

Assoc. Prof. Yunus Ziya ARSLAN

Personal Information

Office Phone: [+90 212 473 7070](tel:+902124737070) Extension: 17748

Fax Phone: [+90 212 473 7180](tel:+902124737180)

Email: yzarlan@istanbul.edu.tr

Web: <https://www.yunusziya.com/>

Address: İstanbul Üniversitesi Mühendislik Fakültesi Makine Mühendisliği Bölümü A Blok Kat 7 34320 Avcılar İstanbul

Biography

Yunus Ziya Arslan received the B.S. degree in 2002, the M.S. degree in 2005, and the Ph.D. degree in 2009 all from the Department of Mechanical Engineering, Faculty of Engineering, Istanbul University, Turkey. He spent six months at the University of Calgary as a Visitor Researcher. He serves currently as an Associate Professor at the Department of Mechanical Engineering, Faculty of Engineering, Istanbul University. His research areas include musculoskeletal biomechanics, dental biomechanics, tissue biomechanics, computational biomechanics, and modeling and control of robotic manipulators.

Education Information

Doctorate, İstanbul University, Institute of Graduate Studies In Sciences, Makine Mühendisliği Abd, Turkey 2005 - 2009
Postgraduate, İstanbul University, Institute of Graduate Studies In Sciences, Makine Mühendisliği Abd, Turkey 2002 - 2005

Undergraduate, İstanbul University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1998 - 2002

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Health&Medicine, First European Computational Motor Control Summer School, Montpellier, Fransa (Organizer: Dr. Nicolas Schweighofer, Dr. Denis Mottet), 2014

Education Management and Planning, Motor Control Summer School-XI, Bled, Slovenia (Organizer: Dr. Mark Latash), 2014

Health&Medicine, SpineFX Workshop: Research Management Skills for the Biomedical Engineer, Leeds Üniversitesi, İngiltere, 2011

Education Management and Planning, Ziyaretçi Araştırmacı, University of Calgary, Faculty of Kinesiology, 2008

Dissertations

Doctorate, Kas iskelet sisteminin mekaniği ve kuvvet optimizasyonu analizi, İstanbul University, Institute of Graduate Studies In Sciences, Makine Mühendisliği Abd, 2009

Postgraduate, İnsanın iki kolunun ortak hareketi esnasında oluşan eklem momentlerinin elektromyografi sinyalleri
yardımıyla analizi, Istanbul University, Institute of Graduate Studies In Sciences, Makine Mühendisliği Abd, 2005

Research Areas

Biomedical Engineering, Biomechanics, Mechanical Engineering, Machine Theory and Dynamics, Robotics, Modeling and Simulation of Dynamic Systems, Engineering and Technology

Academic Titles / Tasks

Associate Professor, İstanbul University, Mühendislik Fakültesi, Makine Mühendisliği, 2015 - Continues

Assistant Professor, İstanbul University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2010 - Continues

Research Assistant, İstanbul University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2002 - 2009

Courses

Strength of Materials, Undergraduate, 2016 - 2017

Sporda Uygulamalı Hareket Analizleri, Doctorate, 2016 - 2017

Tissue Biomechanics, Doctorate, 2016 - 2017

Robotiği Giriş, Undergraduate, 2016 - 2017

Sporda Biyomekanik Analizler, Doctorate, 2016 - 2017

Biomechanics, Postgraduate, 2016 - 2017, 2014 - 2015

Sporda Biyomekanik Analizler, Doctorate, 2015 - 2016

Mukavemet, Undergraduate, 2015 - 2016

Mukavemet, Undergraduate, 2014 - 2015

Biomechanics, Undergraduate, 2014 - 2015

Seminer, Doctorate, 2015 - 2016

Advanced Biomechanics, Postgraduate, 2014 - 2015

Robotiği Giriş, Undergraduate, 2014 - 2015

Sporda Uygulamalı Hareket Analizi , Doctorate, 2015 - 2016

Biyomekanik, Undergraduate, 2013 - 2014

Metalurji Mühendisleri için Mukavemet, Undergraduate, 2012 - 2013

Advising Theses

ARSLAN Y. Z., Kinezyolojik Bantlama ve Kontralateral Kuvvet Yayılımı Arasındaki İlişkinin Belirlenmesi, Doctorate,
H.Denizoğlu(Student), Continues

ARSLAN Y. Z., Titreşime Maruz Kalan İnsan Vücudunun Omurga Bölgesinin Biyomekanik Analizi, Doctorate,
S.Cansel(Student), Continues

ARSLAN Y. Z., Kronik Venöz Yetmezliği Olan Hastalar için Yeni Bir Kompresyon Çorabı Tasarımı, Postgraduate,
S.Karakoç(Student), Continues

ARSLAN Y. Z., Fleksör Tendon Yaralanması Olan Hastalarda Ultrasonografi Kullanarak Tendon Kaymasının Ölçülmesi,
Postgraduate, B.Ay(Student), Continues

ARSLAN Y. Z., İskelet Kaslarının Modellenmesi ve Biyomekanik Analizi, Doctorate, F.Örteş(Student), Continues

