

## Prof. ALAATTİN ŞEN

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### International Researcher IDs

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ScopusID: 7401592711

Yoksis Researcher ID: 1552

### Biography

**Professor Dr. Alaattin ŞEN** was born in the village of Ahmetler, Eşme district of Uşak in 1966. He received his B.S. degree in Biology from the Middle East Technical University (METU) in 1989, graduating as his class valedictorian. In the same year, he started his academic career as a research assistant and began his graduate education at METU.

He received his Master's degree in Biology in 1991 and Ph.D. in Biochemistry in 1997 from Graduate School of Natural Sciences at METU. His doctoral thesis was awarded as the thesis of the year by METU Mustafa Parlar Foundation. In the same year, he was also awarded by the 'Outstanding Young Scientist Award' of Turkish Academy of Sciences (TUBA). In 1997, he started to work as an Assistant Professor in the Department of Chemistry at Pamukkale University (PAU) and worked as a postdoctoral researcher for nine months at the Oregon State University in the United States under the support of the Postdoctoral Research Fellowship (TUBITAK NATO-B1).

After being Associate Professor in November 1999, he joined the Biology Department at PAU in 2000. He served as a guest lecturer at the Oregon State University in the United States for a year from 2001-2002 and became a Professor in February 2006. Between the years of 2005-2011, he served as an Executive Committee Member of the of the Basic Scientific Research Group of TÜBİTAK. Since January 2017, he has been serving as the Biological Hazards Commission Member of Food, Agriculture and Livestock Ministry, General Directorate of Food Control, and Risk Assessment Department. He has supervised many projects and thesis. He has been involved in numerous national and several international projects as principal investigator. He has published over 50 international scientific articles and 80 reports, in the indexed journals (SCI). He is the editor of the three chapters in the printed books. He is the chief editor of the Turkish Journal of Biology since March 2018 and the editorial board member of two other indexed international journals. He speaks English well. He is married and father of two children.

He has held senior management positions at Pamukkale Universities including the faculty dean. He is currently working in the Department of Molecular Biology & Genetics at the Faculty of Life and Natural Science at Abdullah Gül University,

and also holding the Dean position.

## Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biochemistry, Turkey  
1991 - 1997

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biology, Turkey 1989 -  
1991

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 1984 -  
1989

## Dissertations

Doctorate, Purification and characterization of cytochrome P4501A1 and cytochrome P450 reductase from feral leaping mullet (*Liza saliens*) liver, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biochemistry, 1997

Postgraduate, Effects of benzocaine, benzene, and benzo(a)pyrene on gilthead seabream (*Sparus aurata*; Sparidae) liver microsomal mixed function oxidase system, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biology, 1991

## Research Areas

Biochemistry, Molecular Biology and Genetics

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

- I. **Amelioration potential of synthetic oxime chemical cores against multiple sclerosis and Alzheimer's diseases: Evaluation in aspects of in silico and in vitro experiments**  
Yilmaz A., Koca M., Ercan S., Acar O. O., Boga M., Sen A., Kurt A.  
Journal of Molecular Structure, vol.1318, 2024 (SCI-Expanded)
- II. **Role of AHR, NF- $\kappa$ B and CYP1A1 crosstalk with the X protein of Hepatitis B virus in hepatocellular carcinoma cells**  
Celik-Turgut G., Olmez N., Koc T., Ozgun-Acar O., SEMİZ A., DODURGA Y., Satiroglu-Tufan N. L., ŞEN A.  
GENE, vol.853, 2023 (SCI-Expanded)
- III. **Synthesis of nitrogen-containing oleanolic acid derivatives as carbonic anhydrase and acetylcholinesterase inhibitors**  
Şenol H., Çelik Turgut G., Şen A., Sağlamtaş R., Tuncay S., Gülçin I., Topçu G.  
MEDICINAL CHEMISTRY RESEARCH, vol.00, no.00, pp.1-11, 2023 (SCI-Expanded)
- IV. **Synthesis and Comprehensive in Vivo Activity Profiling of Olean-12-en-28-ol, 3 $\beta$ -Pentacosanoate in Experimental Autoimmune Encephalomyelitis: A Natural Remyelinating and Anti-Inflammatory Agent**  
ŞENOL H., Ozgun-Acar O., DAĞ A., EKEN A., GÜNER H., Aykut Z. G., TOPÇU G., ŞEN A.  
Journal of Natural Products, vol.86, no.1, pp.103-118, 2023 (SCI-Expanded)
- V. **Biochemical, pharmacological, and toxicological attributes of caper (*Capparis ovata*) flowering buds and berries pickles**  
Ozgun-Acar O., Celik-Turgut G., GÜNER H., Sezer S., ŞEN A.  
FOOD SCIENCE & NUTRITION, vol.10, no.12, pp.4189-4200, 2022 (SCI-Expanded)
- VI. **Evaluation of Anti-Alzheimer Activity of Synthetic Coumarins by Combination of in Vitro and in Silico Approaches**

Erdoğan Orhan I., Şenol Deniz F. S., Salmas R. E., Irmak S., Acar O. O., Turgut G. C., Sen A., Zbancioc A., Luca S. V., Skiba A., et al.

