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International Researcher IDs

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Publons / Web Of Science ResearcherID: Q-6077-2019

ScopusID: 15070322000

Yoksis Researcher ID: 156434

Education Information

- I. Doctorate, Universitaet Stuttgart, İnşaat Mühendisliği Fakültesi, Germany 2002 - 2007
- II. Postgraduate, Universitaet Stuttgart, Germany 2000 - 2002
- III. Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1994 - 1999

Foreign Languages

- I. English, C1 Advanced

Dissertations

- I. Doctorate, Aspects of Energy Minimization in Solid Mechanics: Evolution of Inelastic Microstructures and Crack Propagation, Universitaet Stuttgart, İnşaat Mühendisliği Fakültesi, 2007
- II. Postgraduate, Two-Scale Relaxation Analysis of Finite-Strain Single Slip Plasticity based on a First-Order Rank-One Convexification, Universitaet Stuttgart, 2002

Research Areas

Mechanics of Solid Bodies, Solid Mechanics, Fracture Mechanics, Finite Element Methods, Continuous Mechanics, Composites, Polymeric Materials, Nanomaterials

Academic Titles / Tasks

- I. Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2017 - Continues
- II. Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2011 - 2017
- III. Medical Doctor, King Abdullah University of Science and Technology, Faculty of Engineering, Mechanical Engineering, 2009 - 2011
- IV. Medical Doctor, California Institute of Technology, Mühendislik Fakültesi, Havacılık Mühendisliği, 2007 - 2009

V. Research Assistant, Universitaet Stuttgart, Mühendislik Fakültesi, İnşaat Mühendisliği, 2002 - 2007

Academic and Administrative Experience

- I. Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2019 - 2021

Courses

- I. APPLICATION OF FINITE ELEMENT ANALYSIS IN AEROSPACE STRUCTURES, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
- II. AEROSPACE STRUCTURES, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016, 2014 - 2015
- III. CONSTITUTIVE MODELING OF ENGINEERING MATERIALS, Postgraduate, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- IV. APPLIED ELASTICITY, Undergraduate, 2022 - 2023, 2019 - 2020, 2016 - 2017
- V. MECHANICAL VIBRATIONS, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
- VI. DYNAMICS, Undergraduate, 2018 - 2019, 2011 - 2012
- VII. MECHANICS OF MATERIALS, Undergraduate, 2017 - 2018, 2013 - 2014, 2012 - 2013
- VIII. STATICS, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- IX. NUMERICAL METHODS, Undergraduate, 2015 - 2016

Advising Theses

- I. Şahin M., Gürses E., Evolutionary topology optimization of a folding missile wing for stiffness and frequency, Postgraduate, A.ÜRÜN(Student), 2023
- II. Gürses E., Numerical calculation of homogenized properties of piezoelectric composites, Postgraduate, M.KURT(Student), 2022
- III. Şahin M., Gürses E., Mechanical characterization of additively manufactured Ti-6Al-4V aircraft structural components produced by electron beam melting, Doctorate, F.YILMAZ(Student), 2022
- IV. Gürses E., Determination of elastic properties of polymer nanocomposites using embedded element method, Postgraduate, A.ELİF(Student), 2022
- V. GÜRSES E., A two-level homogenization method for polymer nanocomposites with coated inclusions, Postgraduate, D.GÜZEL(Student), 2021
- VI. GÜRSES E., Artificial neural network based tool for buckling loads of integrally stiffened aircraft structural panels, Postgraduate, S.GÜZEL(Student), 2021
- VII. Göktepe S., Gürses E., Micromechanical modeling of semicrystalline polymers with spherulite morphology, Doctorate, H.Emre(Student), 2020
- VIII. Gürses E., Modeling oxidation and plasticity induced damage in thermal barrier coatings (TBCS), Doctorate, F.SAİT(Student), 2020
- IX. Gürses E., Development of a structural design methodology for filament winding composite rocket motor case, Postgraduate, Y.ERTURAN(Student), 2019
- X. Gürses E., Finite element modelling of tbc failure mechanisms byusing extended finite element method and cohesive zonemethod, Postgraduate, S.MESUT(Student), 2019
- XI. Gürses E., Experimental and numerical investigation of ballisticimpact behaviour of high strength aluminium plates, Postgraduate, G.BAŞARAN(Student), 2019
- XII. Gürses E., Development of an equivalent model of aluminum honeycomb sandwich structures subjected to