ARSLAN Y. Z., Dinamik Kasılma Esnasındaki Kas Koordinasyonunun Biyomekanik Analizi, Doctorate,
N.Korkmaz(Student), Continues

ARSLAN Y. Z., Mandibular Toplam Dişsizlik Tedavisinde Kullanılan Dental Implantların Farklı Yerleşim
Kombinasyonlarının Analizi, Postgraduate, S.Kahya(Student), Continues

ARSLAN Y. Z., İnsan Elinin Pozisyon ve Kuvvetlerinin Kestirimi Amacıyla EMG Sinyallerinin Sınıflandırılması, Postgraduate, R.Yilmaz(Student), 2017

YAĞIZ N., ARSLAN Y. Z., Dinamik Kasılma Esnasındaki Kas Koordinasyonunun Biyomekanik Analizi, Doctorate, N.Korkmaz(Student), 2017

ARSLAN Y. Z., Spina Bifida Hastalığı olan Çocuklar için Ayak-Ayak Bileği Ortezi Tasarımı, Doctorate, K.Sürmen(Student), 2016

ARSLAN Y. Z., Oral Cerrahide Kullanılmak Üzere Yeni Bir Doku Sabitleme Sisteminin Geliştirilmesi, Postgraduate, D.Karabulut(Student), 2016

Jury Memberships

Doctoral Examination, Doktora yeterlilik jürisi, Boğaziçi Üniversitesi Makine Mühendisliği Bölümü, February, 2017
Doctorate, Doktora tez savunma jürisi, İstanbul Üniversitesi Diş Hekimliği Fakültesi, August, 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Machine learning-based prediction of joint moments based on kinematics in patients with cerebral palsy**
Ozates M. E., KARABULUT D., Salami F., Wolf S. I., Arslan Y. Z.
JOURNAL OF BIOMECHANICS, 2023 (SCI-Expanded)
- II. **Patellar Tendon Advancement for the Treatment of Crouch Gait in Patients with Cerebral Palsy**
KARABULUT D., Arslan Y. Z., Salami F., Wolf S., Goetze M.
GAIT & POSTURE, pp.11-12, 2023 (SCI-Expanded)
- III. **Predicting Joint Moments from Kinematics in Patients with Cerebral Palsy using Deep Learning**
Ozates M. E., Karabulut D., Salami F., Wolf S., Arslan Y. Z.
GAIT & POSTURE, pp.28-29, 2023 (SCI-Expanded)
- IV. **The prolonged effect of Kinesio Taping on joint torque and muscle activity**
Kulli H. D., KARABULUT D., Arslan Y. Z.
SOMATOSENSORY AND MOTOR RESEARCH, no.1, pp.39-45, 2023 (SCI-Expanded)
- V. **Sensitivity of muscle force response of a two-state cross-bridge model to variations in model parameters**
ÖRTEŞ F., Jinha A., Herzog W., Arslan Y. Z.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.236, no.10, pp.1513-1520, 2022 (SCI-Expanded)
- VI. **Evaluation of various design concepts in passive ankle-foot orthoses using finite element analysis**
SÜRMEN H. K., Arslan Y. Z.
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.24, no.6, pp.1301-1307, 2021 (SCI-Expanded)
- VII. **Biomechanical assessment of patellar tendon advancement in patients with cerebral palsy and crouch gait**
KARABULUT D., Arslan Y. Z., Salami F., Wolf S., Gotze M.
KNEE, vol.32, pp.46-55, 2021 (SCI-Expanded)
- VIII. **The Impact of Patellar Tendon Advancement on Knee Joint Moment and Muscle Forces in Patients with Cerebral Palsy**
KARABULUT D., Arslan Y. Z., Gotze M., Wolf S.
LIFE-BASEL, vol.11, no.9, 2021 (SCI-Expanded)
- IX. **Effect of Model Parameters on the Biomechanical Behavior of the Finite Element Cervical Spine Model**
DOĞRU S. C., Arslan Y. Z.