CHEMISTRY & BIODIVERSITY, vol.19, 2022 (SCI-Expanded)

VII. **Cerium Oxide Nanoparticles Biosynthesized Using Fresh Green Walnut Shell in Microwave Environment and their Anticancer Effect on Breast Cancer Cells**

Sulak M., Turgut G. C., ŞEN A.

CHEMISTRY & BIODIVERSITY, vol.19, no.8, 2022 (SCI-Expanded)

VIII. **Complementary medicines used in ulcerative colitis and unintended interactions with cytochrome P450-dependent drug-metabolizing enzymes**

Şen A.

TURKISH JOURNAL OF MEDICAL SCIENCES, vol.52, no.5, pp.1425-1447, 2022 (SCI-Expanded)

IX. **Suppression of inflammatory cytokines expression with bitter melon (*Momordica charantia*) in TNBS-instigated ulcerative colitis**

SEMİZ A., Acar O. O., ÇETİN SORKUN H., SEMİZ G., ŞEN A.

JOURNAL OF TRANSLATIONAL INTERNAL MEDICINE, vol.8, no.3, pp.177-187, 2020 (SCI-Expanded)

X. **Prophylactic and therapeutic roles of oleanolic acid and its derivatives in several diseases**

ŞEN A.

WORLD JOURNAL OF CLINICAL CASES, vol.8, no.10, pp.1767-1792, 2020 (SCI-Expanded)

XI. **Preface**

Sen A.

TURKISH JOURNAL OF BIOLOGY, vol.44, no.3, 2020 (SCI-Expanded)

XII. **Triterpenoids and steroids isolated from Anatolian *Capparis ovata* and their activity on the expression of inflammatory cytokines**

GAZİOĞLU I., Semen S., Acar O. O., KOLAK U., Sen A., TOPÇU G.

PHARMACEUTICAL BIOLOGY, vol.58, no.1, pp.925-931, 2020 (SCI-Expanded)

XIII. **Synthesis and initial evaluation of efficacy of olean-12-en-28-ol, 3 beta-pentacosanoate for the symptomatic treatment of multiple sclerosis**

ŞEN A., ŞENOL H., Acar O. O., Kale E., DAĞ A., TOPÇU G.

FEBS OPEN BIO, vol.9, pp.74, 2019 (SCI-Expanded)

XIV. **Role of cytochrome P450 polymorphisms and functions in development of ulcerative colitis**

ŞEN A., Stark H.

WORLD JOURNAL OF GASTROENTEROLOGY, vol.25, no.23, pp.2846-2862, 2019 (SCI-Expanded)

XV. **EVALUATION OF IN VIVO EFFECTS OF VISCUM ALBUM L. AND ITS CONSTITUENT O-COUMARIC ACID ON BILE ACID SYNTHESIZING CYPS**

Ege T., Ozkan A. M. G., Sen A., ADALI O.

FRESENIUS ENVIRONMENTAL BULLETIN, vol.28, no.4, pp.2825-2834, 2019 (SCI-Expanded)

XVI. **Natural diterpenoid alysin A isolated from *Teucrium alyssifolium* exerts antidiabetic effect via enhanced glucose uptake and suppressed glucose absorption**

Sen A., Ayar B., Yilmaz A., Acar O. O., Turgut G. C., TOPÇU G.

TURKISH JOURNAL OF CHEMISTRY, vol.43, no.5, pp.1350-1372, 2019 (SCI-Expanded)

XVII. **Alteration of drug pharmacokinetics with medicinal plant *Viscum album L.* by rendering major cytochrome P450 activities**

Sen A., Celik-Turgut G., Gencler-Ozkan A. M. G., ADALI O.

FEBS OPEN BIO, vol.8, pp.229, 2018 (SCI-Expanded)

XVIII. **Synthesis of novel acridine-sulfonamide hybrid compounds as acetylcholinesterase inhibitor for the treatment of alzheimer's disease**

Ulus R., Esirden I., Aday B., Turgut G. C., Sen A., Kaya M.