- transverse loads, Postgraduate, O.YARDIMCI(Student), 2019
- XIII. Gürses E., Development of structural optimization and neural network design tool for buckling behaviour of skin stringer structures under combined compression and shear loading, Postgraduate, A.OKUL(Student), 2019
- XIV. GÜRSES E., A study on energy trapping parameters of a multistablebeam, Postgraduate, A.ZEMBİLÖREN(Student), 2018
- XV. GÜRSES E., Micromechanical modeling of carbon nanotube – polymer composites, Postgraduate, V.TAÇ(Student), 2018
- XVI. GÜRSES E., TOFFOLİ H., Density functional theory and molecular dynamics simulations of carbon nanotubes, polyetheretherketone and their interfaces, Postgraduate, G.TORAMAN(Student), 2018
- XVII. GÜRSES E., A modulus gradient elasticity model for nano-reinforced composites, Doctorate, H.GÜLAŞIK(Student), 2018
- XVIII. GÜRSES E., Optimization of compliant parts of a hybrid trailing edge control surface of a morphing unmanned aerial vehicle, Postgraduate, P.ARSLAN(Student), 2017
- XIX. GÜRSES E., Development of an artificial neural network based analysis method for skin-stringer structures, Postgraduate, A.CANKUR(Student), 2017
- XX. GÜRSES E., Numerical simulation of non-energetic reactive armors, Postgraduate, M.CAN(Student), 2017
- XXI. GÜRSES E., ÇÖKER D., Experimental and numerical investigation of damage process in composite laminates under low -velocity impact, Postgraduate, Ö.TANAY(Student), 2016
- XXII. GÜRSES E., Finite element analysis and experimental study of dovetail attachments, Postgraduate, A.ARDA(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A non-iterative boundary element formulation for nonlinear viscoelasticity**
Akay A. A., Gürses E., Göktepe S.
Engineering Analysis with Boundary Elements, vol.163, pp.223-236, 2024 (SCI-Expanded)
- II. **High-fidelity simulations of low-velocity impact induced matrix cracking and dynamic delamination progression in CFRP beams**
Batmaz O. A., Bozkurt M. O., GÜRSES E., ÇÖKER D.
Composites Part A: Applied Science and Manufacturing, vol.177, 2024 (SCI-Expanded)
- III. **Determination of the elastoplastic properties of Ti-6Al-4V alloy manufactured by electron beam melting**
Yılmaz F., Gürses E., Şahin M.
Rapid Prototyping Journal, vol.29, no.10, pp.2149-2163, 2023 (SCI-Expanded)
- IV. **A new time-domain boundary element formulation for generalized models of viscoelasticity**
Akay A. A., Gürses E., Göktepe S.
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.150, pp.30-43, 2023 (SCI-Expanded)
- V. **The Effect of Apical Vertebra Position on Growing Rod Treatment: A Clinical and Finite Element Study**
DURSUN G., Cetik R. M., GÜZEL D., DEMİRKIRAN H. G., Ramazanov R., Dede O., GÜRSES E., Yazici M.
Journal of Pediatric Orthopaedics, vol.42, 2022 (SCI-Expanded)
- VI. **Polymer interfaces with carbon nanostructures: First principles density functional theory and molecular dynamics study of polyetheretherketone adsorption on graphene and nanotubes**
Toraman G., Sert E., Gulasik H., Toffoli D., TOFFOLİ H., GÜRSES E.
COMPUTATIONAL MATERIALS SCIENCE, vol.191, 2021 (SCI-Expanded)
- VII. **Development of a procedure to model the mechanical behavior of composites with embedded element method by considering the matrix non-linearity**
ŞIK A., GÜRSES E., SABUNCUOĞLU B.
COMPOSITE STRUCTURES, vol.259, 2021 (SCI-Expanded)