- APPLIED BIONICS AND BIOMECHANICS, vol.2021, 2021 (SCI-Expanded)
- X. SENSITIVITY OF MODEL-PREDICTED MUSCLE FORCES OF PATIENTS WITH CEREBRAL PALSY TO VARIATIONS IN MUSCLE-TENDON PARAMETERS
Arslan Y. Z., KARABULUT D.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.21, no.1, 2021 (SCI-Expanded)
- XI. Biomechanical comparison of implantation approaches for the treatment of mandibular total edentulism
Arslan Y. Z., KARABULUT D., Kahya S., Cansiz E.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.234, no.10, pp.1139-1150, 2020 (SCI-Expanded)
- XII. CHANGES IN BONE MINERAL DENSITY AFTER TOTAL KNEE ARTHROPLASTY
Dincel Y. M., Sari A., Tekin C., Gunaydin B., Cetin M. U., Arslan Y. Z.
ACTA ORTOPEDICA BRASILEIRA, vol.28, no.5, pp.247-250, 2020 (SCI-Expanded)
- XIII. Direct Validation of Model-Predicted Muscle Forces in the Cat Hindlimb During Locomotion
KARABULUT D., DOĞRU S. C., Lin Y., Pandy M. G., Herzog W., Arslan Y. Z.
JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME, vol.142, no.5, 2020 (SCI-Expanded)
- XIV. Experimental investigation of biodynamic human body models subjected to whole-body vibration during a vehicle ride.
Taskin Y., Hacioglu Y., Ortes F., Karabulut D., Arslan Y. Z.
International journal of occupational safety and ergonomics : JOSE, vol.25, pp.530-544, 2019 (SSCI)
- XV. Force irradiation effect of kinesiotaping on contralateral muscle activation
Kulli H. D., KARABULUT D., SAKA T., AKAN A., ARSLAN Y. Z.
HUMAN MOVEMENT SCIENCE, vol.66, pp.310-317, 2019 (SCI-Expanded)
- XVI. Biomechanical, histological, and radiological effects of different phosphodiesterase inhibitors on femoral fracture healing in rats
Dincel Y. M., Alagoz E., Arikan Y., Caglar A. K., Dogru S. C., Ortes F., Arslan Y. Z.
JOURNAL OF ORTHOPAEDIC SURGERY, vol.26, no.2, 2018 (SCI-Expanded)
- XVII. EFFECTS OF HIGH-DOSE VITAMIN C AND HYALURONIC ACID ON TENDON HEALING
Dincel Y. M., Adanir O., Arikan Y., Caglar A. K., Dogru S. C., Arslan Y. Z.
ACTA ORTOPEDICA BRASILEIRA, vol.26, no.2, pp.82-85, 2018 (SCI-Expanded)
- XVIII. A REVIEW OF FINITE ELEMENT APPLICATIONS IN ORAL AND MAXILLOFACIAL BIOMECHANICS
Dogru S. C., Cansiz E., Arslan Y. Z.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.18, no.2, 2018 (SCI-Expanded)
- XIX. Effects of low molecular weight heparin and rivaroxaban on rat Achilles tendon healing
Eren Y., Adanir O., Dincel Y. M., Genc E., Arslan Y. Z., Caglar A.
EKLEM HASTALIKLARI VE CERRAHISI-JOINT DISEASES AND RELATED SURGERY, vol.29, no.1, pp.13-19, 2018 (SCI-Expanded)
- XX. Object-Oriented Programming in Computer Science
Yilmaz R., Sezgin A., Kurnaz S., Arslan Y. Z.
ENCYCLOPEDIA OF INFORMATION SCIENCE AND TECHNOLOGY, 4TH EDITION, pp.7470-7480, 2018 (SCI-Expanded)
- XXI. General Perspectives on Electromyography Signal Features and Classifiers Used for Control of Human Arm Prosthetics
Ortes F., Karabulut D., Arslan Y. Z.
ENCYCLOPEDIA OF INFORMATION SCIENCE AND TECHNOLOGY, 4TH EDITION, pp.492-504, 2018 (SCI-Expanded)
- XXII. Design, Manufacture, and Selection of Ankle-Foot-Orthoses
Surmen H. K., Akalan N. E., Arslan Y. Z.
ENCYCLOPEDIA OF INFORMATION SCIENCE AND TECHNOLOGY, 4TH EDITION, pp.298-313, 2018 (SCI-Expanded)
- XXIII. A Novel Dorsal Trimline Approach for Passive-Dynamic Ankle-Foot Orthoses
Surmen H. K., AKALAN N. E., Fetvaci M. C., Arslan Y. Z.
STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.64, no.3, pp.185-194, 2018 (SCI-Expanded)

