

## Assoc. Prof. HASAN İLHAN

### Personal Information

Office Phone: [+90 542 319 1807](tel:+905423191807)

Fax Phone: [+90 542 319 1807](tel:+905423191807)

Email: [hsnilhan@ankara.edu.tr](mailto:hsnilhan@ankara.edu.tr)

Web: <https://avesis.ankara.edu.tr/hsnilhan>

### International Researcher IDs

ScholarID: JFGYdLoAAAAJ

ORCID: 0000-0002-4475-1629

Publons / Web Of Science ResearcherID: ABU-5652-2022

ScopusID: 56783948300

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp A.B.D., Turkey 2013 - 2019

Postgraduate, University of Massachusetts at Dartmouth, Faculty of Art and Science, Chemistry and Biochemistry, United States Of America 2008 - 2011

Undergraduate, Ataturk University, Fen Fakültesi, Turkey 2000 - 2004

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Foreign Language, Boston University English Course, Boston University, 2007

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

- I. **Activity of nanosized copper-boron alloys against *Phytophthora* species**  
Yigit U., Turkkan M., İLHAN H., Simsek T., Guler O., Dervis S.  
JOURNAL OF PLANT PATHOLOGY, vol.106, no.1, pp.175-190, 2024 (SCI-Expanded)
- II. **The comparative of chitosan and chitosan nanoparticle versus ethylenediaminetetraacetic acid on the smear layer removal: A systematic review and meta-analysis of in vitro study**  
İLHAN H., Cakici E. B., Cakici F.  
MICROSCOPY RESEARCH AND TECHNIQUE, vol.87, no.2, pp.181-190, 2024 (SCI-Expanded)
- III. **Principles, Methods, and Real-Time Applications of Bacteriophage-Based Pathogen Detection**  
Panhwar S., Keerio H. A., İLHAN H., BOYACI İ. H., TAMER U.  
MOLECULAR BIOTECHNOLOGY, 2023 (SCI-Expanded)
- IV. **Exploring the Potential of Thymoquinone-Stabilized Selenium Nanoparticles: In HEC1B Endometrial Cancer Cells Revealing Enhanced Anticancer Efficacy**  
Gulbay G., Secme M., İLHAN H.  
ACS Omega, vol.8, no.42, pp.39822-39829, 2023 (SCI-Expanded)

