

# TAYFUN DEDE

## PROF.

Email : dtayfun@ktu.edu.tr

Office Phone : [+90 462 377 2638](tel:+904623772638)

Fax Phone : [+90 462 377 2606](tel:+904623772606)

Address : Karadeniz Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Ortahisar, TRABZON

### International Researcher IDs

ORCID: 0000-0001-9672-2232

Yoksis Researcher ID: 22056

## Learning Knowledge

Post Doctorate 2019 - 2019	Czestochowa University Of Technology, Faculty Of Civil Engineering, Poland
Doctorate 2003 - 2009	Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, Turkey
Postgraduate 2000 - 2003	Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, Turkey
Undergraduate 1996 - 2000	Karadeniz Technical University, Mühendislik Mimarlık Fakültesi, İnşaat Mühendisliği Bölümü, Turkey

## Foreign Languages

English, B2 Upper Intermediate

## Certificates, Courses and Trainings

Other, Teaching Staff Mobility, Karadeniz Teknik Üniversitesi, 2018

Occupational Health and Safety, C Sınıfı İş Güvenliği Uzmanlığı Belgesi, ÇALIŞMA VE SOSYAL GÜVENLİK BAKANLIĞI - İŞ SAĞLIĞI VE GÜVENLİĞİ GENEL MÜDÜRLÜĞÜ - MERKEZ BİRİM, 2014

Occupational Health and Safety, İşyeri Hekimliği ve İş Güvenliği Uzmanlığı Eğitici Belgesi, ÇALIŞMA VE SOSYAL GÜVENLİK BAKANLIĞI - İŞ SAĞLIĞI VE GÜVENLİĞİ GENEL MÜDÜRLÜĞÜ - MERKEZ BİRİM, 2013

## Dissertations

Doctorate, Farklı Kriterler Kullanılarak Betonarme Kirişlerin Malzeme Bakımından Doğrusal Olmayan Davranışının Karşılaştırmalı Olarak İncelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, 2009

Postgraduate, Değer Kodlaması Kullanarak Kafes Sistemlerin Genetik Algoritma ile Minimum Ağırlıklı Boyutlandırılması, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, 2003

## Academic Titles / Tasks

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Professor 2020 - Continues	Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği
Associate Professor 2015 - 2020	Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği
Assistant Professor 2011 - 2015	Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği
Research Assistant 2001 - 2009	Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği

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## Awards

1. DEDE T, ICADET 2017 Best Presentation, 2nd International Conference on Advanced Engineering Technologies, September 2017

