

CV

Name and last name: Altan KAYRAN

Date of Birth: 18 March 1964

Title: Prof.Dr.

Education:

Degree	Field	University	Year
Undergraduate	Mechanical Engineering	Middle East Technical University	1985
Ph.D.	Mechanical Engineering	University of Delaware	1990

Ph.D. Thesis Title: Free Vibration Analysis of Laminated Composite Shells of Revolution Including Transverse Shear Deformation

Advisor: Dr. Jack R. Vinson

Experience :

Title	Place of duty	Year
Teaching assistant	Mechanical Engineering Department, University of Delaware, USA	1985-1990
Third-lieutenant: Military service	Ministry of Defense, F-16 System Management Directorate	1990-1992
Senior Design Engineer	Tuskish Aerospace Industries, Ankara, Turkey	1992-1994
Design and Development Engineer	TOFAŞ Turkish Automobile Industries, Bursa Turkey	1994-1996
Assistant Professor	Mechanical Engineering Department, Boğaziçi University, İstanbul, Turkey	1996-1997
Senior Design Engineer	ASELSAN, Military Electronics Industry, Ankara, Turkey	1997-2003
Instructor	Department of Aerospace Engineering, Middle East Technical University, Ankara, Turkey	1998-2003
Assistant Professor	Department of Aerospace Engineering, Middle East Technical University, Ankara, Turkey	2003
Associate Professor	Department of Aerospace Engineering, Middle East Technical University, Ankara, Turkey	2003-2006
Senior Design Engineer	Tuskish Aerospace Industries, Ankara, Turkey	July 2006- January 2011
Professor	Department of Aerospace Engineering, Middle East Technical University, Ankara, Turkey	January 2011-

Project Experience:

- *'Unmanned Air Vehicle UAV-XI Design and Flight Tests,'* TAI Development Project, **Senior Design Engineer**, TAI, 1991-1994.
- *'Future Large Aircraft Pre-Feasibility Study,'* TAI Joint Project, **Senior Design Engineer**, TAI, 1993-1995.
- *'Impact Damage and Damage Growth Mechanisms in Laminated Composites,'* EUCLID/CEPA 3/RTP 3.1 Project, **Senior Design Engineer**, TAI, 1993-1995.
- *'Integration of an LPG kit to a Tofaş Automobile,'* TOFAŞ Project, **Development Engineer**, TOFAŞ, 1995-1996.
- *Initiated studies related to the Customs Union matters in Automotive Industry, and the establishment of the European Union Motor Vehicle Type Approval System in Turkey,* Automobile Industry Association Project, **TOFAŞ Program coordinator**, TOFAŞ, 1994-1996.
- *'Determination of the Influence of Conditions During Impact on the Extent of Damage,'* EUCLID/CEPA 3/RTP 3.1 Project, **Joint Project Coordinator**, Mechanical Engineering Department, Bosphorous University, 1995-1997.
- *'Mechanical Design of Electronic System Packages and Antenna Guide Systems,'* ASELSAN Projects, **Senior Design Engineer**, ASELSAN, 1997-1998.
- *'Prototype design and production of a short range unmanned air vehicle Project Proposal,'* ASELSAN- Middle East Technical University (Department of Aerospace Engineering) Project, **Project Engineer**, ASELSAN, 1998.
- *'Finite Element Modeling of the external store mounted wing of the Light Transport Aircraft CN235: Static Stress Analysis Under Aerodynamic Loading and Free Vibration Analysis,'* ASELSAN-Middle East Technical University (Department of Aerospace Engineering) Project, **Project Coordinator**, ASELSAN-Department of Aerospace Engineering, 1998-2001.
- *'Design, Analysis (Static, Dynamic and Flutter Analyses), Production and Assembly of an external electronic pod to the wing of Light Transport Aircraft CN235 (Electronic Warfare Project Aircraft),'* Joint project between Indonesian Aerospace Industries (IAe), 2nd Air Supply Maintenance Center Command of Turkish Air Force, and ASELSAN, **Project Engineer**, ASELSAN, 1999-2001.
- *'Wing Flutter Analysis of CN235 Light Transport Aircraft (Electronic Warfare Project Aircraft),'* ASELSAN-İstanbul Technical University Project, **Project Coordinator**, ASELSAN, 1998-2001.
- *'Certification Flight Tests of the Modified CN235 Light Transport Project Aircraft,'* ASELSAN-2nd Air Supply Maintenance Center Command of Turkish AirForce-Indonesian Aerospace Industries (IAe) Project, **Joint Project Coordinator and Flight Test Engineer**, ASELSAN, 1998-2001.
- *'Updating of the Aircraft Flight Manuals (Vol.1 and Vol.2) and Pilotchecklist of the modified CN235 Light Transport Project Aircraft Based on the results of the flight test program,'* ASELSAN-Indonesian Aerospace Industries (IAe) Project, **Project Engineer**, ASELSAN, 2001-2002.