- VIII. **Modeling and simulation of coupled phase transformation and stress evolution in thermal barrier coatings**
 Sait F., Gürses E., Aslan O.
 INTERNATIONAL JOURNAL OF PLASTICITY, vol.134, 2020 (SCI-Expanded)
- IX. **Micromechanical modelling of carbon nanotube reinforced composite materials with a functionally graded interphase**
 Taç V., Gürses E.
 Journal of Composite Materials, vol.53, pp.4337-4348, 2019 (SCI-Expanded)
- X. **A modulus gradient model for inhomogeneous materials with isotropic linear elastic constituents**
 Gülaşik H., Göktepe S., Gürses E.
 European Journal of Mechanics, A/Solids, vol.78, 2019 (SCI-Expanded)
- XI. **Development of Bolted Flange Design Tool Based on Artificial Neural Network**
 Yıldırım A., Akay A. A., Gülaşik H., Çöker D., Gürses E., Kayran A.
 Journal of Pressure Vessel Technology, Transactions of the ASME, vol.141, 2019 (SCI-Expanded)
- XII. **A modulus gradient model for an axially loaded inhomogeneous elastic rod**
 Gulasuk H., Göktepe S., Gürses E.
 MECCANICA, vol.53, pp.2573-2584, 2018 (SCI-Expanded)
- XIII. **Structural and aerodynamic analyses of a hybrid trailing edge control surface of a fully morphing wing**
 Gürses E., Tunçöz I. O., Yang Y., Arslan P., Kalkan U., Tiraş H., Şahin M., Özgen S., Yaman Y.
 JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES, vol.28, pp.979-991, 2017 (SCI-Expanded)
- XIV. **Experimental and computational study of the damage process in CFRP composite beams under low-velocity impact**
 Topac O. T., Gözlüklü B., Gürses E., Çöker D.
 COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING, vol.92, pp.167-182, 2017 (SCI-Expanded)
- XV. **Modeling of spherulite microstructures in semicrystalline polymers**
 Oktay H. E., Gürses E.
 MECHANICS OF MATERIALS, vol.90, pp.83-101, 2015 (SCI-Expanded)
- XVI. **Constitutive modeling of stress-driven grain growth in nanocrystalline metals**
 GÜRSİS E., Wafai H., El Sayed T.
 MODELLING AND SIMULATION IN MATERIALS SCIENCE AND ENGINEERING, vol.21, no.2, 2013 (SCI-Expanded)
- XVII. **A phenomenological two-phase constitutive model for porous shape memory alloys**
 EL SAYED T., GÜRSİS E., SIDDIQ A.
 COMPUTATIONAL MATERIALS SCIENCE, vol.60, pp.44-52, 2012 (SCI-Expanded)
- XVIII. **A constitutive model of nanocrystalline metals based on competing grain boundary and grain interior deformation mechanisms**
 Gürses E., El Sayed T.
 MATERIALS LETTERS, vol.65, pp.3391-3395, 2011 (SCI-Expanded)
- XIX. **On evolving deformation microstructures in non-convex partially damaged solids**
 GÜRSİS E., MIEHE C.
 JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.59, no.6, pp.1268-1290, 2011 (SCI-Expanded)
- XX. **Constitutive modeling of strain rate effects in nanocrystalline and ultrafine grained polycrystals**
 Gürses E., Tamer E. S.
 INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.48, no.10, pp.1610-1616, 2011 (SCI-Expanded)
- XXI. **A variational multiscale constitutive model for nanocrystalline materials**
 GÜRSİS E., EL SAYED T.
 JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.59, no.3, pp.732-749, 2011 (SCI-Expanded)
- XXII. **On tension-compression asymmetry in ultrafine-grained and nanocrystalline metals**
 GÜRSİS E., Tamer E. S.
 COMPUTATIONAL MATERIALS SCIENCE, vol.50, no.2, pp.639-644, 2010 (SCI-Expanded)
- XXIII. **Shock-induced subgrain microstructures as possible homogenous sources of hot spots and initiation**

