

## Assoc. Prof. Hüseyin ÜVET

### Personal Information

**Office Phone:** [+90 212 383 2888](tel:+902123832888)

**Email:** [huvet@yildiz.edu.tr](mailto:huvet@yildiz.edu.tr)

**Other Email:** [huseyinuvet@gmail.com](mailto:huseyinuvet@gmail.com)

**Web:** <https://avesis.yildiz.edu.tr/huvet>

### International Researcher IDs

ScholarID: Dt1OpEAAAAAJ

ORCID: 0000-0003-0392-982X

Publons / Web Of Science ResearcherID: ABA-3137-2020

ScopusID: 19640875600

Yoksis Researcher ID: 125475

### Education Information

Doctorate, Osaka University, Graduate School of Engineering Science, Department of Systems Innovation, Japan 2007 - 2010

Postgraduate, Osaka University, Graduate School of Engineering Science, Department of Systems Innovation, Japan 2004 - 2007

Undergraduate, Istanbul Kultur University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 1999 - 2003

### Foreign Languages

English, C2 Mastery

### Research Areas

Sports Health Sciences, Robotics and Mechatronics Systems, Mechatronic Systems, Micro and Nano Robots, Artificial Intelligence, Computer Learning and Pattern Recognition, Bioinstrumentation and Microelectromechanical Systems (MEMS)

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2011 - Continues

Research Assistant PhD, Nagoya University, Mechanical Science & Engineering, Mikro Nano Systems Engineering, 2010 - 2011

### Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics

Engineering, 2017 - 2018

Director of the Center, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2014 - 2016

Deputy Director of the Center, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2012 - 2014

## Courses

### Postgraduate

Robotik Görme, Postgraduate, 2017 - 2018

Mikro-Nano Mekatronik, Postgraduate, 2015 - 2016

Sensors and Actuators, Postgraduate, 2014 - 2015

### Undergraduate

Nesneye Yönelik Programlama, Undergraduate, 2017 - 2018

## Supervised Theses

Üvet H., Microfluidic system development for detection of single-cell mechanical properties, Postgraduate, G.AYDEMİR(Student), 2020

Üvet H., Semi - autonomous warehouse counting system, Postgraduate, G.MELİKE(Student), 2020

Üvet H., Havalı süspansiyonlu ağır ticari araçlar için yükseklik kontrol sistemi yazılımı geliştirilmesi ve devreye alınması, Postgraduate, C.ŞAHBAZ(Student), 2019

Üvet H., A high accurate positioning and manipulation technique for untethered microrobots, Postgraduate, A.Anıl(Student), 2017

Üvet H., Hidrodinamik kavitasyona dayalı medikal uygulamalar için bir mikromanipülator tasarımı ve geliştirilmesi, Postgraduate, C.Sözer(Student), 2017

ÜVET H., Mikro-robot kolu dizaynı, üretimi ve görsel geri besleme ile temassız manipülasyonu, Postgraduate, A.İlginoğlu(Student), 2016

## Research Infrastructure Information

Üvet H., Koyun A., Tüfekci C. S., BİLİM VE TEKNOLOJİ UYGULAMA VE ARAŞTIRMA MERKEZİ, February 2011

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

- I. **A flexible cystoscopy device prototype for mechanical tissue ablation based on micro-scale hydrodynamic cavitation: Ex vivo and in vivo studies**  
Kestek E., Akar Ü., Seyedmirzaei Sarraf S., Kanbur O., Gorkem Kirabali U., Eda Sutova H., Ghorbani M., Kutlu O., ÜVET H., DOĞAN EKİCİ A. I., et al.  
Ultrasonics Sonochemistry, vol.114, 2025 (SCI-Expanded)
- II. **Noninvasive holographic sensor system for measuring stiffness of soft micro samples.**  
Abdioğlu H. B., Işık Y., Sevgi M., Demircali A. A., Gorkem Kirabali U., Esmer G. B., Uvet H.  
Journal of biomedical optics, vol.30, no.3, pp.36501, 2025 (SCI-Expanded)
- III. **Enhanced Fluid Mixing in Microchannels Using Levitated Magnetic Microrobots: A Numerical Study**  
Demircali A. A., Yilmaz A., ÜVET H.  
Micromachines, vol.16, no.1, 2025 (SCI-Expanded)
- IV. **Development of Graphene Oxide-Based Anticancer Drug Combination Functionalized with Folic Acid as Nanocarrier for Targeted Delivery of Methotrexate**

Yanikoglu R., Karakas C. Y., Ciftci F., İNSEL M. A., Karavelioglu Z., Varol R., Yilmaz A., ÇAKIR R., ÜVET H., ÜSTÜNDAĞ C. B.