- XXIV. **THE IMPORTANCE OF FUNDUS AUTOFLUORESCENCE (FAF) IMAGING TO ESTABLISH PATIENT ELIGIBILITY FOR THE ARGUS (R) II RETINAL PROSTHESIS SYSTEM**
 Koyluoglu N., Sahin O., Arslan Y. Z., Arslantas R., Pallikaris I.
EUROPEAN JOURNAL OF OPHTHALMOLOGY, vol.27, no.2, 2017 (SCI-Expanded)
- XXV. **Computer-Aided Design and Manufacturing of a Novel Maxillofacial Surgery Instrument: Application in the Sagittal Split Osteotomy**
 Cansiz E., Turan F., Arslan Y. Z.
JOURNAL OF MEDICAL DEVICES-TRANSACTIONS OF THE ASME, vol.10, no.4, 2016 (SCI-Expanded)
- XXVI. **Improving the ride comfort of vehicle passenger using fuzzy sliding mode controller**
 Arslan Y. Z., Sezgin A., Yagiz N.
JOURNAL OF VIBRATION AND CONTROL, vol.21, no.9, pp.1667-1679, 2015 (SCI-Expanded)
- XXVII. **EXPERIMENTAL ASSESSMENT OF LUMPED-PARAMETER HUMAN BODY MODELS EXPOSED TO WHOLE BODY VIBRATION**
 Arslan Y. Z.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.15, no.3, 2015 (SCI-Expanded)
- XXVIII. **COMPARATIVE EVALUATION OF THE MECHANICAL PROPERTIES OF RESORBABLE AND TITANIUM MINIPLATES USED FOR FIXATION OF MANDIBULAR CONDYLE FRACTURES**
 Cansiz E., Dogru S. C., Arslan Y. Z.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.15, no.2, 2015 (SCI-Expanded)
- XXIX. **Control of a Biomimetic Robot Hand Finger: Classical, Robust, and Intelligent Approaches**
 Arslan Y. Z., Taskin Y., Hacioglu Y., Yagiz N.
HANDBOOK OF RESEARCH ON ADVANCEMENTS IN ROBOTICS AND MECHATRONICS, pp.475-499, 2015 (SCI-Expanded)
- XXX. **Computer-assisted Design of Patient-specific Sagittal Split Osteotomy Guide and Soft Tissue Retractor**
 Cansiz E., Arslan Y. Z., Turan F., Atalay B.
JOURNAL OF MEDICAL AND BIOLOGICAL ENGINEERING, vol.34, no.4, pp.363-367, 2014 (SCI-Expanded)
- XXXI. **PREDICTION OF MUSCLE FORCES USING STATIC OPTIMIZATION FOR DIFFERENT CONTRACTILE CONDITIONS**
 Arslan Y. Z., Jinha A., Kaya M., Herzog W.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.13, no.3, 2013 (SCI-Expanded)
- XXXII. **Analysis of the vertical vibration effects on ride comfort of vehicle driver**
 Sezgin A., Arslan Y. Z.
JOURNAL OF VIBROENGINEERING, vol.14, no.2, pp.559-571, 2012 (SCI-Expanded)
- XXXIII. **Comparison of the Data Classification Approaches to Diagnose Spinal Cord Injury**
 Arslan Y. Z., Demirer R. M., Palamar D., Ugur M., Karamehmetoglu S. S.
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE, 2012 (SCI-Expanded)
- XXXIV. **MIMO fuzzy sliding mode controlled dual arm robot in load transportation**
 Hacioglu Y., Arslan Y. Z., Yagiz N.
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.348, no.8, pp.1886-1902, 2011 (SCI-Expanded)
- XXXV. **Load transportation by dual arm robot using sliding mode control**
 Yagiz N., Hacioglu Y., Arslan Y. Z.
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.24, no.5, pp.1177-1184, 2010 (SCI-Expanded)
- XXXVI. **Prediction of externally applied forces to human hands using frequency content of surface EMG signals**
 Arslan Y. Z., Adli M. A., Akan A., Baslo M. B.
COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.98, no.1, pp.36-44, 2010 (SCI-Expanded)
- XXXVII. **A quantitative skin impedance test to diagnose spinal cord injury**
 Karamehmetoglu S. S., Ugur M., Arslan Y. Z., Palamar D.
EUROPEAN SPINE JOURNAL, vol.18, no.7, pp.972-977, 2009 (SCI-Expanded)

- XXXVIII. **Fuzzy sliding mode control of a finger of a humanoid robot hand**
 Arslan Y. Z., Hacioglu Y., Yagiz N.
 EXPERT SYSTEMS, vol.26, no.3, pp.291-303, 2009 (SCI-Expanded)
- XXXIX. **PI+PD type fuzzy logic controlled dual-arm robot in load transfer**
 Hacioglu Y., Arslan Y. Z., Yagiz N.
 STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.54, no.5, pp.347-355, 2008 (SCI-Expanded)
- XL. **Prosthetic hand finger control using fuzzy sliding modes**
 Arslan Y. Z., Hacioglu Y., Yagiz N.
 JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS, vol.52, no.1, pp.121-138, 2008 (SCI-Expanded)
- XLI. **Sliding mode control of a finger for a prosthetic hand**
 Yagiz N., Arslan Y. Z., Hacioglu Y.
 JOURNAL OF VIBRATION AND CONTROL, vol.13, no.6, pp.733-749, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Design and Production of Subject Specific Insole using Reverse Engineering and 3D Printing Technology**
 SÜRMEN H. K., ÖRTEŞ F., ARSLAN Y. Z.
 International Journal of Engineering and Science Invention, vol.5, no.12, pp.11-15, 2016 (Peer-Reviewed Journal)
- II. **Sagital Split Osteotomi Rehberi Ve Yumuşak Doku Retraktörünün Tasarımı Ve Üretilimi**
 ARSLAN Y. Z., TURAN F., CANSIZ E.
 Süleyman Demirel Üniversitesi Mühendislik Bilimleri ve Tasarım Dergisi, vol.2, no.3, pp.135-140, 2014 (Peer-Reviewed Journal)
- III. **Interpretation of Muscle Fatigue Using Temporal and Spectral Moments of EMG Signals**
 ARSLAN Y. Z., GÜNDÖĞDU U., SAYIN A., AKAN A., KOCASOY ORHAN E., BASLO M. B.
 WSEAS Transactions on Signal Processing, no.2, pp.656-661, 2006 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Design, manufacture and selection of ankle-foot-orthoses**
 SURMEN H. K., AKALAN N. E., ARSLAN Y. Z.
 in: Encyclopedia of Information Science and Technology, Fourth Edition (10 Volumes), Mehdi Khosrow-Pour , Editor, Igi Global Publications, Hershey, pp.298-313, 2018
- II. **General Perspectives on Electromyography Signal Features and Classifiers Used for Control of Human Arm Prosthetics**
 ÖRTEŞ F., KARABULUT D., ARSLAN Y. Z.
 in: Encyclopedia of Information Science and Technology, Mehdi Khosrow-Pour, Editor, Igi Global Publications, Hershey, pp.492-504, 2018
- III. **General Perspectives on Electromyography Signal Features and Classifiers Used for Control of Human Arm Prosthetics**
 ÖRTEŞ F., Karabulut D., ARSLAN Y. Z.
 in: Encyclopedia of Information Science and Technology, Fourth Edition (10 Volumes), Mehdi Khosrow-Pour , Editor, Igi Global Publications, Hershey, pp.1-10, 2017
- IV. **Biyomekanik Uygulamalar İçin Temel Mekanik**
 ARSLAN Y. Z., ÖRTEŞ F.
 in: Temel Kinezyo-Mekanik, Akalan N.E., Temelli Y., Editor, İstanbul Tıp Kitabevleri, İstanbul, pp.1-81, 2016
- V. **Control of a Biomimetic Robot Hand Finger: Classical, Robust and Intelligent Approaches**
 ARSLAN Y. Z., HACIOĞLU Y., TAŞKIN Y., YAĞIZ N.
 in: Handbook of Research on Advancements in Robotics and Mechatronics, Habib M. K., Editor, Igi Global Publisher,

