

Assoc. Prof. ERCAN GÜRSES

Personal Information

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Education Information

Doctorate, Universitaet Stuttgart, İnşaat Mühendisliği Fakültesi, Germany 2002 - 2007

Postgraduate, Universitaet Stuttgart, Germany 2000 - 2002

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1994 - 1999

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Aspects of Energy Minimization in Solid Mechanics: Evolution of Inelastic Microstructures and Crack Propagation, Universitaet Stuttgart, İnşaat Mühendisliği Fakültesi, 2007

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

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2017 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2011 - 2017

Medical Doctor, King Abdullah University of Science and Technology, Faculty of Engineering, Mechanical Engineering, 2009 - 2011

Medical Doctor, California Institute of Technology, Mühendislik Fakültesi, Havacılık Mühendisliği, 2007 - 2009

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

Academic and Administrative Experience

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2019 - Continues

Courses

DYNAMICS, Undergraduate, 2011 - 2012, 2018 - 2019

Advising Theses

- Gürses E., Modeling oxidation and plasticity induced damage in thermal barrier coatings (TBCS), Doctorate, F.SAİT(Student), 2020
- GÖKTEPE S., GÜRSES E., Micromechanical modeling of semicrystalline polymers with spherulite morphology, Doctorate, H.Emre(Student), 2020
- Gürses E., Experimental and numerical investigation of ballistic impact behaviour of high strength aluminium plates, Postgraduate, G.BAŞARAN(Student), 2019
- Gürses E., Development of an equivalent model of aluminum honeycomb sandwich structures subjected to transverse loads, Postgraduate, O.YARDIMCI(Student), 2019
- 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
- Gürses E., Development of a structural design methodology for filament winding composite rocket motor case, Postgraduate, Y.ERTURAN(Student), 2019
- Gürses E., Finite element modelling of tbc failure mechanisms by using extended finite element method and cohesive zone method, Postgraduate, S.MESUT(Student), 2019
- GÜRSES E., Micromechanical modeling of carbon nanotube – polymer composites, Postgraduate, V.TAÇ(Student), 2018
- TOFFOLI H., GÜRSES E., Density functional theory and molecular dynamics simulations of carbon nanotubes, polyetheretherketone and their interfaces, Postgraduate, G.TORAMAN(Student), 2018
- GÜRSES E., A study on energy trapping parameters of a multistable elastic beam, Postgraduate, A.ZEMBİLÖREN(Student), 2018
- GÜRSES E., A modulus gradient elasticity model for nano-reinforced composites, Doctorate, H.GÜLAŞIK(Student), 2018
- GÜRSES E., Optimization of compliant parts of a hybrid trailing edge control surface of a morphing unmanned aerial vehicle, Postgraduate, P.ARSLAN(Student), 2017
- GÜRSES E., Numerical simulation of non-energetic reactive armors, Postgraduate, M.CAN(Student), 2017
- GÜRSES E., Development of an artificial neural network based analysis method for skin-stringer structures, Postgraduate, A.CANKUR(Student), 2017
- GÜRSES E., Finite element analysis and experimental study of dovetail attachments, Postgraduate, A.ARDA(Student), 2016
- GÜRSES E., ÇÖKER D., Experimental and numerical investigation of damage process in composite laminates under low-velocity impact, Postgraduate, Ö.TANAY(Student), 2016

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **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., TOFFOLI H., GÜRSES E.
COMPUTATIONAL MATERIALS SCIENCE, vol.191, 2021 (Journal Indexed in SCI)
- II. **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 (Journal Indexed in SCI)

- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **A modulus gradient model for inhomogeneous materials with isotropic linear elastic constituents**
Gülaşık H., Göktepe S., Gürses E.
European Journal of Mechanics, A/Solids, vol.78, 2019 (Journal Indexed in SCI)
- VI. **Development of Bolted Flange Design Tool Based on Artificial Neural Network**
Yildirim A., Akay A. A. , Gülaşık H., Çöker D., Gürses E., Kayran A.
Journal of Pressure Vessel Technology, Transactions of the ASME, vol.141, 2019 (Journal Indexed in SCI)
- VII. **A modulus gradient model for an axially loaded inhomogeneous elastic rod**
Gulasuk H., Göktepe S., Gürses E.
MECCANICA, vol.53, pp.2573-2584, 2018 (Journal Indexed in SCI)
- VIII. **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., Tıraş H., Şahin M., Özgen S., Yaman Y.
JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES, vol.28, pp.979-991, 2017 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **Modeling of spherulite microstructures in semicrystalline polymers**
Oktay H. E. , Gürses E.
MECHANICS OF MATERIALS, vol.90, pp.83-101, 2015 (Journal Indexed in SCI)
- XI. **Constitutive modeling of stress-driven grain growth in nanocrystalline metals**
GÜRSES E., Wafai H., El Sayed T.
MODELLING AND SIMULATION IN MATERIALS SCIENCE AND ENGINEERING, vol.21, no.2, 2013 (Journal Indexed in SCI)
- XII. **A phenomenological two-phase constitutive model for porous shape memory alloys**
EL SAYED T., GÜRSES E., SIDDIQ A.
COMPUTATIONAL MATERIALS SCIENCE, vol.60, pp.44-52, 2012 (Journal Indexed in SCI)
- XIII. **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 (Journal Indexed in SCI)
- XIV. **On evolving deformation microstructures in non-convex partially damaged solids**
GÜRSES E., MIEHE C.
JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.59, no.6, pp.1268-1290, 2011 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **A variational multiscale constitutive model for nanocrystalline materials**
GÜRSES E., EL SAYED T.

- JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.59, no.3, pp.732-749, 2011 (Journal Indexed in SCI)
- XVII. **On tension-compression asymmetry in ultrafine-grained and nanocrystalline metals**
GÜRSES E., Tamer E. S.
COMPUTATIONAL MATERIALS SCIENCE, vol.50, no.2, pp.639-644, 2010 (Journal Indexed in SCI)
- XVIII. **Shock-induced subgrain microstructures as possible homogenous sources of hot spots and initiation sites in energetic polycrystals**
RIMOLI J., GÜRSES E., ORTIZ M.
PHYSICAL REVIEW B, vol.81, no.1, 2010 (Journal Indexed in SCI)
- XIX. **A computational framework of three-dimensional configurational-force-driven brittle crack propagation**
GÜRSES E., MIEHE C.
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.198, pp.1413-1428, 2009 (Journal Indexed in SCI)
- XX. **A robust algorithm for configurational-force-driven brittle crack propagation with R-adaptive mesh alignment**
MIEHE C., GÜRSES E.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING, vol.72, no.2, pp.127-155, 2007 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **Analysis of material instabilities in inelastic solids by incremental energy minimization and relaxation methods: evolving deformation microstructures in finite plasticity**
MIEHE C., LAMBRECHT M., GÜRSES E.
JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS, vol.52, no.12, pp.2725-2769, 2004 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **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 (Journal Indexed in ESCI)
- II. **Analytical and numerical methods for finite-strain elastoplasticity**
Gürses E., Mainik A., Miehe C., Mielke A.
Lecture Notes in Applied and Computational Mechanics, vol.2006, no.28, pp.491-529, 2006 (Refereed Journals of Other Institutions)

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**
TOPAÇ Ö. T., TAŞDEMİR B., GÖZLÜKLÜ B., GÜRSES E., ÇÖKER D.
in: Failure and Damage Evolution Volume 8 Proceedings of the 2015 Annual Conference on Experimental and Applied Mechanics, Beese, Allison M., Zehnder, Alan T., Xia, Shuman, Editor, Springer, pp.9-16, 2016

- III. **Experimental and Computational Investigation of Out-of-Plane Low Velocity Impact Behavior of CFRP Composite Plates**
Topac T., Tasdemir B., Gozluklu B., GÜRSES 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
- IV. **Analytical and Numerical Methods for Finite Strain Elastoplasticity**
GÜRSES E., MAINIK A., MIEHE C., MIELKE A.
in: Multifield problems in Fluid and Solid Mechanics, Helmig, R., Mielke, A., Wohlmuth, B., Editor, Springer, pp.491-529, 2006

