

## Assoc. Prof. Meral BAYRAKTAR

### Personal Information

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34349 Beşiktaş /İstanbul

### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-4926-2020

ScopusID: 24447905400

Yoksis Researcher ID: 174997

### Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Makine Mühendisliği Anabilim Dalı, Turkey 2004 - 2010

Postgraduate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Makine Mühendisliği Anabilim Dalı, Turkey 2001 - 2004

Undergraduate, Yıldız Technical University, Mühendislik Mimarlık Fakültesi, Makine Mühendisliği Bölümü, Turkey 1997 - 2001

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Raylı taşıtların dingillerinin dinamik analizi, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Makine Muhendisligi / Mak.Teo.Sist. Din.Ve Titr., 2010

Postgraduate, Oynak Makarali Rulmanlarda Degme Analizi ve Elastohidrodinamik Yag Filmi Olusumu, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Makine Muhendisligi / Mak.Teo.Sist. Din.Ve Titr., 2004

### Research Areas

Mechanical Engineering, Machine Theory and Dynamics, Machine Dynamics, Mechanisms, Vehicle Systems Dynamics, Modeling and Simulation of Dynamic Systems, Mechanical Vibrations, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2021 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2018 - 2021

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2010 - 2018

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2001 - 2010

## Academic and Administrative Experience

Disiplinterdisciplinary Course Commissioninler Arası Ders Komisyonu , Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2024 - Continues

Erasmus Program Department Coordinator, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2021 - 2024

Yıldız Teknik Üniversitesi, Faculty of Mechanical Engineering, Makine Muhendisligi Bolumu, 2010 - 2012

## Courses

Dynamics of Mechanisms, Postgraduate, 2019 - 2020

Machine Dynamics, Undergraduate, 2019 - 2020

Machine Dynamics, Undergraduate, 2019 - 2020, 2018 - 2019

Automatic Control I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014

Bitirme Çalışması, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Proje 1, Undergraduate, 2019 - 2020, 2018 - 2019

Proje 2, Undergraduate, 2019 - 2020, 2018 - 2019

Makine Tasarımı 1, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Makine Tasarımı 2, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Mekanizmaların Dinamiği, Postgraduate, 2017 - 2018

Bitirme Çalışması, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Mechanical Vibrations, Undergraduate, 2018 - 2019

Automatic Control 1, Undergraduate, 2017 - 2018, 2015 - 2016

Machine Dynamics, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

## Advising Theses

Bayraktar M., Battery State of Health (SOH) Prediction Using Machine Learning (Makine Öğrenmesi ile Batarya Sağlık Durumu Tahmini), Postgraduate, K.GÜNER(Student), 2023

Bayraktar M., Yazıcı H., Tekerlekli zırhlı aracın doğrusal matris eşitsizlikleri tabanlı H-sonsuz kontrolör ile aktif titreşim kontrolü, Postgraduate, M.Fatih(Student), 2023

Bayraktar M., Steering Knuckle Design by Topology Optimization and Verification, Postgraduate, E.Şen(Student), 2021

Bayraktar M., ALÜMİNYUM SÜSPANSİYON BRAKETİNİN SONLU ELEMANLAR METODU İLE ANALİZİ VE ÖMÜR TAHMİNİ, Postgraduate, V.Nalçacıoğlu(Student), 2021

Bayraktar M., Evaluation of variable pitch and fixed pitch propeller effects on a designed test bench, Postgraduate, M.Şanlıtürk(Student), 2019

Bayraktar M., Modal analysis of Three Bladed Propeller in Situ, Postgraduate, S.Uslu(Student), 2019

Bayraktar M., Akkaya A. V., Değişken Hızlı Alternatif Akım Elektrik Motoru İle Tahrik Edilen Elektro-Hidrolik Yük Algılamalı Bir Abkant Presin Dinamik Performans Analizi, Postgraduate, A.Kandeniz(Student), 2019

