

Ercan Gürses

EDUCATION

Ph.D., Institute of Applied Mechanics

2002-2007 University of Stuttgart, Stuttgart, Germany

Adviser: Prof. Dr. Christian Miehe

Thesis: “Aspects of Energy Minimization in Solid Mechanics: Evolution of Inelastic Microstructures and Crack Propagation”.

M.Sc., Computational Mechanics of Materials and Structures (COMMAS)

2000-2002 University of Stuttgart, Stuttgart, Germany

Adviser: Prof. Dr. Christian Miehe

Thesis: “Two-Scale Relaxation Analysis of Finite-Strain Single Slip Plasticity based on a First-Order Rank-One Convexification”.

B.S., Civil Engineering

1994-1999 Middle East Technical University, Ankara, Turkey

ACADEMIC EXPERIENCE

- Associate Professor at Aerospace Engineering Department, Middle East Technical University (METU), Turkey, April 2017 to present.
- Assistant Professor at Aerospace Engineering Department, Middle East Technical University (METU), Turkey, May 2011-April 2017.
- Postdoctoral Scholar in Mechanical Engineering (Computational Solid Mechanics Group), King Abdullah University of Science and Technology (KAUST), October 2009 - February 2011
- Postdoctoral Scholar in Graduate Aerospace Laboratories (Computational Solid Mechanics Group), California Institute of Technology, October 2007-October 2009.
- Graduate Research Assistant at the Institute of Applied Mechanics, University of Stuttgart, 2002-2007.
- Graduate Student Assistant at the Institute of Applied Mechanics, University of Stuttgart, 2001-2002.
- Graduate Teaching Assistant at the Civil Engineering Department, Middle East Technical University, 1999-2000.

PROJECTS

- Karbon Nanotüp İle Güçlendirilmiş Polimer Kompozitlerin Çok Ölçekli Modellenmesi (Multiscale Modeling of Carbon Nanotube Reinforced Polymer Composites), TÜBİTAK 1001 Projesi, 01/09/2015 - 01/03/2018, Principle Investigator
- Flanş İleri Analiz Arayüzü ve Tasarım Programı Oluşturulması SANTEZ Projesi (Development of Advanced Flange Design and Analysis Interface), 01/02/2014 - 30/01/2017, Principle Investigator
- CHANGE - Combined morphing assessment software using flight envelope data and mission based morphing prototype wing development, EU-FP7 Project, 01/08/2012 - 31/12/2015, Researcher
- Ultra Yüksek Moleküler Ağırlıklı Polietilenin Çok Ölçekli Modellenmesi (Multiscale Modeling of Ultra High Molecular Weight Polyethylene), TÜBİTAK Kariyer Projesi, 111M646, 01/05/2012 - 01/11/2014, Principle Investigator
- Şişen Zırh Ara Katman Malzemesinin Zırh Performansı Üzerine Etkisi ve Zırh Optimizasyonuna Yönelik Malzeme İsterlerinin Oluşturulması (Effect of Intermediate Layer Material on the Performance of Nonexplosive Reactive Armor), Döner Sermaye Projesi-ROKETSAN, DSM-7630-13-01N/R, 01/07/2013 - 30/06/2014, Principle Investigator

- Nanokristal Malzemelerin Çok Ölçekli Modellenmesi (Multiscale Modeling of Nanocrystalline Materials), BAP Bilimsel Araştırma Projesi, BAP-08-11-2012-112, 01/01/2012 - 31/12/2014, Principle Investigator

PROFESSIONAL ACTIVITIES

- Referee for
 - Advances in Materials Science and Engineering
 - Applied Mathematical Modeling
 - ASME Journal of Applied Mechanics
 - Computational Materials Science
 - Engineering Fracture Mechanics
 - Frontiers Materials
 - International Journal for Multiscale Computational Engineering
 - International Journal for Numerical Methods in Engineering
 - International Journal of Solids and Structures
 - International Journal of Damage Mechanics
 - International Journal of Structural Changes in Solids
 - Journal of Aeronautics and Space Technologies
 - Journal of Composite Materials
 - Journal of Elasticity
 - Mechanics of Materials
 - Polymer Bulletin