Refereed Congress / Symposium Publications in Proceedings

- I. **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
- II. **Arafazlı, Heterojen Mikroyapının Çok Seviyeli Homojenleştirme Yaklaşımı ile Modellenmesi**
Güzel D., Gürses E.
VIII. Ulusal Havacılık ve Uzay Konferansı (UHUK), Ankara, Turkey, 9 - 11 September 2020, pp.1-12
- III. **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
- IV. **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
- V. **Structural Analysis and Design on Composite Rocket Motor Case**
Erturan Y., Gürses E.
10th Ankara International Aerospace Conference, Ankara, Turkey, 18 - 20 September 2019
- VI. **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
- VII. **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
- VIII. **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
- IX. **Finite Element Modelling of TBC Failure Mechanisms by Using XFEM and CZM**
Bostanci 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
- X. **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
- XI. **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
- XII. **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
- XIII. **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
- XIV. **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
- XV. **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
- XVI. **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
- XVII. **DEVELOPMENT OF ARTIFICIAL NEURAL NETWORK BASED DESIGN TOOL FOR AIRCRAFT ENGINE BOLTED FLANGE CONNECTION SUBJECT TO COMBINED AXIAL AND MOMENT LOAD**
Sanli T. V. , Gürses E., Çöker D., Kayran A.
ASME International Mechanical Engineering Congress and Exposition, Tama, Japan, 3 - 09 November 2017
- XVIII. **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
- XIX. **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
- XX. **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
- XXI. **An Artificial Neural Network Based Analysis Method for Skin- Stringer Structures**
CANKUR A., GÜRSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXII. **Equivalent Model of a Sandwich Beam With Ramp Region Under Four Point Bending via Genetic Algorithm**
YARDIMCI O., GÜRSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXIII. **Alternative Finite Element Based Modeling Approaches for Carbon Nanotubes**
KOCA O., GÜLAŞIK H., GÜRSES E.
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017
- XXIV. **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
- 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. **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
- XXVII. **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
- XXVIII. **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
- XXIX. **Kirişle Güçlendirilmiş Kabuk Yapılar İçin Yapay Sinir Ağ Bazlı Analiz Yöntemi Geliştirilmesi**
CANKUR A., GÜRSES E.
XX. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017
- XXX. **Damage Progression and Delamination Speeds in CFRP Under Impact Loading**
BOZKURT M. O. , TOPAÇ Ö. T. , GÜRSES E., ÇÖKER D.
20th International Conference on Composite Structures ICCS 20, Paris, France, 4 - 07 September 2017
- XXXI. **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
- XXXII. **Numerical Study of High Velocity Impact Response of Vehicle Armor Combination Using LS DYNA**
Başaran G., GÜRSES E.
11th European LS DYNA Conference, Salzburg, Austria, 9 - 11 May 2017
- XXXIII. **Birden Fazla Kararlı Hale Sahip Elastik BİR Kirişin Enerji Tuzaklama Miktarını Etkileyen Parametrelerin Belirlenmesi**
ZEMBİLÖREN A., GÜRSES E.
8. Savunma Teknolojileri Kongresi (SAVTEK), Turkey, 12 - 14 October 2016
- XXXIV. **Bal Peteği Dolguya Sahip Sandviç Yapıların Bükme Yükü Altındaki Davranışlarının Karşılaştırılması**
YARDIMCI O., GÜRSES E.
VI. Ulusal Havacılık ve Uzay Konferansı (UHUK), Kocaeli, Turkey, 28 - 30 September 2016
- XXXV. **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
- XXXVI. **EXPERIMENTAL AND NUMERICAL INVESTIGATION OF IMPACT INDUCED DAMAGE PROGRESSION IN FIBER REINFORCED COMPOSITES**
GÜRSES E., Topac T., ÇÖKER D.
ICTAM 2016, Montreal, Canada, 21 - 26 August 2016
- XXXVII. **EXPERIMENTAL AND COMPUTATIONAL STUDY OF DAMAGE PROCESS IN CFRP COMPOSITE BEAMS UNDER LOW VELOCITY IMPACT**
TOPAÇ Ö. T. , GÜRSES E., ÇÖKER D.
17th International Conference on Experimental Mechanics, Rodos, Greece, 3 - 07 July 2016
- XXXVIII. **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
- XXXIX. **Hybrid Morphing Trailing Edge Designed for Camber Change of the Control Surface Change**
TUNÇÖZ İ. O. , YANG Y., GÜRSES E., ŞAHİN M., ÖZGEN S., YAMAN Y.
AIAA Scitech, 4 - 08 January 2016
- XL. **Hybrid morphing trailing edge designed for camber change of the control surface**
Tunçöz İ. O. , Yang Y., Gürses E., Şahin M., Özgen S., Yaman Y.
24th AIAA/AHS Adaptive Structures Conference, 2016, California, United States Of America, 4 - 08 January 2016