- V. **To what extent are orally ingested nanoplastics toxic to the hippocampus in young adult rats?**  
Bas O., İLHAN H., Hancı H., Celikkand H., Ekinçi D., Degermenci M., Karapınar B. O., Warille A. A., Çankaya S., Ozkasapoglu S.  
JOURNAL OF CHEMICAL NEUROANATOMY, vol.132, 2023 (SCI-Expanded)
- VI. **Nanoarchitectonics of the Effects of Curcumin Carbon Dot-Decorated Chitosan Nanoparticles on Proliferation and Apoptosis-Related Gene Expressions in HepG2 Hepatocellular Carcinoma Cells**  
İLHAN H.  
ACS OMEGA, vol.8, no.37, pp.33554-33563, 2023 (SCI-Expanded)
- VII. **Fluorescent and Biocompatible Nitrogen and Sulfur Co-Doped Carbon Nanodot as an Ocular Fundus Angiography Imaging Agent**  
İLHAN H., Erdem B., Ozkasapoglu S., Yayla M., Bas O., ÇELİKKAN H.  
JOURNAL OF FLUORESCENCE, vol.33, no.5, pp.1917-1925, 2023 (SCI-Expanded)
- VIII. **Nanofiber mats containing lavender oil and methyl jasmonate as an innovative treatment to extend vase life in cut rose flowers**  
Gun S., UZUN L., Tuysuz M., Erturk O., İLHAN H., Acikgoz M. A., Ozturk B.  
POSTHARVEST BIOLOGY AND TECHNOLOGY, vol.201, 2023 (SCI-Expanded)
- IX. **Adsorption of Textile Dyes on Willow Tree Pollen: Determination of Equilibrium, Kinetics, and Thermodynamic**  
Alkan S., Karakoc E., İLHAN H., Caliskan M., Savran A., Kubilay Ş.  
IRANIAN JOURNAL OF CHEMISTRY & CHEMICAL ENGINEERING-INTERNATIONAL ENGLISH EDITION, vol.41, no.5, pp.1588-1601, 2022 (SCI-Expanded)
- X. **High-Performance *E. coli* Antibody-Conjugated Gold Nanorods for the Selective Electrochemical Detection of Pathogens in Drinking Water**  
Panhwar S., İLHAN H., Aftab A., Muqet M., Keerio H. A., Solangi G. S., Suludere Z., TAMER U.  
JOURNAL OF ELECTRONIC MATERIALS, vol.50, no.12, pp.7119-7125, 2021 (SCI-Expanded)
- XI. **Replacement of antibodies with bacteriophages in lateral flow assay of Salmonella Enteritidis**  
İLHAN H., Tayyarcı E. K., ÇAĞLAYAN M. G., BOYACI İ. H., SAĞLAM N., TAMER U.  
BIOSENSORS & BIOELECTRONICS, vol.189, 2021 (SCI-Expanded)
- XII. **Hot-Spot Engineering Through Soft Actuators for Surface-Enhanced Raman Spectroscopy (SERS) Applications**  
LİMAN G., Yıldız E., İLHAN H., ÇETİN A., DEMİREL G.  
ADVANCED OPTICAL MATERIALS, vol.9, no.16, 2021 (SCI-Expanded)
- XIII. **A Novel Approach for Real-Time Enumeration of *Escherichia coli* ATCC 47076 in Water through High Multi-Functional Engineered Nano-Dispersible Electrode**  
Panhwar S., Aftab A., Keerio H. A., İLHAN H., Sarmadivaleh M., TAMER U.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.168, no.3, 2021 (SCI-Expanded)
- XIV. **Thermodynamic and Kinetic Parameters of Thermostable Alkaline Phosphatase from *Geobacillus pallidus* P26**  
ÇELİK S., İLHAN H.  
RUSSIAN JOURNAL OF BIOORGANIC CHEMISTRY, vol.47, no.1, pp.236-243, 2021 (SCI-Expanded)
- XV. **Fabrication of self-functionalized polymeric surfaces and their application in electrochemical acetaminophen detection**  
KURALAY F., Caglayan T., İLHAN H., Dumangoz M., Celebi M. S.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.137, no.48, 2020 (SCI-Expanded)
- XVI. **Dual Responsive Disposable Electrode for the Enumeration of *Escherichia coli* in Whole Blood**  
Panhwar S., İLHAN H., Hassan S. S., Zengin A., BOYACI İ. H., TAMER U.  
ELECTROANALYSIS, vol.32, no.10, pp.2244-2252, 2020 (SCI-Expanded)
- XVII. **A disposable gold-cellulose nanofibril platform for SERS mapping**  
Tanis S. N., İLHAN H., Guven B., Tayyarcı E. K., Ciftci H., SAĞLAM N., BOYACI İ. H., TAMER U.  
ANALYTICAL METHODS, vol.12, no.24, pp.3164-3172, 2020 (SCI-Expanded)