Pharmaceutics, vol.16, no.6, 2024 (SCI-Expanded)

- V. **Enhancing mechanical properties and surface quality of FDM-printed ABS: A comprehensive study on cold acetone vapor treatment**  
Demircali A. A., Yilmaz D., Yilmaz A., Keskin O., Keshavarz M., ÜVET H.  
International Journal of Advanced Manufacturing Technology, vol.130, no.7-8, pp.4027-4039, 2024 (SCI-Expanded)
- VI. **Fiberbots: Robotic fibers for high-precision minimally invasive surgery**  
Abdelaziz M. E. M. K., Zhao J., Gil Rosa B., Lee H., Simon D., Vyas K., Li B., Koguna H., Li Y., Demircali A. A., et al.  
Science advances, vol.10, no.3, 2024 (SCI-Expanded)
- VII. **Classification of 3D shoe prints using the PointNet architecture: proof of concept investigation of binary classification of nike and adidas outsoles**  
Oğuz R., Babacan H. H., AŞICIOĞLU F., ÜVET H.  
Forensic Science, Medicine, and Pathology, 2024 (SCI-Expanded)
- VIII. **On the application of hydrodynamic cavitation on a chip in cellular injury and drug delivery**  
Namli I., Karavelioglu Z., Sarraf S. S., Aghdam A. S., Varol R., Yilmaz A., Sahin S. B., Ozogul B., Bozkaya D. N., Acar H. F., et al.  
Lab on a Chip, vol.23, no.11, pp.2640-2653, 2023 (SCI-Expanded)
- IX. **Machine Learning Approach on High Risk Treadmill Exercise Test to Predict Obstructive Coronary Artery Disease by using P, QRS, and T waves' Features**  
Yilmaz A., Hayiroğlu M. İ., Salturk S., Pay L., Demircali A. A., Coşkun C., Varol R., Tezen O., Eren S., Çetin T., et al.  
Current Problems in Cardiology, vol.48, no.2, 2023 (SCI-Expanded)
- X. **An Automated Deep Segmentation and Classification Model for Lumbar Disk Degeneration and Clarification of Its Impact on Clinical Decisions**  
Soydan Z., Bayramoglu E., Karasu R., Sayin I., Saltürk S., Üvet H.  
Global Spine Journal, 2023 (SCI-Expanded)
- XI. **Microfluidic wound scratching platform based on an untethered microrobot with magnetic actuation**  
Yilmaz A., Karavelioglu Z., Aydemir G., Demircali A. A., Varol R., Kosar A., ÜVET H.  
Sensors and Actuators B: Chemical, vol.373, 2022 (SCI-Expanded)
- XII. **Deep convolutional neural networks for onychomycosis detection using microscopic images with KOH examination**  
Yilmaz A., Goktay F., Varol R., Gencoglan G., ÜVET H.  
MYCOSES, vol.65, no.12, pp.1119-1126, 2022 (SCI-Expanded)
- XIII. **Acousto-holographic reconstruction of whole-cell stiffness maps**  
Üvet H.  
NATURE COMMUNICATIONS, vol.13, no.7351, pp.1-10, 2022 (SCI-Expanded)
- XIV. **MobileSkin: Classification of Skin Lesion Images Acquired Using Mobile Phone-Attached Hand-Held Dermoscopes**  
Yilmaz A., Gencoglan G., Varol R., Demircali A. A., Keshavarz M., ÜVET H.  
Journal of Clinical Medicine, vol.11, no.17, 2022 (SCI-Expanded)
- XV. **A Flexible Cystoscope Based on Hydrodynamic Cavitation for Tumor Tissue Ablation.**  
Abbasiasl T., Sutova H. E., Niazi S., Celebi G., Karavelioglu Z., Kirabali U. G., Yilmaz A., Uvet H., Kutlu O., Ekici S., et al.  
IEEE transactions on bio-medical engineering, vol.69, pp.513-524, 2022 (SCI-Expanded)
- XVI. **Untethered MicroRobot Motion Mechanism with Increased Longitudinal Force**  
Demircali A. A., Varol R., Erkan K., Üvet H.  
Journal of Mechanisms and Robotics-Transactions of the ASME, vol.13, no.6, pp.1-9, 2021 (SCI-Expanded)
- XVII. **Longitudinal Motion Modeling and Experimental Verification of a Microrobot Subject to Liquid Laminar Flow**  
Demircali A. A., Varol R., Aydemir G., Saruhan E. N., Erkan K., Uvet H.  
IEEE-Asme Transactions On Mechatronics, vol.26, no.6, pp.2956-2966, 2021 (SCI-Expanded)