- sites in energetic polycrystals
RIMOLI J., GÜRSSES E., ORTIZ M.
PHYSICAL REVIEW B, vol.81, no.1, 2010 (SCI-Expanded)
- XXIV. A computational framework of three-dimensional configurational-force-driven brittle crack propagation
GÜRSSES E., MIEHE C.
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.198, pp.1413-1428, 2009 (SCI-Expanded)
- XXV. A robust algorithm for configurational-force-driven brittle crack propagation with R-adaptive mesh alignment
MIEHE C., GÜRSSES E.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING, vol.72, no.2, pp.127-155, 2007 (SCI-Expanded)
- XXVI. A computational framework of configurational-force-driven brittle fracture based on incremental energy minimization
Miehe C., Gürses E., Birkle M.
INTERNATIONAL JOURNAL OF FRACTURE, vol.145, no.4, pp.245-259, 2007 (SCI-Expanded)
- XXVII. Analysis of material instabilities in inelastic solids by incremental energy minimization and relaxation methods: evolving deformation microstructures in finite plasticity
MIEHE C., LAMBRECHT M., GÜRSSES E.
JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.52, no.12, pp.2725-2769, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. A Two-Level Homogenization Approach for Polymer Nanocomposites with Coated Inclusions
GÜZEL D., GÜRSSES E.
Procedia Structural Integrity, vol.35, pp.34-41, 2022 (Peer-Reviewed Journal)
- II. Weight reduction of an unmanned aerial vehicle pylon fitting by topology optimization and additive manufacturing with electron beam melting
Gürses E.
Journal of Additive Manufacturing Technologies, vol.1, no.2, pp.1-5, 2021 (Peer-Reviewed Journal)
- III. Decamber Morphing Concepts by Using a Hybrid Trailing Edge Control Surface
Yaman Y., Tuncoz I. O., Yang Y., Arslan P., Kalkan U., Tiras H., Gürses E., Şahin M., Özgen S.
AEROSPACE, vol.2, pp.482-504, 2015 (ESCI)

Books & Book Chapters

- I. Modeling of a Three-Dimensional Spherulite Microstructure in Semicrystalline Polymers
Oktay H. E., Gürses E.
in: Numerical Mathematics and Advanced Applications, M. Manguoğlu, M. Tezer-Sezgin, S. Göktepe, Ö. Uğur, Editor, Springer, London/Berlin, Berlin, pp.567-574, 2016
- II. Experimental and Computational Investigation of Out-of-Plane Low Velocity Impact Behavior of CFRP Composite Plates
Topac T., Tasdemir B., Gozluklu B., GÜRSSES E., ÇÖKER D.
in: Fracture Fatigue Failure and Damage Evolution Volume 8, Allison M. Beese, Alan T. Zehnder, Shuman Xia, Editor, Springer, pp.9-16, 2016
- III. Analytical and Numerical Methods for Finite Strain Elastoplasticity
GÜRSSES E., MAINIK A., MIEHE C., MIELKE A.
in: Multifield problems in Fluid and Solid Mechanics, Helmig, R., Mielke, A., Wohlmuth, B., Editor, Springer, pp.491-