MEDICINAL CHEMISTRY RESEARCH, vol.27, no.2, pp.634-641, 2018 (SCI-Expanded)

XIX. **Synthesis and Functional Investigations of Computer Designed Novel Cladribine-Like Compounds for the Treatment of Multiple Sclerosis**

Yavuz S., Cetin A., AKDEMİR A., Doyduk D., Disli A., Celik Turgut G., Sen A., Yildirim Y.

ARCHIV DER PHARMAZIE, vol.350, no.11, 2017 (SCI-Expanded)

- XX. **Computer design, synthesis, and bioactivity analyses of drugs like fingolimod used in the treatment of multiple sclerosis**  
Turgut G. C., Doyduk D., Yildirim Y., Yavuz S., AKDEMİR A., Disli A., Sen A.  
BIOORGANIC & MEDICINAL CHEMISTRY, vol.25, no.2, pp.483-495, 2017 (SCI-Expanded)
- XXI. **In vivo examination of the effects of hydroxycinnamic acid on xenobiotic metabolizing and antioxidant enzymes**  
Semiz A., Celik-Turgut G., Karakurt S., Akca H., Arslan S., ADALI O., Sen A.  
ARCHIVES OF BIOLOGICAL SCIENCES, vol.69, no.1, pp.103-110, 2017 (SCI-Expanded)
- XXII. **The isolation of tetrangomycin from terrestrial Streptomyces sp CAH29: evaluation of antioxidant, anticancer, and anti-MRSA activity**  
Ozakin S., Davis R. W., Umile T. P., Pirinccioglu N., Kizil M., Celik G., Sen A., Minbiole K. P. C., Ince E.  
MEDICINAL CHEMISTRY RESEARCH, vol.25, no.12, pp.2872-2881, 2016 (SCI-Expanded)
- XXIII. **Modulatory role of GSTM1 null genotype on the frequency of micronuclei in pesticide-exposed agricultural workers**  
Tumer T. B., Savranoglu S., Atmaca P., Terzioglu G., Sen A., Arslan S.  
TOXICOLOGY AND INDUSTRIAL HEALTH, vol.32, no.12, pp.1942-1951, 2016 (SCI-Expanded)
- XXIV. **Capparis ovata treatment suppresses inflammatory cytokine expression and ameliorates experimental allergic encephalomyelitis model of multiple sclerosis in C57BL/6 mice**  
Ozgun-Acar O., Celik-Turgut G., GAZİOĞLU I., KOLAK U., Ozbal S., Ergur B. U., Arslan S., Sen A., TOPÇU G.  
JOURNAL OF NEUROIMMUNOLOGY, vol.298, pp.106-116, 2016 (SCI-Expanded)
- XXV. **Inhibitory action of Epilobium hirsutum extract and its constituent ellagic acid on drug-metabolizing enzymes**  
Celik G., Semiz A., Karakurt S., Gencler-Ozkan A. M., Arslan S., ADALI O., Sen A.  
EUROPEAN JOURNAL OF DRUG METABOLISM AND PHARMACOKINETICS, vol.41, no.2, pp.109-116, 2016 (SCI-Expanded)
- XXVI. **Association between herbivore stress and glutathione S-transferase expression in Pinus brutia Ten.**  
Semiz A., Celik-Turgut G., Semiz G., Ozgun O., Sen A.  
CELLULAR AND MOLECULAR BIOLOGY, vol.62, no.3, pp.89-94, 2016 (SCI-Expanded)
- XXVII. **Contribution of ellagic acid on the antioxidant potential of medicinal plant Epilobium hirsutum**  
Karakurt S., Semiz A., Celik G., Gencler-Ozkan A. M., Sen A., ADALI O.  
NUTRITION AND CANCER-AN INTERNATIONAL JOURNAL, vol.68, no.1, pp.173-183, 2016 (SCI-Expanded)
- XXVIII. **Investigation of Chironomidae (Diptera) relationships using mitochondrial COI gene**  
Sari A., Duran M., Sen A., Bardakci F.  
BIOCHEMICAL SYSTEMATICS AND ECOLOGY, vol.59, pp.229-238, 2015 (SCI-Expanded)
- XXIX. **Cloning and expression of a CYP720B orthologue involved in the biosynthesis of diterpene resin acids in Pinus brutia**  
Semiz A., Sen A.  
MOLECULAR BIOLOGY REPORTS, vol.42, no.3, pp.737-744, 2015 (SCI-Expanded)
- XXX. **Modulatory actions of o-coumaric acid on carcinogen-activating cytochrome P450 isozymes and the potential for drug interactions in human hepatocarcinoma cells**  
Sen A., Terzioglu G., Atmaca P., Celik G., Ozgun O., Arslan S.  
PHARMACEUTICAL BIOLOGY, vol.53, no.9, pp.1391-1398, 2015 (SCI-Expanded)
- XXXI. **Anticarcinogenic Effect and Carcinogenic Potential of the Dietary Phenolic Acid: o-Coumaric Acid**  
Sen A., Atmaca P., Terzioglu G., Arslan S.  
NATURAL PRODUCT COMMUNICATIONS, vol.8, no.9, pp.1269-1274, 2013 (SCI-Expanded)
- XXXII. **Epilobium hirsutum alters xenobiotic metabolizing CYP1A1, CYP2E1, NQO1 and GPx activities, mRNA and protein levels in rats**  
Karakurt S., Semiz A., Celik G., Gencler-Ozkan A. M., Sen A., ADALI O.  
PHARMACEUTICAL BIOLOGY, vol.51, no.5, pp.650-658, 2013 (SCI-Expanded)
- XXXIII. **Association of the CYP1A1\*2A, GSTT1 null, GSTM1 null, mEPHX\*3, and XRCC1-399 genetic**