- XVIII. **Local Carpet Bombardment of Immobilized Cancer Cells with Hydrodynamic Cavitation**  
Gevari M. T., Aydemir G., Kutlu Ö., Üvet H., Ghorbani M., Koşar A.  
IEEE Access, vol.21, pp.1-9, 2021 (SCI-Expanded)
- XIX. **Interferometric Measurement of TGF- $\beta$  Induced Epithelial-Mesenchymal Transition of Tumor Cells**  
Varol R., Esmer G. B., Uvet H.  
APPLIED SCIENCES-BASEL, vol.10, no.24, pp.9107-9117, 2020 (SCI-Expanded)
- XX. **Holographic Imaging of Cell Proliferation**  
Varol R., Aydemir G., Karadağ A., Meço E., Ömeroğlu S., Oruç M. E., Başpınar Y., Esmer G. B., Üvet H.  
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.44, no.6, pp.1-2, 2019 (SCI-Expanded)
- XXI. **Design and implementation of a passive micro flow sensor based on diamagnetic levitation**  
Aydemir G., Kosar A., Üvet H.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.300, 2019 (SCI-Expanded)
- XXII. **Detailed Magnetic Force Analysis of A 4-Pole Hybrid Electromagnet by Magnetic Equivalent Circuit Method**  
Ertugrul H. F., ERKAN K., ÜVET H.  
JOURNAL OF MAGNETICS, vol.23, no.4, pp.499-508, 2018 (SCI-Expanded)
- XXIII. **Mini Glider Design and Implementation with Wing-Folding Mechanism**  
Demirçalı A. A., Üvet H.  
APPLIED SCIENCES-BASEL, vol.8, 2018 (SCI-Expanded)
- XXIV. **Stabilization of Microrobot Motion Characteristics in Liquid Media**  
DEMİRÇALI A. A., ÜVET H.  
MICROMACHINES, vol.9, no.7, 2018 (SCI-Expanded)
- XXV. **Micro-UFO (Untethered Floating Object): A Highly Accurate Microrobot Manipulation Technique**  
ÜVET H., DEMİRÇALI A. A., KAHRAMAN Y., Varol R., Köse T., ERKAN K.  
MICROMACHINES, vol.9, no.3, 2018 (SCI-Expanded)
- XXVI. **Biomedical device prototype based on small scale hydrodynamic cavitation**  
Ghorbani M., Sözer C., Alcan G., Unel M., Ekici S., ÜVET H., Kosar A.  
AIP ADVANCES, vol.8, no.3, 2018 (SCI-Expanded)
- XXVII. **A Study on Finding Optimum Parameters of a Diamagnetically Driven Untethered Microrobot**  
DEMİRÇALI A. A., ERKAN K., ÜVET H.  
JOURNAL OF MAGNETICS, vol.22, no.4, pp.539-549, 2017 (SCI-Expanded)
- XXVIII. **Visualization of microscale cavitating flow regimes via particle shadow sizing imaging and vision based estimation of the cone angle**  
Ghorbani M., Alcan G., Unel M., Gozuacik D., Ekici S., ÜVET H., Sabanovic A., Kosar A.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.78, pp.322-333, 2016 (SCI-Expanded)
- XXIX. **Magnetic levitation control of a three degrees of freedom 4-pole hybrid electromagnet**  
ERTUĞRUL H. F., ERKAN K., ÜVET H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.3, pp.632-645, 2016 (SCI-Expanded)
- XXX. **Multi-view fast object detection by using extended haar filters in uncontrolled environments**  
Vural S., Mae Y., Uvet H., Arai T.  