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Multi-objective time-cost-safety risk trade-off optimization for the construction scheduling problem**  
YILMAZ M., DEDE T.  
ENGINEERING CONSTRUCTION AND ARCHITECTURAL MANAGEMENT, 2024 (SCI-Expanded)
2. **Optimization of roofs with solar panels using Rao algorithms**  
Yakak B., ATMACA B., Kinalı N. S., DEDE T., Grzywinski M., Rao R. V.  
Applied Soft Computing, vol.165, 2024 (SCI-Expanded)
3. **Integrated Design Optimization Process for Building Projects**  
ASLAY S. E., DEDE T., Kaveh A.  
PERIODICA POLYTECHNICA-CIVIL ENGINEERING, no.4, pp.1175-1183, 2024 (SCI-Expanded)
4. **Reduce the construction cost of a 7-story RC public building with metaheuristic algorithms**  
ASLAY S. E., DEDE T.  
ARCHITECTURAL ENGINEERING AND DESIGN MANAGEMENT, vol.20, no.2, pp.214-229, 2024 (SCI-Expanded)
5. **Modified dynamic opposite learning assisted TLBO for solving Time-Cost optimization in generalized construction projects**  
Azim Eirgash M., TOĞAN V., DEDE T., Basri Başağa H. B.  
STRUCTURES, vol.53, pp.806-821, 2023 (SCI-Expanded)
6. **Optimal design of dome structures with recently developed algorithm: Rao series**  
DEDE T., ATMACA B., Grzywinski M., Rao R. V.  
STRUCTURES, vol.42, pp.65-79, 2022 (SCI-Expanded)
7. **3D cost optimization of 3 story RC constructional building using Jaya algorithm**  
ASLAY S. E., DEDE T.  
Structures, vol.40, pp.803-811, 2022 (SCI-Expanded)
8. **Optimizing of Discrete Time-Cost in Construction Projects Using New Adaptive Weight Formulations**  
TOĞAN V., Berberoglu N., DEDE T.  
KSCE JOURNAL OF CIVIL ENGINEERING, vol.26, no.2, pp.511-521, 2022 (SCI-Expanded)
9. **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)
10. **Optimum design of reinforced concrete counterfort retaining walls using TLBO, Jaya algorithm**  
Öztürk H. T., Dede T., Türker E.  
STRUCTURES, vol.25, pp.285-296, 2020 (SCI-Expanded)
  11. **Optimization of cables size and prestressing force for a single pylon cable-stayed bridge with Jaya algorithm**  
ATMACA B., DEDE T., Grzywinski M.  
STEEL AND COMPOSITE STRUCTURES, vol.34, no.6, pp.853-862, 2020 (SCI-Expanded)
  12. **Continuous size optimization of large-scale dome structures with dynamic constraints**  
DEDE T., Grzywinski M., Selezdak J.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.73, no.4, pp.397-405, 2020 (SCI-Expanded)
  13. **Design of reinforced concrete cantilever retaining wall using Grey wolf optimization algorithm**  
Kalemci E. N., İKİZLER S. B., DEDE T., ANGIN Z.  
STRUCTURES, vol.23, pp.245-253, 2020 (SCI-Expanded)
  14. **Shape and size optimization of trusses with dynamic constraints using a metaheuristic algorithm**  
Grzywinski M., Selezdak J., DEDE T.  
STEEL AND COMPOSITE STRUCTURES, vol.33, no.5, pp.747-753, 2019 (SCI-Expanded)
  15. **A multi-objective decision making model based on TLBO for the time - cost trade-off problems**  
EIRGASH M. A., TOĞAN V., DEDE T.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.71, no.2, pp.139-151, 2019 (SCI-Expanded)
  16. **Optimization of the braced dome structures by using Jaya algorithm with frequency constraints**  
Grzywinski M., DEDE T., ÖZDEMİR Y. I.  
STEEL AND COMPOSITE STRUCTURES, vol.30, no.1, pp.47-55, 2019 (SCI-Expanded)
  17. **Artificial Intelligence Applications in Civil Engineering**  
DEDE T., Kankal M., Vosoughi A. R., Grzywinski M., Kripka M.  
ADVANCES IN CIVIL ENGINEERING, vol.2019, 2019 (SCI-Expanded)
  18. **Prediction and analysis of optimal frequency of layered composite structure using higher-order FEM and soft computing techniques**  
Das A., Hirwani C. K., Panda S. K., TOPAL U., DEDE T.  
STEEL AND COMPOSITE STRUCTURES, vol.29, no.6, pp.749-758, 2018 (SCI-Expanded)
  19. **Buckling load optimization of laminated plates resting on Pasternak foundation using TLBO**  
TOPAL U., Trung Vo-Duy T. V., DEDE T., Nazarimofrad E.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.67, no.6, pp.617-628, 2018 (SCI-Expanded)
  20. **A hybrid DQ-TLBO technique for maximizing first frequency of laminated composite skew plates**  
Vosoughi A. R., Malekzadeh P., TOPAL U., DEDE T.  
STEEL AND COMPOSITE STRUCTURES, vol.28, no.4, pp.509-516, 2018 (SCI-Expanded)
  21. **A coupled DQ-TLBO for frequency maximization of laminated composite skew plates**  
Vosoughi A. R., Malekzadeh P., TOPAL U., DEDE T.  
STEEL AND COMPOSITE STRUCTURES, vol.1, pp.1-15, 2018 (SCI-Expanded)
  22. **Jaya algorithm to solve single objective size optimization problem for steel grillage structures**  
DEDE T.  
STEEL AND COMPOSITE STRUCTURES, vol.26, no.2, pp.163-170, 2018 (SCI-Expanded)
  23. **Advanced Optimization Techniques and Their Applications in Civil Engineering**  
DEDE T., Kripka M., TOĞAN V., Yepes V., Rao R. V.  
ADVANCES IN CIVIL ENGINEERING, vol.2018, 2018 (SCI-Expanded)
  24. **Stacking Sequence Optimization for Maximum Fundamental Frequency of Simply Supported Antisymmetric Laminated Composite Plates using Teaching-Learning-Based Optimization**  
TOPAL U., DEDE T., ÖZTÜRK H. T.  
KSCE JOURNAL OF CIVIL ENGINEERING, vol.21, no.6, pp.2281-2288, 2017 (SCI-Expanded)
  25. **Modeling stream dissolved oxygen concentration using teaching-learning based optimization algorithm**