Bayraktar M., Bayraktar S., Two-Dimensional Computational Analysis of Vortex-Induced Vibration, Postgraduate, O.MUTLU(Student), 2019

BAYRAKTAR M., Bir Hızlı Tren Modelinde Süspansiyon Parametrelerinin Optimizasyonu Ve Araç Dinamik Karakteristiğine Etkisi, Postgraduate, M.Tahtalı(Student), 2019  
BAYRAKTAR M., Alternatif sac bağlantı tekniği ve bu yöntemle üretilen tamburun dinamik analizi, Postgraduate, V.ÇERKEZ(Student), 2018  
BAYRAKTAR M., Küçük Çınlama Odası Tasarımı ve Akustik Malzemelerin Ses Yutum ve İletim Özelliklerinin Ölçümü, Postgraduate, Y.Cakirci(Student), 2018

## **Jury Memberships**

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, İstanbul Teknik Üniversitesi, February, 2024

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Kahramanmaraş Sütçü İmam Üniversitesi, November, 2023

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

- I. **Modeling and Simulation of Elevation Dynamics of Main Battle Tank Weapon System with Linear Graph Method**  
Çakır M. F., Sezer S., Bayraktar M.  
Arabian Journal for Science and Engineering, vol.49, no.8, pp.11157-11166, 2024 (SCI-Expanded)
- II. **Effects of geometric parameters on sound absorption performance of acoustic metasurface with subwavelength thickness**  
Baydur İ., Bayraktar M.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.39, no.3, pp.1417-1426, 2024 (SCI-Expanded)
- III. **Innovative computational modal analysis of a marine propeller**  
Uslu S., BAYRAKTAR M., DEMİR C., BAYRAKTAR S.  
APPLIED OCEAN RESEARCH, vol.113, 2021 (SCI-Expanded)
- IV. **Two-dimensional simulations of vortex-induced vibration of a circular cylinder**  
Mutlu A. O., BAYRAKTAR M., BAYRAKTAR S.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M: JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.235, no.3, pp.683-694, 2021 (SCI-Expanded)
- V. **Experimental and numerical investigation of clinched joint and implementation of the results to design of a tumble dryer**  
Bayraktar M., Cerkez V.  
Journal Of The Brazilian Society Of Mechanical Sciences And Engineering, vol.42, pp.1-12, 2020 (SCI-Expanded)
- VI. **Modelling of main battle tank and designing LQR controller to decrease weapon oscillations Ana muharebe tankinin modellenmesi ve silah salınımlarının azaltılması için LQR kontrolör tasarımı**  
Çakır M. F., BAYRAKTAR M.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.35, no.4, pp.1861-1876, 2020 (SCI-Expanded)
- VII. **Determination of critical section of wagon axle by considering dynamic and safety factors**  
Dikmen F., Bayraktar M., Güçlü R.  
Alexandria Engineering Journal, vol.58, no.2, pp.611-624, 2019 (SCI-Expanded)
- VIII. **Manufacturing polymer/metal macro-composite structure for vibration damping**  
Altan M., Bayraktar M., Yavuz B.  
International Journal of Advanced Manufacturing Technology, vol.86, pp.2119-2126, 2016 (SCI-Expanded)
- IX. **A New Approach for Reliability Life Prediction of Rail Vehicle Axle by Considering Vibration Measurement**

BAYRAKTAR M., GÜÇLÜ R., Tahrali N.