PATTERN RECOGNITION LETTERS, vol.33, no.2, pp.126-133, 2012 (SCI-Expanded)
- XXXI. **Vision-Based Automated Single-Cell Loading and Supply System**  
Uvet H., Hasegawa A., Ohara K., Takubo T., Mae Y., Arai T.  
IEEE TRANSACTIONS ON NANOBIOSCIENCE, vol.8, no.4, pp.332-340, 2009 (SCI-Expanded)
- XXXII. **Miniaturized Vision System for Microfluidic Devices**  
Uvet H., Arai T., Mae Y., Takubo T., Yamada M.  
ADVANCED ROBOTICS, vol.22, no.11, pp.1207-1222, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Recent advances in health biotechnology during pandemic**  
Arı Yuka S., Akpek A., Özarslan A., Vural A., Koçer A. T., Aslan A., Karaaltın A. B., Gök B., Yılmaz B. B., İnan B., et al.  
Sigma Journal of Engineering and Natural Sciences, vol.41, no.3, pp.625-655, 2023 (ESCI)
- II. **An innovative tailored instructional design for computer programming courses in engineering**  
Adorno D. P., Uğraş T., Quaiçoe J. S., Jecheva V., Ogunyemi A. A., Bauters M., Toshkov A., Ortakci Y., Ozacar K., Atasoy F., et al.  
U.Porto Journal of Engineering, vol.9, no.3, pp.209-222, 2023 (Scopus)
- III. **Study on the Concept and Development of a Mobile Incubator**  
Ay F. C., Bilici N., Varol R., Yılmaz A., Kirabali U. G., Yılmaz A., Üvet H.  
Arxiv, vol.1, pp.1-4, 2022 (Non Peer-Reviewed Journal)
- IV. **Benchmarking of Lightweight Deep Learning Architectures for Skin Cancer Classification using ISIC 2017 Dataset**  
Üvet H.  
arXiv preprint, vol.1, no.1, pp.1-2, 2021 (Non Peer-Reviewed Journal)
- V. **The Effect of Pore Structure in Flapping Wings on Flight Performance**  
Üvet H.  
arXiv preprint, vol.1, no.1, pp.1-2, 2021 (Non Peer-Reviewed Journal)
- VI. **Comparison of Deep Learning and Traditional Machine Learning Techniques for Classification of Pap Smear Images**  
Üvet H.  
arXiv preprint, vol.1, no.1, pp.1-2, 2020 (Non Peer-Reviewed Journal)
- VII. **Optimization of Different Surface Modifications for Binding of Tumor Cells in a Microfluidic Systems 10.30621/jbachs.2019.601**  
Meco H. E., Karadağ A., Omeroglu S., Kocal G. C., Oruc M. E., Üvet H., Basbınar Y.  
JOURNAL OF BASIC AND CLINICAL HEALTH SCIENCES, vol.3, pp.73-77, 2019 (Peer-Reviewed Journal)
- VIII. **HİDRODİNAMİK KAVİTASYONA DAYALI BİYOMEDİKAL UYGULAMALAR İÇİN SİSTOSKOP TABANLI MİKROMANİPÜLATÖR TASARIMI VE GELİŞTİRİLMESİ**  
Sözer C., Üvet H.  
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.8, pp.593-601, 2019 (Peer-Reviewed Journal)
- IX. **Automatic Single-Cell Transfer Module**  
ÜVET H., Hasegawa A., Ohara K., Takubo T., Mae Y., Arai T.  
BIOLOGICALLY INSPIRED ROBOTICS, pp.125-145, 2012 (Peer-Reviewed Journal)
- X. **Illumination Normalization for Outdoor Face Recognition by Using Ayofa-filters**  
Vural S., Mae Y., Üvet H., Arai T.  
Journal of Pattern Recognition Research, vol.6, no.2, pp.1-18, 2011 (ESCI)

