

Prof. FEVZİ SUAT KADIOĞLU

Personal Information

Office Phone: [+90 312 210 5294](tel:+903122105294) Extension: 5294

Fax Phone: [+90 312 210 2536](tel:+903122102536)

Email: kadioglu@metu.edu.tr

Web: <https://users.metu.edu.tr/kadioglu>

Address: Orta Doğu Teknik Üniversitesi, Makina Mühendisliği Bölümü 06800 Çankaya, ANKARA

International Researcher IDs

ScholarID: NzdQnqwAAAAJ

ORCID: 0000-0003-2295-2494

Publons / Web Of Science ResearcherID: ABA-4220-2020

ScopusID: 55891284600

Yoksis Researcher ID: 8615

Education Information

Doctorate, Lehigh University, Makina Mühendisliği, United States Of America 1989 - 1993

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (Dr), Turkey 1986 - 1989

Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1983 - 1986

Foreign Languages

English, C1 Advanced

Research Areas

Mechanical Engineering, Mechanical, Solid Mechanics, Fracture Mechanics, Engineering and Technology

Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2001 - 2003

Advising Theses

KADIOĞLU F. S., Nonlinear behaviour and stress concentrations in natural fiber composites under transverse loading, Postgraduate, O.ÇAKMAKÇI(Student), 2019

KADIOĞLU F. S., Thermal stress problems in FGMS, Postgraduate, E.Nur(Student), 2019

KADIOĞLU F. S., Stress redistribution around fiber breaks in unidirectional steel fiber composites under longitudinal tensile loading, Postgraduate, Ç.Mutlu(Student), 2019

KADIOĞLU F. S., Fatigue pre-cracking life estimation for fracture toughness test specimens, Postgraduate,

A.ALIPOUR(Student), 2018
KADIOĞLU F. S., Formulation of a beam finite element for micro beams, Postgraduate, Y.PEHLIVANOĞLU(Student), 2018
KADIOĞLU F. S., Dynamic analysis of beams with breathing crack using finite element method, Postgraduate, B.Özkan(Student), 2017
KADIOĞLU F. S., Dynamic analysis of beam with breathing crack using finite element method, Postgraduate, B.ÖZKAN(Student), 2017
KADIOĞLU F. S., Theoretical and experimental analyses of compliant universal joint, Postgraduate, Ç.MERVE(Student), 2014
KADIOĞLU F. S., Fracture analysis of welded connections, Postgraduate, A.YETGİN(Student), 2013
KADIOĞLU F. S., Thermal stress problem for an fgm strip containing periodic cracks, Postgraduate, A.KÖSE(Student), 2013
KADIOĞLU F. S., Periodic crack problem for an FGM coated half plane, Postgraduate, İ.İNCE(Student), 2012
KADIOĞLU F. S., Vibration analysis of cracked beams on elastic foundation using Timoshenko beam theory, Postgraduate, A.ÇAĞRI(Student), 2011
KADIOĞLU F. S., Shock failure analysis of military equipments by using strain energy density, Postgraduate, Ü.MERCİMEK(Student), 2010
Kadioğlu F. S., Yazıcıoğlu Y., Design and Analysis of a Multi-Axis Thrust Measurement Systems, Postgraduate, A.AYDOĞMUŞ(Student), 2009
KADIOĞLU F. S., Design and analysis of a linear shape memory alloy actuator, Doctorate, B.SÖYLEMEZ(Student), 2009
KADIOĞLU F. S., DAĞ S., Computational 3d fracture analysis in axisymmetric media, Postgraduate, Ö.ÜNAL(Student), 2008
KADIOĞLU F. S., Residual stress analysis of riveting process using finite element method, Postgraduate, M.MURAT(Student), 2007
KADIOĞLU F. S., Analytical solution of a crack problem in a radially graded FGM, Postgraduate, S.ÇETİN(Student), 2007
KADIOĞLU F. S., Vibration induced stress and accelerated life analyses of an aerospace structure, Postgraduate, S.ÖZSOY(Student), 2006
DAĞ S., KADIOĞLU F. S., Buckling driven delamination of orthotropic functionally graded materials, Postgraduate, S.YILMAZ(Student), 2006
KADIOĞLU F. S., Vibration fatigue analysis of equipments used in aerospace, Postgraduate, M.AYKAN(Student), 2005
KADIOĞLU F. S., Analytical solution of a ring shaped crack problems in a hollow cylinder imbedded in a dissimilar medium, Postgraduate, Ö.MADEN(Student), 2002
KADIOĞLU F. S., A Computational elastic fracture analysis of cylindrical and conical structures, Postgraduate, G.ATALAY(Student), 2002
KADIOĞLU F. S., Development of a computer program for the analysis of fatigue crack growth, Postgraduate, A.MURTAZA(Student), 2002
KADIOĞLU F. S., Transversely isotropic layer bonded to a rigid substrate, Postgraduate, M.AYKUT(Student), 2000
KADIOĞLU F. S., Axisymmetrical crack problem for a fiber imbedded in a matrix, Postgraduate, E.SABRİ(Student), 1999

