

# Prof. OĐUZHAN HASANÇEBİ

## Personal Information

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## International Researcher IDs

ScholarID: h1-JRZ4AAAAJ

ORCID: 0000-0002-5501-1079

Publons / Web Of Science ResearcherID: ABA-2592-2020

ScopusID: 55924346500

Yoksis Researcher ID: 163601

## Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1996 - 2001

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1994 - 1996

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1989 - 1994

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Optimum structural design using analogies to natural processes, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2001

Postgraduate, Use of genetic algorithms in optimum design of space trusses, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 1996

## Research Areas

Design of Coastal Structures, Buildings (industrial, commercial and public), Structural Engineering, Steel Structures, Performance of Constructed Facilities, Earthquake Engineering, Concrete Structures, Repair and Strengthening in Buildings

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2014 - Continues  
Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2009 - 2014

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2004 - 2009

Lecturer PhD, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2004 - 2004

Expert, Drexel University, Drexel Infrastructure Institute, İnşaat Mühendisliği Bölümü, 2001 - 2003

Research Assistant, Middle East Technical University, Graduate School of Natural and Applied Sciences, Graduate School of Natural and Applied Sciences, 1996 - 2000

## Academic and Administrative Experience

Rector's Advisor, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2024 - Continues

Dean, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2024 - Continues

University Executive Board Member, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2020 - Continues

Member of the Senate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2020 - Continues

Rektörlük Kalite Komisyonu Üyesi, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2020 - Continues

Rektörlük Stratejik Plan Komisyonu Başkanı, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2016 - Continues

Rectorate Commissioner, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2016 - Continues

University Executive Board Member, KKTC Orta Doğu Teknik Üniversitesi Kampüsü, 2020 - 2024

Vice Rector, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2020 - 2024

assistant Secretary General, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2017 - 2020

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2016 - 2020

Birim Stratejik Plan Komisyonu Başkanı, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2017 - 2018

Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2016 - 2016

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2012 - 2016

## Courses

DESIGN OF STEEL STRUCTURES, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

STRUCTURAL OPTIMIZATION, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008

FUNDAMENTALS OF STEEL DESIGN, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

STRUCTURAL ANALYSIS, Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004

ENGINEERING MECHANICS STATICS, Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2005 - 2006, 2004 - 2005, 2003 - 2004

## Supervised Theses

Hasançebi O., ROBUST AND PRACTICAL OPTIMIZATION COMPUTING PLATFORM FOR DESIGN OF REAL-WORLD STRUCTURES, Doctorate, A.KOURUCU(Student), Continues

HASANÇEBİ O., Developing a structural optimization software for efficient and practical optimum design of real-world steel structures, Doctorate, A.KORUCU(Student), 2022

Hasançebi O., MULTI-OBJECTIVE PERFORMANCE BASED DESIGN OPTIMIZATION OF STEEL STRUCTURES, Doctorate, H.ESER(Student), 2021

HASANÇEBİ O., Optimization of onshore steel drilling rigs using the convergence rate approach integrated metaheuristic search algorithms, Postgraduate, R.SALATIN(Student), 2018

HASANÇEBİ O., CAD – integrated size and shape optimization of steel lattice energy transmission line towers using simulated annealing, Doctorate, S.Şahin(Student), 2016

HASANÇEBİ O., Cad-integrated size and shape optimization of steel lattice energy transmission line towers using simulated annealing, Doctorate, S.ŞAHİN(Student), 2016

HASANÇEBİ O., Optimum design of steel structures via artificial bee colony (ABC) algorithm and SAP2000, Postgraduate, C.ESER(Student), 2014

HASANÇEBİ O., Computationally enhanced techniques for practical optimum design of steel structures, Doctorate, S.KAZEMZADEH(Student), 2014

HASANÇEBİ O., A practical optimum design of steel structures with scatter search method and SAP2000, Postgraduate, A.ESAT(Student), 2013

HASANÇEBİ O., Optimum design of steel structures via differential evolution algorithm and application programming interface of SAP2000, Postgraduate, Ö.DEDEKARGINOĞLU(Student), 2012

HASANÇEBİ O., Optimum design of double-layer grid systems: Comparison with current design practice using real-life industrial applications, Postgraduate, Y.AYDINCILAR(Student), 2010