## Books

- I. **Automatic Single Cell Transfer Module**  
ÜVET H., HASEGAWA A., OHARA K., TOMIHITO T., MAE Y., TATSUO A.  
in: Biologically Inspired Robotics, Yunhui Liu, Dong Sun, Editor, CRC PRESS, New-York, pp.125-147, 2011

## Papers Published in Refereed Scientific Meetings

- I. **A Study on Tennis Ball Ground Impact Point Detection**  
Sarıalioğlu O., Balcı İ. C., Sayın İ., Çiçek B., Saltürk S., Üvet H.  
2024 11th International Conference on Electrical and Electronics Engineering (ICEEE), Muğla, Turkey, 22 April

2024, pp.377-381

- II. **Heart Rate-Based Prediction of Daily Activity Levels Using Wearable Devices for Home Rehabilitation Process of Cardiac Patients**  
Balci İ. C., Saltürk S., Üvet H., Barman H. A., Sayın İ.  
2024 11th International Conference on Electrical and Electronics Engineering (ICEEE), Muğla, Turkey, 22 - 24 April 2024
- III. **Online/Hybrid Course Design for Programming Languages in Engineering Education**  
Üvet H., Uğraş T., Quaioco J. S., Ogunyemi A. A., Bauters M., Jecheva V., Toshkov A., Persano Adorno D., Peri D., Ortakci Y., et al.  
4th International Conference on Higher Education Learning Methodologies and Technologies Online, HELMeTO 2022, Palermo, Italy, 21 - 23 September 2022, vol.1779 CCIS, pp.433-445
- IV. **Determination of Cell Stiffness Using Polymer Micro Beads as Reference**  
Ömeroğlu S., Varol R., Karavelioğlu Z., Karadağ A., Başbınar Y., Oruç M. E., Üvet H.  
Medical Technologies Congress 2020, 19 - 20 November 2020, pp.1-4
- V. **Interferometric Investigation of Cell Stiffness and Morphology on Oxidative Stress-Induced Human Umbilical Vein Endothelial Cells (HUVEC)**  
Karavelioğlu Z., Ömeroğlu S., Varol R., Meço E., Buyrukbilen Y., Başbınar Y., Oruç M. E., Üvet H.  
Medical Technologies Congress 2020, 19 - 20 November 2020
- VI. **Use of Velocity Vectors for Cell Classification Under Acoustic Drifting Forces**  
Varol R., Ömeroğlu S., Karavelioğlu Z., Kumuk E., Saruhan E., Aydemir G., Oruç M. E., Üvet H.  
Medical Technologies Congress 2020, 19 - 20 November 2020, pp.1-5
- VII. **A New Method for Creating a Wound Model with Micro-robot in Microfluidic Device**  
Aydemir G., Varol R., Tarar C., Ömeroğlu S., Ustomar E. O., Gül B. E., Üvet H.  
International Conference on Manipulation, Automation and Robotics at Small Scales, 13 - 16 July 2020, pp.1-6
- VIII. **Classification Of Cells Based on Their Drifting Velocity Under Acoustic Radiation Pressure**  
Varol R., Saruhan E. N., Orucu Z., Karavelioğlu Z., Aydemir G., Başbınar Y., Üvet H.  
International Conference on Manipulation, Automation and Robotics at Small Scales, 13 - 16 July 2020, pp.1-5
- IX. **Manipulation of Cell Cultures by Means of Holographic Visual Feedback**  
Varol R., Aydemir G., Kamlı B. G., Ömeroğlu S., Demircali A., Karavelioğlu Z., Başbınar Y., Üvet H.  
International Conference on Manipulation, Automation and Robotics at Small Scales, 13 - 16 July 2020, pp.1-5
- X. **Interferometric Measurement of Refractive Index Change of Tumor Cells Under Electrical Fields**  
Varol R., Ömeroğlu S., Yılmaz A., Oruç M. E., Esmer G. B., Üvet H.  
Digital Holography and Three-Dimensional Imaging, 22 - 26 June 2020, pp.42-44
- XI. **Measurement of Mechanical Response of Cell Membrane to High-Frequency Periodic Stimuli**  
Varol R., Ömeroğlu S., Demircali A., ÜVET H., ESMER G. B.  
Digital Holography and Three-Dimensional Imaging, 22 - 26 June 2020
- XII. **Holographic imaging of tumor cells during epithelial-mesenchymal transition**  
Varol R., Esmer G. B., Efe O., Ömeroğlu S., Aydemir G., Karadağ A., Meço E., Oruç M. E., Başbınar Y., Üvet H.  
Photonics Europe 2020, 6 - 08 April 2020
- XIII. **Immobilization of CTCs on Silane-Modified Surfaces**  
Ömeroğlu S., Meço E., Karadağ A., Aydemir G., Varol R., ORUÇ M. E., BAŞBINAR Y., ESMER G. B., ÜVET H.  
2nd International Cancer Ion Channels Congress, İzmir, Turkey, 22 - 24 September 2019
- XIV. **Holographic Imaging of Cancer Cell Proliferation**  
Ömeroğlu S., Meço E., Karadağ A., Aydemir G., Varol R., ORUÇ M. E., BAŞBINAR Y., ESMER G. B., ÜVET H.  
2nd International Cancer Ion Channels Congress, İzmir, Turkey, 22 - 24 September 2019
- XV. **Design of Flapping Wing Mini Air Vehicle with Crank-Rocker Mechanism**  
Demirçalı A. A., Üvet H.  
23rd International Conference on Mechatronics Technology – ICMT 2019, Salerno, Italy, 23 - 26 October 2019, vol.1, no.1, pp.1
- XVI. **Indoor Drone Application with Acoustic Localization**  
Demirçalı A. A., Üvet H.