Refereed Congress / Symposium Publications in Proceedings

- I. **KATLANABİLİR FÜZE KANADININ DİRENGENLİK KİSTASINA GÖRE YAPISAL ENİYİLEMESİ**
Ürün A., Şahin M., Gürses E.
9. ULUSAL HAVACILIK VE UZAY KONFERANSI (UHUK), İzmir, Turkey, 14 - 16 September 2022, pp.1-13
- II. **PİEZOELEKTRİK FİBERLİ KOMPOZİTLERİN ETKİN ÖZELLİKLERİİNİN DEĞERLENDİRİLMESİ**
Kurt M., Gürses E.
9. ULUSAL HAVACILIK VE UZAY KONFERANSI (UHUK), İzmir, Turkey, 14 - 16 September 2022, pp.1-14
- III. **TOPOLOJİ OPTİMİZASYONU VE EKLEMELİ İMALAT İLE HAFİFLETİLEN BİR İNSANSIZ HAVA ARACI PİLON BAĞLANTI PARÇASININ KALİFİKASYONU**
Yılmaz F., Gürses E., Şahin M.
10. Savunma Teknolojileri Kongresi (SAVTEK), Ankara, Turkey, 13 - 15 September 2022, pp.1067-1080
- IV. **A Two-Level Homogenization Method for Coated Inclusion Problem in Elasticity**
Güzel D., Gürses E.
11th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 08 September 2021
- V. **Determination of the 1st buckling and collapse loads for integrally stiffened panels by artificial neural network and design of experiment methodology**
Güzel Ş. G., Gürses E.
10th EASN International Conference on Innovation in Aviation and Space to the Satisfaction of the European Citizens, EASN 2020, Virtual, Online, 2 - 04 September 2020, vol.1024
- VI. **Arafazlı, Heterojen Mikroyapının Çok Seviyeli Homojenleştirme Yaklaşımı ile Modellemesi**
Güzel D., Gürses E.
VIII. Ulusal Havacılık ve Uzay Konferansı (UHUK), Ankara, Turkey, 9 - 11 September 2020, pp.1-12
- VII. **Nanokompozit Malzemelerin Elastik Özelliklerinin Gömülü Eleman Yöntemi ile Hesaplanması**
Altay A. E., Gürses E.
VIII. Ulusal Havacılık ve Uzay Konferansı (UHUK), Ankara, Turkey, 9 - 11 September 2020, pp.1-7
- VIII. **Development of a modeling strategy to improve the embedded element method in composites modeling in case of matrix nonlinearity**
ŞIK A., GÜRSES E., SABUNCUOĞLU B.
Fibremod Conference, Leuven, Belgium, 9 - 12 December 2019
- IX. **Structural Analysis and Design on Composite Rocket Motor Case**
Erturan Y., Gürses E.
10th Ankara International Aerospace Conference, Ankara, Turkey, 18 - 20 September 2019
- X. **A micromechanically based multi-scale model for semi-crystalline polymers**
Oktay H. E., Gürses E., Göktepe S.
Beyond 2019, Ankara, Turkey, 9 - 11 September 2019, pp.51
- XI. **ÇOK FAZLI MALZEMELERİN DÜZLEMSEL ARAYÜZLERLE HOMOJENLEŞTİRİLMESİ: KİNEMATİK UYUMLU YAKLAŞIM**
Oktay H. E., GÜRSES E., GÖKTEPE S.
21. Ulusal Mekanik Kongresi, Turkey, 2 - 06 September 2019
- XII. **High Velocity Impact Response of High Strength Aluminum Using LS DYNA**
BAŞARAN G., ÖZBAYRMOĞLU E., BÜTÜN O., ÖNEY E., GÜRSES E.
12th European LS DYNA Conference, Austria, 14 - 16 May 2019
- XIII. **Finite Element Modelling of TBC Failure Mechanisms by Using XFEM and CZM**
Bostancı S. M., GÜRSES E., ÇÖKER D.
1st International Workshop on Plasticity, Damage and Fracture of Engineering Materials (IWPDF), Ankara, Turkey, 22 - 23 August 2019, vol.21, pp.91-100