HASANÇEBİ O., Investigating the effect of column orientations on minimum weight design of steel frames, Postgraduate, M.KIZILKAN(Student), 2010

HASANÇEBİ O., Optimal wind bracing systems for multi-storey steel buildings, Postgraduate, İ.YILDIRIM(Student), 2009

HASANÇEBİ O., TÜRER A., Calibration of the finite element model of a long span cantilever through truss bridge using artificial neural networks, Postgraduate, Ö.BURAK(Student), 2008

HASANÇEBİ O., Approximate analysis and condition assesment of reinforced concrete T-beam bridges using artificial neural networks, Postgraduate, T.DUMLUPINAR(Student), 2008

HASANÇEBİ O., Optimum design of pin-jointed 3-D dome structures using global optimization techniques, Postgraduate, Y.Saraç(Student), 2005

HASANÇEBİ O., Optimum design of pin-jointed 3D dome structures using global optimization techniques, Postgraduate, Y.SARAÇ(Student), 2005

## **Jury Memberships**

Award, The 12th International Student Competition in Structural Optimization (ISCSO 2023), Orta Doğu Teknik Üniversitesi, December, 2023

Competition, International Student Comptetion in Structural Optimization 2021, Orta Doğu Teknik Üniversitesi, November, 2021

Doctorate, Doctorate, Dicle Üniversitesi, November, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, July, 2021

Doctorate, Doctorate, Dicle Üniversitesi, July, 2021

Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul, June, 2021

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, May, 2021

Associate Professor Exam, Associate Professor Exam, Orta Doğu Teknik Üniversitesi, May, 2021

Associate Professor Exam, Associate Professor Exam, April, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Anadolu Üniversitesi, October, 2020

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, January, 2020

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2020

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2020

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2020

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Malatya Turgut Özal Üniversitesi, December, 2019

Competition, International Student Competition in Structural Optimization , Orta Doğu Teknik Üniversitesi, December, 2019

Doctorate, Doctorate, Bilecik Şeyh Edebali Üniversitesi, November, 2019

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Bilecik Şeyh Edebali Üniversitesi, June, 2019

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, May, 2019

Associate Professor Exam, Associate Professor Exam, February, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2019

Competition, International Student Competition in Structural Optimization , Orta Doğu Teknik Üniversitesi, December, 2018

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, May, 2018

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

- I. **A Study on the Optimum Design of Steel Roof Systems in Turkish Engineering Practice**  
Eser H., Hasançebi O.  
Turkish Journal of Civil Engineering (TJCE), vol.36, no.3, pp.1-19, 2025 (SCI-Expanded)
- II. **Optimal seismic design of reinforced concrete moment-resisting frames using an improved metaheuristic and neural networks**  
Razavi N., Gholizadeh S., HASANÇEBİ O.  
Structures, vol.73, 2025 (SCI-Expanded)
- III. **Historical evolution of structural optimization techniques for steel skeletal structures including industrial design applications**  
SAKA M. P., HASANÇEBİ O., ESER H., Geem Z. W.  
ENGINEERING OPTIMIZATION, no.1, pp.69-129, 2025 (SCI-Expanded)
- IV. **Efficient neural network-aided seismic life-cycle cost optimization of steel moment frames**  
Gholizadeh S., Hasançebi O.  
Computers and Structures, vol.301, 2024 (SCI-Expanded)