SCIENTIFIC VISITS

- TU Dresden, Institut für Statik und Dynamik der Tragwerke (Institute for Structural Analysis), January 2013 (1 week)
- TU Dresden, Institut für Statik und Dynamik der Tragwerke (Institute for Structural Analysis), July 2012 (1 week)
- Los Alamos National Laboratory, Materials Science and Technology Division, New Mexico, USA May 2009 (2 weeks)

Publications

INTERNATIONAL
JOURNAL
PUBLICATIONS

V. Taç, **E. Gürses**, “Micromechanical Modelling of Carbon Nanotube Reinforced Composite Materials with a Functionally Graded Interphase”, *Journal of Composite Materials*, in review, (2019).

H. Gülaşık, S. Göktepe, **E. Gürses**, “A Modulus Gradient Model for an Axially Loaded Inhomogeneous Elastic Rod”, *Meccanica*, vol. 53, 2573-2584, (2018)

Ö. T. Topaç, B. Gözlüklü, **E. Gürses**, D. Çöker, “Experimental and Computational Study of Damage Process in CFRP Composite Beams under Low-Velocity Impact”, *Composites Part A: Applied Science and Manufacturing*, vol. 92, 167-182, (2017).

E. Gürses, İ O. Tunçöz, Y. Yang, P. Arslan, U. Kalkan, H. Tıraş, M. Şahin, S. Özgen, Y. Yaman, ”Structural and Aerodynamic Analyses of a Hybrid Trailing Edge Control Surface of a Fully Morphing Wing,” *Journal of Intelligent Material Systems and Structures*, vol. 28, 979-991, (2017).

Y. Yaman, İ O. Tunçöz, Y. Yang, P. Arslan, U. Kalkan, H. Tıraş, **E. Gürses**, M. Şahin, S. Özgen, “Decamber Morphing Concepts by Using a Hybrid Trailing Edge Control Surface”, *Aerospace*, vol. 2, 482-504, (2015).

H. E. Oktay and **E. Gürses**, “Modeling of Spherulite Microstructures in Semicrystalline Polymers”, *Mechanics of Materials*, vol. 90, 83-101, (2015).

E. Gürses, H. Wafai and T. El Sayed, “Constitutive Modeling of Stress-Driven Grain Growth in Nanocrystalline Metals”, *Modelling and Simulation in Materials Science*, vol. 21, 025011, (2013).

T. El Sayed, **E. Gürses** and A. Siddiq, “A Phenomenological Two-Phase Constitutive Model for Porous Shape Memory Alloys”. *Computational Materials Science*, vol. 60, 44-52, (2012).

E. Gürses and T. El Sayed, “A Constitutive Model of Nanocrystalline Metals Based on Competing Grain Boundary and Grain Interior Deformation Mechanisms”. *Materials Letters*, vol. 65, 3391-3395, (2011).

E. Gürses and T. El Sayed, “Constitutive Modeling of Strain Rate Effects in Nanocrystalline and Ultrafine Grained Polycrystals”. *International Journal of Solids and Structures*, vol. 48, 1610-1616, (2011).

E. Gürses and C. Miehe, “On Evolving Deformation Microstructures in Non-Convex Partially Damaged Solids”. *Journal of the Mechanics and Physics of Solids*, vol. 59, 1268-1290, (2011).

E. Gürses and T. El Sayed, “A Variational Multiscale Constitutive Model for Nanocrystalline Materials”. *Journal of the Mechanics and Physics of Solids*, vol. 59 732-749 (2011).

E. Gürses and T. El Sayed, “On Tension-Compression Asymmetry in Ultrafine-Grained and Nanocrystalline Metals”. *Computational Materials Science*, vol. 50, 639-644 (2010).