- XLII. DEVELOPMENT OF BOLTED FLANGE DESIGN TOOL BASED ON FINITE ELEMENT ANALYSIS AND ARTIFICIAL NEURAL NETWORK**
Yildirim A., Kayran A., Gulasik H., Çöker D., Gürses E., Kayran A.
ASME International Mechanical Engineering Congress and Exposition (IMECE2015), Texas, United States Of America, 13 - 19 November 2015
- XLIII. IMECE2015 51021 DEVELOPMENT OF BOLTED FLANGE DESIGN TOOL BASED ON FINITE ELEMENT ANALYSIS AND ARTIFICIAL NEURAL NETWORK**
yıldırım a., hasan g., AKAY A. A. , GÜRSES E., ÇÖKER D., KAYRAN A.
IMECE2015 - ASME 2015 International Mechanical Engineering Congress & Exposition, Houston, 13 - 19 November 2015
- XLIV. Experimental and numerical investigation of damage interaction mechanism in composites under dynamic transverse loading**
Topac O., Burak G., GÜRSES E., ÇÖKER D.
SES 52nd Annual Technical Meeting, College Park, United States Of America, 26 - 28 October 2015
- XLV. Failure Initiation and Progression in 0 90 CFRP Composite Beams Subject to Out of Plane Low velocity Impact**
ÇÖKER D., Topaç Ö. T. , GÜRSES E.
Society of Engineering Science 52nd Annual Technical Meeting, College Park, United States Of America, 26 - 28 October 2015
- XLVI. Büyük Oranda Şekil Değiştirebilen Bir Hibrid Firar Kenarı Kontrol Yüzeyinin Tasarımı ve Analizleri**
İlhan Ozan T., Yosheph Y., Gürses E., Şahin M., Özgen S., Yaman Y.
UHAT2015, III. Ulusal Havacılık Teknolojisi ve Uygulamaları Kongresi, İzmir, Turkey, 23 - 24 October 2015
- XLVII. Modeling of a Three-Dimensional Spherulite Microstructure in Semicrystalline Polymers**
Oktay H. E. , Gürses E.
European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Ankara, Turkey, 14 - 18 September 2015, vol.112, pp.567-575
- XLVIII. Finite Element Modeling of Three Dimensional Spherulite Microstructures**
Oktay H. E. , Gürses E.
European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Ankara, Turkey, 14 - 18 September 2015
- XLIX. PARAMETRIC STUDY FOR THE STUDY OF THE EFFECT OF CONTACT PARAMETERS FOR PLASTIC ANALYSIS OF BOLTED FLANGE CONNECTIONS**
Yilmaz S. E. , Kayran A., Gürses E., Çöker D.
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015
- L. Design and Analysis of an Unmanned Aerial Vehicle Hybrid Trailing Edge Control Surface Having Camber and Decamber Capabilities**
Topaç Ö. T. , Taşdemir B., GÜRSES E., ÇÖKER D.
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015
- L. 3D Numerical Simulation of Nonenergetic Reactive Armor**
Saeidi F., Kurt M. C. , Gürses E., Çöker D.
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015
- LII. PARAMETERS CORRELATION STUDY TO INVESTIGATE THE EFFECTS OF GEOMETRIC VARIABLES ON THE SAFETY OF BOLTED FLANGE CONNECTIONS**
Yildirim A., Akay A. A. , Gulasik H., Çöker D., Gürses E., Kayran A.
8th Ankarar International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015
- LIII. MODELING OF A CIRCULAR DOUBLE FLANGE JOINT INCLUDING CONTACT AND FRICTION EFFECTS**
Akay A. A. , Gulasik H., Yildirim A., Çöker D., Kayran A., Gürses E.
8th Ankara International Aerospcae Conference, Ankara, Turkey, 10 - 12 September 2015
- LIV. Experimental Investigation of Impact Induced Failure Process in CFRP Composite Laminates**
Topaç Ö. T. , Taşdemir B., GÜRSES E., ÇÖKER D.
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015

- LIV. **Modeling of Circular Double Flange Joint Including Contact and Friction Effects**
AKAY A. A. , Gülaşık H., Yıldırım A., ÇÖKER D., KAYRAN A., GÜRSES E.
8th Ankara International Aerospace Conference-AIAC, Ankara, Turkey, 10 - 12 September 2015
- LV. **Design and Analyses of an Unmanned Aerial Vehicle Hybrid Trailing Edge Control Surface Having Camber and Decamber Capabilities**
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