- V. **Performance-based design optimization of steel moment frames using capacity controlled search algorithm: a comparison with force-based design approach**  
Eser H., Hasançebi O., Yakut A., Gholizadeh S.  
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.1, no.1, pp.1-16, 2023 (SCI-Expanded)
- VI. **A guided evolution strategy for discrete sizing optimization of space steel frames**  
Korucu A., Hasançebi O.  
Structural and Multidisciplinary Optimization, vol.66, no.8, 2023 (SCI-Expanded)
- VII. **Optimum design of steel frames with sizing and orientation design variables using a reformulated evolution strategy**  
Hasançebi O.  
STRUCTURES, vol.52, pp.273-285, 2023 (SCI-Expanded)
- VIII. **Seismic optimization and performance assessment of special steel moment-resisting frames considering nonlinear soil-structure interaction**  
Gholizadeh S., Milany A., HASANÇEBİ O.  
STEEL AND COMPOSITE STRUCTURES, vol.47, no.3, pp.339-353, 2023 (SCI-Expanded)
- IX. **Capacity controlled search: A new and efficient design-driven method for discrete size optimization of steel frames**  
ESER H., HASANÇEBİ O.  
Computers and Structures, vol.275, 2023 (SCI-Expanded)
- X. **Seismic collapse safety based optimization of steel Moment-Resisting frames**  
Gholizadeh S., HASANÇEBİ O., ESER H., KOÇKAYA O.  
STRUCTURES, vol.45, pp.329-342, 2022 (SCI-Expanded)
- XI. **Optimum design of seismic isolation systems using metaheuristic search methods**  
ÇERÇEVİK A. E., Avsar O., HASANÇEBİ O.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.131, 2020 (SCI-Expanded)
- XII. **Discrete Sizing of Steel Frames Using Adaptive Dimensional Search Algorithm**  
HASANÇEBİ O., Azad S. K.  
PERIODICA POLYTECHNICA-CIVIL ENGINEERING, vol.63, no.4, pp.1062-1079, 2019 (SCI-Expanded)
- XIII. **Optimum design of steel lattice transmission line towers using simulated annealing and PLS-TOWER**  
Tort C., Sahin S., HASANÇEBİ O.  
COMPUTERS & STRUCTURES, vol.179, pp.75-94, 2017 (SCI-Expanded)
- XIV. **Cost efficiency analyses of steel frameworks for economical design of multi-storey buildings**  
HASANÇEBİ O.  
JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH, vol.128, pp.380-396, 2017 (SCI-Expanded)
- XV. **Metaheuristics in structural optimization and discussions on harmony search algorithm**  
Saka M. P., Hasançebi O., Geem Z. W.  
SWARM AND EVOLUTIONARY COMPUTATION, vol.28, pp.88-97, 2016 (SCI-Expanded)
- XVI. **Discrete sizing optimization of steel trusses under multiple displacement constraints and load cases using guided stochastic search technique**  
Azad S. K., HASANÇEBİ O.  
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.52, no.2, pp.383-404, 2015 (SCI-Expanded)
- XVII. **Computationally efficient discrete sizing of steel frames via guided stochastic search heuristic**  
Azad S. K., HASANÇEBİ O.  
COMPUTERS & STRUCTURES, vol.156, pp.12-28, 2015 (SCI-Expanded)
- XVIII. **Adaptive dimensional search: A new metaheuristic algorithm for discrete truss sizing optimization**  
Hasançebi O., Azad S. K.  
COMPUTERS & STRUCTURES, vol.154, pp.1-16, 2015 (SCI-Expanded)
- XIX. **Improving Computational Efficiency of Bat-Inspired Algorithm in Optimal Structural Design**  
Hasanebi O., Azad S. K.  
ADVANCES IN STRUCTURAL ENGINEERING, vol.18, no.7, pp.1003-1015, 2015 (SCI-Expanded)
- XX. **An elitist self-adaptive step-size search for structural design optimization**