- BAYRAM A., UZLU E., Kankal M., DEDE T.  
ENVIRONMENTAL EARTH SCIENCES, vol.73, no.10, pp.6565-6576, 2015 (SCI-Expanded)
26. **Combined size and shape optimization of structures with a new meta-heuristic algorithm**  
DEDE T., AYVAZ Y.  
APPLIED SOFT COMPUTING, vol.28, pp.250-258, 2015 (SCI-Expanded)
27. **A teaching learning based optimization for truss structures with frequency constraints**  
DEDE T., TOĞAN V.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.53, no.4, pp.833-845, 2015 (SCI-Expanded)
28. **Prediction of berm geometry using a set of laboratory tests combined with teaching-learning-based optimization and artificial bee colony algorithms**  
UZLU E., Komurcu M. I., Kankal M., DEDE T., ÖZTÜRK H. T.  
APPLIED OCEAN RESEARCH, vol.48, pp.103-113, 2014 (SCI-Expanded)
29. **Estimates of energy consumption in Turkey using neural networks with the teaching-learning-based optimization algorithm**  
UZLU E., Kankal M., Akpınar A., DEDE T.  
ENERGY, vol.75, pp.295-303, 2014 (SCI-Expanded)
30. **Application of Teaching-Learning-Based-Optimization algorithm for the discrete optimization of truss structures**  
Dede T.  
KSCE JOURNAL OF CIVIL ENGINEERING, vol.18, no.6, pp.1759-1767, 2014 (SCI-Expanded)
31. **Optimum design of grillage structures to LRFD-AISC with teaching-learning based optimization**  
Dede T.  
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.48, no.5, pp.955-964, 2013 (SCI-Expanded)
32. **Composed material models for nonlinear behavior of reinforced concrete**  
DEDE T., AYVAZ Y.  
COMPUTERS AND CONCRETE, vol.12, no.3, pp.303-318, 2013 (SCI-Expanded)
33. **Structural optimization with teaching-learning-based optimization algorithm**  
DEDE T., AYVAZ Y.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.47, no.4, pp.495-511, 2013 (SCI-Expanded)
34. **Materially nonlinear free vibration analysis of reinforced concrete beam**  
DEDE T., Ayvaz Y., ÖZDEMİR Y. I.  
JOURNAL OF VIBRATION AND CONTROL, vol.17, no.7, pp.1090-1098, 2011 (SCI-Expanded)
35. **Weight minimization of trusses with genetic algorithm**  
DEDE T., Bekiroglu S., AYVAZ Y.  
APPLIED SOFT COMPUTING, vol.11, no.2, pp.2565-2575, 2011 (SCI-Expanded)
36. **Comparative study of plasticity models for concrete material by using different criteria including Hsieh-Ting-Chen criterion**  
DEDE T., Ayvaz Y.  
MATERIALS & DESIGN, vol.31, no.3, pp.1482-1489, 2010 (SCI-Expanded)
37. **Plasticity models for concrete material based on different criteria including Bresler-Pister**  
DEDE T., Ayvaz Y.  
MATERIALS & DESIGN, vol.31, no.1, pp.278-286, 2010 (SCI-Expanded)
38. **Nonlinear analysis of reinforced concrete beam with/without tension stiffening effect**  
DEDE T., Ayvaz Y.  
MATERIALS & DESIGN, vol.30, no.9, pp.3846-3851, 2009 (SCI-Expanded)
39. **Implementation of different encoding types on structural optimization based on adaptive genetic algorithm**  
Bekiroglu S., DEDE T., Ayvaz Y.  
FINITE ELEMENTS IN ANALYSIS AND DESIGN, vol.45, no.11, pp.826-835, 2009 (SCI-Expanded)