**polymorphisms with ulcerative colitis**

Buyukgoze O., Osmanoglu N., Arslan S., Sen A.

INTERNATIONAL JOURNAL OF COLORECTAL DISEASE, vol.28, no.4, pp.593-595, 2013 (SCI-Expanded)

**XXXIV. Investigation of aromatase inhibition by several dietary vegetables in human non-small cell lung cancer cell lines**

Celik G., Akca H., Sen A.

TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.38, no.2, pp.207-217, 2013 (SCI-Expanded)

**XXXV. A Comparative Study for the Evaluation of Two Doses of Ellagic Acid on Hepatic Drug Metabolizing and Antioxidant Enzymes in the Rat**

Celik G., Semiz A., Karakurt S., Arslan S., ADALI O., Sen A.

BIOMED RESEARCH INTERNATIONAL, vol.2013, 2013 (SCI-Expanded)

**XXXVI. Assessment of the Sediment Toxicity in Bulgarian and Turkish Rivers Using the Biomarkers in Chironomus riparius Mg. (Diptera: Chironomidae)**

Duran M., Michailova P., Sari A., Ilkova J., Sen A., Karadurmus E.

ACTA ZOOLOGICA BULGARICA, pp.167-173, 2012 (SCI-Expanded)

**XXXVII. Alteration of drug metabolizing enzymes in sulphite oxidase deficiency**

Tutuncu B., Kucukatay V., Arslan S., Sahin B., Semiz A., Sen A.

JOURNAL OF CLINICAL BIOCHEMISTRY AND NUTRITION, vol.51, no.1, pp.50-54, 2012 (SCI-Expanded)

**XXXVIII. Diverse action of acrylamide on cytochrome P450 and glutathione S-transferase isozyme activities, mRNA levels and protein levels in human hepatocarcinoma cells**

Sen A., Ozgun O., Arinc E., Arslan S.

CELL BIOLOGY AND TOXICOLOGY, vol.28, no.3, pp.175-186, 2012 (SCI-Expanded)

**XXXIX. Structural and functional alterations in salivary gland chromosomes and enzyme activity of Chironomus riparius Mg. (Diptera, Chironomidae) from anthropogenically polluted sites in Bulgaria and Turkey**

Michailova P., Ilkova J., Duran M., Karadurmus E., Berber R., Sen A.

CARYOLOGIA, vol.65, no.2, pp.157-169, 2012 (SCI-Expanded)

**XL. Polycyclic Aromatic Hydrocarbons in Water from the Menderes River, Turkey**

Ardag H., Ozel M. Z., Sen A.

BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.86, no.2, pp.221-225, 2011 (SCI-Expanded)

**XLI. Potential Use of the Oligochaete Limnodrilus profundicola V., as a Bioindicator of Contaminant Exposure**

Ozdemir A., Duran M., Sen A.

ENVIRONMENTAL TOXICOLOGY, vol.26, no.1, pp.37-44, 2011 (SCI-Expanded)

**XLII. EROD and metallothionein in Limnodrilus profundicola (Oligochaeta: Tubificidae) as an indicator of pollution exposure in the Curuksu stream of Menderes river, Denizli-Turkey**

Ozdemir A., Duran M., Akyildiz G. K., Sen A.

DESALINATION AND WATER TREATMENT, vol.26, pp.98-103, 2011 (SCI-Expanded)

**XLIII. EFFECTS OF CYCLAMEN TROCHOPTERANTHUM ON HEPATIC DRUG-METABOLIZING ENZYMES**

Arslan S., Ozgun O., Celik G., Semiz A., Dusen O., Mammadov R., Sen A.