- Azad S. K., Hasançebi O.  
APPLIED SOFT COMPUTING, vol.19, pp.226-235, 2014 (SCI-Expanded)
- XXI. **Guided stochastic search technique for discrete sizing optimization of steel trusses: A design-driven heuristic approach**  
Azad S. K., HASANÇEBİ O., Saka M. P.  
COMPUTERS & STRUCTURES, vol.134, pp.62-74, 2014 (SCI-Expanded)
- XXII. **Discrete size optimization of steel trusses using a refined big bang-big crunch algorithm**  
Hasançebi O., Azad S. K.  
ENGINEERING OPTIMIZATION, vol.46, no.1, pp.61-83, 2014 (SCI-Expanded)
- XXIII. **Bat inspired algorithm for discrete size optimization of steel frames**  
Hasançebi O., Carbas S.  
ADVANCES IN ENGINEERING SOFTWARE, vol.67, pp.173-185, 2014 (SCI-Expanded)
- XXIV. **A bat-inspired algorithm for structural optimization**  
Hasançebi O., Teke T., Pekcan O.  
COMPUTERS & STRUCTURES, vol.128, pp.77-90, 2013 (SCI-Expanded)
- XXV. **Detailed load rating analyses of bridge populations using nonlinear finite element models and artificial neural networks**  
Hasançebi O., Dumlupinar T.  
COMPUTERS & STRUCTURES, vol.128, pp.48-63, 2013 (SCI-Expanded)
- XXVI. **Upper Bound Strategy in Optimum Design of Truss Structures: A Big Bang-Big Crunch Algorithm Based Application**  
Kazemzadeh Azad S., Hasançebi O., Kazemzadeh Azad S., Erol O. K.  
ADVANCES IN STRUCTURAL ENGINEERING, vol.16, pp.1035-1046, 2013 (SCI-Expanded)
- XXVII. **Linear and nonlinear model updating of reinforced concrete T-beam bridges using artificial neural networks**  
Hasançebi O., Dumlupinar T.  
COMPUTERS & STRUCTURES, vol.119, pp.1-11, 2013 (SCI-Expanded)
- XXVIII. **Upper bound strategy for metaheuristic based design optimization of steel frames**  
Kazemzadeh Azad S., Hasançebi O., Kazemzadeh Azad S.  
ADVANCES IN ENGINEERING SOFTWARE, vol.57, pp.19-32, 2013 (SCI-Expanded)
- XXIX. **A neural network approach for approximate force response analyses of a bridge population**  
Hasançebi O., Dumlupinar T.  
NEURAL COMPUTING & APPLICATIONS, vol.22, pp.755-769, 2013 (SCI-Expanded)
- XXX. **An exponential big bang-big crunch algorithm for discrete design optimization of steel frames**  
Hasançebi O., Azad S. K.  
COMPUTERS & STRUCTURES, vol.110, pp.167-179, 2012 (SCI-Expanded)
- XXXI. **Optimum design of high-rise steel buildings using an evolution strategy integrated parallel algorithm**  
Hasançebi O., Bahcecioğlu T., Kurç Ö., Saka M. P.  
COMPUTERS & STRUCTURES, vol.89, pp.2037-2051, 2011 (SCI-Expanded)
- XXXII. **Comparison of non-deterministic search techniques in the optimum design of real size steel frames**  
Hasançebi O., Carbas S., Dogan E., Erdal F., Saka M. P.  
COMPUTERS & STRUCTURES, vol.88, pp.1033-1048, 2010 (SCI-Expanded)
- XXXIII. **Adaptive Harmony Search Method for Structural Optimization**  
Hasançebi O., Erdal F., Saka M. P.  
JOURNAL OF STRUCTURAL ENGINEERING, vol.136, pp.419-431, 2010 (SCI-Expanded)
- XXXIV. **Improving the performance of simulated annealing in structural optimization**  
Hasançebi O., Carbas S., Saka M. P.  
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.41, pp.189-203, 2010 (SCI-Expanded)
- XXXV. **Performance evaluation of metaheuristic search techniques in the optimum design of real size pin jointed structures**  
Hasançebi O., Carbas S., Dogan E., Erdal F., Saka M. P.