MATHEMATICAL PROBLEMS IN ENGINEERING, 2014 (SCI-Expanded)

- X. **Dynamic analysis of rail vehicle axle**  
DİKMEN F., BAYRAKTAR M., GUCLU R.  
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.38, no.2, pp.265-280, 2013 (SCI-Expanded)
- XI. **Railway Axle Analyses: Fatigue Damage and Life Analysis of Rail Vehicle Axle**  
DİKMEN F., BAYRAKTAR M., GÜÇLÜ R.  
STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.58, no.9, pp.545-552, 2012 (SCI-Expanded)
- XII. **Reliability and fatigue life evaluation of railway axles**  
BAYRAKTAR M., Tahrali N., GÜÇLÜ R.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.24, no.3, pp.671-679, 2010 (SCI-Expanded)
- XIII. **Numerical investigation of a water flow in a rib-roughened channel by using Reynolds stress model**  
Bayraktar S., Bayraktar M., Vardar N.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.22, no.5, pp.331-339, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Rayli tasitlarda dinamik hareketler ve titresim azaltma yöntemlerinin incelenmesi**  
Bayraktar M., Tahtali M.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.26, no.1, pp.9-20, 2020 (ESCI)
- II. **FREE VIBRATION ANALYSIS OF AN AIRCRAFT WING BY CONSIDERING AS A CANTILEVER BEAM**  
Demirtas A., Bayraktar M.  
Selçuk Üniversitesi Mühendislik, Bilim ve Teknoloji Dergisi, vol.7, no.1, pp.12-21, 2019 (Peer-Reviewed Journal)
- III. **Frenli Tas Menteşe Kinematik, Kinetik ve Yorulma Analizi**  
Bayraktar M., Bilyaz H., Demir C.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.22, no.2, pp.772-783, 2018 (Peer-Reviewed Journal)
- IV. **Vibration Analysis of 19 Degrees of Freedom Rail Vehicle**  
Dikmen F., Bayraktar M., Güçlü R.  
Scientific Research and Essays, vol.6, no.26, pp.5600-5608, 2011 (Peer-Reviewed Journal)
- V. **Zincir baklasında yük altında oluşan gerilmelerin sonlu elemanlar yöntemi ve fotoelastisite yöntemiyle incelenmesi**  
Azeloğlu C. O., Keskin Öner İ., Bayraktar M.  
Makine Teknolojileri Elektronik Dergisi (elektronik), vol.2008, no.5, pp.41-48, 2008 (Peer-Reviewed Journal)
- VI. **Gemilerde korozyon analizi ve korozyonu etkileyen faktörler**  
Bayraktar S., Barut M.  
Gemi ve Deniz Teknolojisi, vol.3, no.162, pp.1-4, 2004 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Acoustic Ventilation Metamaterial for Simultaneous Noise Reduction and Air Circulation**  
Baydur C., Bayraktar M., Huang S., Wang X., Bağcı F., Bayraktar S.  
4th International Naval Architecture and Maritime Symposium (Int-Nam 2023), İstanbul, Turkey, 11 - 13 October 2023, vol.1, no.1, pp.1-9
- II. **The Role of Rubber Coatings in Underwater Acoustic Metamaterial**  
Baydur C., Bayraktar M., Huang S., Wang X.  
4th International Naval Architecture and Maritime Symposium (Int-Nam 2023), İstanbul, Turkey, 11 - 13 October 2023, vol.1, no.1, pp.1-10
- III. **Improving acoustic performance of a triple-layer perforated panel by examining the geometric**

## **parameters**

Baydur C., Bayraktar M.

Turkish physical society 39th international physics congress,, Muğla, Turkey, 31 August - 04 September 2023, vol.1, no.1, pp.1-10

