rats**
Haidar M. K. , TİMUR S. S. , Kazanci A., Turkoglu O. F. , GÜRSOY R. N. , NEMUTLU E., Sargon M. F. , BODUR E., GÖK M., ULUBAYRAM K., et al.
EUROPEAN JOURNAL OF PHARMACEUTICS AND BIOPHARMACEUTICS, vol.153, pp.1-13, 2020 (Journal Indexed in SCI)
- XXVIII. **Assessment of Dose Proportionality of Rivaroxaban Nanocrystals**
Demir H., GÜLSÜN İNAL T., ÖZKAN M. H. , NEMUTLU E., ŞAHİN S., ÖNER L.
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- XXIX. **Metabolic infrastructure of pregnant women with methylenetetrahydrofolate reductase polymorphisms: A metabolomic analysis**
REÇBER T., ÖRGÜL G., AYDIN E., TANAÇAN A., NEMUTLU E., KIR S., BEKSAÇ M. S.
BIOMEDICAL CHROMATOGRAPHY, vol.34, no.8, 2020 (Journal Indexed in SCI)
- XXX. **Neuroactivity of naturally occurring proaporphine alkaloid, pronuciferine**
Bayazeid O., NEMUTLU E., Eylem C. C. , Yalcin F. N.
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, 2020 (Journal Indexed in SCI)
- XXXI. **Metabolomics and proteomics profiles of some medicinal plants and correlation with BDNF activity**
Gonulalan E. M. , NEMUTLU E., Bayazeid O., KOÇAK E., Yalcin F. N. , DEMİREZER L. Ö.
PHYTOMEDICINE, vol.74, 2020 (Journal Indexed in SCI)
- XXXII. **The effects of fatty acid amide hydrolase and monoacylglycerol lipase inhibitor treatments on lipopolysaccharide-induced airway inflammation in mice**
Abohalaka R., Bozkurt T. E. , Nemutlu E., Onder S., Sahin-Erdemli I.
PULMONARY PHARMACOLOGY & THERAPEUTICS, vol.62, 2020 (Journal Indexed in SCI)
- XXXIII. **Atorvastatin-loaded nanosprayed chitosan nanoparticles for peripheral nerve injury**
Haidar M. K. , Demirbolat G. M. , TİMUR S. S. , GÜRSOY R. N. , NEMUTLU E., ULUBAYRAM K., ÖNER L., EROĞLU H.
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- XXXIV. **Improved oral bioavailability of anticancer drug tamoxifen through complexation with water soluble cyclodextrins: in vitro and in vivo evaluation**
Erdoğar N., NEMUTLU E., İSKİT A. B. , KARA Ş. A. , Teksin Z. Ş. , BİLENSOY E.
JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, vol.96, no.1-2, pp.81-91, 2020 (Journal Indexed in SCI)
- XXXV. **Altered metabolomic profile of dual-species biofilm: Interactions between Proteus mirabilis and Candida albicans**
KART D., YABANOĞLU ÇİFTÇİ S., NEMUTLU E.
Microbiological Research, vol.230, 2020 (Journal Indexed in SCI)
- XXXVI. **Development and validation of an HPLC method for determination of rofecoxib in bovine serum albumin microspheres**
DEMİRTÜRK E., NEMUTLU E., ŞAHİN S., ÖNER L.
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.3, pp.647-655, 2020 (Journal Indexed in SCI)
- XXXVII. **Untargeted multi-omic analysis of colorectal cancer-specific exosomes reveals joint pathways of colorectal cancer in both clinical samples and cell culture**
Eylem C. C. , YILMAZ M., DERKUŞ B., NEMUTLU E., Camci C. B. , YILMAZ E., Turkoglu M. A. , Aytac B., Ozyurt N., EMREGÜL E.
CANCER LETTERS, vol.469, pp.186-194, 2020 (Journal Indexed in SCI)
- XXXVIII. **Metabolic Infrastructure of Pregnant Women With Trisomy 21 Fetuses; Metabolomic Analysis**
NEMUTLU E., ÖRGÜL G., REÇBER T., AYDIN E., ÖZKAN E., TURĞAL M., ALİKAŞIYOĞLU M., KIR S., BEKSAÇ M. S.