- Hershey, Pa, pp.475-499, 2015
- VI. **Control of a Biomimetic Robot Hand Finger: Classical, Robust and Intelligent Approaches**
 ARSLAN Y. Z., HACIOĞLU Y., TAŞKIN Y., YAĞIZ N.
 in: Handbook of Research on Advancements in Robotics and Mechatronics, Habib M. K., Editor, Igı Global Publisher, Hershey, Pa, pp.475-499, 2015
- VII. **Control of a Biomimetic Robot Hand Finger: Classical, Robust and Intelligent Approaches**
 ARSLAN Y. Z., Hacioglu Y., TAŞKIN Y., YAĞIZ N.
 in: Handbook of Research on Advancements in Robotics and Mechatronics, Habib M. K., Editor, Igı Global Publisher, Hershey, Pa, pp.475-499, 2015
- VIII. **Control of a Biomimetic Robot Hand Finger: Classical, Robust and Intelligent Approaches**
 ARSLAN Y. Z., Hacioglu Y., TAŞKIN Y., YAĞIZ N.
 in: Handbook of Research on Advancements in Robotics and Mechatronics, Habib M. K., Editor, Igı Global Publisher, Hershey, Pa, pp.475-499, 2015
- IX. **Control of a Biomimetic Robot Hand Finger: Classical, Robust and Intelligent Approaches**
 ARSLAN Y. Z., HACIOĞLU Y., TAŞKIN Y., YAĞIZ N.
 in: Handbook of Research on Advancements in Robotics and Mechatronics (2 Volumes), Habib M, Editor, Igı Global Publications, Hershey, pp.475-499, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **Modeling and simulation of the musculoskeletal system of the cat hind limb in Opensim**
 KARABULUT D., DOĞRU S. C., LIN Y., PANDY M., HERZOG W., ARSLAN Y. Z.
 8th World Congress of Biomechanics, Dublin, Ireland, 8 - 12 July 2018, pp.1
- II. **Argus II retinal implant application in a patient with history of epilepsy**
 Koyluoglu Unal N., Akkan F., Altindag E., Arslantas R., ARSLAN Y. Z.
 Artificial Vision 2017, Aachen, Germany, 1 December - 02 November 2017, pp.1
- III. **İstemli Hareketler Öncesinde Postural Kontrol Mekanizmasının İncelenmesi**
 Çelik H., Arpinar Avsar P., ARSLAN Y. Z.
 1. Yürüyüş ve Denge Kongresi, Ankara, Turkey, 21 - 23 September 2017, pp.1
- IV. **Dinamik Alt Ekstremite Hareketleri Sırasında Çoklu Kas Sinerjilerinin İncelenmesi**
 Arpinar Avsar P., ARSLAN Y. Z., Çelik H.
 28-29. Ulusal Biyofizik Kongresi, İstanbul, Turkey, 6 - 09 September 2017, pp.1
- V. **A musculoskeletal spine model for predicting spinal muscle forces of a human body exposed to whole body vibration**
 DOĞRU S. C., Qui Y., Yang M., ARSLAN Y. Z.
 6th International Conference on Whole Body Vibration Injuries, Gothenburg, Sweden, 19 - 21 June 2017, pp.1-2
- VI. **Computer aided design of custom-made miniplates for virtual planning in orthognathic surgery**
 Kara M. B., ÖRTEŞ F., CANSIZ E., ARSLAN Y. Z.
 9th International Symposium on Mechanics of Materials and Structures, Augustow, Poland, 4 - 08 June 2017, pp.92-94
- VII. **Rambling and trembling in the analysis of postural adjustments prior to the self-selected and reaction time tasks**
 Çelik H., ARSLAN Y. Z., Arpinar Avsar P.
 27th Annual Meeting of the Society for the Neural Control of Movement, Dublin, Ireland, 2 - 05 May 2017, pp.1
- VIII. **Evaluation of the gait characteristics of the patients subjected to iliac crest bone grafting**
 CANSIZ E., DOĞRU S. C., KARABULUT D., AKALAN N. E., ARSLAN Y. Z., TEMELLİ Y.
 23rd International Conference on Oral and Maxillofacial Surgery, Hongkong, Hong Kong, 31 March - 03 April 2017, pp.17-177
- IX. **Evaluation of the gait characteristics of the patients subjected to the Atrophic jaw augmentation,**
 Karabulut D., DOĞRU S. C., CANSIZ E., ARSLAN Y. Z., AKALAN N. E., TEMELLİ Y.