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Simulation of crack closure effect on cracked beam vibrations**
Günhan D., Acar B., KADIOĞLU F. S.
Engineering Fracture Mechanics, vol.301, 2024 (SCI-Expanded)
- II. **Bond-based peridynamic fatigue analysis of ductile materials with Neuber's plasticity correction**
Altay U., Dorduncu M., KADIOĞLU F. S., Madenci E.
Engineering with Computers, 2024 (SCI-Expanded)
- III. **An improved peridynamic approach for fatigue analysis of two dimensional functionally graded materials**
Altay U., DÖRDÜNCÜ M., KADIOĞLU F. S.
Theoretical and Applied Fracture Mechanics, vol.128, 2023 (SCI-Expanded)

- IV. **Dynamic stress concentrations around a single fiber break in unidirectional composites: a 3D finite element analysis**
MUTLU Ç., SABUNCUOĞLU B., Kadioğlu F. S., Swolfs Y.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.42, no.19-20, pp.1075-1087, 2023 (SCI-Expanded)
- V. **Stress redistribution around fiber breaks in unidirectional steel fiber composites considering the nonlinear material behavior**
SABUNCUOĞLU B., MUTLU Ç., KADIOĞLU F. S., Swolfs Y.
COMPOSITE STRUCTURES, vol.239, 2020 (SCI-Expanded)
- VI. **Fiber/matrix interface stress analysis of flax-fiber composites under transverse loading considering material nonlinearity**
SABUNCUOĞLU B., Cakmakci O., KADIOĞLU F. S.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.39, pp.345-360, 2020 (SCI-Expanded)
- VII. **Vibration Analysis of a Cracked Beam on an Elastic Foundation**
Batihan A. C., KADIOĞLU F. S.
INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS, vol.16, no.5, 2016 (SCI-Expanded)
- VIII. **Steel compliant Cardan universal joint**
Tanik C. M., PARLAKTAŞ V., TANIK E., Kadioğlu S.
MECHANISM AND MACHINE THEORY, vol.92, pp.171-183, 2015 (SCI-Expanded)
- IX. **Shock failure analysis of metallic structures by using strain energy density method**
Çelik M., Mercimek Ü., Kadioğlu S.
Journal of Strain Analysis for Engineering Design, vol.49, no.7, pp.501-509, 2014 (SCI-Expanded)
- X. **Periodic crack problem for a functionally graded half-plane an analytic solution**
YILDIRIM B., Kutlu O., KADIOĞLU F. S.
INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.48, no.21, pp.3020-3031, 2011 (SCI-Expanded)
- XI. **Precise position control using shape memory alloy wires**
Donmez B., Ozkan B., KADIOĞLU F. S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.18, no.5, pp.899-912, 2010 (SCI-Expanded)
- XII. **An accelerated life test approach for aerospace structural components**
Özsoy S., Çelik M., KADIOĞLU F. S.
Engineering Failure Analysis, vol.15, no.7, pp.946-957, 2008 (SCI-Expanded)
- XIII. **Delamination of compressively stressed orthotropic functionally graded material coatings under thermal loading**
YILDIRIM B., Yilmaz S., Kadioğlu S.
Journal of Applied Mechanics, Transactions ASME, vol.75, no.5, pp.511061-5110610, 2008 (SCI-Expanded)
- XIV. **Circumferentially cracked hollow cylinder under thermal shock - Revisited**
KADIOĞLU F. S.
JOURNAL OF THERMAL STRESSES, vol.31, no.11, pp.1056-1078, 2008 (SCI-Expanded)
- XV. **Circumferentially cracked bimaterial hollow cylinder under mechanical and transient thermal loading**
KADIOĞLU F. S.
Journal of Thermal Stresses, vol.29, no.12, pp.1073-1106, 2006 (SCI-Expanded)
- XVI. **Edge cracks in a transversely isotropic hollow cylinder**
KADIOĞLU F. S.
Engineering Fracture Mechanics, vol.72, no.14, pp.2159-2173, 2005 (SCI-Expanded)
- XVII. **Axisymmetric crack problem for a hollow cylinder imbedded in a dissimilar medium**
KADIOĞLU F. S.
International Journal of Engineering Science, vol.43, pp.617-638, 2005 (SCI-Expanded)
- XVIII. **Axisymmetric crack terminating at the interface of transversely isotropic dissimilar media**
KADIOĞLU F. S.
International Journal of Fracture, vol.116, no.1, pp.51-79, 2002 (SCI-Expanded)