- IV. **Machine Learning Prediction of Battery State of Health (SOH)**  
Güner K., Bayraktar M.  
5th International Conference on Natural and Applied Science and Engineering (ICNASSEN 2023), Nevşehir, Turkey, 26 - 28 May 2023, vol.1, no.1, pp.1-10
- V. **Design strategy for low-frequency absorbing acoustic metasurfaces**  
Baydur C., Bayraktar M., Wang X.  
27. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 16 December 2022, pp.60
- VI. **Active Vibration Control of a Wheeled Armoured Vehicle with  $H_{\infty}$  Controller Based on Linear Matrix Inequalities**  
Çakır M. F., Bayraktar M., Yazıcı H.  
2nd Global Conference on Engineering Research - GLOBECER'22, Balıkesir, Turkey, 7 - 11 September 2022, pp.216-223
- VII. **Steering Knuckle Design, Optimization and CAE Verification**  
Sen E., Bayraktar M.  
II. International Conference on Innovative Engineering Applications (CIEA' 2021), Muş, Turkey, 20 - 22 May 2021, vol.1, no.1, pp.1-10
- VIII. **Aluminum suspension bracket fatigue life prediction for lightweight vehicles**  
Bayraktar M., Nalcacioglu V.  
5TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, İstanbul, Turkey, 17 - 19 December 2019, pp.1-10
- IX. **Dynamic Performance of a Hydraulic System Driven By a Variable Speed AC Electric Motor with Electro-Hydraulic Load Sensing**  
Kandeniz A., Bayraktar M., Akkaya A. V.  
International Symposium For Environmental Science and Engineering Research (ISESER 2019), Konya, Turkey, 25 - 27 May 2019, pp.94-100
- X. **1-DOF 2D URANS Simulatiom of Vortex-Induced Vibration of a Cylinder with Different Damping Parameters**  
Mutlu A. O., Bayraktar M., Bayraktar S.  
4th International Congress on Engineering, Architecture and Design, İstanbul, Turkey, 23 - 24 April 2019, vol.1, no.1, pp.1-10
- XI. **Designing, Implementation of Test Bench with PID Control for Variable Pitch Propeller system**  
Şanlıtürk M., Bayraktar M.  
4. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, İstanbul, Turkey, 23 April 2019, vol.1, no.1, pp.1-5
- XII. **Modeling and Vibration Analyses of a High Speed Rail Vehicle**  
Tahtali M., BAYRAKTAR M.  
4th International Conference on Advances in Mechanical Engineering (ICAME 2018), İstanbul, Turkey, 19 December 2018, vol.1, no.1, pp.1-10
- XIII. **CLINCHING STRENGTHS OF DIFFERENT SHEET METALS THAT CLINCHEDWITH SAME TOOLS AT SAME PRESS PARAMETERS**  
Cerkez V., Bayraktar M., Demir C.  
1st International Symposium on Graduate Research in Science: Focus on Entrepreneurship and Innovation,, İstanbul, Turkey, 04 October 2018, vol.1, no.1, pp.1-5
- XIV. **Numerical and Experimental Modal Analysis of a Three Bladed Marine Propeller**  
Uslu S., Bayraktar M.  
International Symposium on Naval Architecture and Maritime (INT-NAM), İstanbul, Turkey, 23 April 2018, vol.1, no.1, pp.1-10
- XV. **Traffic Noise Pollution of Istanbul D-100 Highway**

Ozkan B., BAYRAKTAR M.

Transist 2018 International Istanbul Transport Congress and Exhibition, İstanbul, Turkey, 01 December 2017, vol.1, no.1, pp.1-7