- XIV. **Development of Structural Neural Network Design Tool for Buckling Behaviour of Skin-Stringer Structures Under Combined Compression and Shear Loading**
Okul A., Gürses E.
ASME 2018 International Mechanical Engineering Congress Exposition, Pennsylvania, United States Of America, 9 - 15 November 2018
- XV. **Micromechanical Characterization of Nanotube Reinforced Polymers**
Taç V., Gürses E.
1st International Conference on Advances in Mechanical and Mechatronics Engineering ICAMMEN 2018, Ankara, Turkey, 8 - 09 November 2018
- XVI. **A functionally graded multi-phase micromechanical model for carbon nanotube-polymer composites**
Taç V., Gürses E.
9th Multiscale Materials Modeling (MMM) Conference, Osaka, Japan, 28 October - 02 November 2018
- XVII. **Micromechanical Modelling of Carbon Nanotube Reinforced Composite Materials with a Functionally Graded Interphase**
Gülaşık H., Göktepe S., Gürses E.
SES 2018, Madrid, Spain, 10 - 12 October 2018, pp.1
- XVIII. **Yüksek Hızda Mermi Çarpışma Durumunda Zırh Kombinasyonlarının Sayısal Olarak İncelenmesi**
Başaran G., Gürses E.
VII. Ulusal Havacılık ve Uzay Konferansı (UHUK), Samsun, Turkey, 12 - 14 September 2018
- XIX. **Finite element modelling of TBC failure mechanisms by using XFEM**
Bostancı S. M., Gürses E., Çöker D.
ASME 2018 International Mechanical Engineering Congress and Exposition, IMECE 2018, Pennsylvania, United States Of America, 9 - 15 November 2018, vol.1
- XX. **DEVELOPMENT OF ARTIFICIAL NEURAL NETWORK BASED DESIGN TOOL FOR AIRCRAFT ENGINE BOLTED FLANGE CONNECTION SUBJECT TO COMBINED AXIAL AND MOMENT LOAD**
Sanlı T. V., Gürses E., Çöker D., Kayran A.
ASME International Mechanical Engineering Congress and Exposition, Tama, Japan, 3 - 09 November 2017
- XXI. **EXPERIMENTAL STUDY AND FINITE ELEMENT ANALYSIS OF DOVETAIL ATTACHMENTS**
Akay A. A., Çöker D., Kayran A., Gürses E.
ASME International Mechanical Engineering Congress and Exposition, Tama, Japan, 3 - 09 November 2017
- XXII. **A comparative study of the polymer-nanotube interface through a reactive force field and density functional theory**
Toffoli H., Gürses E., Gülaşık H., Konuk M., Sert E., Toraman G.
International Symposium on Chemistry via Computation, Ankara, Turkey, 30 October 2017
- XXIII. **Laminated Shell Modeling of Sandwich Beams with Ramp Region Under Four Point Bending Loading via Structural Optimization**
Yardımcı O., Gürses E.
7th EASN International Conference on Innovation in European Aeronautics Research, Warszawa, Poland, 26 - 29 September 2017
- XXIV. **Development of an Artificial Neural Network Based Analysis Method for Skin-Stringer Structures**
Cankur A., Gürses E.
7th EASN International Conference on Innovation in European Aeronautics Research, Warszawa, Poland, 26 - 29 September 2017
- XXV. **Molecular Dynamics Simulations of Carbon Nanotube Reinforced Polymer Composites**
Toraman G., Konuk M., Sert E., Toffoli H., Gülaşık H., Gürses E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXVI. **Alternative Finite Element Based Modeling Apporaches for Carbon Nanotubes**
KOCA O., GÜLAŞIK H., GÜRSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXVII. **Equivalent Model of a Sandwich Beam With Ramp Region Under Four Point Bending via Genetic Algorithm**

- YARDIMCI O., GÜRSSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXVIII. **A Study on Energy Trapping Parameters of a Multistable Elastic Beam**
Zembilören A., Gürses E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXIX. **Optimization of Compliant Parts of a Trailing Edge Control Surface of a Morphing Wing**
Arslan P., Gürses E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXX. **An Artificial Neural Network Based Analysis Method for Skin- Stringer Structures**
CANKUR A., GÜRSSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXXI. **Implementation of the Submodelling Technique on the Dovetail Attachments”**
Akay A. A., Çöker D., Kayran A., Gürses E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXXII. **Kirişle Güçlendirilmiş Kabuk Yapılar İçin Yapay Sinir Ağ Bazlı Analiz Yöntemi Geliştirilmesi**
CANKUR A., GÜRSSES E.
XX. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017
- XXXIII. **Micromechanically Motivated Modeling of Semicrystalline Polymers**
Oktay H. E., Gürses E., Göktepe S.
XIV International Conference on Computational Plasticity COMPLAS, Barcelona, Spain, 5 - 07 September 2017
- XXXIV. **Damage Progression and Delamination Speeds in CFRP Under Impact Loading**
BOZKURT M. O., TOPAÇ Ö. T., GÜRSSES E., ÇÖKER D.
20th International Conference on Composite Structures ICCS 20, Paris, France, 4 - 07 September 2017
- XXXV. **Multi-Scale Modelling of Carbon Nanotube Reinforced Polymer Composites**
Toraman G., Konuk M., Gülaşık H., Sert E., Toffoli H., Gürses E.
Materials Resistant to Extreme Conditions for Future Energy Systems, Kyiv, Ukraine, 12 - 14 June 2017
- XXXVI. **Numerical Study of High Velocity Impact Response of Veicle Armor Combination Using LS DYNA**
Başaran G., GÜRSSES E.
11th European LS DYNA Conference, Salzburg, Austria, 9 - 11 May 2017
- XXXVII. **Birden Fazla Kararlı Hale Sahip Elastik Bir Kirişin Enerji Tuzaklama Miktarını Etkileyen Parametrelerin Belirlenmesi**
ZEMBİLÖREN A., GÜRSSES E.
8. Savunma Teknolojileri Kongresi Kongresi (SAVTEK), Turkey, 12 - 14 October 2016
- XXXVIII. **Bal Peteği Dolguya Sahip Sandviç Yapıların Bükme Yükü Altındaki Davranışlarının Karşılaştırılması**
YARDIMCI O., GÜRSSES E.
VI. Ulusal Havacılık ve Uzay Konferansı (UHUK), Kocaeli, Turkey, 28 - 30 September 2016
- XXXIX. **Eksenel Kesme ve Moment Yükü Altındaki Flanşlar İçin Yapay Sinir Ağına Dayalı Cıvatalı Flanş Tasarım Aracı Geliştirilmesi**
Şanlı V., Akay A. A., Yıldırım A., Gürses E., Çöker D., Kayran A.
VI. Ulusal Havacılık ve Uzay Konferansı (UHUK), Kocaeli, Turkey, 28 - 30 September 2016
- XL. **EXPERIMENTAL AND NUMERICAL INVESTIGATION OF IMPACT INDUCED DAMAGE PROGRESSION IN FIBER REINFORCED COMPOSITES**
GÜRSSES E., Topac T., ÇÖKER D.
ICTAM 2016, Montreal, Canada, 21 - 26 August 2016
- XLI. **EXPERIMENTAL AND COMPUTATIONAL STUDY OF DAMAGE PROCESS IN CFRP COMPOSITE BEAMS UNDER LOW VELOCITY IMPACT**
TOPAÇ Ö. T., GÜRSSES E., ÇÖKER D.
17th International Conference on Experimental Mechanics, Rodos, Greece, 3 - 07 July 2016
- XLII. **A Hybrid Morphing Trailing Edge Designed for Camber Change of the Control Surface**
Tunçöz İ. O., Yang Y., Gürses E., Şahin M., Yaman Y., Özgen S.
SciTech2016, AIAA Science and Technology Forum 2016, California, United States Of America, 4 - 08 January 2016