## Articles Published in Other Journals

1. **Yapay Zekâ Tabanlı Algoritmalar ile Kentsel Dönüşüm Tahminlerinin Yapılması**  
Uçan H. A., DEDE T., NACAR S.  
Çevre Şehir ve İklim Dergisi, 2023 (Peer-Reviewed Journal)
2. **Investigating multi-objective time, cost, and risk problems using the Grey Wolf Optimization algorithm**  
YILMAZ M., DEDE T., Grzywinski M.  
Czestochowa University of Technology, vol.12, 2023 (Peer-Reviewed Journal)
3. **Solving a stochastic time-cost-quality trade-off problem by meta-heuristic optimization algorithms**  
Mohammadi M. O., DEDE T., Grzywinski M.  
Czestochowa University of Technology, vol.11, 2022 (Peer-Reviewed Journal)
4. **IDENTIFICATION MATERIAL PROPERTIES BY MODAL CALIBRATION METHOD BASED ON AMBIENT VIBRATION TESTS**  
YANIK Y., TÜRKER T., YILDIRIM Ö., DEDE T.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.25, pp.573-590, 2020 (Peer-Reviewed Journal)
5. **Malzeme Özelliklerinin Titreşim Testi Verilerine Dayalı Model Kalibrasyon Yöntemiyle Belirlenmesi**  
YANIK Y., TÜRKER T., YILDIRIM Ö., DEDE T.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.25, pp.573-590, 2020 (Peer-Reviewed Journal)
6. **Estimating Electric Energy Consumption in Turkey Using Artificial Neural Networks Optimized with Jaya Algorithm**  
Uzlu E., Dede T.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, vol.8, no.3, pp.511-528, 2020 (Peer-Reviewed Journal)
7. **THE SIZE OPTIMIZATION OF STEEL BRACED BARREL VAULT STRUCTURE BY USING RAO-1 ALGORITHM**  
Dede T., Grzywiński M., Rao R. V., Atmaca B.  
Sigma Journal of Engineering and Natural Sciences, vol.38, no.3, pp.1415-1425, 2020 (ESCI)
8. **Binaların Kontrollü Yıkımı için Simülasyon Programı Tasarımı**  
TÜRKER T., Tavşan V., DEDE T.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi (TR-DİZİN), vol.8, no.1, pp.391-409, 2020 (Peer-Reviewed Journal)
9. **New optimization algorithms and their application for 2D truss structures**  
Grzywinski M., DEDE T.  
Zeszyty Naukowe Politechniki Czestochowskiej, vol.25, pp.50-54, 2020 (Peer-Reviewed Journal)
10. **2007-2018 Türk Deprem Yönetmeliklerinde Yapı Elemanları Çıkarma Senaryoları ve Bina Periyotlarının Karşılaştırılması**  
Aslay S. E., DEDE T.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.0, no.0, 2020 (ESCI)
11. **Optimization of post-tensioning forces in stay-cables of cable-stayed bridges**  
ATMACA B., Grzywinski M., DEDE T.  
Construction of optimized energy potential, vol.8, no.2, pp.69-76, 2019 (Peer-Reviewed Journal)
12. **Rao\_1 Optimizasyon Algoritması Kullanılarak Taban Plağı Dişli Betonarme Konsol İstinat Duvarı Tasarımı (TR-DİZİN)**  
KALEMCİ E. N., İKİZLER S. B., DEDE T., ANGIN Z.  
Uludağ University Journal of The Faculty of Engineering, vol.24, pp.291-308, 2019 (Peer-Reviewed Journal)
13. **İnşaat Sektöründe İş Güvenliği Mevzuatlarının Algılanabilirliği**  
DEDE T., Baltacı Y.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi ( TR-DİZİN ), vol.7, no.3, pp.1087-1099, 2019 (Peer-Reviewed Journal)
14. **Usage of Optimization Techniques in Civil Engineering During the Last Two Decades**  
DEDE T., Kripka M., TOĞAN V., Yepes V., Rao R. V.