THE 6TH INTERNATIONAL SYMPOSIUM ON ELECTRICAL AND ELECTRONICS ENGINEERING, Galati, Romania, 18 - 20 October 2019, vol.1, no.1, pp.1

- XVII. Pasif Diyamanyetik Levitasyon Kullanılarak Mikrorobotun Yanal Kuvvetlerinin Artırılması**  
Demirçalı A. A., Erkan K., Üvet H.  
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Muğla, Turkey, 11 - 14 September 2019, pp.1-5
- XVIII. Laminer Akış İçerisindeki Mikrorobotun Kontrolü**  
Demirçalı A. A., Erkan K., Üvet H.  
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Muğla, Turkey, 11 - 14 September 2019, pp.1-5
- XIX. Krank-Biyel Mekanizmalı Kanat Çırpan Mini Hava Aracı Tasarımı**  
Sipahi M. A., Yılmaz A., Kaya A., Demirçalı A. A., Üvet H.  
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Muğla, Turkey, 11 - 14 September 2019, pp.1-5
- XX. An Introduction to LOC Devices**  
ÜVET H.  
2nd International Cancer Ion Channels Congress, İzmir, Turkey, 22 - 24 September 2019
- XXI. MOTION CONTROL OF MICROROBOT IN LAMINAR FLOW**  
Demirçalı A. A., Erkan K., Üvet H.  
I. International Science and Innovation Congress, Denizli, Turkey, 26 - 29 August 2019, pp.1-5
- XXII. INCREASING LATERAL FORCE OF MICROROBOT USING PASSIVE DIAMAGNETIC LEVITATION**  
Demirçalı A. A., Üvet H., Erkan K.  
I. International Science and Innovation Congress, Denizli, Turkey, 26 - 29 August 2019, pp.1-5
- XXIII. A study on the development of semi automated warehouse stock counting system**  
Cidal G. M., Ayhan Cimbeç Y., Karahan G., Emre Boler O., Ozkardesler O., ÜVET H.  
6th International Conference on Electrical and Electronics Engineering, ICEEE 2019, İstanbul, Turkey, 16 - 17 April 2019, pp.323-326
- XXIV. HAVALI SÜSPANSİYONLU AĞIR TİCARİ ARAÇLAR İÇİN YÜKSEKLİK KONTROL SİSTEMİ GELİŞTİRME ÇALIŞMASI**  
ŞAHBAZ C., KELEŞ T., EMRE EMİRHAN S., GÖRÜRĞÖZ M., ÜVET H.  
OTEKON 2018, the International Conference on Automotive Technologies, 7 - 08 May 2018, pp.720-730
- XXV. A Study on Micro Flow Sensor Using Diamagnetic Levitation**  
AYDEMİR G., ÇALIŞ B., ERKAN K., ÜVET H.  
MARSS, the annual International Conference on Manipulation, Automation and Robotics at Small Scales, Nagoya, Japan, 4 - 08 June 2018
- XXVI. Micro-Flow Sensor Design and Implementation Based on Diamagnetic Levitation**  
AYDEMİR G., ÖZER C., ÜVET H.  
CEIT 2018 (International Conference on Control Engineering and Information Technology), Turkey, 25 - 27 October 2018
- XXVII. Mikro/Nano Robotik'in Medikal Teknolojilerinde Uygulamaları**  
ÜVET H.  
1. Temel Onkoloji Sempozyumu, Turkey, 9 - 11 May 2018
- XXVIII. Control of head-tilting angle of the diamagnetically levitated microrobot in liquid media**  
DEMİRÇALI A. A., Yılmaz C. A., ÜVET H.  
MARSS2018, Nagoya, Japan, 04 July 2018, pp.1-5
- XXIX. Mikro-Akışkan Kanal İçerisindeki Mikrorobotun Oryantasyon Kontrolü**  
DEMİRÇALI A. A., Yılmaz A., ÜVET H.  
TORK2018, İstanbul, Turkey, 12 April 2018, pp.65-69
- XXX. Mikro-Akışkan Kanal İçerisindeki Mikrorobotun Kontrolü**  
DEMİRÇALI A. A., ÜVET H.  
TOK, İstanbul, Turkey, 23 October 2017, pp.100
- XXXI. Otonom Katlanabilir İnsansız Hava Aracının Geliştirilmesi**  
DEMİRÇALI A. A., ÜVET H.  
TOK, İstanbul, Turkey, 23 October 2017, pp.100