J. Rimoli, **E. Gürses** and M. Ortiz, “Shock-induced subgrain microstructures as possible homogeneous sources of hot spots and initiation sites in energetic polycrystals”, *Physical Review B*, vol. 81, 014112 (2010).

E. Gürses and C. Miehe, “A Computational Framework of Three Dimensional Configurational Force Driven Brittle Crack Propagation”, *Computer Methods in Applied Mechanics and Engineering*, vol. 198, 1413-1428 (2009).

C. Miehe, **E. Gürses** and M. Birkle, “A Computational Framework of Configurational Force Driven Brittle Fracture Based on Incremental Energy Minimization”, *International Journal of Fracture*, Vol. 145, 245-259 (2007).

C. Miehe and **E. Gürses**, “A Robust Algorithm for Configurational Force Driven Brittle Crack Propagation with R-Adaptive Mesh Alignment”, *International Journal for Numerical Methods in Engineering*, vol. 72, 127-155 (2007).

C. Miehe, M. Lambrecht and **E. Gürses**, “Analysis of Material Instabilities in Inelastic Solids by Incremental Energy Minimization and Relaxation Methods: Evolving Deformation Microstructures in Finite Plasticity”, *Journal of the Mechanics and Physics of Solids*, vol. 52, 2725-2769 (2004).

BOOK CHAPTERS

H. E. Oktay, **E. Gürses**, “Modeling of a Three-Dimensional Spherulite Microstructure in Semicrystalline Polymers”, in *Numerical Mathematics and Advanced Applications - ENUMATH 2015*, Volume 112 of the series *Lecture Notes in Computational Science and Engineering*, Edited by B. Karasözen, M. Manguoğlu, M. Tezer-Sezgin, S. Göktepe, Ö. Uğur, 567-575, Springer, 2016.

Ö. T. Topaç, B. Taşdemir, B. Gözlüklü, **E. Gürses**, D. Çöker, “Experimental and Computational Investigation of Out-of-Plane Low Velocity Impact Behavior of CFRP Composite Plates”, *Fracture, Fatigue, Failure and Damage Evolution Volume 8, Proceedings of the 2015 Annual Conference on Experimental and Applied Mechanics*, Edited by A. M. Beese, A. T. Zehnder, S. Xia, 9-16, Springer, 2016.

E. Gürses, A. Mainik, C. Miehe and A. Mielke, “Analytical and Numerical Methods for Finite Strain Elastoplasticity”, In R. Helmig, A. Mielke, B. Wohlmuth, editors, *Multifield problems in Fluid and Solid Mechanics*. Series Lecture Notes in Applied and Computational Mechanics, 28: 491-529. Springer, 2006.

INTERNATIONAL PROCEEDINGS / CONFERENCE PAPERS

A. Okul, **E. Gürses**, “Development of Structural Neural Network Design Tool for Buckling Behaviour of Skin-Stringer Structures Under Combined Compression and Shear Loading”, *IMECE 2018 - ASME 2018 International Mechanical Engineering Congress & Exposition*, 9-15 November, 2018, Pittsburgh, Pennsylvania, USA.

S. M. Bostancı, **E. Gürses**, D. Çöker, “Finite Element Modelling of TBC Failure Mechanisms by Using XFEM”, *IMECE 2018 - ASME 2018 International Mechanical Engineering Congress & Exposition*, 9-15 November, 2018, Pittsburgh, Pennsylvania, USA.

V. Taç, **E. Gürses**, “Micromechanical Characterization of Nanotube Reinforced Polymers”, *1st International Conference on Advances in Mechanical and Mechatronics Engineering ICAMMEN 2018*, 8-9 November, 2018, Ankara, Turkey.

T. V. Sanlı, D. Çöker, **E. Gürses**, A. Kayran, “Development of Artificial Neural Network Based Design Tool for Aircraft Engine Bolted Flange Connection Subject to Combined Axial and Moment Load”, *IMECE 2017 - ASME 2017 International Mechanical Engineering Congress & Exposition*, 3-9 November, 2017, Tampa, Florida, USA.