- Current Trends in Civil & Structural Engineering, no.2, pp.1-17, 2019 (Peer-Reviewed Journal)
15. **Application of MOO Techniques for the Time-Cost Trade off Problems in Civil Engineering**  
DEDE T., Kamil S.  
Current Trends in Civil & Structural Engineering, vol.1, pp.1-2, 2019 (Peer-Reviewed Journal)
  16. **Metaheuristic Optimization Algorithms and Civil Engineering**  
DEDE T.  
Current Trends in Civil & Structural Engineering, vol.1, pp.1-2, 2018 (Peer-Reviewed Journal)
  17. **Decision-Making Process Techniques Used in the Optimization of Construction Projects**  
DEDE T.  
Engineering Sciences (NWSAENS), vol.-, no.13, pp.128-136, 2018 (Peer-Reviewed Journal)
  18. **Integration of Structural Analysis Software for 3D-Design of Counterfort Retaining Walls**  
DEDE T., ÖZTÜRK H. T.  
Eurasian Journal of Engineering Sciences and Technology, 2018 (Peer-Reviewed Journal)
  19. **WATER TANK USAGE IN BUILDING SITES IN TURKEY: AN INTERNET-BASED STUDY WITH CIVIL ENGINEERS**  
TOĞAN V., BAŞAĞA H. B., DEDE T., Kolaylı C. C., Şahin K., TOPBAŞ M.  
The Turkish Journal of Occupational / Environmental Medicine and Safety, no.2, pp.412-419, 2017 (Peer-Reviewed Journal)
  20. **Material Properties Identification of Structural Elements by Model Updating Method**  
YANIK Y., TÜRKER T., yıldırım ö., DEDE T.  
Eurasian Journal of Engineering Sciences and Technology,, vol.1, pp.45-53, 2017 (Peer-Reviewed Journal)
  21. **Time-Cost Trade off Optimization for Construction Projects Using an Optimization Engine**  
EIRGASH M. A., TOĞAN V., DEDE T., BAŞAĞA H. B.  
Eurasian Journal of Engineering Sciences and Technology, vol.1, pp.54-68, 2017 (Peer-Reviewed Journal)
  22. **Parametric analysis of thick plates subjected to earthquake excitations**  
ÖZDEMİR Y. I., Ayvaz Y., DEDE T.  
CHALLENGE JOURNAL OF STRUCTURAL MECHANICS, vol.1, no.1, pp.9-12, 2015 (Peer-Reviewed Journal)
  23. **İş güvenliği mevzuatı ile ilgili standartlara göre yapı işlerinde kullanılacak iskelelerde aranan özellikler**  
TOĞAN V., BAŞAĞA H. B., DEDE T., TEMEL B. A.  
İMO Trabzon Şubesi Bülteni, 2015 (Non Peer-Reviewed Journal)
  24. **Least Weight Design of Space Trusses By Using Value Encoding in GA with Discrete Design Variables**  
DEDE T., Bekiroglu S., Ayvaz Y.  
e-Journal of New World Sciences Academy, vol.4, no.3, pp.414-427, 2009 (Peer-Reviewed Journal)
  25. **Betonun Gerilme-Şekildeğiştirme Eğrileri**  
DEDE T., Ayvaz Y.  
Yapı Dünyası Dergisi, vol.160, pp.52-58, 2009 (Peer-Reviewed Journal)
  26. **Betonun Doğrusal Olmayan Analizinde Kullanılan Kriterler**  
DEDE T., Ayvaz Y.  
Fırat Üniv. Fen ve Müh. Bil. Dergisi, vol.24, pp.151-159, 2009 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Time–Cost Trade-Off Problems with Multi-objective Quasi-Oppositional Teaching Learning-Based Optimization**  
Eirgash M. A., TOĞAN V., DEDE T.  
in: Advanced Engineering Optimization Through Intelligent Techniques, Ravipudi Venkata Rao, Jan Taler, Editor, Springer, pp.269-277, 2023
2. **Application of Teaching-Learning-Based Optimization on Solving of Time Cost Optimization Problems**  
TOĞAN V., DEDE T., BAŞAĞA H. B.

in: Handbook of AI-based Metaheuristics, Kulkarni Anand J, Siarry Patrick, Editor, CRC Press, Boca Raton, FL, pp.239-262, 2022

3. **Jaya: A New Meta-heuristic Algorithm for the Optimization of Braced Dome Structures**  
DEDE T., Grzywinski M., Rao R. V.  
in: Advanced Engineering Optimization Through Intelligent Techniques, R. Venkata Rao and J. Taler , Editor, Springer, -, pp.13-19, 2019