- COMPUTERS & STRUCTURES, vol.87, pp.284-302, 2009 (SCI-Expanded)
- XXXVI. **Adaptive evolution strategies in structural optimization: Enhancing their computational performance with applications to large-scale structures**  
Hasançebi O.  
COMPUTERS & STRUCTURES, vol.86, pp.119-132, 2008 (SCI-Expanded)
- XXXVII. **Optimization of truss bridges within a specified design domain using evolution strategies**  
Hasançebi O.  
ENGINEERING OPTIMIZATION, vol.39, pp.737-756, 2007 (SCI-Expanded)
- XXXVIII. **Limitations in structural identification of large constructed structures**  
Catbas F. N., Ciloglu S. K., Hasançebi O., Grimmelsman K., Aktan A. E.  
JOURNAL OF STRUCTURAL ENGINEERING-ASCE, vol.133, pp.1051-1066, 2007 (SCI-Expanded)
- XXXIX. **Discrete approaches in evolution strategies based optimum design of steel frames**  
Hasançebi O.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.26, pp.191-210, 2007 (SCI-Expanded)
- XL. **Layout optimisation of trusses using simulated annealing**  
Hasançebi O., Erbatur F.  
ADVANCES IN ENGINEERING SOFTWARE, vol.33, pp.681-696, 2002 (SCI-Expanded)
- XLI. **On efficient use of simulated annealing in complex structural optimization problems**  
Hasançebi O., Erbatur F.  
ACTA MECHANICA, vol.157, pp.27-50, 2002 (SCI-Expanded)
- XLII. **Layout optimization of trusses using improved GA methodologies**  
Hasançebi O., Erbatur F.  
ACTA MECHANICA, vol.146, pp.87-107, 2001 (SCI-Expanded)
- XLIII. **Evaluation of crossover techniques in genetic algorithm based optimum structural design**  
Hasançebi O., Erbatur F.  
COMPUTERS & STRUCTURES, vol.78, pp.435-448, 2000 (SCI-Expanded)
- XLIV. **Optimal design of planar and space structures with genetic algorithms**  
Erbatur F., Hasançebi O., Tutuncu I., Kilic H.  
COMPUTERS & STRUCTURES, vol.75, no.2, pp.209-224, 2000 (SCI-Expanded)
- XLV. **Constraint handling in genetic algorithm integrated structural optimization**  
Hasançebi O., Erbatur F.  
ACTA MECHANICA, vol.139, pp.15-31, 2000 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Structural Optimization Using Big Bang-Big Crunch Algorithm: A Review**  
Kazemzadeh Azad S., Kazemzadeh Azad S., Hasançebi O.  
International Journal of Optimization in Civil Engineering, vol.6, no.3, pp.443-445, 2016 (Peer-Reviewed Journal)
- II. **Structural Optimization Problems of the ISCSO 2011-2015: A Test Set**  
Kazemzadeh Azad S., Kazemzadeh Azad S., Hasançebi O.  
International Journal of Optimization in Civil Engineering, vol.6, no.4, pp.629-638, 2016 (Peer-Reviewed Journal)
- III. **Elitist Self-Adaptive Step-Size Search in Optimum Sizing of Steel Structures**  
Hasançebi O., Kazemzadeh Azad S.  
International Journal of Advances in Computer Science and Its Applications, vol.4, no.4, pp.192-196, 2014 (Peer-Reviewed Journal)
- IV. **Optimum Design of Skeletal Structures Using Metaheuristics: A Survey of the State-of-the-Art**  
Kazemzadeh Azad S., Hasançebi O.  
International Journal of Engineering and Applied Sciences, vol.6, no.3, pp.1-11, 2014 (Peer-Reviewed Journal)
- V. **Computationally Efficient Optimum Design of Large Scale Steel Frames**  
Kazemzadeh Azad S., Hasançebi O.

International Journal of Optimization in Civil Engineering (Iran University of Science and Technology), vol.4, no.2, pp.233-259, 2014 (Peer-Reviewed Journal)