8. National Biomechanics Congress with International Participation, Ankara, Turkey, 19 - 23 October 2016, pp.1
- X. **Estimation of In Vivo Muscle Forces Using Artificial Neural Networks and EMG Signals**
ÖRTEŞ F., KARABULUT D., ARSLAN Y. Z., HERZOG W.
8. Ulusal Biyomekanik Kongresi, Ankara, Turkey, 19 - 23 October 2016, pp.1
- XI. **Evaluation of gait characteristics of patient subjected to the Atrophic jaw augmentation**
Karabulut D., DOĞRU S. C., CANSIZ E., ARSLAN Y. Z., AKALAN N. E., TEMELLİ Y.
8. National Biomechanics Congress with International Participation, Ankara, Turkey, 19 - 23 October 2016, pp.1
- XII. **Açık ve Kapalı Becerilerde Harekete Hazırlık Safhasında Vücut Salınımı Değişimlerinin İncelenmesi**
Arpinar Avsar P., Çelik H., ARSLAN Y. Z.
8. Ulusal Biyomekanik Kongresi, Ankara, Turkey, 19 - 23 October 2016, pp.1
- XIII. **Development of a computational musculoskeletal model of the cat hind limb**
KARABULUT D., DOĞRU S. C., ARSLAN Y. Z., LIN Y., PANDY M., HERZOG W.
International Conference of the Polish Society of Biomechanics-BIOMECHANICS 2016, Biala Podlaska, Poland, 5 - 07 September 2016, pp.1-2
- XIV. **Evaluation Of Preoperative And Postoperative Gait Analyses Of Patients Subjected To Iliac Crest Augmentation For The Treatment Of Maxillary Alveolar Atrophy**
CANSIZ E., DOĞRU S. C., KARABULUT D., ARSLAN Y. Z., TEMELLİ Y., AKALAN N. E.
TOAMS 2016, Muğla, Turkey, 26 - 30 May 2016, pp.34
- XV. **Evaluation Of Morbidity Following Anterior Iliac Crest Bone Grafting For The Reconstruction Of Deficient Alveolar Ridges Via General And Combined Spinal Epidural Anesthesia**
CANSIZ E., DOĞRU S. C., Karabulut D., ARSLAN Y. Z., TEMELLİ Y., AKALAN N. E., ŞİTİLCİ A. T.
TAOMS 2016, Muğla, Turkey, 26 - 30 May 2016, pp.34
- XVI. **Effects of a functional exercise program on injury prevention in young male soccer players**
bulat m., dinç e., begovic h., ARSLAN Y. Z., BAYRAKTAR B.
CASEM 2016 Victoria, 19 - 21 May 2016
- XVII. **Mechanical analysis of an ankle-foot orthosis using finite element method**
SURMEN H. K., FETVACI M. C., ARSLAN Y. Z.
International Conference on Research in Education and Science (ICRES), Muğla, Turkey, 19 - 22 May 2016, pp.1635-1639
- XVIII. **Evaluation of an ankle-foot-orthosis designed for children with spina bifida**
SURMEN H. K., AKALAN N. E., ARSLAN Y. Z., TEMELLİ Y.
International Conference on Research in Education and Science (ICRES), Muğla, Turkey, 19 - 22 May 2016, pp.1630-1634
- XIX. **An educational application of 3d printing technique used for insole production**
SURMEN H. K., ORTES F., ARSLAN Y. Z.
International Conference on Education in Mathematics, Science& Technology (ICEMST), Muğla, Turkey, 19 - 22 May 2016, pp.1-5
- XX. **A biomechatronic application on prosthetics for undergraduate engineering students**
ORTES F., SURMEN H. K., ARSLAN Y. Z.
International Conference on Education in Mathematics, Science& Technology (ICEMST), Muğla, Turkey, 19 - 22 May 2016, pp.1-4
- XXI. **Effects of a Functional Exercise Program on Injury Prevention in Young Male Soccer Players**
Bulat M., DİNÇ E., Begovic H., ARSLAN Y. Z., BAYRAKTAR B.
CASEM Annual Symposium 2016, Victoria, Canada, 19 - 21 May 2016, vol.26, no.3
- XXII. **Extraction and Classification of EMG signal features for the human arm prosthetics**
ÖRTEŞ F., KARABULUT D., ARSLAN Y. Z.
BİYOMUT, İstanbul, Turkey, 6 - 07 November 2015, pp.1-4
- XXIII. **Development and validation of a musculoskeletal model of the cat hind limb**
Karabulut D., DOĞRU S. C., ARSLAN Y. Z., Li Y. C., Pandy M., Herzog W.
BİYOMUT, İstanbul, Turkey, 6 - 07 November 2015, pp.1-4
- XXIV. **İnsan Kolu Protezleri için EMG Sinyallerinin Öz niteliklerinin Elde Edilmesi ve Sınıflandırılması**