- ZEITSCHRIFT FUR GEBURTSHILFE UND NEONATOLOGIE, vol.223, no.5, pp.297-303, 2019 (Journal Indexed in SCI)
- XXXIX. **A new perspective on evaluation of medicinal plant biological activities: The correlation between phytonics and matrix metalloproteinases activities of some medicinal plants**
Gonulalan E., NEMUTLU E., DEMİREZER L. Ö.
SAUDI PHARMACEUTICAL JOURNAL, vol.27, no.3, pp.446-452, 2019 (Journal Indexed in SCI)
- XL. **Determination of N-acetylcysteine in the presence of ciprofloxacin or levofloxacin in microparticulate dry powder inhalers**
Akdag Y., ŞAHİN S., NEMUTLU E., ÖNER L.
TURKISH JOURNAL OF CHEMISTRY, vol.43, no.3, pp.846-856, 2019 (Journal Indexed in SCI)
- XLI. **A snapshot on the current status of Alzheimer's disease, treatment perspectives, in-Vitro and in-Vivo research studies and future opportunities**
Tezel G., TİMUR S. S. , Bozkurt İ., Faruk Türkoğlu Ö., EROĞLU İ., NEMUTLU E., ÖNER L., EROĞLU H.
Chemical and Pharmaceutical Bulletin, vol.67, no.10, pp.1030-1041, 2019 (Journal Indexed in SCI)
- XLII. **In vitro release test of nano-drug delivery systems based on analytical and technological perspectives**
NEMUTLU E., EROĞLU İ., EROĞLU H., KIR S.
Current Analytical Chemistry, vol.15, no.4, pp.373-409, 2019 (Journal Indexed in SCI)
- XLIII. **An LC-ESI-MS/MS method for the simultaneous determination of proniciferine and roemerine in some Papaver species**
Bayazeid O., Eylem C. C. , REÇBER T., YALÇIN F. N. , KIR S., NEMUTLU E.
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- XLIV. **Determination of Urinary Metabolic Profiles of Children with Central and Peripheral Precocious Puberty**
BALCI A., REÇBER T., NEMUTLU E., Bulus D., KIR S., Gumusel B. K. , Erkekoglu P.
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- XLV. **Human bone marrow mesenchymal stem cells secrete endocannabinoids that stimulate in vitro hematopoietic stem cell migration effectively comparable to beta-adrenergic stimulation**
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EXPERIMENTAL HEMATOLOGY, vol.57, pp.30-41, 2018 (Journal Indexed in SCI)
- XLVI. **Dual release behavior of atorvastatin and alpha-lipoic acid from PLGA microspheres for the combination therapy in peripheral nerve injury**
EROĞLU H., Haidar M. K. , NEMUTLU E., ÖZTÜRK Ş., BAYRAM C., ULUBAYRAM K., ÖNER L.
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.39, pp.455-466, 2017 (Journal Indexed in SCI)
- XLVII. **An Improved and Validated HPLC Method for the Determination of Methylprednisolone Sodium Succinate and its Degradation Products in Nanoparticles**
KARABEY-AKYUREK Y., NEMUTLU E., BİLENSOY E., ÖNER L.
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- XLVIII. **A Simple Extraction Procedure for HPLC Analysis of Fluoxetine in Rat Plasma Samples**
REÇBER T., Ozkan E., Eren-Kocak E., YILMAZ M., NEMUTLU E., KIR S.
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- XLIX. **Decline of Phosphotransfer and Substrate Supply Metabolic Circuits Hinders ATP Cycling in Aging Myocardium**
Nemutlu E., Gupta A., Zhang S., VIQAR M., HOLMUHAMEDOV E., TERZIC A., JAHANGIR A., DZEJA P.
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- L. **Cardiac Resynchronization Therapy Induces Adaptive Metabolic Transitions in the Metabolomic Profile of Heart Failure**
Nemutlu E., Zhang S., XU Y., TERZIC A., ZHONG L., DZEJA P. D. , CHA Y.