- XXXII. **Analysis of Defects in Medical Implants by Holographic Interferometry Approach.**  
ABALI B., DEMİRÇALI A. A., ÜVET H.  
2nd International Science Symposium "Science Festival", 5 - 08 September 2017
- XXXIII. **AN ALTERNATIVE APPROACH TO ALGORITHM ANALYSIS WITH HOLOGRAPHIC INTERFEROMETRY**  
AYDIN S., DEMİRÇALI A. A., ÜVET H.  
ISS 2017 2nd International Science Symposium "Science Festival", 5 - 08 September 2017
- XXXIV. **Highly Price Micro-Robot Manipulation Tehcniques for Lab-on-a-chip Systems**  
ÜVET H., DEMİRCALİ A., Köse T., KAHRAMAN Y., ERKAN K.  
The 3rd International Conference on Engineering and Natural Sciences (ICENS), 3 - 07 May 2017
- XXXV. **A new design concept of magnetically levitated 4 pole hybrid mover driven by linear motor**  
BUCAK M., Bozkurt A. F., ERKAN K., Uvet H.  
2017 IEEE International Conference on Robotics and Automation, ICRA 2017, Singapore, Singapore, 29 May - 03 June 2017, pp.596-601
- XXXVI. **HIGHLY PRICE MICRO-ROBOT MANIPULATION**  
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- LXIV. **On-Chip Disposable Compact Vision System**  
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- LXXI. **Compact Vision System Design and Application on a PDMS Chip**  
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- LXXII. **Compact Vision System on a Chip Application**  
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## Supported Projects

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- Saltürk S., Barman H. A., Üvet H., Doğan S. M., BALCI İ. C., TUBITAK Project, Doktorun gözü: Giyilebilir kalp - akciğer takip cihazı, 2023 - 2025
- ÜVET H., ERKAN K., ŞAHİN O., GÜVEN R., KIRABALI U. G., Project Supported by Higher Education Institutions, Süper Paramanyetik Demir Oksit Nanoparçacık(SPION) Hedeflemeli Derin Doku Foto-Akustik Mikroskopi, 2023 - 2024
- Üvet H., Ünal S., UĞRAŞ T., Erasmus Project, Save Life: Reorganizing Basic/Advanced Life Support Training Through the Use of Innovative Digital Materials, 2022 - 2024
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- Saltürk S., Üvet H., TUBITAK Project, Teniste Yapay Zeka Destekli Sanal Spor Koçu, 2022 - 2024
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- Edalı M., Aydın N., Özkaya B., Hacar M., Özügül M. D., Demir Ö., Saraçoğlu A., Bakırman T., Alp S., Şeker Ş., et al., Ministry of Transport, Sürdürülebilir ve Akıllı Hareketlilik Stratejisi ve Eylem Planının Oluşturulması, 2021 - 2023
- Üvet H., Kirbali U. G., TUBITAK Project, Medikal Alanda Kullanılmak Üzere Lenssiz Holografik Tomogram Geliştirilmesi, 2021 - 2022
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- Akdoğan E., Livatyali H., Üvet H., Ömürlü V. E., TUBITAK Project, Yıldız Technical University R & D Strategy Document (Mechatronics) - 1000-Support Program for Increasing Research and Development Potential of Universities, 2016 - 2017
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- Üvet H., Koşar A., TUBITAK Project, Hidrodinamik Kaviteye Dayanan Medikal Uygulamalar İçin Kullanılacak Ulusal Endoskopik Cihaz Tasarımı ve Geliştirilmesi, 2013 - 2016
- Üvet H., Erkan K., TUBITAK Project, Design and Visual Feedback Position Control of Flexible Conveyance System Based on Electromagnetic Suspension System Driven by Planar Linear Motor, 2012 - 2015
- Üvet H., Hazar A. B., Project Supported by Higher Education Institutions, Süperkritik Akışkan Ekstraksiyonu Yöntemi ile Mikrokapül Üretimi, 2012 - 2012