A. A. Akay, D. Çöker, A. Kayran, **E. Gürses**, “Experimental Study and Finite Element Analysis of Dovetail Attachments”, *IMECE 2017 - ASME 2017 International Mechanical Engineering Congress & Exposition*, 3-9 November, 2017, Tampa, Florida, USA.

A. Cankur, **E. Gürses**, “Development of an Artificial Neural Network Based Analysis Method for Skin-Stringer Structures”, *7th EASN International Conference on Innovation in European Aeronautics Research*, 26-29 September 2017, Warsaw, Poland.

O. Yardımcı, **E. Gürses**, “Laminated Shell Modeling of Sandwich Beams with Ramp Region Under Four Point Bending Loading via Structural Optimization”, *7th EASN International Conference on Innovation in European Aeronautics Research*, 26-29 September 2017, Warsaw, Poland.

A. A. Akay, D. Çöker, A. Kayran, **E. Gürses**, “Implementation of the Submodelling Technique on the Dovetail Attachments”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

A. Zembilören, **E. Gürses**, “A Study on Energy Trapping Parameters of a Multistable Elastic Beam”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

A. Cankur, **E. Gürses**, “An Artificial Neural Network Based Analysis Method for Skin-Stringer Structures”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

G. Toraman, M. Konuk, E. Sert, H. Üstünel, H. Gülaşık, **E. Gürses**, “Molecular Dynamics Simulations of Carbon Nanotube Reinforced Polymer Composites”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

O. Koca, Gülaşık, **E. Gürses**, “Alternative Finite Element Based Modeling Approaches for Carbon Nanotubes”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

O. Yardımcı, **E. Gürses**, “Equivalent Model of a Sandwich Beam With Ramp Region Under Four Point Bending via Genetic Algorithm”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

P. Arslan, **E. Gürses**, “Optimization of Compliant Parts of a Trailing Edge Control Surface of a Morphing Wing”, *9th Ankara International Aerospace Conference*, 20-22 September 2017, Ankara, Turkey.

G. Başaran, **E. Gürses**, “Numerical Study of High Velocity Impact Response of Vehicle Armor Combination Using LS DYNA”, *11th European LS DYNA Conference*, 9-11 May 2017, Salzburg, Austria.

E. Gürses, Ö. T. Topaç, D. Çöker, “Experimental and Numerical Investigation of Impact Induced Damage Progression in Fiber Reinforced Composites”, *24th International Congress on Theoretical and Applied Mechanics (ICTAM)*, 21-26 August 2016, Montreal, Canada.

İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, “Hybrid Morphing Trailing Edge Designed for Camber Change of the Control Surface”, *24th AIAA/AHS Adaptive Structures Conference*, 4-8 January 2016, San Diego, California, USA.

A. Yıldırım, A. A. Akay, H. Gülaşık, **E. Gürses**, D. Çöker, A. Kayran, “Development of Bolted Flange design Tool Based on Finite Element Analysis and Artificial Neural Networks”, *IMECE2015 - ASME 2015 International Mechanical Engineering Congress & Exposition*, 13-19 November 2015, Houston, Texas, USA.

Ö. T. Topaç, B. Taşdemir, **E. Gürses**, D. Çöker, “Experimental Investigation of Impact-Induced Failure Process in CFRP Composite Laminates”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

F. Saeidi, M. C. Kurt, T. Deniz, **E. Gürses**, “3D Numerical Simulation of Nonenergetic Reactive Armor”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

A. Yıldırım, A. A. Akay, H. Gülaşık, D. ker, **E. Gürses**, A. Kayran, “Parameters Correlation

Study to Investigate the Effects of Geometric Variables on the Safety Bolted Flange Connections”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

S. E. Yılmaz, A. Kayran, **E. Gürses**, D. Çöker, “Parametric Study for the Study of the Effect of Contact Parameters for Plastic Analysis of Bolted Flange Connections”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

A. A. Akay, H. Gülaşık, A. Yıldırım, D. Çöker, A. Kayran, **E. Gürses**, “Modeling of a Circular Double Flange Joint Including Contact and Friction Effects”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, “Design and Analysis of an Unmanned Aerial Vehicle Hybrid Trailing Edge Control Surface Having Camber and Decamber Capabilities”, *8th Ankara International Aerospace Conference*, 10-12 September 2015, Ankara, Turkey.