ARCHIVES OF BIOLOGICAL SCIENCES, vol.63, no.3, pp.545-555, 2011 (SCI-Expanded)

**XLIV. Determination of 7-ethoxyresorufin-o-deethylase (EROD) induction in leaping mullet (Liza saliens) from the highly contaminated Aliaga Bay, Turkey**

Sen A., Ulutas O. K., Tutuncu B., Ertas N., Cok I.

ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.165, pp.87-96, 2010 (SCI-Expanded)

**XLV. Characterization of drug metabolizing enzymes and assessment of aging in the gilthead seabream (Sparus aurata) liver**

Akdogan H. A., Sen A.

VETERINARNI MEDICINA, vol.55, no.9, pp.463-471, 2010 (SCI-Expanded)

**XLVI. Drug Interaction Potential of the Seed Extract of Urtica urens L. (Dwarf Nettle)**

- Agus H. H., Tekin P., Bayav M., Semiz A., Sen A.  
PHYTOTHERAPY RESEARCH, vol.23, no.12, pp.1763-1770, 2009 (SCI-Expanded)
- XLVII. **ENVIRONMENTAL AND DIETARY FACTORS ON CANCER WITH REGARD TO CYP450**  
Sen A.  
IUBMB LIFE, vol.61, no.3, pp.295-296, 2009 (SCI-Expanded)
- XLVIII. **In vivo effects of *Urtica urens* (dwarf nettle) on the expression of CYP1A in control and 3-methylcholanthrene-exposed rats**  
Ozkarsli M., Sevim H., Sen A.  
XENOBIOTICA, vol.38, no.1, pp.48-61, 2008 (SCI-Expanded)
- XLIX. **Effects of metals and detergents on biotransformation and detoxification enzymes of leaping mullet (*Liza saliens*)**  
Sen A., Semiz A.  
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.68, no.3, pp.405-411, 2007 (SCI-Expanded)
- L. **Determination of heavy metals and EROD induction in mullet from highly contaminated Aliaga Bay, Izmir, Turkey**  
Ulutas O. K., Ertas N., Sen A., Tutuncu B., Cok I.  
TOXICOLOGY LETTERS, vol.172, 2007 (SCI-Expanded)
- LI. **Antioxidant and chemoprotective properties of *Momordica charantia* L. (bitter melon) fruit extract**  
Semiz A., Sen A.  
AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.6, no.3, pp.273-277, 2007 (SCI-Expanded)
- LII. **Biochemical characterization and distribution of glutathione S-transferases in leaping mullet (*Liza saliens*)**  
Sen A., Kirikbakan A.  
Biokhimiya, vol.69, no.9, pp.1223-1232, 2004 (SCI-Expanded)
- LIII. **cDNA-directed expression of a functional zebrafish CYP1A in yeast**  
Chung W., Sen A., Wang-Buhler J., Yang Y., Lopez N., Merrill G., Miranda C., Hu C., Buhler D.  
AQUATIC TOXICOLOGY, vol.70, no.2, pp.111-121, 2004 (SCI-Expanded)
- LIV. **Biochemical characterization and distribution of glutathione S-transferases in leaping mullet (*Liza saliens*)**  
Sen A., Kirikbakan A.  
BIOCHEMISTRY-MOSCOW, vol.69, no.9, pp.993-1000, 2004 (SCI-Expanded)
- LV. **Liquid-liquid extraction of transition metal cations by nine new azo derivatives calix[n]arene**  
Akdogan A., Deniz M., Cebecioglu S., Sen A., Deligoz H.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.37, no.4, pp.973-980, 2002 (SCI-Expanded)
- LVI. **Immunohistochemical localization and differential expression of cytochrome P450 3A27 in the gastrointestinal tract of rainbow trout**  
Lee S., Hedstrom O., Fischer K., Wang-Buhler J., Sen A., Cok I., Buhler D.  
TOXICOLOGY AND APPLIED PHARMACOLOGY, vol.177, no.2, pp.94-102, 2001 (SCI-Expanded)
- LVII. **Cloning, sequencing, and characterization of CYP1A1 cDNA from leaping mullet (*Liza saliens*) liver and implications for the potential functions of its conserved amino acids**  
Sen A., Hu C., Urbach E., Wang-Buhler J., Yang Y., Arinc E., Buhler D.  
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, vol.15, no.5, pp.243-255, 2001 (SCI-Expanded)
- LVIII. **Further immunochemical and biocatalytic characterization of CYP1A1 from feral leaping mullet liver (*Liza saliens*) microsomes**  
Sen A., Arinc E.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.126, no.3, pp.235-244, 2000 (SCI-Expanded)
- LIX. **Cytochrome P4501A and associated mixed-function oxidase induction in fish as a biomarker for toxic carcinogenic pollutants in the aquatic environment**  
Arinc E., Sen A., Bozcaarmutlu A.  
PURE AND APPLIED CHEMISTRY, vol.72, no.6, pp.985-994, 2000 (SCI-Expanded)