- ‘*Conceptual Design of a Stewart Platform,*’ Development project of the Dynamic Systems Group of the Mechanical Design Department, **Project Engineer**, ASELSAN, 2002.
- ‘*Preparation of the Test Plan for the Certification of the Mission System Aircraft, Management of the ground and flight tests of the CN235 Light Transport Project Aircraft,*’ ASELSAN-2nd Air Supply Maintenance Center Command of Turkish AirForce-223th Squadron of the 12th Base of the Turkish AirForce Project, **Project Engineer**, ASELSAN, 2002.
- ‘*Effect of the flare ejection loads on the structural strength of the countermeasure dispenser unit – aircraft mounting interface for the electronic warfare project aircraft, and evaluation of the effect of asymmetric flare ejection loads on the aircraft roll and pitch characteristics,*’ ASELSAN Project, **Project Engineer**, ASELSAN, 2002.
- ‘Slip-ring system design and manufacturing’, , ASELSAN Project, **Mechanical design lead of the project**, ASELSAN, 2003.
- ‘*Design and manufacturing of unmanned air vehicle*’, YUUP 2004K120740, **Researcher**, BAP2 Project, Middle East Technical University, 2004-2007.
- ‘*Design and manufacturing of tactical unmanned air vehicle*’, Project awarded by Scientific and Technological Research Council of Turkey Project No: 108M104, **Researcher**, Middle East Technical University, 2008-2012.
- ‘*Design, manufacturing and testing of a electric propulsion system that will be used in satellite systems*’, Project awarded by Scientific and Technological Research Council of Turkey, Project No: 109M402, **Researcher**, Middle East Technical University, 2010-2012.
- ‘*Development of bolted flange connection design tool,*’ Funded by the Ministry of Science, Technology and Industry of Turkey, Proje No: 0055.STZ.2013-1, **Researcher**, Middle East Technical University, 2013-2016.
- ‘*Progressive interlaminar failure analysis in composite missile structures,*’ Researcher Development Program For Industry, Funded by Roketsan Inc. and Undersecretariat of Defense Industry of Turkey, Project No: 2014-03-13-2-00-02, **Project Manager**, Middle East Technical University, 2014-2016.
- ‘*Determination of the bending-twisting coupling in composite structures via digital image correlation (DIC) method and exploiting bending-twisting coupling in turbine blades for load alleviation in horizontal axis wind turbines,*’ Project awarded by Scientific and Technological Research Council of Turkey, Project No: 213M611, **Project Manager**, Middle East Technical University, 2014-2016.
- ‘*Wind energy technologies research and application center, Infrastructure project of the Ministry of Development,*’ Project No: BAP-08-11-DPT.2011K120340, **Assistant director**, Middle East Technical University, 2011-2018.
- ‘*Determination of design criteria for repair regions in composite structures and progressive failure analysis,*’ Researcher Development Program For Industry, Funded by Roketsan Inc. and Undersecretariat of Defense Industry of Turkey, Project No: 2015-03-13-2-00-07, **Project Manager**, Middle East Technical University, 2015-2018.
- *Design of a Very Light Aircraft (VLA)*, Leading a group of students together with other Professors in the university for the design of the VLA, **Responsibilities:** Structural design and analysis, cockpit design, loads and

aeroelasticity. Project is sponsored by Turkish Aerospace Inc. and Middle East Technical University, 2018-2020.

- *Design, analysis, fabrication and test of a novel small horizontal axis wind turbine blade for use in urban areas*, International Bilateral Joint Cooperation Program Project, **Project Manager on Turkish side**, Project partners: Scientific and Technological Research Council of Turkey- METU RUZGEM, Iran MSTR-MERC, 2020-2022.

PUBLICATIONS

International refereed journals (SCI)

1. Kayran, A. ve J.R. Vinson, 'Free Vibration Analysis of Laminated Composite Truncated Conical Shells,' *AIAA Journal*, **28**, 1259-1269, (1990).
2. Kayran, A. ve J.R. Vinson, 'Torsional Vibrations of Layered Composite Paraboloidal Shells,' *Journal of Sound and Vibration*, **141**, 231-244, (1990).
3. Kayran, A. ve J.R. Vinson, 'The Effect of Transverse Shear Deformation on the Natural Frequencies of Laminated Composite Paraboloidal Shells,' *Journal of Vibration and Acoustics-Transactions of the ASME*, **8**, 1268-1274, (1990).
4. Kayran, A., J.R. Vinson ve E.S. Ardiç, 'A Method for the Calculation of Natural Frequencies of Orthotropic Axisymmetrically Loaded Shells of Revolution,' *Journal of Vibration and Acoustics- Transactions of the ASME*, **116**, 16-25, (1994).
5. Ardiç, E.S., C. Bolcan ve A. Kayran, 'A Method of Strain and Stress Analysis of Composites for Nonlinear Strain Distribution Case,' *International Journal of Solid and Structures*, **31**, 3457-3473, (1994).
6. Ardiç, E.S., C. Bolcan ve A.Kayran, 'A Strain Analysis Method for the Failure Prediction in Laminated Composites,' *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **209**, 43-51, (1995).
7. Kayran, A. ve G. Anlaş, 'Effect of Stacking Sequence on Free Vibration Frequencies of Laminated Composite Circular Cylindrical Shells,' *Journal of Vibration and Control*, **5**, 355-372, (1999).
8. Kayran, A., 'Flutter qualification of transport aircraft with store suspension,' *Aircraft Engineering and Aerospace Technology*, **Vol. 76**, No. 1, 19-28, (2004).
9. Kayran, A., 'Küssner's function in sharp edged gust problem- A correction', *Journal of Aircraft*, Vol. 43, No.5, 1596-1599, (2006).
10. Kayran, A., 'Flight flutter testing and aeroelastic stability of aircraft,' *Aircraft Engineering and Aerospace Technology*, **Vol. 79**, No. 2, 150-162, (2007).
11. Kayran, A., and Yavuzbalkan, E., 'Semi-analytical study of free vibration characteristics of shear deformable filament wound anisotropic shells of revolution,' *Journal of Sound and Vibration*, Vol. 319, pp. 260-281, (2009).