## Patent

- Üvet H., ELEKTRİK DİPOL ALAN İLE SAÇILIM KONTROLLÜ AKTİF DİELEKTRİK NANOREZONATÖR, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Recourse Number: PCT/TR2022/050055 , Standard Registration, 2022
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- Üvet H., TEMASSIZ TAŞIMA SİSTEMİ, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Recourse Number: 2019/10205 , Standard Registration, 2019
- Erkan K., ÜVET H., MİKRO ROBOT SİSTEMİ, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2015 16147 , Standard Registration, 2018
- Üvet H., Kanat Çırpan Hava Araçları İçin Geliştirilmiş Kanat Çırpa Mekanizması, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Recourse Number: 2017/23485 , Standard Registration, 2017

## Peer Reviews in Scientific Publications

- Vision-based Shape and Motion Analysis of Cells Fast-flowing in a Microchannel, SCI Journal, June 2013
- Improved Laser Manipulation for On-chip Fabricated Microstructures based on Solution Replacement and Its Application in Single Cell Analysis, SCI Journal, April 2013

## Metrics

- Publication: 122
- Citation (WoS): 108
- Citation (Scopus): 244
- H-Index (WoS): 6
- H-Index (Scopus): 10

## Invited Talks

- An Introduction to LOC Devices, Conference, Dokuz Eylül Üniversitesi, Turkey, September 2019
- 2019 6th International Conference On Electrical And Electronics Engineering (ICEEE 2019), Conference, Gazi Üniversitesi, Turkey, April 2019
1. Basic Oncology Symposium, Workshop, Dokuz Eylül Üniversitesi, Turkey, May 2018
- 2017 4th International Conference on Electrical and Electronics Engineering (ICEEE2017), Conference, Gazi Üniversitesi, Turkey, April 2017
- International Conference on Electrical and Electronics Engineering (ICEEE 2015) /Micro-Nano Robotics Technologies, Conference, American Society for Research, Turkey, April 2015

## Scholarships

MEXT Scholarship, Official Institutions of Foreign Countries, 2004 - 2009

## Awards

Demirçalı A. A., Erkan K., Üvet H., Pasif Diyamanyetik Levitasyon Kullanılarak Mikrorobotun Yanal Kuvvetlerinin Artırılması, Otomatik Kontrol Türk Milli Komitesi, September 2019

Üvet H., Aydemir G., Karadağ A., Ömeroğlu S., Oruç M. E., Başbınar Y., Esmer G. B., Tailor of Science Reward, 2Nd International Cancer & Ion Channels Congress , September 2019

Üvet H., Yeni Nesil Uçan Araç Teknolojisi, Tet Ar-Ge Proje Pazarı, October 2018

Üvet H., En İyi Makale Ödülü , Tork 2018 (Turkey Robotics Science Conference), September 2018

Üvet H., En İyi Makale Ödülü, Tok 2017 (Turkey Automatic Control Conference), November 2017

Üvet H., Elginkan Vakfı Teknoloji Ödülü, Elginkan Vakfı, April 2016

Üvet H., En İyi Makale Ödülü, 5. Ulusal Nanoteknoloji Kongresi, February 2015

Üvet H., En İyi Makale Ödülü, Ieee International Conference On Robotics And Biomimetic 2009, June 2009

## Non Academic Experience

BİLİM SANAYİ VE TEKNOLOJİ BAKANLIĞI, İzleyici Hakemliği

TÜBİTAK, TEYDEB Hakemliği

TÜBİTAK, TEYDEB İzleyici Hakemliği

BİLİM SANAYİ VE TEKNOLOJİ BAKANLIĞI, Proje Hakemliği

DHL Lojistik, Danışman

Turk Hava Yolları, Danışman