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- LI. **Modulation of Mitochondrial Complex I Activity Averts Cognitive Decline in Multiple Animal Models**

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ZHANG L., Zhang S., MAEZAWA I., TRUSHIN S., MINHAS P., PINTO M., JIN L., Prasain K., Nguyen T. D. T. , YAMAZAKI Y., et al.

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- LII. **O-18-assisted P-31 NMR and Mass Spectrometry for Phosphometabolomic Fingerprinting and Metabolic Monitoring**
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- LIII. **Adenylate Kinase Isoform Network: A Major Hub in Cell Energetics and Metabolic Signaling**
Zhang S., NEMUTLU E., Terzic A., Dzeja P.
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- LIV. **Comparative assessment of dermal wound healing potentials of various Trifolium L. extracts and determination of their isoflavone contents as potential active ingredients**
RENDA G., Yalcin F. N. , NEMUTLU E., AKKOL E., SÜNTAR İ., KELEŞ H., Ina H., ÇALIŞ İ., ERSÖZ T.
JOURNAL OF ETHNOPHARMACOLOGY, vol.148, no.2, pp.423-432, 2013 (Journal Indexed in SCI)
- LV. **The pharmacokinetic profiles of pre-operative prophylactic cefepime application in pregnant and non-pregnant women undergoing surgical interventions using a fully validated liquid chromatographic method**
DOĞAN A., NEMUTLU E., Özek M. A. , EROĞLU H., KIR S., BEKSAÇ M. S.
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- LVI. **O-18-assisted dynamic metabolomics for individualized diagnostics and treatment of human diseases**
NEMUTLU E., Zhang S., Juranic N. O. , Terzic A., Macura S., Dzeja P.
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- LVII. **Electron spray ionization mass spectrometry and 2D P-31 NMR for monitoring O-18/O-16 isotope exchange and turnover rates of metabolic oligophosphates**
NEMUTLU E., Juranic N., Zhang S., Ward L. E. , Dutta T., Nair K. S. , Terzic A., Macura S., Dzeja P. P.
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- LVIII. **Dynamic phosphometabolomic profiling of human tissues and transgenic models by O-18-assisted P-31 NMR and mass spectrometry**
NEMUTLU E., Zhang S., Gupta A., Juranic N. O. , Macura S. I. , Terzic A., Jahangir A., Dzeja P.
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- LIX. **P-31 NMR correlation maps of O-18/O-16 chemical shift isotopic effects for phosphometabolite labeling studies**
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- LX. **Multiresidue determination of quinolones regulated by the European Union in bovine and porcine plasma. Application of chromatographic and capillary electrophoretic methodologies**
HERMO M. P. , NEMUTLU E., Barbosa J., Barron D.
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- LXI. **A Quadruped Study on Chitosan Microspheres Containing Atorvastatin Calcium: Preparation, Characterization, Quantification and in-Vivo Application**
EROĞLU H., NEMUTLU E., TURKOĞLU O. F. , NACAR O., BODUR E., SARGON M. F. , BESKONAKLI E., ÖNER L.
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- LXII. **Maternal and fetal blood levels of moxifloxacin, levofloxacin, cefepime and cefoperazone**
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- LXIII. **Comparison of pharmacokinetic profiles of moxifloxacin in caesarean versus non-pregnant sectioned women by fully validated HPLC with fluorescence detection**
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- LXIV. **Quantification of Moxifloxacin and Levofloxacin in Curettage Material by SPE-LC**
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- LXV. **Maternal blood and amniotic fluid levels of moxifloxacin, levofloxacin and cefixime**
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- LXVI. **Simultaneous multiresponse optimization of an HPLC method to separate seven cephalosporins in plasma and amniotic fluid: Application to validation and quantification of cefepime, cefixime and cefoperazone**
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- LXVII. **Improved determination of quinolones in milk at their MRL levels using LC-UV, LC-FD, LC-MS and LC-MS/MS and validation in line with regulation 2002/657/EC**
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