- 12.** Aydınçak, İ., and Kayran, A., 'An approach for the evaluation of effective elastic properties of honeycomb cores by finite element analysis of sandwich panels,' *Journal of Sandwich Structures and Materials*, (ISSN (print): 1099-6362 , ISSN (online): 1530-7972), Vol.11, No. 5, pp.385-408, (2009).
- 13.** Kayran, A., Yavuzbalkan, E., 'Free vibration analysis of ring-stiffened branched composite shells of revolution,' *AIAA Journal* (ISSN:0001-1452), Vol. 48, No.4, pp. 749-762, (2010).
- 14.** Konokman, HE., Çoruh, MM., and Kayran A., 'Computational and experimental study of high speed impact of metallic Taylor cylinders,' DOI 10.1007/s00707-011-0467-1, *ACTA Mechanica* , published online, (2011).
- 15.** Kayran, A., İbrahimoğlu, CS., 'Effect of semi-geodesic winding on the vibration characteristics of filament wound shells of revolution,' *Journal of Applied Mechanics*, Vol. 78 (6), pp. 061008-1 - 061008-11, (2011).
- 16.** Kayran, A., İbrahimoğlu C.S., Preliminary study on the applicability of semi-geodesic winding in the design and manufacturing of composite towers, 2014 J. Phys.: Conf. Ser. 555 012059, doi:10.1088/1742-6596/555/1/012059.
- 17.** Günel, M., Kayran, A., 'Non-Linear Progressive Failure Analysis of Open-Hole Composite Laminates Under Combined Loading,' *Journal of Sandwich Structures and Materials*, Vol. 15(3), pp.309-339, (2013).
- 18.** Gözcü, M.O., Kayran, A., Investigation of the effect of bending-twisting coupling on the load in wind turbines with superelement blade definition, 2014 J. Phys.: Conf. Ser. 524 012040, doi:10.1088/1742-6596/524/1/012040.
- 19.** Sargın, H., Kayran, A., Comparison of transient and quasi-steady aeroelastic analysis of wind turbine blade in steady wind conditions, 2014 J. Phys.: Conf. Ser. 524 012051, doi:10.1088/1742-6596/524/1/012051.
- 20.** Sayar, M.B., Kayran, A. 'Two Stage Fatigue Life Evaluation of Aircraft Fuselage Panel with a Bulging Circumferential Crack and a Broken Stringer', *Fatigue Fract Engng Mater Struct*, Vol: 37, pp. 494-507, (2014).
- 21.** Dababneh, O., Kayran, A., Design, Analysis and Optimization of Thin Walled Semi-Monocoque Wing Structures Using Different Structural Idealizations in the Preliminary Design Phase, *International Journal of Structural Integrity*, Vol 5,No:3 pp.214 – 226, (2014).
- 22.** Çınar, O., Erdal M., Kayran, A., Accurate Equivalent Models of Sandwich Laminates with Honeycomb Core and Composite Face Sheets via Optimization Involving Modal Behavior, accepted for publication in *Journal of Sandwich Structures and Materials*, DOI:10.1177/1099636215613934, 2015.

- 23.** Çiçek, K.F., Erdal M., Kayran, A., Experimental and Numerical Study of Process-Induced Total Spring-in of Corner-Shaped Composite Parts, *Journal of Composite Materials*, Vol. 51, No. 16, pp. 2347-2361, 2016, DOI: 10.1177/0021998316669993.
- 24.** Konokman, H.E., Kayran, A., Kaya, M., Aircraft Vulnerability Assessment against Fragmentation Warhead, *Aerospace Science and Technology*, Vol. 67, 2017, pp. 215-227.
- 25.** Şener, Ö., Farsadi, T., Gözcü, M.O., Kayran, A., Evaluation of the Effect of Spar Cap Fiber Angle of Bending-Torsion Coupled Blades on the Aero-Structural Performance of Wind Turbines, *Journal of Solar Energy Engineering*, Vol. 140, pp. 041004-1-18, August 2018, doi: 10.1115/1.4039350.
- 26.** Atalay, O., Kayran A., Load Reduction in Wind Turbines with Bend-Twist Coupled Blades without Power Loss at Underrated Wind Speeds, *J. Phys.: Conf. Ser.* 1037, (2018), 042015, doi :10.1088/1742-6596/1037/4/042015.
- 27.** Farsadi, T., Rahmanian, M., Kayran, A., Geometrically Nonlinear Aeroelastic Behaviour of Pretwisted Composite Wings Modeled as Thin Walled Beams, *Journal of Fluids and Structures*, Vol. 83, 2018, pp. 259-292, <https://doi.org/10.1016/j.jfluidstructs.2018.08.013>.
- 28.** Yıldırım, A., Akay, A.A., Gülaşık, H., Çoker, D., Gürses, E., Kayran, A., Development of bolted flange design tool based on artificial neural network, *Journal of Pressure Vessel Technology*, Vol. 141, No. 5, October 2019, 051293-1-11, DOI: 10.1115/1.4043915.
- 29.** Shabestari, S.S.H., Kayran, A., Development of a regression model for the life assessment of open-hole specimens with double through cracks utilizing stress intensity factor calculations via XFEM, *Structural Integrity Procedia* Vol.21,2019, pp. 154-165, DOI: 10.1016/j.prostr.2019.12.097.
- 30.** Demirel, G.I., Kayran, A., Implementation of Dirlik's damage model for the vibration fatigue analysis, *Structural Integrity Procedia* Vol.21,2019, pp. 101-111, DOI: 10.1016/j.prostr.2019.12.091.
- 31.** Farsadi, T., Rahmanian, M., Kayran, A., Reduced order nonlinear aeroelasticity of swept composite wings using compressible indicial unsteady aerodynamics, *Journal of Fluids and Structures* Vol.92, 2020, 102812, <https://doi.org/10.1016/j.jfluidstructs.2019.102812>.
- 32.** Farsadi, T., Bozkurt, M.O., Coker, D., Kayran, A., Improvement of structural characteristics of composite thin-walled beams using variable stiffness concept via curvilinear fiber placement, *Proc IMechE Part G: J Aerospace Engineering* Vol.0(0), 2021, pp.1-16, DOI: 10.1177/0954410020988240.
- 33.** Farsadi, T., Kayran, A., Classical flutter analysis of composite wind turbine blades including compressibility, *Wind Energy* Vol.24, 2021, pp. 69-91, DOI: 10.1002/we.2559.

34. Asadi, D., Farsadi, T., Kayran, A., Flutter Optimization of a Wing Engine System with Passive and Active Control Approaches, *AIAA Journal* Vol.59(4), 2021, pp. 1422-1440, <https://doi.org/10.2514/1.J059568>.

35. Farsadi, T., Kayran, A., Flutter study of flapwise bend twist coupled composite wind turbine blades, *Wind and Structures* Vol.32(3), 2021, pp. 267-281, DOI: <https://doi.org/10.12989/was.2021.32.3.267>.

36. Hasilci, Z., Bogoclu, M.E., Dalkilic, A.S., Kayran, A., Development of a prediction model using fully connected neural networks in the analysis of composite structures under bird strike, *Journal of Mechanical Science and Technology* Vol.36(2), 2022, pp. 709-722, DOI 10.1007/s12206-022-0119-5.