H. E. Oktay, **E. Gürses**, “Finite Element Modeling of Textured Surfaces of Ultra High Molecular Weight Tibial Insert”, *9th European Solid Mechanics Conference (ESMC 2015)*, 6-10 July 2015, Madrid, Spain.

İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, “A Hybrid Trailing Edge Control Surface Capable of Camber and Decamber Morphing”, *7th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2015)*, 3-6 June 2015, Ponta Delgada, Portugal.

S. E. Yılmaz, T. Özcihan, A. Kayran, **E. Gürses**, D. Çöker, “Design of Experiments Study for Determination for the Study of the Effect of Contact Parameters in Bolted Flange Connections”, *International Conference on Advances in Mechanical Engineering (ICAME 2015)*, 13-15 May 2015, Yıldız Technical University, İstanbul, Turkey.

P. Arslan, U. Kalkan, H. Tıraş, İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen and Y. Yaman, “Structural Analysis of an Unconventional Hybrid Control Surface of a Morphing Wing”, in: *Proceedings of ICAST 2014*, pages 1–12, 2014.

E. Gürses and T. El Sayed, “Constitutive Modeling of Nanocrystalline Metals based on Competing Grain Boundary and Grain Interior Deformation Mechanisms”, *ECCOMAS - European Congress on Computational Methods in Applied Sciences and Engineering*, September 10-14, 2012, Vienna, Austria.

E. Gürses and T. El Sayed, “Modeling of Nanocrystalline Metals Based on Competing Grain Boundary and Grain Interior Deformation Mechanisms”, *23rd International Congress on Theoretical and Applied Mechanics (ICTAM)*, 19-24 August 2012, Beijing, China.

E. Gürses and T. El Sayed, “Softening in Nanocrystalline Metals: Modeling of Grain Growth Induced Creep and Relaxation”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 11, 2011, pp. 377-378.

T. El Sayed and **E. Gürses**, “Multiscale Modeling of Nanocrystalline Materials: A Variational Approach”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 11, 2011, pp. 511-512

E. Gürses and C. Miehe, “A Computational Framework of Three Dimensional Configurational Force Driven Brittle Crack Propagation”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 7, 2007, pp. 4030019-4030020.

C. Miehe, **E. Gürses** and D. Zimmermann, “A Robust Adaptive Algorithm for Material Force Driven Brittle Fracture Based on Incremental Energy Minimization”, *Proceedings of the 6th*

European Solid Mechanics Conference, 28 August-1 September, 2006, Budapest, Hungary, online available in

E. Gürses and C. Miehe, “Robust Algorithm for Brittle Fracture based on Energy Minimization”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 6, 2006, pp. 167-168.

M. Birkle, **E. Gürses** and C. Miehe, “On Variational Based Scale-Bridging of Inelastic Composites”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 6, 2006, pp. 465-466.

E. Gürses, M. Birkle and C. Miehe, “Deformation Driven Homogenization of Fracturing Solids”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 5, 2005, pp. 333-334.

E. Gürses and C. Miehe, “Analysis of Evolving Deformation Microstructures in Instable Inelastic Solids Based on Energy Relaxation Methods,” *Proceedings of the XXI International Congress of Theoretical and Applied Mechanics ICTAM 2004*, 15-21 August 2004, Warsaw, Poland, online available in

E. Gürses, M. Becker and C. Miehe, “Numerical Computation of Anisotropically Evolving Yield Surfaces based on Micro-to-Macro Transitions”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 4, 2004, pp. 219-220.