- ÖRTEŞ F., Karabulut D., ARSLAN Y. Z.
BİYOMUT, İstanbul, Turkey, 5 - 06 November 2015, pp.1-4
- XXV. **Evaluation of gait characteristics of patient subjected to the atrophic jaw augmentation**
Karabulut D., DOĞRU S. C., CANSIZ E., ARSLAN Y. Z., AKALAN N. E., TEMELLİ Y.
International Conference on Electrical, Computer, Mechanical and Mechatronics Engineering, İstanbul, Turkey, 27 August - 28 November 2015, pp.1-5
- XXVI. **Application of a maxillofacial surgery instrument manufactured by laser sintering in the sagittal split osteotomy**
ARSLAN Y. Z., CANSIZ E., TURAN F.
8th International Symposium on Mechanics of Materials and Structures, Augustow, Poland, 31 May - 03 June 2015, pp.1-2
- XXVII. **Design and production of a novel computer assisted, patient specific sagittal split osteotomy guide and soft tissue retractor**
CANSIZ E., ARSLAN Y. Z., TURAN F.
7th International ACBID Congress, Antalya, Turkey, 29 May - 02 June 2015, pp.1-2
- XXVIII. **EVALUATION OF DIFFERENT FIXATION MATERIALS FOR MANDIBULAR CONDYLE FRACTURES**
DOĞRU S. C., CANSIZ E., ARSLAN Y. Z.
XIX International Conference on Mechanics in medicine and Biology, Bologna, Italy, 3 - 04 September 2014
- XXIX. **Design and manufacture of a patient-specific surgical device for sagittal split osteotomy**
ARSLAN Y. Z., TURAN F., CANSIZ E.
7th World Congress of Biomechanics, Boston, United States Of America, 6 - 11 July 2014, pp.1
- XXX. **16. Ulusal Makina Teorisi Sempozyumu**
SEZGİN A., ARSLAN Y. Z., YAĞIZ N.
Yol Kaynaklı Taşit Titreşimlerinin İnsan Vücudu Üzerindeki Etkisinin Kayan Kipli Kontrolcü ile Azaltılması, Erzurum, Turkey, 11 - 12 September 2013, vol.1, pp.34-41
- XXXI. **Yol Kaynaklı Taşit Titreşimlerinin İnsan Vücudu Üzerindeki Etkisinin Kayan Kipli Kontrolcü ile Azaltılması**
SEZGİN A., ARSLAN Y. Z., YAĞIZ N.
16. Ulusal Makina Teorisi Sempozyumu, Erzurum, Turkey, 1 - 04 September 2013, vol.1, no.1, pp.34-41
- XXXII. **Static optimization solution to the force sharing problem**
ARSLAN Y. Z., Kaya M., Jinha A., Herzog W.
XXIV Congress of the International Society of Biomechanics, Natal, Brazil, 4 - 09 August 2013, pp.1-2
- XXXIII. **Evaluation of muscle force predictions using optimization theory**
Arslan Y. Z., Kaya M., Herzog W.
1st International Conference on Mathematical Modelling in Physical Sciences (IC-MSQUARE), Budapest, Hungary, 3 - 07 September 2012, vol.410
- XXXIV. **Can we determine the level of spinal cord injury in a quantitative manner?**
ARSLAN Y. Z., Palamar D., KARAMEHMETOĞLU Ş. S., UĞUR M.
23rd International Society of Biomechanics Congress, Brüksel, Belgium, 3 - 07 July 2011, pp.1
- XXXV. **Assessment of force prediction performances of the phenomenological musculotendinous unit models**
ARSLAN Y. Z., ULUS T., YAĞIZ N.
XV Scientific Convention of Engineering and Architecture (CCIA 15), Havana, Cuba, 29 November - 03 December 2010, vol.1, pp.1
- XXXVI. **The determination of the level of spinal cord injury according to the measurement of skin resistance**
KARAMEHMETOĞLU Ş. S., UĞUR M., ARSLAN Y. Z., PALAMAR D., GÖKDEMİR A.
46th ISCoS Annual Scientific Meeting, Iceland, pp.110
- XXXVII. **Simultaneous trajectory manipulation of a dual-arm robot using sliding mode control**
YAĞIZ N., HACIOĞLU Y., ARSLAN Y. Z.
Proceedings of the 12-th International Conference on Aerospace Sciences & Aviation Technology, Kahire, Egypt, 29 - 31 May 2007, vol.1, pp.1-12