Articles presented in refereed international scientific conferences and published in the proceedings (books, CDROM, stick hard disk)

1- Kayran, A., 'Free Vibration Analysis of Laminated Composite Truncated Circular Conical Shells,' Proceedings of 30th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, April 1989, Mobile, Alabama, USA.

2- Erarslanoğlu, G., E.S. Ardiç, A.Kayran ve C. Bolcan, 'A Method of Failure Prediction in Laminated Composites Subjected to Low Velocity Impact,' Proceedings of Second Biennial European Joint Conference on Engineering Systems Design and Analysis (ESDA), Vol. 2, 111-118, 1994.

3- Kayran, A., 'Impact Damage Assessment in Composite Structures,' Proceedings of the 2nd Ankara International Aerospace Conference, 1998, METU, Ankara, Turkey.

4- Kayran, A., 'Aeroelastic Stability of a Transport Aircraft with Wing Mounted Store Suspension-Part I: Analysis,' Proceedings of ESDA04, 7th Biennial Conference on Engineering Systems Design and Analysis, 2004, Manchester, UK.

5- Kayran, A., 'Aeroelastic Stability of a Transport Aircraft with Wing Mounted Store Suspension-Part II: Flight Test,' Proceedings of ESDA04, 7th Biennial Conference on Engineering Systems Design and Analysis, 2004, Manchester, UK.

6- Kayran, A., Yavuzbalkan, E., 'Numerical Integration Based Vibration Analysis of Anisotropic Branched Shells of Revolution with Ring Stiffeners,' Proceedings of 48th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, AIAA-2007-2114, 23-26 April 2007, Honolulu, Hawaii, USA.

7- Kayran, A., Yavuzbalkan, E., 'Effect of Anisotropy on the Vibration Characteristics of Composite Shells of Revolution,' Proceedings of 16th International Conference on Composite Materials- ICCM-16, 8-13 July 2007, Kyoto, Japan.

- 8-** Kayran, A., ‘General Review of Aeroelastic Stability Flight Testing,’ AIAC-2007-025, 4th Ankara International Aerospace Conference-AIAC, 10-12 September 2007, METU, Ankara, Turkey.
- 9-** Turgut, T., Kayran, A., ‘Structural Analysis of a Lightweight Composite Wing and Material Characterization,’ AIAC-2007-027, 4th Ankara International Aerospace Conference-AIAC, 10-12 September 2007, METU, Ankara, Turkey.
- 10-** Kafdađlı, E., Kayran, A., ‘Development of a Sabot Design Tool for Aeroballistic Range Testing,’ AIAC-2007-032, 4th Ankara International Aerospace Conference-AIAC, 10-12 September 2007, METU, Ankara, Turkey.
- 11-** Konakman, E., Kayran, A., and Özyörük, Y., ‘Lagrangian Hyrdocode Formulation for Large Deformation Problems and Methods to Prevent Volumetric Locking of Triangular Elements,’ AIAC-2007-072, 4th Ankara International Aerospace Conference-AIAC, 10-12 September 2007, METU, Ankara, Turkey.
- 12-** Kayran, A., ‘Free Vibration Characteristics of Composite Shells of Revolution with Variable Stiffness Coefficients’ Proceedings of ESDA08, 9th Biennial Conference on Engineering Systems Design and Analysis, 2008, Haifa, Israel.
- 13-** Sercan Soysal, Altan Kayran, Engin Şenelt and Nafiz Alemdarođlu, ‘Composite Manufacturing of the Wing of a Tactical Unmanned Air Vehicle,’ 7th International Conference on Composite Science and Technology, 20-22 January, 2009, American University of Sharjah, Sharjah, United Arab Emirates.
- 14-** Sercan Soysal, Altan Kayran, and Nafiz Alemdarođlu, ‘Structural Analysis of the Sandwich Composite Wing of a Tactical Unmanned Air Vehicle,’ 7th International Conference on Composite Science and Technology, 20-22 January, 2009, American University of Sharjah, Sharjah, United Arab Emirates.
- 15-** Oygür, S.Ö., Kayran, A., ‘A Numerical Integration Based Approach to the Analysis of Anisotropic Shells of Revolution Subjected to Non-Axisymmetric Loading,’ AIAA-2009-2346, Proceedings of 50th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 4-7 May 2009, Palm Springs, California, USA.
- 16-** Kayran, A., Aydınçak, İ., ‘Assessment of Effective Elastic Properties of Honeycomb Cores by Finite Element Analysis of Sandwich Panels,’ Proceedings of 17th International Conference on Composite Materials- ICCM-17, 26-31 July 2009, Edinburgh, United Kingdom.
- 17-** Kayran, A., Soysal S., Alemdarođlu, N., ‘Co-cured and Secondary Bonding Method of Manufacturing Multi-Cell Box Beam and Wing Structures and by Vacuum Infusion and Vacuum Bagging Processes,’ AIAC-2009-030, 5th Ankara International Aerospace Conference-AIAC, 17-19 August 2009, METU, Ankara, Turkey.
- 18-** Develliođlu, Y., Kayran, A., ‘Electronic Packaging and Environmental Test and Analysis of an Electronic Unit,’ AIAC-2009-041, 5th Ankara International Aerospace Conference-AIAC, 17-19 August 2009, METU, Ankara, Turkey.