## Refereed Congress / Symposium Publications in Proceedings

1. **Damage Assessment of an Inclined Minaret with ANN**  
DEMİRTAŞ B., TÜRKER T., DEDE T., YANIK Y.  
5th International Conference on Advanced Engineering Technologies (ICADET-2024), Bayburt, Turkey, 25 September 2024, vol.46, pp.846-855
2. **Application of Grey Wolf Algorithm with Archive and Grid Mechanisms for Solving Construction Time–Cost–Quality Problems**  
YILMAZ M., DEDE T.  
4th International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2023, Surat, India, 28 - 30 September 2023, vol.1226 LNEE, pp.1-9
3. **Evaluation and Selection of Environmental Factors in Infrastructure Projects Using SWARA Method**  
Baltacı Y., DEDE T., Rao R. V.  
4th International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2023, Surat, India, 28 - 30 September 2023, vol.1226 LNEE, pp.253-263
4. **Optimum Design of Steel Space Truss Roofs with Solar Panels Using Rao-2 Algorithm**  
Yakak B., Kınalı N. S., ATMACA B., DEDE T., Grzywinski M., Rao R. V.  
4th International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2023, Surat, India, 28 - 30 September 2023, vol.1226 LNEE, pp.281-291
5. **Using Meta-Heuristic Optimization Methods in Solving Time–Cost–Quality Trade-Off Problems**  
Mohammadi M. O., DEDE T., Rao R. V.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022, Surat, India, 28 - 30 January 2022, pp.107-114
6. **Optimization of Construction Scheduling with Rao Algorithm**  
YILMAZ M., DEDE T., Venkata Rao R.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022, Surat, India, 28 - 30 January 2022, pp.99-105
7. **Computation of Post-tensioning Force of Cable-Stayed Bridge with Jaya Algorithm**  
ATMACA B., Ghafoori R., DEDE T., ATEŞ Ş.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022, Surat, India, 28 - 30 January 2022, pp.195-202
8. **Time–Cost Trade-Off Problems with Multi-objective Quasi-Oppositional Teaching Learning-Based Optimization**  
Eirgash M. A., TOĞAN V., DEDE T.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022, Surat, India, 28 - 30 January 2022, pp.269-277
9. **Optimal Weight Design of 3D Truss Tower Structure with SAP-Rao Algorithm**  
DEDE T., Grzywiński M., ATMACA B., Rao R. V.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022, Surat, India, 28 - 30 January 2022, pp.185-193
10. **Cost and Design Optimization of a 2-Story RC Building**  
ASLAY S. E., DEDE T., Rao R. V.  
International Conference on Advanced Engineering Optimization Through Intelligent Techniques, AEOTIT 2022,

Surat, India, 28 - 30 January 2022, pp.203-209

11. **Cables Size Optimization of Cable-Stayed Bridge**  
ATMACA B., DEDE T., Grzywinski M., SELEJDAK J.  
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.431-439
12. **Discrete Optimization of Large-Scale Dome Structure**  
DEDE T., Grzywinski M.  
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.379-386
13. **Barrel Vault Structure Optimization Using Rao-1 Algorithm**  
DEDE T., Grzywinski M., RAO R. V.  
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.1011-1019
14. **TRUSS OPTIMIZATION WITH FREQUENCY CONSTRAINTS BASED ON TLBO ALGORITHM**  
Grzywinski M., Selejdak J., DEDE T.  
4th Polish Congress of Mechanics & 23rd International Conference on Computer Methods in Mechanic, Krakow, Poland, 8 - 12 September 2019, pp.1-7
15. **İstatistiksel Ölçek İndirgeme Yöntemi ile NCEP/NCAR re-analiz Verilerinin Doğu Karadeniz Havzası Aylık Yağış ve Sıcaklık Değerlerine İndirgenmesi**  
NACAR S., KANKAL M., OKKAN U., DEDE T.  
International Conference on Innovation, Sustainability, Technology and Education in Civil Engineering, Hatay, Turkey, 13 - 15 June 2019, vol.1, no.1, pp.470-483
16. **The Dynamic Behavior and Response of a Thick Plate at the Kocaeli Earthquake in Turkey**  
ÖZDEMİR Y. İ., DEDE T.  
International Conference on Innovation, Sustainability, Technology and Education in Civil Engineering, Hatay, Turkey, 13 - 15 June 2019, pp.1288-1298
17. **İstatistiksel Ölçek İndirgeme Yöntemi ile NCEP/NCAR Re-analiz Verilerinin Doğu Karadeniz Havzası Aylık Yağış ve Sıcaklık Değerlerine İndirgenmesi**  
NACAR S., Kankal M., Okkan U., DEDE T.  
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## Research Areas

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