- XVIII. **Surface enhanced Raman spectroscopy as a novel tool for rapid quantification of heroin and metabolites in saliva**  
AKÇAN R., Yildirim M. S., İLHAN H., Guven B., TAMER U., SAĞLAM N.  
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.50, no.5, pp.1470-1479, 2020 (SCI-Expanded)
- XIX. **The coupling of immunomagnetic enrichment of bacteria with paper-based platform**  
İLHAN H., Guven B., Dogan U., TORUL H., Evran S., ÇETİN D., Suludere Z., SAĞLAM N., BOYACI İ. H., TAMER U.  
TALANTA, vol.201, pp.245-252, 2019 (SCI-Expanded)
- XX. **Comparative DNA isolation behaviours of silica and polymer based sorbents in batch fashion: monodisperse silica microspheres with bimodal pore size distribution as a new sorbent for DNA isolation**  
GÜNAL KARATAŞ G., KİP F. Ç., Oğut S. E., İLHAN H., Kibar G., Tuncel A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.46, no.1, pp.178-184, 2018 (SCI-Expanded)
- XXI. **Determination of  $TiO_2$  and  $AgTiO_2$  Nanoparticles in *Artemia salina*: Toxicity, Morphological Changes, Uptake and Depuration**  
Ozkan Y., ALTINOK İ., İLHAN H., Sokmen M.  
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.96, no.1, pp.36-42, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Assessment of Some Nutrient Contents and Heavy Metal Accumulation in Some Wild Edible Mushrooms in Türkiye**  
UZUN Y., ALKAN S., İRENDE İ., İLHAN H., ÇAVUŞOĞLU Ş., ASLAN A.  
MANTAR DERGİSİ, vol.14, pp.69-77, 2023 (Peer-Reviewed Journal)
- II. **Green Synthesis of Biocompatible Hybrid Ginger/Chitosan Carbon Nanodot Exhibiting Antiproliferative Activity on Carcinoma Cells**  
İLHAN H.  
Igdir University, vol.13, 2023 (Peer-Reviewed Journal)
- III. **Antifungal activity and optimization procedure of silver nanoparticles green synthesized with *Prunus laurocerasus* L. (cherry laurel) leaf extract**  
YİĞİT U., Gürel Y., İLHAN H., TÜRKKAN M.  
International Journal of Life Sciences and Biotechnology, vol.6, pp.1-20, 2023 (Peer-Reviewed Journal)
- IV. **Determination of the acute toxic effect of  $ZnO$ - $TiO_2$  nanoparticles in brine shrimp (*Artemia salina*)**  
DAĞLIOĞLU Y., ALTINOK İ., İLHAN H., SÖKMEN M.  
Acta Biologica Turcica, vol.1, no.29, pp.6-13, 2016 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **EDTA@CARBON NANODOT COATED SILVER NANOPARTICLES EVALUATION OF ANTIBACTERIAL EFFECT AGAINST A. ACTINOMYCETEMCOMMITANS, P. INTERMEDIA PERIODONTOPATOGENS AND S. MUTANS, S. SALIVARIUS: AN IN VITRO STUDY**  
HACISALİHOĞLU B., İLHAN H., KARAMAN Ü., ÇANAKÇI V.  
7th INTERNATIONAL CONFERENCE ON MEDICAL & HEALTH SCIENCES, 6 July - 08 October 2023
- II. **Synthesis of Nanoplastics and in vitro the Toxicological Effects and Bioaccumulation**  
İLHAN H.  
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), 14 - 16 December 2022
- III. **The Detection Of Dopamine With High Sensitivity And Selectivity Using Amine- Coated Carbon Dots**  
İLHAN H.

5th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2022), 23 - 25 November 2022