- 19-** Konakman, E., Kayran, A., ‘Hydrocode Analysis and Experimental Verification of Taylor Impact Tests,’ AIAC-2009-068, 5th Ankara International Aerospace Conference-AIAC, 17-19 August 2009, METU, Ankara, Turkey.
- 20-** Ekren, M., Kayran, A., ‘Structural Optimization of Wing Torque Boxes Using Different Idealizations in the Finite Element Model,’ AIAC-2009-120, 5th Ankara International Aerospace Conference-AIAC, 17-19 August 2009, METU, Ankara, Turkey.
- 21-** Özöztürk, S., S.Ö., Kayran, A., Alemdaroğlu, N., Seber, G., ‘On the Design and Aeroelastic Stability Analysis of Twin Wing-Tail Boom Configuration Unmanned Air Vehicle,’ AIAA-2011-1918, Proceedings of 52th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 4-7 April 2011, Denver, Colorado, USA.
- 22-** Sayar, B., Kayran, A. ‘Comparison of Stress Intensity Factor Calculations in Cracked Sheets with Riveted Stringers by Analytical and Finite Element Method,’ 2nd International Conference of Engineering Against Fracture (ICEAF II), 22-24 June 2011, Mykonos, Greece.
- 23-** Günel, M., Kayran, A., ‘Comparative Study of Linear and Non-Linear Progressive Failure Analysis of Composite Aerospace Structures ,’ ICCS 16, 16th International Conference on Composite Structures, 28-30 June 2011, Porto, Portugal.
- 24-** Kayran, A., İbrahimoglu, CS., ‘Investigation of the Effect of Friction on the Stiffness and Vibration Characteristics of Filament Wound Composite Shells of Revolution,’ ICCS 16, 16th International Conference on Composite Structures, 28-30 June 2011, Porto, Portugal.
- 25-** Günel, M., Kayran, A., ‘Non-Linear Progressive Failure Analysis of Composite Aerospace Structures,’ ICCM 18, 18th International Conference on Composite Materials, 21-26 August 2011, Jeju Island, Korea.
- 26-** Kayran, A., ‘Wind turbine components and materials,’ International 100% Renewable Energy Conference and Exhibition (IRENEC 2011), 6-8 October 2011, İstanbul, Turkey.
- 27-** Kayran, A., Aydınçak, İ., ‘Assessment of Effective Elastic Properties of Honeycomb Cores by Finite Element Analysis of Sandwich Panels via ANSYS’, 14th Conference for Computer Aided Engineering and System Modeling, 5-6 November 2009, METU, Ankara, Turkey.
- 28-** Sayar, B., Kayran, A., ‘Determination of Stress Intensity Factors in Cracked Sheets with Riveted Stringers by Analytical and Finite Element Method,’ AIAC-2011-074, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.
- 29-** Günel, M., Kayran, A., ‘Comparative Study of Linear and Non-Linear Progressive Failure Analysis of Composite Aerospace Structures,’ AIAC-2011-069, 6th Ankara

International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

30- Özöztürk, S., Kayran, A., Alemdaroğlu, N., Seber, G. 'Aeroelastic Stability Analysis of Twin Wing-Tail Boom Configuration Unmanned Air Vehicle,' AIAC-2011-070, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

31- Dababneh, O., Kayran, A., 'Design and Analysis of Thin Walled Semi-Monocoque Wing Structures Using Different Structural Idealizations in the Preliminary Design Phase,' AIAC-2011-066, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

32- Dababneh, O., Kayran, A., 'Structural Optimization of Thin Walled Semi-Monocoque Wing Structures Using Different Types of Finite Elements in the Preliminary Design Phase,' AIAC-2011-064, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

33- Özöztürk, S., Kayran, A., Alemdaroğlu, N. 'Computational Aerodynamics and Structural Analysis of a Fully Composite Twin Wing-Tail Boom Configuration Unmanned Air Vehicle,' AIAC-2011-071, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

34- İbrahimoğlu, S., Kayran, A., Alemdaroğlu, N. 'Investigation of the Effect of Preset Friction on the Stiffness and Vibration Characteristics of Filament Wound Composite Shells of Revolution,' AIAC-2011-055, 6th Ankara International Aerospace Conference-AIAC, 14-16 September 2011, METU, Ankara, Turkey.

35- Kayran, A., Yavuzbalkan, E., and İbrahimoğlu, S. 'Investigation of the Effect of Geodesic and Semi-geodesic Winding on the Vibration Characteristics of Variable Stiffness Filament Wound Shells of Revolution,' Proceedings of 53rd AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, AIAA-2012-1472, 23-26 April 2012, Honolulu, Hawaii, USA.

36- Günel, M., and Kayran, A., 'Linear and Nonlinear Progressive Failure Analysis of Composite Aerospace Structures Under Combined Loading,' Proceedings of 53rd AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, AIAA-2012-1860, 23-26 April 2012, Honolulu, Hawaii, USA.

37- Özcan, G., Özöztürk, S., Senelt, E., Kayran, A., Alemdaroğlu, N., 'Aero-structural and Integrated Circuit Design of a Twin Wing-Tail Boom Configuration Tactical UA', 2012 International Conference on Unmanned Aircraft Systems (ICUAS'12), Philadelphia, June 12-15, 2012, PA USA,

38- Sayar, M.B., Kayran, A. 'Two Stage Damage Tolerance Evaluation of and Aircraft Fuselage Panel with a Circumferential Crack and a Broken Stringer', AIAA-2013-1478, Proceedings of 54th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 8-11 April 2013, Boston, USA.