- XXXVIII. **PI-type fuzzy logic control of a dual arm robot**
Hacioglu Y., Arslan Y. Z., Akan A., Yagiz N.
9th WSEAS International Conference on Automatic Control, Modeling and Simulation, İstanbul, Turkey, 27 - 29 May 2007, pp.42-43
- XXXIX. **Observations on the characteristics of EMG signals recorded at different depths**
ARSLAN Y. Z., Tunç M., KOCASOY ORHAN E., BASLO M. B.
Proceedings of the 5th European Symposium on Biomedical Engineering, Patras, Greece, 7 - 09 July 2006, pp.1-4
- XL. **Robust control of a prosthetic hand finger**
YAGIZ N., HACIOĞLU Y., ARSLAN Y. Z.
5th European Symposium on Biomedical Engineering, Greece, pp.1-4
- XLI. **Modeling and control of a humanoid robot hand finger**
ARSLAN Y. Z., HACIOĞLU Y.
5th International Symposium on Intelligent Manufacturing Systems, Turkey, pp.1141-1149
- XLII. **Investigation of Muscle Fatigue Using Temporal and Spectral Moments**
GÜNDÖĞDU U., SAYIN A., AKAN A., ARSLAN Y. Z., KOCASOY ORHAN E., BASLO M. B.
The 5th WSEAS International Conference on Signal Processing, Turkey, pp.10-14
- XLIII. **Investigation of the relationship between EMG signals and the forces applied to human arms**
ARSLAN Y. Z., Adlı M. A., AKAN A.
Proceedings of the 4th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 7 - 11 December 2005, pp.199-203
- XLIV. **Estimation of the forces applied to human arm by EMG signals Insan koluna uygulanan kuvvetlerin EMG sinyalleri ile kestirimi**
Arslan Y. Z., Akan A., Baslo M. B.
IEEE 13th Signal Processing and Communications Applications Conference, SIU 2005, Kayseri, Turkey, 16 - 18 May 2005, vol.2005, pp.199-202
- XLV. **Estimation of the human arm tip forces by using EMG signals**
ARSLAN Y. Z., AKAN A., Adlı M. A.
3rd European Medical and Biological Engineering Conference, Prag, Czech Republic, 20 - 25 November 2005, vol.11, pp.1-6
- XLVI. **İnsan Koluna Uygulanan Kuvvetlerin Emg Sinyalleri Yardımıyla Analizi**
ARSLAN Y. Z., AKAN A., ADLI M., UĞUR M., BASLO M. B.
II. Ulusal Biomekanik Kongresi, İstanbul, Turkey, 1 - 04 November 2004, pp.113-121

Supported Projects

ARSLAN Y. Z., TUBITAK Project, Çok eklemli vücut hareketlerinin gerçekleştirilmesinde motor kontrol mekanizmalarının incelenmesi, 2015 - Continues
CANSIZ E., ARSLAN Y. Z., TURAN F., Project Supported by Higher Education Institutions, APPLICATION OF NEWLY DESIGNED PATIENT SPESIFIC SAGITTAL SPLIT OSTEOTOMY GUIDE AND SOFT TISSUE RETRACTOR, 2016 - 2016

Activities in Scientific Journals

Journal of Low Frequency Noise, Vibration & Active Control, Special Issue Editor, 2016 - Continues
Journal of Medical Research and Development, Publication Committee Member, 2012 - 2015
American Journal of Biomedical Engineering , Publication Committee Member, 2011 - 2015

Memberships / Tasks in Scientific Organizations

International Society of Biomechanics, Member, 2008 - Continues
TMMOB Makina Mühendisleri Odası, Member, 2002 - Continues

Scientific Refereeing

Journal of Mechanics in Medicine and Biology, Journal Indexed in SSCI, April 2017
Medical & Biological Engineering & Computing, SCI Journal, April 2017
Gait and Posture, SCI Journal, March 2017
Journal of Biomechanics, SCI Journal, March 2015
TÜBİTAK TEYDEP, Other Journals, January 2015
Medical&Biological Engineering&Computing, SCI Journal, March 2014
Medical&Biological Engineering&Computing, SCI Journal, December 2013
Computer Methods and Programs in Biomedicine, SCI Journal, June 2013
American Journal of Biomedical Engineering, Other Indexed Journal, June 2013
Journal of Low Frequency Noise Vibration and Active Control, Journal Indexed in SSCI, June 2013
TUBITAK Project, June 2013
Turkish Journal of Electrical Engineering & Computer Sciences , Journal Indexed in SSCI, May 2013
Journal of Vibration and Control, SCI Journal, March 2013
Acta Biotheoretica, SCI Journal, March 2013
Journal of Mechanics in Medicine and Biology , SCI Journal, February 2013
Digital Signal Processing, SCI Journal, November 2012
Journal of Vibroengineering, SCI Journal, November 2012
TUBITAK Project, November 2012

Metrics

Publication: 99
Citation (WoS): 210
Citation (Scopus): 230
H-Index (WoS): 7
H-Index (Scopus): 7

Scholarships

2214 - YURT DIŞI ARAŞTIRMA BURS PROGRAMI (Doktora Öğrencileri İçin), TUBITAK, 2008 - Continues