- LX. **Hepatic cytochrome P4501A and 7-ethoxycorsorufin O-deethylase induction in mullet and common sole as an indicator of toxic organic pollution in Izmir Bay, Turkey**  
Arinc E., Sen A.  
MARINE ENVIRONMENTAL RESEARCH, vol.48, no.2, pp.147-160, 1999 (SCI-Expanded)
- LXI. **Preparation of highly purified cytochrome P4501A1 from leaping mullet (*Liza saliens*) liver microsomes and its biocatalytic, molecular and immunochemical properties**  
Sen A., Arinc E.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.121, pp.249-265, 1998 (SCI-Expanded)
- LXII. **Purification and Characterization of Cytochrome P450 Reductase from Liver Microsomes of Feral Leaping Mullet (*Liza saliens*)**  
Sen A., Arinc E.  
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, vol.12, no.2, pp.103-113, 1998 (SCI-Expanded)
- LXIII. **Separation of three P450 isozymes from liver microsomes of gilthead seabream treated with D-NF and partial purification of cytochrome P4501A1**  
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- LXIV. **Separation of three P450 isozymes from liver microsomes of gilthead seabream treated with  $\beta$ -NF and partial purification of cytochrome P4501A1**  
Şen A., Arinç E.  
Biochemistry and Molecular Biology International, vol.41, no.1, pp.131-141, 1997 (SCI-Expanded)
- LXV. **Tissue- and species-dependent expression of sheep lung microsomal cytochrome p4502B(LgM2)**  
Arinc E., Hanukoglu I., Sen A., ADALI O.  
BIOCHEMISTRY AND MOLECULAR BIOLOGY INTERNATIONAL, vol.37, no.6, pp.1121-1126, 1995 (SCI-Expanded)
- LXVI. **IN-VIVO EFFECTS OF THE ANESTHETIC, BENZOCAINE, ON LIVER MICROSOMAL CYTOCHROME-P450 AND MIXED-FUNCTION OXIDASE ACTIVITIES OF GILTHEAD SEABREAM (*SPARUS-AURATA*)**  
ARINC E., SEN A.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-PHARMACOLOGY TOXICOLOGY & ENDOCRINOLOGY, vol.107, no.3, pp.399-404, 1994 (SCI-Expanded)
- LXVII. **EFFECTS OF IN-VIVO BENZO(A)PYRENE TREATMENT ON LIVER MICROSOMAL MIXED-FUNCTION OXIDASE ACTIVITIES OF GILTHEAD SEABREAM (*SPARUS-AURATA*)**  
ARINC E., SEN A.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-PHARMACOLOGY TOXICOLOGY & ENDOCRINOLOGY, vol.107, no.3, pp.405-414, 1994 (SCI-Expanded)
- LXVIII. **CHARACTERIZATION OF CYTOCHROME-P450 DEPENDENT MIXED-FUNCTION OXIDASE SYSTEM OF GILTHEAD SEABREAM (*SPARUS-AURATA*, SPARIDAE) LIVER**  
ARINC E., SEN A.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY B-BIOCHEMISTRY & MOLECULAR BIOLOGY, vol.104, no.1, pp.133-139, 1993 (SCI-Expanded)
- LXIX. **EFFECTS OF INVIVO BENZENE TREATMENT ON CYTOCHROME-P450 AND MIXED-FUNCTION OXIDASE ACTIVITIES OF GILTHEAD SEABREAM (*SPARUS-AURATA*) LIVER-MICROSOMES**  
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- I. **Apatinib sensitizes human breast cancer cells against navitoclax and venetoclax despite up-regulated bcl-2 and mcl-1 gene expressions**  
Kavakcioglu Yardimci B., Ozgun Acar O., SEMİZ A., ŞEN A.