- 39-** Balevi, S., Kayran, A., ‘Simulated Flutter Test of Wings,’ AIAC-2013-011, in the 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 40-** Konokman E.H, Kayran, A., Kaya, M., ‘Survivability Analysis of Aircraft under Fragmentation Warhead Threat,’ AIAC-2013-1156, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 41-** Güldü, S., Kayran, A., Tursun G., Koçkar, A., ‘Two Level Optimization of Fiber Placed Laminated Cylindrical Shells of Revolution,’ AIAC-2013-1127, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 42-** Tola, C., Kayran, A., ‘The Effect of Fiber Orientation Angle on Subsonic and Supersonic Flutter Characteristics of a Composite Missile Fin,’ AIAC-2013-012, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 43-** Nalcı, M.O., Kayran, A., ‘Aeroelastic and Control System Modeling of a Missile Control Fin for Aeroservoelastic Analysis,’ AIAC-2013-124, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 44-** Nalcı, M.O., Kayran, A., ‘Development of an Aeroservoelastic Mathematical Model of a Missile Control Fin,’ AIAC-2013-125, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 45-** İnci, H., Kayran, A., ‘Continuous Fiber Path Optimization in Composite Structures,’ AIAC-2013-074, 7th Ankara International Aerospace Conference-AIAC, 11-13 September 2013, METU, Ankara, Turkey.
- 46-** İbrahimoğlu, CS., Kayran, A., ‘Semi-geodesic Winding of Composite Conical Shells – Possible Application for Composite Towers’, RUZGEM 2013, Conference on Wind Energy Science and Technology, 3-4 October 2013, METU, Ankara, Turkey.
- 47-** Yeniceci, S.C., Kayran, A., ‘Design Optimization of a Whiffletree System for Static Testing of a Wind Turbine Blade’, 2013, Conference on Wind Energy Science and Technology, 3-4 October 2013, METU, Ankara, Turkey.
- 48-** Gözcü, M.O., Olgun, M.N., Kayran, A., ‘Inverse Design of 3D Reference Wind Turbine Blades To Study Bending-Twisting Coupling Effect on Load Alleviation’, RUZGEM 2013, Conference on Wind Energy Science and Technology, 3-4 October 2013, METU, Ankara, Turkey.
- 49-** Gözcü, M.O., Olgun, M.N., Kayran, A., ‘Effect of Off-Axis Plies on the Damage Equivalent Loads in Wind Turbines with Superelement Blade Definition’, RUZGEM 2013, Conference on Wind Energy Science and Technology, 3-4 October 2013, METU, Ankara, Turkey.

50- Dababneh, O., Kayran, A., ‘Design, Analysis and Optimization of Thin Walled Semi-Monocoque Wing Structures Using Different Structural Idealizations in the Preliminary Design Phase,’ 3rd International Workshop on AeroStructures, 9-11 October 2013, Milano, Italy.

51. Kayran, A., ‘Static and dynamic analysis of shear deformable composite shells of revolution by semi-analytical approach’, Jubilee 10th International Conference “Shell Structures, Theory and Applications (10th SSTA 2013), October, 2013, Gdańsk , Poland.

52. Konokman E.H, Kayran, A., Kaya, M., ‘Analysis of Aircraft Survivability Against Fragmenting Warhead Threats,’ AIAA 2014-0355, AIAA Science and Technology Forum and Exposition 2014, Gaylord National Resort & Convention Center, 13-17 January 2014, National Harbor, MD, USA.

53. Gözcü, M.O., Olgun, M.N., Kayran, A., ‘Investigation of the effect of off-axis spar cap plies on damage equivalent loads in wind turbines with superelement blade definition,’ AIAA 2014-1223, AIAA Science and Technology Forum and Exposition 2014, Gaylord National Resort & Convention Center, 13-17 January 2014, National Harbor, MD, USA.

54. Nalcı, M.O., Kayran, A., Aeroservoelastic Modelling and Analysis of a Missile Control Surface with a Nonlinear Electromechanical Actuator, AIAA 2014-2055, AIAA Atmospheric Flight Mechanics Conference, AIAA Aviation and Aeronautics Forum and Exposition, 16-20 June 2014, Atlanta, GA, USA.

55. Gözcü, M.O., Kayran, A., Investigation of the effect of bending-twisting coupling on the load in wind turbines with superelement blade definition, Poster sunumu, The Science of Making Torque from Wind (TORQUE 2014), 17-20 July 2014, Technical University of Denmark, Copenhagen, Denmark.

56. Sargın, H., Kayran, A., Comparison of transient and quasi-steady aeroelastic analysis of wind turbine blade in steady wind conditions, Poster sunumu, The Science of Making Torque from Wind (TORQUE 2014), 17-20 July 2014, Technical University of Denmark, Copenhagen, Denmark.

57. Kayran, A., İbrahimoğlu C.S., Preliminary study on the applicability of semi-geodesic winding in the design and manufacturing of composite towers, Poster presentation, The Science of Making Torque from Wind, October 9-11, 2012, Oldenburg, Germany.

58. Gözcü, M.O., Farsadi,T., Şener, Ö., Kayran, A., ‘Assessment of the Effect of Hybrid GFRP-CFRP Usage in Wind Turbine Blades on the Reduction of Fatigue Damage Equivalent Loads in the Wind Turbine System,’ AIAA 2015-0999, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2015, 33rd Wind Energy Symposium, 5-9 January 2015, Kissimmee, Florida, USA.

59. Güldü, S., Kayran, A., ‘Maximizing Buckling Load Factors of Fiber-Placed Composite Cylindrical Shells by Particle Swarm Optimization,’ AIAA 2015-0449, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2015, 56th AIAA/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference,

5-9 January 2015, Kissimmee, Florida, USA.

60. Yılmaz, SE, Özçilhan T., Kayran, A., Gürses, E., Çoker, D., ‘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, İstanbul 2015-ICAME’15, 13-15 May 2015, Yıldız Technical University, İstanbul, Turkey.

61. Gözcü, M.O., Farsadi,T., Şener, Ö., Kayran, A., ‘Reduction of Fatigue Damage Equivalent Loads in the Wind Turbine System Through the Use of Off-Axis Plies in the Spar Caps of Composite Wind Turbine Blades,’ 20th International Conference on Composite Materials, Copenhagen, 19-24th July 2015.

62- Yıldırım, A., Akay, AA, Gülaşık, H., Çoker, D., Gürses, E., Kayran, A., ‘Parameters Correlation Study to Investigate the Effects of Geometric Variables on the Safety of Bolted Flange Connections,’ AIAC-2015-1107, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

63- Akay, AA, Gülaşık, H., Yıldırım, A., Çoker, D., Kayran, A., Gürses, E., ‘Modeling of Circular Double Flange Joint Including Contact and Friction Effects,’ AIAC-2015-1201, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

64- Yılmaz, SE, Kayran, A., Gürses, E., Çoker, D., ‘Parametric Study for the Study of the Effect of Contact Parameters for Plastic Analysis of Bolted Flange Connections,’ AIAC-2015-1068, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

65- Bartan, B., Kayran, A., Acar, B., ‘Parametric Study of Delamination Analysis in Composites with Cohesive Zone Method,’ AIAC-2015-078, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

66- Mert, B., Kayran, A., ‘Post-Buckling Load Redistribution of Stiffened Panels in Aircraft Wingbox Structures,’ AIAC-2015-116, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

67- Dede, O., Kayran, A., ‘Investigation of Effects of Bird Strike on Wing Leading Edge By Using Explicit Finite Element Method,’ AIAC-2015-138, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

68- Şener, Ö., Farsadi,T., Gözcü, M.O., Kayran, A., ‘Utilizing Bending-Twisting Coupling in Composite Wind Turbine Blades in Achieving Reduction in Fatigue Loads,’ AIAC-2015-069, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

69- Özöztürk S., Kayran, A., Tuncer IH., ‘Fluid Structure Interaction Based on Panel Method and Geometrically Nonlinear Structural Analysis,’ AIAC-2015-159, 8th Ankara International Aerospace Conference-AIAC, 10-12 September 2015, METU, Ankara, Turkey.