- IV. **Fluorescence Based Immunoassays Using Quantum Dot Labelled Antibody for Detection of E. coli**  
İLHAN H., TAMER U.  
4. EBAT 2022, 3 - 06 November 2022
- V. **The Detection of Pathogens in a Microfluidic Chip System Using Surface Enhanced Raman Scattering (SERS)**  
İLHAN H., TAMER U.  
9th International Conference on Materials Science and Nanotechnology for Next Generation, 22 - 24 September 2022
- VI. **SERS Mapping on Surface of Nanofibril and Lateral Flow Assay for Detection of Bacteria**  
İLHAN H., TANIŞ S. N., SAĞLAM N., BOYACI İ. H., TAMER U.  
Nano TR 16, 5 - 08 September 2022
- VII. **Measurement Of Heroin And Its Metabolites In Saliva Using Surface Enhanced Raman Spectroscopy**  
AKÇAN R., YILDIRIM M. Ş., İLHAN H., TAMER U., SAĞLAM N.  
9th Rostocker International Conference: "Thermophysical Properties For Technical Thermodynamics" (Thermam), 15 - 16 October 2020
- VIII. **Bacteriophage Based Lateral Flow Immunoassay System For Detection Of Salmonelle Enteritidis**  
İLHAN H., ÇAĞLAYAN M. G., Tayyarcı E. K., BOYACI İ. H., TAMER U., SAĞLAM N.  
International Conference on Advanced Materials Science & Engineering and High Tech Devices Applications; Exhibition (ICMATSE 2020, 2 - 04 October 2020
- IX. **Use of Surface Enhanced Raman Spectroscopy as a Tool for Detection of 6-Mono Acetyl Morphine (6-MAM)**  
AKÇAN R., YILDIRIM M. Ş., İLHAN H., DEMİREL G., TAMER U., SAĞLAM N.  
8 th Rostocker Int. Conf.: Thermophysical Properties for Technical Thermodynamics, 22 - 24 September 2019
- X. **Metal Organic Framework functionalized nanoparticles for Electrochemical enumeration of bacteria**  
Sallahuddin P., TAMER U., İLHAN H., Hassan S. S., ZENGİN A., BOYACI İ. H.  
XX Euroanalysis, Turkey, 1 - 05 September 2019
- XI. **EVALUATION OF RAMAN ACTIVE QUALITIES OF DIFFERENT SUBSTRATES IN SERS ANALYSIS OF MORPHINE**  
AKÇAN R., YILDIRIM M. Ş., İLHAN H., TAMER U., SAĞLAM N.  
7th Rostocker International Conference: "Thermophysical Properties for Technical Thermodynamics, 26 - 27 July 2018
- XII. **Measurements of 6-monoacetylmorphine in body fluids using surface enhanced raman spectroscopy**  
AKÇAN R., YILDIRIM M. Ş., İLHAN H., DEMİREL G., TAMER U., SAĞLAM N.  
20th euroanalysis, 1 May - 05 September 2019
- XIII. **SERS based LFIA for Detection of Pathogen Bacteria in Nanotechnology**  
İLHAN H., TAMER U., SAĞLAM N.  
8th Rostocker International Conference: Thermophysical Properties for Technical Thermodynamics (THERMAM), 22 - 24 September 2019
- XIV. **A Novel Application of Surface Enhanced Raman Spectroscopy: Measurements of Heroin in Body Fluids**  
AKÇAN R., YILDIRIM M. Ş., İLHAN H., TAMER U., SAĞLAM N.  
7th Rostocker International Conference: "Thermophysical Properties for Technical Thermodynamics", 26 - 27 July 2018
- XV. **LFIA enumeration of E.coli using FE3O4/AU-PEI nanoparticles in blood.**  
İLHAN H., DOĞAN Ü., SULUDERE Z., BOYACI İ. H., ÇETİN D., SAĞLAM N., TAMER U.  
ISOPS-12 Ankara, TURKEY, 26 - 29 June 2018
- XVI. **SERS Based E.coli enumeration in urine with using casein bound magnetic nanoparticles.**  
İLHAN H., DOĞAN Ü., SULUDERE Z., BOYACI İ. H., ÇETİN D., SAĞLAM N., TAMER U.  
8th Black Sea Basin Conference on Analytical Chemistry (8th BBCAC) İstanbul Turkey, 9 - 11 May 2018

- XVII. **The sythesis and characterization of PEI modified Fe<sub>3</sub>O<sub>4</sub> Au nanoparticles for rapid enumeration of E coli**  
İLHAN H., DOĞAN Ü., ÇİFTÇİ H., TAMER U., Sağlam N.  
3.International Congress on Biosensor, 5 - 07 October 2016

## **Metrics**

Publication: 42  
Citation (WoS): 182  
Citation (Scopus): 204  
H-Index (WoS): 8  
H-Index (Scopus): 8