E. Gürses, M. Lambrecht, C. Miehe “Application of Relaxation Techniques to Nonconvex Isotropic Damage Model”, *Proceedings in Applied Mathematics and Mechanics PAMM*, vol. 3, 2003, pp. 222-223.

M. Lambrecht, **E. Gürses** and C. Miehe, “Relaxation Analysis of Material Instabilities in Damage Mechanics Based on Incremental Convexification Techniques”, *Proceedings of the VII International Conference on Computational Plasticity, COMPLAS 2003*, 7-10 April 2003, Barcelona, Spain.

NATIONAL
PROCEEDINGS /
CONFERENCE
PAPERS

G. Başaran, **E. Gürses**, “Yüksek Hızda Mermi Çarpışma Durumunda Zırh Kombinasyonlarının Sayısal Olarak İncelenmesi”, *VII. Ulusal Havacılık ve Uzay Konferansı (UHUK)*, 12-14 Eylül 2018, Ondokuz Mayıs Üniversitesi, Samsun, Türkiye.

A. Cankur, **E. Gürses**, “Kirişle Güçlendirilmiş Kabuk Yapılar İçin Yapay Sinir Ağ Bazlı Analiz Yöntemi Geliştirilmesi”, *XX. Ulusal Mekanik Kongresi*, 5-9 Eylül 2017, Uludağ Üniversitesi, Bursa, Türkiye.

A. Zembilören, **E. Gürses**, “Birden Fazla Kararlı Hale Sahip Elastik Bir Kirişin Enerji Tuzaklama Miktarını Etkileyen Parametrelerin Belirlenmesi”, *8. Savunma Teknolojileri Kongresi Kongresi SAVTEK 2016*, 12-14 Ekim 2016, Ankara, Türkiye.

O. Yardımcı, **E. Gürses**, “Bal Peteği Dolguya Sahip Sandviç Yapıların Bükme Yükü Altındaki Davranışlarının Karşılaştırılması” *VI. Ulusal Havacılık ve Uzay Konferansı (UHUK)*, 28-30 Eylül 2016, Kocaeli, Türkiye.

V. Şanlı, A. A. Akay, A. Yıldırım, **E. Gürses**, D. Çöker, A. Kayran, “Eksenel Kesme ve Moment Yükü Altındaki Flanşlar İçin Yapay Sinir Ağına Dayalı Cıvatalı Flanş Tasarım Aracı Geliştirilmesi”, *VI. Ulusal Havacılık ve Uzay Konferansı (UHUK)*, 28-30 Eylül 2016, Kocaeli, Türkiye.

İ. O. Tunçöz, Y. Yang, P. Arslan, U. Kalkan, H. Tıraş, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, “Büyük Oranda Şekil Değiştirebilen Bir Hibrit Firar Kenarı Kontrol Yüzeyinin Tasarımı ve Analizleri,” *3. Ulusal Havacılık Teknolojisi ve Uygulamaları Kongresi UHAT 23-24 Ekim 2015*, İzmir, Türkiye.

P. Arslan, U. Kalkan, H. Tıraş, İ. O. Tunçöz, Y. Yang, S. Özgen, **E. Gürses**, M. Şahin,

Y. Yaman, "Hibrit Bir Kontrol Yüzeyinin Hesaplamalı Akışkanlar Dinamiği Destekli Yapısal Analizi", *Uluslararası Katılımlı 17. Makina Teorisi Sempozyumu (UMTS 2015)*, 14-17 Haziran 2015, İzmir, Türkiye.

P. Arslan, U. Kalkan, H. Tıraş, İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Bir Hibrit Fırar Kenarı Kontrol Yüzeyinin Tasarımı ve Analizi", *VIII. Ulusal Uçak, Havacılık ve Uzay Mühendisliği Kurultayı*, 22-23 Mayıs 2015, Eskişehir, Türkiye.

Topaç, Ö.T., Taşdemir, B., Çöker D., **E. Gürses**, "Katmanlı Kompozitlerde Düşük Hızlı Darbe Davranış Analizi", *V. Ulusal Havacılık ve Uzay Konferansı (UHUK)*, 8-10 Eylül 2014, Kayseri, Turkey.

