Prof. UMUT TOPAL

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International Researcher IDs
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Education Information

Doctorate, Karadeniz Technical University, -, İnşaat Mühendisliği, Turkey 2003 - 2009
Postgraduate, Karadeniz Technical University, -, İnşaat Mühendisliği, Turkey 2000 - 2003
Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, İnşaat Mühendisliği, Turkey 1994 - 1998

Research Areas

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Structural Mechanics, Building Dynamics, Building Stability, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Karadeniz Technical University, -, İnşaat Mühendisliği, 2011 - Continues
Lecturer PhD, Karadeniz Technical University, -, İnşaat Mühendisliği, 2009 - 2011
Lecturer, Karadeniz Technical University, -, İnşaat Mühendisliği, 2006 - 2009
Research Assistant, Karadeniz Technical University, -, İnşaat Mühendisliği, 2000 - 2003

Academic and Administrative Experience

Karadeniz Technical University, 2011 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A novel approach for buckling optimization of stiffened piezolaminated composite plates**
Goodarzimehr V., TOPAL U., Fotovat M. B.
JOURNAL OF COMPOSITE MATERIALS, vol.58, no.28, pp.2975-2991, 2024 (SCI-Expanded)

II. **Buckling load optimization of laminated composite plates with elliptical hole under different non-uniform edge loads using bonobo optimizer algorithm**
Shaterzadeh A., TOPAL U., Hadad V., Das A. K.
MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, 2024 (SCI-Expanded)

III. **A local–global optimization approach for maximizing the multiphysics frequency response of laminated functionally graded CNTs reinforced magneto-electro-elastic plates**
Ly D., Nguyen-Thoi T., Topal U., Thongchom C.
Advances in Engineering Software, vol.190, 2024 (SCI-Expanded)

IV. **SABO algorithm for optimum design of truss structures with multiple frequency constraints**
Goodarzimehr V., Topal U., Das A. K., Vo-Duy T.
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, vol.52, no.10, pp.7745-7777, 2024 (SCI-Expanded)

V. **Improved chaos game optimization algorithm for optimal frequency prediction of variable stiffness curvilinear composite plate**
Goodarzimehr V., TOPAL U., Vo-Duy T., Shojaee S.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.42, no.19-20, pp.1054-1066, 2023 (SCI-Expanded)

VI. **Bonobo optimizer algorithm for optimum design of truss structures with static constraints**
Goodarzimehr V., Topal U., Das A. K., Vo-Duy T.
Structures, vol.50, pp.400-417, 2023 (SCI-Expanded)

VII. **Stochastic normal mode frequency analysis of hybrid angle ply laminated composite skew plate with opening using a novel approach**
Mishra B. B., Kumar A., Topal U.
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, vol.51, no.1, pp.275-309, 2023 (SCI-Expanded)

VIII. **Maximization of the fundamental frequency of the FG-CNTRC quadrilateral plates using a new hybrid PSOG algorithm**
TOPAL U., Goodarzimehr V., Bardhan A., Vo-Duy T., Shojaee S.
COMPOSITE STRUCTURES, vol.295, 2022 (SCI-Expanded)

IX. **Optimal Response Prediction of Composite Honeycomb Sandwich Plate: Theoretical and Experimental Verification**
Rajamohan V., Sudhagar P. E., Praveen A. P., TOPAL U., Panda S. K., Trung Vo-Duy T. V.
INTERNATIONAL JOURNAL OF APPLIED MECHANICS, vol.14, no.04, 2022 (SCI-Expanded)

X. **Optimal deflection and stacking sequence prediction of curved composite structure using hybrid (FEM and soft computing) technique**
Sharma N., Lalepalli A. K., Hirwani C. K., Das A., Panda S. K., TOPAL U., DEDE T.
Engineering with Computers, vol.37, pp.477-487, 2021 (SCI-Expanded)

XI. **Multiobjective optimization of angle-ply laminated plates for maximum buckling load**
Topal U., Uzman U.
FINITE ELEMENTS IN ANALYSIS AND DESIGN, vol.46, no.3, pp.273-279, 2010 (SCI-Expanded)

XII. **Effect of Rectangular/Circular Cutouts on Thermal Buckling Load Optimization of Angle-Ply Laminated Thin Plates**
Topal U., Uzman U.
SCIENCE AND ENGINEERING OF COMPOSITE MATERIALS, vol.17, no.2, pp.93-110, 2010 (SCI-Expanded)

XIII. **Frequency optimization of laminated general quadrilateral and trapezoidal thin plates**
Topal U.
MATERIALS & DESIGN, vol.30, no.9, pp.3643-3652, 2009 (SCI-Expanded)

XIV. **Multiobjective optimization of laminated composite cylindrical shells for maximum frequency and buckling load**
Topal U.
MATERIALS & DESIGN, vol.30, no.7, pp.2584-2594, 2009 (SCI-Expanded)

XV. **Thermal buckling load optimization of angle-ply laminated cylindrical shells**
TOPAL U., Uzman U.
MATERIALS & DESIGN, vol.30, no.3, pp.532-536, 2009 (SCI-Expanded)

XVI. **Effects of nonuniform boundary conditions on the buckling load optimization of laminated composite plates**
TOPAL U., Uzman U.
MATERIALS & DESIGN, vol.30, no.3, pp.710-717, 2009 (SCI-Expanded)

XVII. **Frequency optimization of laminated folded composite plates**
TOPAL U., Uzman U.
MATERIALS & DESIGN, vol.30, no.3, pp.494-501, 2009 (SCI-Expanded)

XVIII. **Strength optimization of laminated composite plates**
TOPAL U., Uzman U.
JOURNAL OF COMPOSITE MATERIALS, vol.42, no.17, pp.1731-1746, 2008 (SCI-Expanded)

XIX. **Thermal buckling load optimization of laminated composite plates**
TOPAL U., Uzman U.
THIN-WALLED STRUCTURES, vol.46, no.6, pp.667-675, 2008 (SCI-Expanded)

XX. **Maximization of buckling load of laminated composite plates with central circular holes using MFD method**
TOPAL U., Uzman U.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.35, no.2, pp.131-139, 2008 (SCI-Expanded)

XXI. **Frequency optimization of laminated composite angle-ply plates with circular hole**
TOPAL U., Uman U.
MATERIALS & DESIGN, vol.29, no.8, pp.1512-1517, 2008 (SCI-Expanded)

XXII. **Optimum design of laminated composite plates to maximize buckling load using MFD method**
Topal U., Uzman U.
THIN-WALLED STRUCTURES, vol.45, pp.660-669, 2007 (SCI-Expanded)

XXIII. **Optimal design of laminated composite plates to maximise fundamental frequency using MFD method**
Topal U., Uzman U.
STRUCTURAL ENGINEERING AND MECHANICS, vol.24, no.4, pp.479-491, 2006 (SCI-Expanded)

Articles Published in Other Journals

I. **Evaluation of the seismic behavior of semi-supported steel shear walls with different ratio and shape of openings**
Kholerdi S. E. S., Nazarimofrad E., Farrokhzad M., TOPAL U.
AUSTRALIAN JOURNAL OF STRUCTURAL ENGINEERING, vol.19, no.2, pp.118-130, 2018 (ESCI)

Metrics

Publication: 46
Citation (WoS): 469
Citation (Scopus): 531
H-Index (WoS): 13
H-Index (Scopus): 13