- VI. **Cost efficiency analyses of optimally sized steel frames for economical design of medium-rise buildings**  
Hasançebi O.  
Civil-Comp Proceedings, vol.106, 2014 (Scopus)
- VII. **Automated Sizing of Truss Structures Using a Computationally Improved SOPT Algorithm**  
Hasançebi O., Kazemzadeh Azad S.  
International Journal of Optimization in Civil Engineering, vol.3, no.2, pp.131-143, 2013 (Peer-Reviewed Journal)
- VIII. **Improving Computational Efficiency of Particle Swarm Optimization for Optimal Structural Design**  
Hasançebi O., Kazemzadeh Azad S.  
International Journal of Optimization in Civil Engineering, vol.3, no.4, pp.563-574, 2013 (Peer-Reviewed Journal)
- IX. **An Efficient Metaheuristic Algorithm for Engineering Optimization: SOPT**  
Hasançebi O., Kazemzadeh Azad S.  
International Journal of Optimization in Civil Engineering, vol.2, pp.477-489, 2012 (Peer-Reviewed Journal)
- X. **Harmony search algorithms in structural engineering**  
Saka M., Aydogdu I., Hasançebi O., Geem Z.  
Studies in Computational Intelligence, vol.359, pp.145-182, 2011 (Scopus)
- XI. **Evaluation of topological forms for weight-effective optimum design of single-span steel truss bridges**  
Hasançebi O., Doğan E.  
Asian Journal of Civil Engineering, vol.12, pp.431-448, 2011 (Scopus)
- XII. **Ant Colony Search Method in Practical Structural Optimization**  
Hasançebi O., Çarbaş S.  
International Journal of Optimization in Civil Engineering, vol.1, pp.91-105, 2011 (Peer-Reviewed Journal)
- XIII. **Evaluating Efficiency of Big-Bang Big-Crunch in Benchmark Engineering Optimization Problems**  
Hasançebi O., Kazemzadeh Azad S., Erol O. K.  
International Journal of Optimization in Civil Engineering, vol.3, no.1, pp.495-505, 2011 (Peer-Reviewed Journal)
- XIV. **Optimizing Single-Span Steel Truss Bridges with Simulated Annealing**  
Hasançebi O., Doğan E.  
ASIAN JOURNAL OF CIVIL ENGINEERING, vol.11, no.6, pp.763-775, 2010 (Scopus)
- XV. **Optimum Design of Geodesic Steel Domes Under Code Provisions using Metaheuristic Techniques**  
Hasançebi O., Erdal F., Saka M. P.  
International Journal of Engineering and Applied Sciences , vol.2, no.2, pp.88-103, 2010 (Peer-Reviewed Journal)
- XVI. **A Refinement of discrete particle swarm optimization for large-scale truss structures**  
Doğan E., Hasançebi O., Polat Saka M.  
Asian Journal of Civil Engineering, vol.10, pp.321-334, 2009 (Scopus)
- XVII. **Adaptive Harmony Search Algorithm for Design Code Optimization of Steel Structures**  
Saka M. P., Hasançebi O.  
HARMONY SEARCH ALGORITHMS FOR STRUCTURAL DESIGN OPTIMIZATION, vol.239, pp.79-120, 2009 (Scopus)

## Books

- I. **Küresel Salgın Bağlamında Yükseköğretim Kurumlarında Sağlıklı ve Temiz Ortamların Geliştirilmesi Kılavuzu**  
Hasançebi O., Çelik G. E., İlhan M. N., Çakır B., Kayaaslan B., Erdoğan F., Karacan M., Sezer M., Kırbaş E., Çandarlı D.  
YÖK (Yükseköğretim Kurulu Başkanlığı), Ankara, 2020
- II. **Harmony Search Algorithms in Structural Engineering**  
Hasançebi O.  
in: Computational Optimization and Applications in Engineering and Industry, Slawomir Koziel, Xin-She Yang, Editor,



Springer-Verlag , Berlin, pp.145-182, 2011

III. **Adaptive Harmony Search Algorithm for Design Code Optimization of Steel Structures**

Saka M. P., Hasacebi O.

in: Harmony Search Algorithms for Structural Design, Z. W. Geem, Editor, Springer-Verlag , Berlin, pp.79-120, 2009

