

## Prof. UMUT TOPAL

### Personal Information

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### International Researcher IDs

ORCID: 0000-0003-0298-3795

Publons / Web Of Science ResearcherID: AAW-5374-2020

Yoksis Researcher ID: 133814

### 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 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)
- II. **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, 2024 (SCI-Expanded)

- III. **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)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **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)
- XI. **Frequency optimization of laminated general quadrilateral and trapezoidal thin plates**  
Topal U.  
MATERIALS & DESIGN, vol.30, no.9, pp.3643-3652, 2009 (SCI-Expanded)
- XII. **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)
- XIII. **Frequency optimization of laminated folded composite plates**  
TOPAL U., Uzman U.  
MATERIALS & DESIGN, vol.30, no.3, pp.494-501, 2009 (SCI-Expanded)
- XIV. **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)
- 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. **Strength optimization of laminated composite plates**  
TOPAL U., Uzman U.  
JOURNAL OF COMPOSITE MATERIALS, vol.42, no.17, pp.1731-1746, 2008 (SCI-Expanded)
- XVII. **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)
- XVIII. **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)
- XIX. **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)
- XX. **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)
- XXI. **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: 44  
Citation (WoS): 469  
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