Turk Onkoloji Dergisi, vol.36, no.1, pp.8-16, 2021 (ESCI)

- II. **Effects of folk medicinal plant epilobium hirsutum l. And its ingredient ellagic acid on rat liver bile acid synthesizing cyps in rats**  
Ege T., Gençler-özkan A., Şen A., ADALI O.  
Pharmacologyonline, vol.3, pp.200-215, 2018 (Scopus)
- III. **A potential therapeutic role in multiple sclerosis for stigmast-5,22-dien-3 beta-ol myristate isolated from Capparis ovata**  
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## Refereed Congress / Symposium Publications in Proceedings

- I. **Investigating multitargeting effect of fingolimod/ciproxifan butterfly derivatives for multiple sclerosis on brain organoids**  
Acar B., Stark H., Şen A.  
FEBS, Tours, France, 8 - 12 July 2023, vol.13, no.2, pp.193
- II. **Opposite effects of even and odd-numbered long chain fatty acids on expression of myelination related genes in human oligodendrogloma cells**  
Aktaş Pepe N., Dilbaz I. S., Metin E., Acar B., Şen A.  
European Biotechnology Congress 2021, 23 - 25 September 2021, vol.5, pp.58
- III. **Optimization of myelination on human cerebral organoids for studying multiple sclerosis (MS)**  
Acar B., Aktaş Pepe N., Şen A.  
European Biotechnology Congress 2021, 23 - 25 September 2021, vol.5, pp.58
- IV. **Tetrangomycin from Streptomyces stramineus CAH29 and its antimicrobial and cytotoxic activities**  
Ozakin S., Sen A., Ince E.  
European Biotechnology Congress, Athens, Greece, 26 - 28 April 2018, vol.280
- V. **Stigmast-5,22-dien-3 beta-ol myristate isolated from Capparis ovata having anti-inflammatory and immunomodulatory actions could be of interest for use in multiple sclerosis**  
Sen A., Acar O. O., GAZİOĞLU I., KOLAK U., TOPÇU G.  
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- VI. **Initial screening the anti-cancer effect of Vitexagnus castus in neuroblastoma cell lines**  
Bozagac N., Turgut G. C., Semiz G., Semiz A., Sen A.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.255
- VII. **In vitro investigaton of anti-cancer effect of Pinus nigra Arnold subsp pallasiana (Lamb.) Holmboe essential oil in neuroblastoma cells (SH-SY5Y)**  
Semiz A., Celik-Turgut G., Semiz G., Kale E., Sen A.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.257
- VIII. **Neuroprotective and immunomodulatory effects of Urtica urens**  
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41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.296
- IX. **A promising novel antidiabetic compound: Alysine-A**  
Sen A., Ayar B., TOPÇU G., Yilmaz A.  
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- X. **Beneficial actions of dichloromethane sub-fraction of the COWE extract for multiple sclerosis: a potential therapeutic role**  
Acar O. O., Sen A., TOPÇU G., GAZİOĞLU I., KOLAK U., Arslan S.



41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.358

- XI. **F3-A13 h, novel fingolimod derivative, activates cAMP-dependent signalling pathway in SK-N-SH cell line**  
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- XII. **Evaluation of anti-diabetic potential of circiliol and circilineol using CACO2 cell line**  
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- XIII. **Capparis ovate ameliorates experimental allergic encephalomyelitis model of multiple sclerosis in C57BL/6 mice**  
Ozgun O., Turgut G. C., GAZIÖĞLU I., Kolat U., Ozbal S., Ergur B. U., Arslan S., TOPÇU G., Sen A.  
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- XIV. **Anti-neuroinflammatory effect of butanolic subextract of Capparis ovata water extract used as an alternative and complementary treatment for multiple sclerosis**  
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- XV. **Assessing of anti-inflammatory effect of Small nettle' (Urtica urens) increasing polarity extracts**  
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- XVI. **Toxicogenomic analysis of Capparis ovata water extract (MSCov)**  
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- XVIII. **Modulation of protein and mRNA expressions of rat liver vitamin D3 metabolizing CYP27B1 by o-coumaric acid**  
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- XIX. **Cloning and expression of CYP720B from Pinus brutia involved in the biosynthesis of diterpene resin acids**  
Semiz A., Sen A.  
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- XX. **Antiproliferative and anticarcinogenic effects of an aqueous preparation of Urtica urens in human hepatocarcinoma HepG2 cells**  
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- XXI. **In vivo effect of epilobium hirsutum on xenobiotic metabolising CYP2E1, CYP1A1, glutathione peroxidase and NAD(P)H:quinone oxidoreductase 1 enzymes in rat liver**  
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- XXII. **The effects of folk medicinal plant viscum album l. On protein and mRNA expressions of CYP27A1 in rat liver**