- XVI. **Bir raylı taşıtta farklı koşullar altında yolcu konforu analizi**  
AHAN A. O., ARISOY D. O., Müderrisoğlu K., BAYRAKTAR M., GÜÇLÜ R.  
Uluslararası Katılımlı 17. Makina Teorisi Sempozyumu, İzmir, Turkey, 14 June 2015, pp.1-6
- XVII. **Raylı Taşıt Ve Karayolu Taşıtı Trafiği Etkisi Altındaki Bir Asma Köprünün Dinamik Analizi**  
Müderrisoğlu K., Arısoy D. O., Ahan A. O., Bayraktar M., Güçlü R.  
Uluslararası Katılımlı 17. Makina Teorisi Sempozyumu, İzmir, Turkey, 14 - 17 June 2015, pp.1-11
- XVIII. **Roller Coaster Güzergahında Tanımlanan Noktasal Bir Cismin Dinamik Analizi**  
AHAN A. O., ARISOY D. O., Müderrisoğlu K., BAYRAKTAR M.  
XVI. Ulusal Makina Teorisi Sempozyumu, Erzurum, Turkey, 12 September 2013, pp.1-7
- XIX. **Static and Dynamic Analysis of Railway Wagon Trailer Bogie in Computer Environment**  
ARISOY D. O., AHAN A. O., Müderrisoğlu K., BAYRAKTAR M.  
1. International Workshop on Railway System Engineering, Karabük, Turkey, 11 October 2012, pp.1-7
- XX. **Raylı Taşıt Dingillerinin Dinamik Analizi**  
BAYRAKTAR M.  
Fikirler Pazarı Etkinliği, YÜTÜ Otağ-ı Hümayun, S.87, İstanbul, TÜRKİYE, 01 May 2011
- XXI. **Stress Analysis, Life and Reliability Evaluation for the Eccentric Press Shaft**  
BAYRAKTAR M.  
1st. International Scientific Conference on Engineering Manufacturing and Advanced Technologies (MAT 2010), Mostar, BOSNA and HERZEGOVİNA, 01 November 2010
- XXII. **Modelling of Air Springs in a Rail Vehicle**  
Bayraktar M., Güçlü R., Metin M.  
13th International Research/Expert Conference, Trends in the Development of Machinery and Associated Technology, TMT 2009, Nabeul, Tunisia, 16 - 21 October 2009, pp.829-832
- XXIII. **THE HIGHLIGHT OF GROWING LIGHT RAIL TRANSIT**  
Bayraktar M., Güçlü R.  
13th International Research/Expert Conference "Trends in the Development of Machinery and Associated Technology", Nabeul, Tunisia, 16 - 21 October 2009, pp.821-824
- XXIV. **Vibration of Rail Vehicles and Modelling of System by using Matlab**  
Bayraktar M., Güçlü R.  
VIBRATION OF RAIL VEHICLES AND MODELLING OF SYSTEM BY USING MATLAB, Nabeul, Tunisia, 16 - 21 October 2009, pp.825-829
- XXV. **Aks modellemesiyle hafif raylı taşıtın titreşimlerinin incelenmesi**  
Bayraktar M., Güçlü R., Metin M., Yazıcı H.  
14. Ulusal Makina Teorisi Sempozyumu UMTS 2009, ODTÜ Kuzey Kıbrıs Kampüsü, Güzelyurt, Cyprus (Kktc), 2 - 04 July 2009, pp.233-240
- XXVI. **Design of Rail Vehicle Axle Related to Failure and Life**  
BAYRAKTAR M.  
5. Uluslararası İleri Teknolojiler Sempozyumu (IATS 2009), Karabük, TÜRKİYE, 01 May 2009
- XXVII. **Systematic Design: Analysis of Natural Systems and Synectics Approach**  
Bayraktar M., Bayraktar S.  
European Conference for Academic Disciplines organized by Proceedings of the International Journal of Arts & Sciences Conference, 01-04 December 2008, Freiburg, Germany, 1 - 04 December 2008, vol.1, no.1, pp.1-8
- XXVIII. **Statical and Modal Analyses of Axle in a Light Rail**  
BAYRAKTAR M.  
International Journal of Arts&Sciences Conference (IJAS), Freiburg, GERMANY, 01 December 2008
- XXIX. **Investigation of the Effects of Turbulence on a 2-D Rib Roughened Channel**  
Bayraktar M., Bayraktar S., Yılmaz T.  
11th International Research/Expert Conference "Trends in the Development of Machinery and Associated