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II. Gürses E., Sabuncuoğlu B., TUBITAK Project, Gömülü Eleman Yöntemi İle Doğrusal Olmayan Malzeme Davranışı Gösteren Kompozit Malzemelerin Mekanik Davranışının Modellenmesi, 2018 - 2020

III. GÜRSSES E., GÖKTEPE S., TUBITAK Project, Karbon Nanotüp İle Güçlendirilmiş Polimer Kompozitlerin Çok Ölçekli

- Modellenmesi, 2015 - 2018
- IV. GÜRSES E., Industrial Thesis Project, Flanş İleri Analiz Arayüzü ve Tasarım Programı Oluşturulması, 2014 - 2017
 - V. Gürses E., Yaman Y., Şahin M., Özgen S., FP7 Project, CHANGE Combined morphing Assessment software usiNG flight Envelope data and mission based morphing prototype wing development, 2012 - 2016
 - VI. Gürses E., Aydiner C. C., TUBITAK Project, Sıkı Dizilimli Hegzagonel Yapısal Metallerde Temel Deformasyon Fiziğinin Çok Ölçekli Tam Saha Gerinim Ölçümleriyle Yük Altında İncelenmesi, 2013 - 2015
 - VII. Gürses E., Company, ŞİŞEN ZIRH ARA KATMAN MALZEMESİNİN ZIRH PERFORMANSI ÜZERİNE ETKİSİ VE ZIRH OPTİMİZASYONUNA YÖNELİK MALZEME İSTERLERİNİN OLUŞTURULMASI PROJESİ, 2013 - 2014
 - VIII. GÜRSES E., TUBITAK Project, Ultra Yüksek Moleküller Ağırlıklı Polietilenin Çok Ölçekli Modellenmesi, 2012 - 2014

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- III. Tuncer İ. H., Yaman Y., Kayran A., Uzol O., Gürses E., Perçin M., 10th Ankara International Aerospace Conference (AIAC2019), Scientific Congress, Ankara, Turkey, Eylül 2019
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Coaching Duties

Refereeing Duties

Non Academic Experience

- I. King Abdullah University of Science and Technology
- II. California Institute of Technology
- III. University of Stuttgart