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- XXIII. **Cloning, expression, purification and characterization of Bacillus licheniformis catalase from Pamukkale Hot Springs**  
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- XXIV. **Diverse action of 5-aminosalicylic acid on cytochrome P450 expression in human cervical cancer cell line**  
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- XXV. **Differential effects of cyclamen extract on p450 gene expression in human hepatocarcinoma hepg2 cells**  
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- XXVI. **Bee venom induced apoptosis in human hepatocarcinoma HEPG2 cells**  
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- XXVIII. **Modulations of drug metabolizing enzymes by in vivo treatment of epilobium hirsutum extract in rat**  
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36th FEBS Congress of the Biochemistry for Tomorrows Medicine, Torino, Italy, 25 - 30 June 2011, vol.278, pp.225-226
- XXIX. **Antioxidant capacity of epilobium hirsutum in rats**  
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- XXX. **Antioxidant and drug conjugation potential of cyclamen trochopteranthum**  
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- XXXI. **In vivo effects of epilobium hirsutum extract on different glutathione transferase isozymes**  
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- XXXIV. **Modulatory effects of cyclamen trochopteranthum on drug and carcinogen metabolism in heLa cells**  
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- XXXV. **Dietary Aromatase Inhibitors in Human Non-Small Cell Lung Cancer**  
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- XXXVII. **Possible implications of *Cyclamen trochopterantum* on human therapeutics**  
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- XL. **Genetic polymorphisms of drug-metabolizing enzymes CYP2C9, CYP2D6, and CYP3A4 in the Turkish population**  
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- XLI. **Possible use of endpoint fluorometric 7-methoxy-4-trifluoromethyl coumarin o-demethylase assay for assessment of CYP2C activity in rat liver**  
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- XLII. **Brain aromatase of gilthead seabream (*Sparus aurata*) using dibenzylfluorescein**  
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- XLIII. **Changes in protein, activity and mRNA levels of hepatic CYP2E and CYP3A in annual nettle treated Wistar rats**  
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- XLV. **Changes of drug metabolizing enzymes activities in senescent gilthead seabream (*Sparus aurata*)**  
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31st Congress of the Federation-of-European-Biochemical-Societies (FEBS), İstanbul, Turkey, 24 - 29 June 2006, vol.273, pp.140
- XLVI. **A potential role of sulfite oxidase deficiency in xenobiotic metabolism**  
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- XLVII. **Cholinesterases as potential biomarkers in *Tubifex* sp.**  
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- XLVIII. **In vivo assessment of *Urtica urens* supplementation on rat xenobiotic metabolizing enzymes**

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**XLIX. In vivo effects of Urtica urens seed extracts on the cytochrome P450-dependent monooxygenases in the liver, lung, and kidney of control and 3-methylcholanthrene-exposed rats**

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## Supported Projects

ŞEN A., ACAR B., DEMİRTAŞ T. T., Project Supported by Higher Education Institutions, Üç boyutlu 3B hücre kültüründe Metakrilatlanmış jelatin JelMA ve Matrijelin nöral farklılaşmaya ve organoid oluşumuna etkilerinin karşılaştırmalı olarak incelenmesi, 2022 - Continues

Şen A., Ayaz Guner Ş. A., Gungor B., Erturk Zararsiz G., Guner H., Yousef M., TUBITAK Project, Integrative transcriptomic, proteomic, and machine learning approach to identifying the role of lncRNA XIST in MS etiopathogenesis using human vascular brain organoids, 2024 - 2027

Aktas Pepe N., Şen A., Erturk Zararsiz G., Ayaz Guner S., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Investigation of the role of long non-coding RNA (X-inactive specific transcript) in the female bias of multiple sclerosis by transcriptomics and proteomics approaches in cerebral organoids., 2023 - 2024

Şen A., TUBITAK Project, Multitargeting on Neuroinflammation for Multiple Sclerosis and Cognitive Impairment: Design and Synthesis of Ciproxifan and Fingolimod Based Hybrid Derivatives and Determination of Their Bioactivities in Brain Organoids, 2020 - 2023

## Activities in Scientific Journals

Turkish Journal Of Biology, First Editor, 2018 - Continues

TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, Editor, 2014 - Continues

## Memberships / Tasks in Scientific Organizations

European Association for Cancer Research, Member, 2014 - Continues, United Kingdom

National Society of the Molecular Cancer Research, Member, 2014 - Continues, Turkey

Molecular Biology Association of Turkey, Member, 2011 - Continues, Turkey

The Society of Environmental Toxicology and Chemistry (SETAC), Member, 2008 - 2011, United States Of America

Turkish Society of Toxicology, Member, 2008 - 2010, Turkey

International Society for the Study of Xenobiotics (ISSX, Member, 1997 - 2006, United States Of America

## Metrics

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