- Technology", (TMT 2007), Tunis, Tunisia, 5 - 09 September 2007, vol.1, no.1, pp.1-4
- XXX. **Investigation of the Effects of Turbulence on a 2-D Rib Roughened Pipe**  
BAYRAKTAR S.  
11th International Research/Expert Conference on Trends in the Development of Machinery and Associated Technologies (TMT 2007), 05-09 September, 2007, Hammamet, TUNISIA, 01 September 2007
- XXXI. **Hyperelastic Material Model of Rubber and Rubber-Like Materials**  
BAYRAKTAR M.  
11th International Conference Research/Expert Conference Trends in the Development of Machinery and Associated Technologies (TMT 2007), 01 September 2007
- XXXII. **Elastohydrodynamic Lubricant Film Forming of Different Bearings**  
BAYRAKTAR M.  
11th International Conference Research/Expert Conference Trends in the Development of Machinery and Associated Technologies (TMT 2007), Hammamet, TUNUSIA, 01 September 2007
- XXXIII. **The Expectation of the Society from a Mechanical Engineer and the Efficiency of the Education**  
BAYRAKTAR M.  
SEFI 34th Annual Conference on Engineering Education and Active Students, Uppsala, SWEDEN, 01 June 2006
- XXXIV. **A Comparison Between Yildiz Technical University Mechanical Engineering Department and Other Well-Known Universities of Turkey and World for Option and Course Variety**  
BAYRAKTAR M.  
SEFI 33th Annual Conference on Engineering Education at the Cross-Roads of Civilization, Ankara, TÜRKİYE, 01 June 2006
- XXXV. **The Importance of Training at Mechanical Engineering Education in YTU (Turkiye) and in the World**  
BAYRAKTAR M.  
SEFI 34th Annual Conference on Engineering Education and Active Students, Uppsala, SWEDEN, 01 June 2006
- XXXVI. **Otomobil Dış Karoseri Elemanlarından Dikiz Aynasının Aerodinamik Özelliklerinin ANSYS Yazılımı ile Analizi**  
BAYRAKTAR M.  
4th International Advanced Technologies Symposium (IATS 2005), Konya, TÜRKİYE, 01 September 2005
- XXXVII. **Makaralı Oynak Rulmanlarda Elastohidrodinamik Yağ Filmi Oluşumu**  
BAYRAKTAR M.  
3. Makina Tasarım ve İmalat Teknolojileri Kongresi (MATIT 2005), Konya, TÜRKİYE, 01 September 2005
- XXXVIII. **Dişli Çarkların Sonlu Elemanlar Yöntemi ile Modellenmesi ve Analizi**  
BAYRAKTAR M.  
3. Makina Tasarım ve İmalat Teknolojileri Kongresi (MATIT 2005), Konya, TÜRKİYE, 01 September 2005
- XXXIX. **Tribodizayn: Makina Tasarımının Temel Bir Dalı**  
BAYRAKTAR M.  
5. Ulusal Makina Mühendisliği ve Eğitim Sempozyumu, İstanbul, TÜRKİYE, 01 November 2003

## Other Publications

- I. **Raylı Taşıt Bojisinde ve Aksında Titreşim Ölçümleri**  
GÜÇLÜ R., BAYRAKTAR M., TAHRALI N.  
Technical Report, pp.1-10, 2010
- II. **Raylı Taşıt Aks Millerinin Kırılmalarının Değerlendirilmesi ve Wöhler Diyagramlarına Göre Ömür Hesapları**  
GÜÇLÜ R., BAYRAKTAR M., TAHRALI N.  
Technical Report, pp.1-10, 2010
- III. **Raylı Taşıt Aks Millerinin Doğal Frekans Değerlerinin Modal Analiz Yöntemi (DeneySEL ve Sonlu Eleman Programı NASTRAN) ile Belirlenmesi**  
GÜÇLÜ R., BAYRAKTAR M., TAHRALI N.