P. Arslan, U. Kalkan, H. Tıraş, İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Konvansiyonel Olmayan İki Farklı Kontrol Yüzeyinin Yapısal Özelliklerinin Değerlendirilmesi ve Karşılaştırılması", *V. Ulusal Havacılık ve Uzay Konferansı (UHUK)*, 8-10 Eylül 2014, Kayseri, Turkey.

P. Arslan, U. Kalkan, H. Tıraş, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Konvansiyonel ve Konvansiyonel Olmayan Kontrol Yüzeyine Sahip İnsansız Hava Aracı Kanatlarının Ağırlıklarının İncelenmesi", *7. Savunma Teknolojileri Kongresi Kongresi SAVTEK 2014*, 25-27 Haziran 2014, Ankara, Turkey.

Y. Yang, İ. O. Tunçöz, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Konvansiyonel ve Konvansiyonel Olmayan Kontrol Yüzeyine Sahip İnsansız Hava Aracı Kanatlarının Aerodinamik Özelliklerinin Değerlendirilmesi", *7. Savunma Teknolojileri Kongresi Kongresi SAVTEK 2014*, 25-27 Haziran 2014, Ankara, Turkey.

M. C. Kurt, F. Saeidi, T. Deniz, **E. Gürses**, "Çukur İmla Şişen Zırh Etkileşiminin Sayısal Yöntemlerle İncelenmesi", *7. Savunma Teknolojileri Kongresi Kongresi SAVTEK 2014*, 25-27 Haziran 2014, Ankara, Turkey.

P. Arslan, U. Kalkan, H. Tıraş, İ. O. Tunçöz, Y. Yang, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Bir İnsansız Hava Aracının Konvansiyonel Olmayan Esnek Kontrol Yüzeylerinin Yapısal Analizi ve İç Yapısının Tasarımı", *3. Ulusal Havacılıkta İleri Teknolojiler Konferansı HİTEK 2014*, 18-19 Haziran 2014, İstanbul, Turkey.

H. Tıraş, İ. O. Tunçöz, **E. Gürses**, M. Şahin, S. Özgen, Y. Yaman, "Büyük Oranda Şekil Değiştirebilen Kontrol Yüzeylerinin Yapısal Özelliklerinin Değerlendirilmesi", pp. 453-461, *2. Ulusal Havacılık Teknolojisi ve Uygulamaları Kongresi UHAT 29-30 Kasım 2013*, İzmir, Turkey.

P. Arslan, U. Kalkan, Y. Yang, S. Özgen, M. Şahin, **E. Gürses**, Y. Yaman, "Büyük Oranda Şekil Değiştirebilen Kanat Yüzeylerinin Aerodinamik Yükler Altındaki Davranışları", pp. 462-469, *2. Ulusal Havacılık Teknolojisi ve Uygulamaları Kongresi UHAT 29-30 Kasım 2013*, İzmir, Turkey.

H. E. Oktay, **E. Gürses**, "Yarı Kristal Polimer Malzemelerin Çok Ölçekli Modellenmesi", *XVIII. Ulusal Mekanik Kongresi 26-30 Ağustos 2013*, Manisa, Turkey.

Y. Yaman, S. Özgen, M. Şahin, **E. Gürses**, "Büyük Oranda şekil Değiştirebilen Kanat/Kontrol Yüzeylerinin Uçuştaki Etkileri", *1. Ulusal Havacılık Teknolojisi ve Uygulamaları Kongresi UHAT 20-22 Aralık 2012*, İzmir, Turkey.

M. U. Polat, S. Göktepe and **E. Gürses**, "Prefabrikte Çerçeve ve Panel Duvar Yapısal Sistemlerin Deprem Davranışı ve Sismik Rehabilitasyonu", *Deprem ve Prefabrikasyon - 10. Prefabrikasyon Sempozyumu*, (2000), pp. 117-126.