- 70-** Yıldırım, A., Akay, AA, Gülaşık, H., Çoker, D., Gürses, E., Kayran, A., 'Development of Bolted Flange Design Tool Based on Finite Element Analysis and Artificial Neural Network,' IMECE2015-51021, Proceedings of the ASME 2015 International Mechanical Engineering Congress and Exposition, 13-19 November 2015, Houston, Texas, USA.
- 71.** Bartan. B., Acar, B., Kayran, A., Three Dimensional Delamination Analysis in Composite Open Hole Tensile Specimens with Cohesive Zone Method, AIAA 2016-0980, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2016, 4-8 January 2016, San Diego, California, USA.
- 72.** Farsadi,T., Kayran, A., Aeroelastic Stability Evaluation of Bend-Twist Coupled Composite Wind Turbine Blades Designed for Load Alleviation in Wind Turbine Systems, AIAA 2016-1009, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2016, 4-8 January 2016, San Diego, California, USA.
- 73.** Farsadi,T., Kayran, A., Classical Aeroelastic Stability Analysis of Large Composite Wind Turbine Blades, AIAA 2016-1959, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2016, 4-8 January 2016, San Diego, California, USA.
- 74.** Farsadi,T., Kayran, A., Structural Dynamics Analysis and Passive Control of Wind Turbine Vibrations with Tuned Mass Damper (TMD) Technique, AIAA 2016-1481, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2016, 4-8 January 2016, San Diego, California, USA.
- 75.** Mert,M., Kayran, A., Post-Buckling Load Redistribution of Stiffened Panels in Aircraft Wingbox Structures, AIAA 2016-1974, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2016, 4-8 January 2016, San Diego, California, USA.
- 76.** Ataç, M.N., Kayran, A., Comparative Study of Finite Element Analysis and Geometrically Exact Beam Analysis of a Composite Helicopter Blade, American Helicopter Society AHS 72nd Annual Forum, 17-19 May 2016, West Palm Beach, Florida, USA.
- 77.** Işık, A.A., Kayran, A., Structural Optimization of Composite Helicopter Rotor Blades, Paper Number 3002, American Society for Composites, 31st Technical Conference and ASTM Committee D30 Meeting, September 19-22 2016, Williamsburg, Virginia, USA.
- 78.** Kesemen, L., Kayran, A., High Strain Rate Material Characterization of Al 7075-T651 by Modified Taylor Impact Test and Velocity Interferometry, AIAA 2017-0354, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2017, 9-13 January 2017, Grapevine, Texas, USA.
- 79.** Şener, Ö., Farsadi, T., Kayran, A., Effect of Fibre Orientation of Bend-Twist Coupled Blades on the Structural Performance of the Wind Turbine System, AIAA 2017-1167, AIAA Science and Technology Forum and Exposition, AIAA SciTech

2017, 9-13 January 2017, Grapevine, Texas, USA.

80. Hayırlı, U., Kayran, A., Stick Model Development of Aircraft Structures for Dynamic Analysis, AIAA 2017-0407, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2017, 9-13 January 2017, Grapevine, Texas, USA.

81- Enes A., Kayran, A., 'Investigation of the Effect of Boundary Conditions on the Buckling Coefficients of Stiffened Flat Panels,' AIAC-2017-103, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

82- Öztürk, G., Kayran, A., 'Energy Absorption Mechanisms and Crash Analysis of Helicopter Seats,' AIAC-2017-148, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

83- Demirel, G.İ., Kayran, A., 'The Effect of Modal Damping on Random Vibration Metal Fatigue Analysis,' AIAC-2017-044, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

84- İnci, H., Kayran, A., 'Design Optimization of Variable Stiffness Composite Laminates Using Surrogate Models for Compliance and Buckling Load,' AIAC-2017-164, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

85- Özturan, B.İ., Kayran, A., 'Multibody Simulation of Helicopter Rotor with Flexible Blade,' AIAC-2017-163, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

86- Atasoy, M., Kayran, A., 'Comparison of 2D and 3D Homogenization Processes for Micromechanics Analysis of Unidirectional Composites,' AIAC-2017-045, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

87- Atalay, O., Farsadi, T., Kayran, A., 'Performance Study of Wind Turbines with Bend-Twist Coupled Blades at Underrated Wind Speeds,' AIAC-2017-122, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

88- Özkaya, Ö., Kayran, A., 'Nonlinear Static Aeroelastic Behaviour of Composite Missile Fin with Interlaminar Damage,' AIAC-2017-051, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

89- Akay, AA., Çoker, D., Kayran, A., Gürses, E., 'Implementation of the Submodelling Technique on the Dovetail Attachments,' AIAC-2017-086, 9th Ankara International Aerospace Conference-AIAC, 20-22 September 2017, METU, Ankara, Turkey.

90. Erdolu, Ö., Kayran, A., Damage Analysis in Blast Loaded Concrete Columns Using Single Degree of Freedom Approach, 17th International Symposium on the

interaction of the Effects of Munitions with Structures- ISIEMS, 16-20 October 2017, Bad Neuenahr, Germany.

91- Akay, AA, Gülaşık, H., Çoker, D., Kayran, A., Gürses, E., Experimental Study and Finite Element Analysis of Dovetail Attachments, IMECE2017-70180, Proceedings of the ASME 2017 International Mechanical Engineering Congress and Exposition, 3-9 November 2017, Tampa, Florida, USA.