- XIX. **Circumferential crack problem for an fgm cylinder under thermal stresses**
DAĞ S., Kadioğlu S., Yahşi O. S.
Journal of Thermal Stresses, vol.22, no.7, pp.659-687, 1999 (SCI-Expanded)
- XX. **Crack problem for a functionally graded layer on an elastic foundation**
Kadioğlu S., DAĞ S., Yahşi S.
International Journal of Fracture, vol.94, no.1, pp.63-77, 1998 (SCI-Expanded)
- XXI. **Indentation of a cantilever beam or plate**
Kadioğlu S., Yahşi O.
International Journal of Fracture, vol.74, no.2, pp.99-130, 1995 (SCI-Expanded)
- XXII. **The free-end interface crack problem for bonded orthotropic layers**
Kadioglu S., Erdogan F.
International Journal of Engineering Science, vol.33, no.8, pp.1105-1120, 1995 (SCI-Expanded)
- XXIII. **T-shaped crack problem for bonded orthotropic layers**
Erdogan F., Kadioglu S.
International Journal of Fracture, vol.67, no.4, pp.273-300, 1994 (SCI-Expanded)

Articles Published in Other Journals

- I. **Dual Horizon Peridynamic Approach for Studying the Effect of Porous Media on the Dynamic Crack Growth in Brittle Materials**
Altay U., DÖRDÜNCÜ M., KADIOĞLU F. S.
Journal of Peridynamics and Nonlocal Modeling, vol.6, no.3, pp.505-529, 2024 (Scopus)
- II. **Fatigue Precracking Time Estimates for Three-Point Bending Specimens**
Ghasabi A. A., Motameni A., Kadioğlu F. S.
JOURNAL OF FAILURE ANALYSIS AND PREVENTION, vol.19, no.5, pp.1275-1285, 2019 (ESCI)
- III. **Critical crack size investigation method for a land launcher**
Yetgin A., Acar B., Kadioğlu S.
Advances in Military Technology, vol.13, no.1, pp.119-131, 2018 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Non-linear Dynamic Analysis for the Lateral Vibration of Beams with Breathing Crack under Harmonic Excitation Using Finite Element Method**
Özkan B., Ciğeroğlu E., Özgen G. O., Kadioğlu F. S.
ICAF 2017 (35th Conference and 29th Symposium of the International Committee on Aeronautical Fatigue and Structural Integrity), Nagoya, Japan, 7 - 09 June 2017
- II. **Analytical Solution of a Crack Problem in a Radially Graded FGM**
Cetin S., KADIOĞLU F. S.
10th International Symposium on Multiscale, Multifunctional and Functionally Graded Materials, Sendai, Japan, 22 - 25 September 2008, pp.115-120
- III. **Ring shaped crack problem for a hollow cylinder imbedded in a dissimilar medium**
KADIOĞLU F. S., Maden Ö.
11th International Conference on Fracture 2005, ICF11, Turin, Italy, 20 - 25 March 2005, vol.1, pp.327-332

Supported Projects

KADIOĞLU F. S., TANABI H., Project Supported by Higher Education Institutions, Kompozit Malzemelerde Mikrovasküler Kanallar Yardımıyla Elektrik İletkenliği Oluşturulması, 2015 - 2019

Metrics

Publication: 29

Citation (WoS): 217

Citation (Scopus): 259

H-Index (WoS): 8

H-Index (Scopus): 8

Non Academic Experience

Aselsan

Lehigh University (USA)

Lehigh University (USA)

Lehigh University (USA)