Technical Report, pp.1-10, 2010

- IV. İstatistiki Değerlendirme ve Kırılan Dingiller Esas Alınarak Elde Edilen Diyagramlar  
BAYRAKTAR M.  
Other, 2008

## Supported Projects

Bayraktar M., Yatı R. B., Fidan B., Çermaoğlu M. F., TUBITAK Project, Değişken Frekanslı Kompresörün Kullanıldığı Isı Pompası Sisteminin Borulama Tasarımları ve Doğal Frekans Testleri , 2021 - 2022  
Bayraktar M., Akgül M. T., Ağyürek O., Altun Ö. F., Alı M. A., TUBITAK Project, GANGWAY PLATFORM Yaylı Kaldırma Sistemi ve Ağırlık Optimizasyonu, 2021 - 2022  
Altan M., Bayraktar M., Yavuz B., TUBITAK Project, Plastik Enjeksiyon Yöntemi İle Titreşim Sönümleyici Sandviç Yapılı Polimer/Metal Makro Kompozitlerin Üretilmesi Ve Özelliklerinin Geliştirilmesi, 2013 - 2015  
Yazıcı H., Güçlü R., Bayraktar M., TUBITAK Project, Yapısal Sistemlerin Farklı Bozucu Girişler Etkisi Altındaki Titreşimlerinin Analizi ve Aktif-Pasif Kontrolü, (TÜBİTAK 1001 Bilimsel ve Teknolojik Araştırma Projesi, MAG, Proje No:109M523), 2010 - 2012

## Patent

BAYRAKTAR M., Titreşimden Elektrik Üreten Elektromekanik Sistemli Makine(Başvuru süreci devam ediyor. 2017-Devam ediyor), Patent, CHAPTER H Electricity, Standard Registration, 2017

## Memberships / Tasks in Scientific Organizations

Makina Teorisi Derneği (MAKTED), Member, 2020 - Continues

## Scientific Refereeing

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART F-JOURNAL OF RAIL AND RAPID TRANSIT, Journal Indexed in SCI-E, March 2022  
Project Supported by Other Official Institutions, Yıldız Technical University, Turkey, June 2021  
Project Supported by Other Official Institutions, Yıldız Technical University, Turkey, January 2021  
Advances in Mechanical Engineering, Journal Indexed in SSCI, February 2019  
Arabian Journal for Science and Engineering, SCI Journal, June 2018  
Arabian Journal for Science and Engineering, SCI Journal, April 2018  
Arabian Journal for Science and Engineering, SCI Journal, February 2018  
Advances in Mechanical Engineering, SCI Journal, February 2018  
Journal of Vibration, SCI Journal, January 2018  
Technicki Vjesnik-Technical Gazette, SCI Journal, December 2017  
Sigma Journal of Engineering and Natural Sciences, National Scientific Refreed Journal, August 2017  
Arabian Journal for Science and Engineering, SCI Journal, April 2016  
Uludağ University Journal of The Faculty of Engineering, National Scientific Refreed Journal, February 2016  
Bulletin of Earthquake Engineering, SCI Journal, November 2015  
2nd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2015), Other journals, October 2015  
Symposium on Theory of Machines and Mechanisms, Other journals, June 2015  
Arabian Journal for Science and Engineering, SCI Journal, April 2015  
Arabian Journal for Science and Engineering, SCI Journal, September 2014



Journal of Applied Research and Technology, SCI Journal, June 2014  
Journal of Applied Research and Technology, SCI Journal, May 2013  
Journal of Engineering Manufacture, SCI Journal, December 2012  
Caspian Journal of Applied Sciences Research, SCI Journal, November 2012  
Journal of Mechanical Engineering Science, SCI Journal, October 2012  
Journal of Mechanical Engineering Science, SCI Journal, July 2012  
Transportation Research Part C, SCI Journal, May 2012  
Transportation Research Part C-Emerging Technologies, SCI Journal, February 2012  
Caspian Journal of Applied Sciences Research, SCI Journal, February 2012  
Journal of Engineering Manufacture, SCI Journal, February 2012

## **Metrics**

Publication: 62  
Citation (WoS): 65  
Citation (Scopus): 90  
H-Index (WoS): 5  
H-Index (Scopus): 6

## **Scholarships**

Doktora Sonrasi Arastirma Bursu-Lehigh University-USA, University, 2013 - Continues

## **Non Academic Experience**

Lehigh University