92- Sanlı V., Gürses, E., Çoker, D., Kayran, A., Development of Artificial Neural Network Based Design Tool for Aircraft Engine Bolted Flange Connection Subject to Combined Axial and Moment Load, IMECE2017-70448, Proceedings of the ASME 2017 International Mechanical Engineering Congress and Exposition, 3-9 November 2017, Tampa, Florida, USA.

93- Farsadi, T., Şener, Ö., Kayran, A., Free Vibration Analysis of Uniform and Asymmetric Composite Pretwisted Rotating Thin Walled Beam, IMECE2017-70531, Proceedings of the ASME 2017 International Mechanical Engineering Congress and Exposition, 3-9 November 2017, Tampa, Florida, USA.

94. İnci, H., Kayran, A., Optimization of Variable Stiffness Composite Laminates by Particle Swarm and Whale Optimization Algorithms Utilizing Surrogate Models, 10.2514/6.2018-2242, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2018, 8-12 January 2018, Kissimmee, Florida, USA.

95. Özkaya, Ö., Kayran, A., Nonlinear Static Aeroelastic Behavior of Composite Missile Fin with Interlaminar and Intralaminar Damage , 10.2514/6.2018-1449, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2018, 8-12 January 2018, Kissimmee, Florida, USA.

96. Soğancı, S., Kayran, A., Tuncer, I.H., Coupling of a Multibody Simulation Tool for Rotary Systems with an Unsteady Viscous Flow Solver, 10.2514/6.2018-2065, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2018, 8-12 January 2018, Kissimmee, Florida, USA.

97. Şener, Ö., Kayran, A., Structural Performance and Power Production of Wind Turbine Systems with Bend-Twist Coupled Blades in Underrated Wind Conditions, 10.2514/6.2018-1242, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2018, 8-12 January 2018, Kissimmee, Florida, USA.

98. Şener, Ö., Dede, O., Atalay, O., Atasoy, M., Kayran, A., Determination of Transverse Shear Moduli of Composite Core Materials Through Sandwich Beam Tests., 12th International Conference on Sandwich Structures ICSS-12, 19-22 August 2018, EPFL, Switzerland.

99. Aydın, E., Kayran, A., Comparative Study of Pos-Buckling Load Redistribution in Stiffened Aircraft Panel With and Without Material Nonlinearity, IMECE2018-86346, Proceedings of the ASME 2018 International Mechanical Engineering Congress and Exposition, November 9-15, 2018, Pittsburgh, PA, USA.

100. Öztürk, G., Kayran, A., Energy Absorption Mechanisms and Crash Analysis of Helicopter Seats, IMECE2018-86220, Proceedings of the ASME 2018 International

Mechanical Engineering Congress and Exposition, November 9-15, 2018, Pittsburgh, PA, USA.

101. Şener. Ö., Dede, O., Atalay, O., Atasoy, M., Kayran, A., Evaluation of Transverse Shear Moduli of Composite Sandwich Beams Through Three-Point Bending Tests, IMECE2018-87636, Proceedings of the ASME 2018 International Mechanical Engineering Congress and Exposition, November 9-15, 2018, Pittsburgh, PA, USA.

102. Şener. Ö., Atalay, O., Kayran, A., Experimental assessment of bend-twist coupling potentials of composite materials via digital image correlation method, <https://doi.org/10.2514/6.2019-2274>, AIAA 2019-2274, AIAA Science and Technology Forum and Exposition, AIAA SciTech 2019, January 7-11, 2018, San Diego, CA, USA.

103- Arpacioglu, B, Kayran, A., Comparative Structural Optimization Study of Composite and Aluminum Horizontal Tail Plane of a Helicopter, IMECE2019-11153, Proceedings of the ASME 2019 International Mechanical Engineering Congress and Exposition , November 11-14, 2019, Salt Lake City, UT, USA.

104- Çiçek, G, Kayran, A., Aeroelastic Modeling and Analysis of High Aspect Ratio Wings with Different Fidelity Structural Models, IMECE2019-11483, Proceedings of the ASME 2019 International Mechanical Engineering Congress and Exposition , November 11-14, 2019, Salt Lake City, UT, USA.

105- Ozturan, B.I, Kayran, A., Multibody Simulation of Helicopter Rotor with Structural Flexibility, 8th Asian/Australian Rotorcraft Forum , October 30 - November 2, 2019, Ankara, Turkey.

106- Demirer, G, Kayran, A., Aeroelastic Model Corrections of a Very Light Aircraft; Implications on Static Trim, Flutter and Gust Response, AIAA Aviation 2022 Forum, 27 June – 01 July, 2022, Illinois, USA.

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Refereeing

Journal of Sound and Vibration, Journal of Composite Materials, Composites Part B, Journal of Sandwich Structures and Materials, Shock and Vibration, International Journal of Mechanical Sciences, Meccanica, Turkish Journal of Engineering and Environmental Sciences, Aerospace Science and Technology, Fatigue and Fracture of Engineering Materials and Structures, Advances in Engineering Software, Journal of Renewable and Sustainable Energy, Journal of Spacecraft and Rockets, AIAA

Journal, Aerospace, Ocean Engineering, Chinese Journal of Aeronautics, Energies, Engineering Structures, Marine Structures, Polymer Testing

Awards/Honors

- Prof. Dr. Mustafa N. Parlar education and research foundation, 2004-2005 education year, thesis of the year award, Co-advisor of graduate student Ercan Taylan
- Certificate of success, given by Aselsan general manager Dr. Hacım Kamoy for the success demonstrated in the projects that Dr. Kayran was involved in, December 1999.
- Certificate of outstanding performance demonstrated by Dr. Kayran in the UAV-X1 unmanned air vehicle program, given by general manager of TAI Mr. J.R. Jones, December 1992.
- Teaching assistantship, University of Delaware, Department of Mechanical and Aerospace Engineering, Newark, Delaware, USA, years covered: 1985-86-1989-90