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Publons / Web Of Science ResearcherID: AAZ-6632-2021

ScopusID: 7004588941

Yoksis Researcher ID: 163987

### Advising Theses

- ARIKAN M. A. S., Investigation of Damage in GFRP Tapered Composite Laminates, Doctorate, S.HOSSEINPOUR(Student), 2021
- ARIKAN M. A. S., YILDIRIM E., Numerical and experimental investigation of ultrasonic embossing technique for fabrication of thermoplastic microfluidic devices, Doctorate, F.ÇOĞUN(Student), 2018
- ARIKAN M. A. S., Dynamic modelling and analysis of gun turret elevation drive system, Postgraduate, Ç.ÇİLOĞLU(Student), 2016
- AKIN T., ARIKAN M. A. S., Development of new, simple, and robust wafer level hermetic packaging methods for MEMS sensors, Doctorate, M.MERT(Student), 2015
- AKIN T., ARIKAN M. A. S., A THREE AXIS CAPACITIVE MEMS ACCELEROMETER ON A MULTI-STACK SUBSTRATE, Doctorate, S.TEZ(Student), 2014
- ARIKAN M. A. S., Machining of polycarbonate for optical applications, Postgraduate, M.BOLAT(Student), 2013
- AKIN T., ARIKAN M. A. S., Wafer level vacuum packaging of MEMS sensors and resonators, Postgraduate, M.MERT(Student), 2011
- ARIKAN M. A. S., Rough cutting of germanium with polycrystalline diamond tools, Postgraduate, Ç.Yergök(Student), 2010
- ARIKAN M. A. S., A Feature Based Design Software for Parts To Be Machined in a Four-Axis CNC Lathe, Postgraduate, D.Hatipoğlu(Student), 2005

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

- I. **Utilization of cross-correlation function for assessment of replication quality in ultrasonic embossing of microchannels on polymethyl methacrylate**  
Yildirim E., Ulku M. K., Arıkan M. A. S.  
Polymer Engineering and Science, vol.64, no.7, pp.3227-3242, 2024 (SCI-Expanded)
- II. **Investigation of process-affected zone in ultrasonic embossing of microchannels on thermoplastic substrates**  
Sucularlı F., ARIKAN M. A. S., YILDIRIM E.  
JOURNAL OF MANUFACTURING PROCESSES, vol.50, pp.394-402, 2020 (SCI-Expanded)
- III. **Investigation on replication of microfluidic channels by hot embossing**  
Cogun F., Yıldırım E., Arıkan M. A. S.  
MATERIALS AND MANUFACTURING PROCESSES, vol.32, pp.1838-1844, 2017 (SCI-Expanded)
- IV. **Modeling of paint flow rate flux for elliptical paint sprays by using experimental paint thickness**

## **distributions**

Arikan M., Balkan T.

INDUSTRIAL ROBOT-AN INTERNATIONAL JOURNAL, vol.33, no.1, pp.60-66, 2006 (SCI-Expanded)

- V. **Direct calculation of AGMA geometry factor J by making use of polynomial equations**  
Arikan M.  
MECHANICS RESEARCH COMMUNICATIONS, vol.29, no.4, pp.257-268, 2002 (SCI-Expanded)
- VI. **A kinematic structure-based classification and compact kinematic equations for six-dof industrial robotic manipulators**  
Balkan T., Ozgoren M., Arikan M., Baykurt H.  
MECHANISM AND MACHINE THEORY, vol.36, no.7, pp.817-832, 2001 (SCI-Expanded)
- VII. **Process simulation and paint thickness measurement for robotic spray painting**  
Arikan M., Balkan T.  
CIRP ANNALS-MANUFACTURING TECHNOLOGY, vol.50, no.1, pp.291-294, 2001 (SCI-Expanded)
- VIII. **Process modeling, simulation, and paint thickness measurement for robotic spray painting**  
Arikan M., Balkan T.  
JOURNAL OF ROBOTIC SYSTEMS, vol.17, no.9, pp.479-494, 2000 (SCI-Expanded)
- IX. **A method of inverse kinematics solution including singular and multiple configurations for a class of robotic manipulators**  
Balkan T., Ozgoren M., Arikan M., Baykurt H.  
MECHANISM AND MACHINE THEORY, vol.35, no.9, pp.1221-1237, 2000 (SCI-Expanded)
- X. **Modeling of paint flow rate flux for circular paint sprays by using experimental paint thickness distribution**  
Balkan T., Arikan M.  
MECHANICS RESEARCH COMMUNICATIONS, vol.26, no.5, pp.609-617, 1999 (SCI-Expanded)
- XI. **PROWELD: an off-line welding robot programming package with an interactive graphical interface**  
Balkan T., Arikan M., Bulut M.  
INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.12, pp.364-372, 1997 (SCI-Expanded)
- XII. **CONTACT STRESS AND SURFACE FATIGUE FAILURE ANALYSIS FOR COMBINED NORMAL AND TANGENTIAL LOADING**  
ARIKAN M.  
TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING, vol.18, no.3, pp.249-267, 1994 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **MEMS Malzeme Karakterizasyonu için Bütünleşik bir Elektrostatik Mikro Bükülme Test Yapısı Tasarımı ve Gerçekleştirilmesi**  
YILDIRIM E., AKIN T., ARIKAN M. A. S.  
Cankaya University Journal of Science and Engineering, vol.9, pp.9-23, 2012 (Peer-Reviewed Journal)
- II. **MEMS Malzeme Karakterizasyonu için Bütünleşik bir Elektrostatik Mikro Bükülme Test Yapısı Tasarımı ve Gerçekleştirilmesi**  
YILDIRIM E., ARIKAN M. A. S., AKIN T.  
Çankaya Üniversitesi Journal of Science and Engineering, vol.9, pp.9-23, 2012 (Non Peer-Reviewed Journal)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **An ultrasonic assisted method for fabricating metal layers on thermoplastic substrates for lab-on-a-chip**  
FARAHANI S., GÜMÜŞTAŞ A., ÜLKÜ M. K., TAMER U., ARIKAN M. A. S., YILDIRIM E.

Microfluidics 2022, Heidelberg, Germany, 11 July 2022, pp.58

**II. CHARACTERIZATION OF EMBEDDED MICROCHANNELS FABRICATED BY SLA**

Yıldırım E., Yaman U., Arıkan M. A. S.

4th INTERNATIONAL CONGRESS ON 3D PRINTING (ADDITIVE MANUFACTURING) TECHNOLOGIES AND DIGITAL INDUSTRY, Antalya, Turkey, 11 - 14 April 2019

**III. Cam Geometry Generation and Optimization for Torsion Bar Systems**

Kurtulmus E., ARIKAN M. A. S.

33rd IMAC Conference and Exposition on Structural Dynamics, Florida, United States Of America, 2 - 05 February 2015, pp.459-471

**IV. An electrostatically actuated parylene microvalve for lab on a chip applications**

YILDIRIM E., ARIKAN M. A. S., KÜLAH H.

16. International Conference on Solid State Sensors, Actuators and Micro Systems, 5 - 09 July 2011

**V. Design and Leakage Characterization of a Microvalve for Parylene Based Lab-on-a-Chip Systems**

Yıldırım E., Arıkan M. A. S., Külah H.

4. Mühendislik ve Teknoloji Sempozyumu, Ankara, Turkey, 28 - 29 April 2011

## **Metrics**

Publication: 20

Citation (WoS): 165

Citation (Scopus): 202

H-Index (WoS): 7

H-Index (Scopus): 8

## **Non Academic Experience**

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