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **A Comparison of Optimal Force-Based and Performance-Based Designs for a Planar Ordinary Moment-Resisting Steel Frame**  
Eser H., Hasacebi O.  
AI and Big Data in Engineering Applications, İstanbul, Turkey, 14 - 15 June 2021, pp.77-91
- II. **A Comparison of Optimal Force-Based and Performance-Based Designs for a Planar Ordinary Moment-Resisting Steel Frame**  
Eser H., Hasacebi O.  
International Conference on AI and Big Data in Engineering Applications, İstanbul, Turkey, 14 June 2021, pp.77-91
- III. **Metaheuristic Search Techniques in Discrete Structural Optimization**  
Hasacebi O.  
International Conference on Civil and Architectural Engineering, Kuala-Lumpur, Malaysia, 01 July 2015, pp.93-99
- IV. **Cost Efficiency Analyses of Optimally Sized Steel Frames for Economical Design of Medium-Rise Buildings**  
Hasacebi O.  
THE TWELFTH INTERNATIONAL CONFERENCE ON COMPUTATIONAL STRUCTURES TECHNOLOGY, Naples, Italy, 2 - 05 September 2014, pp.1-20
- V. **Elitist Self-Adaptive Step-Size Search in Optimum Sizing of Steel Structures**  
Hasacebi O., Kazemzadeh Azad S.  
International Conference on Advances in Civil and Structural Engineering, Kuala-Lumpur, Malaysia, 01 August 2014, pp.1-8
- VI. **Optimum design of steel space frames via bat inspired algorithm**  
Hasacebi O.  
10th world congress on structural and multidisciplinary optimization, Florida, United States Of America, 19 - 24 May 2013, pp.1-10
- VII. **Reformulations of Big Bang-Big Crunch Algorithm for Discrete Structural Design Optimization**  
Hasacebi O., Kazemzadeh Azad S.  
International Conference on Environmental and Civil Engineering (ICECE), Kuala-Lumpur, Malaysia, 1 - 02 February 2013, pp.174-185
- VIII. **Improving the big bang-big crunch algorithm for optimum design of steel frames**  
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8th International Conference on Engineering Computational Technology, ECT 2012, Dubrovnik, Croatia, 4 - 07 September 2012, vol.100
- IX. **A reformulation of the ant colony optimization algorithm for large scale structural optimization**  
Hasacebi O., arbas S., Saka M.  
2nd International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, CSC 2011, Chania, Crete, Greece, 6 - 09 September 2011, vol.97
- X. **Optimum design of high-rise steel buildings using an evolution strategy integrated parallel algorithm**  
HASACEBİ O., Baheciođlu T., KUR Ö., Saka M.  
12th International Conference on Civil, Structural and Environmental Engineering Computing, CC 2009, Funchal, Portugal, 1 - 04 September 2009
- XI. **Discrete and continuous structural optimization using Evolution Strategies**  
HASACEBİ O., Ulusoy A.  
8th International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental

Engineering, AICivil-Comp 2005, Rome, Italy, 30 August - 02 September 2005, vol.82

**XII. Layout optimization of trusses using simulated annealing**

Hasancebi O., Erbatur F.

5th International Conference on Computational Structures Technology/2nd International Conference on Engineering Computational Technology, Leuven, Belgium, 6 - 08 September 2000, pp.175-190

**XIII. Evaluation of crossover techniques in genetic algorithm based optimum structural design**

Hasancebi O., Erbatur F.

1st International Conference on Engineering Computational Technology/4th International Conference on Computational Structures Technology, Edinburgh, Saint Helena, 18 - 21 August 1998, pp.111-123

**XIV. On the use of genetic algorithms in structural optimization**

Erbatur F., Hasancebi O.

4th International Kerensky Conference on Structures in the New Millennium, in Honor of Dr Oleg Alexander Kerensky, HONG KONG, Hong Kong, 3 - 05 September 1997, pp.655-660

## Other Publications

**I. Küresel Salgın Bağlamında YÜKSEKÖĞRETİM KURUMLARINDA SAĞLIK VE TEMİZ ORTAMLARIN GELİŞTİRİLMESİ KILAVUZU**

Koçak Tufan Z., Hasancebi O., Çelik G. E., İlhan M. N., Çakır B., Kayaaslan B.

Other, pp.1-82, 2020

## Supported Projects

HASANÇEBİ O., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Araştırma Parkı, 2013 - Continues

Hasancebi O., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, ODTÜ Araştırma Parkı, 2013 - 2023

Hasancebi O., Türer A., KOSGEB, Yapısal Sağlık İzleme, ölçüme dayalı yapısal değerlendirme, web tabanlı programlama ve sensör/alet geliştirilmesi, 2016 - 2018

Grup M., Hasancebi O., TUBITAK Project, Kafes Bilgi Modelleme Sistemi, 2011 - 2013

HASANÇEBİ O., TUBITAK Project, Stokastik Optimizasyon Yöntemleri Kullanılarak Üç Boyutlu Çelik Taşıyıcı Sistemlerin Optimum Tasarımı Ve Ülkemiz Yapı Mühendisliğine Uygulanması, 2008 - 2010

Türer A., Hasancebi O., TUBITAK Project, R&D of economical seismic strengthening of masonry houses, 2004 - 2007

## Patent

Şahin S., Hasancebi O., Benzetimli Tavlama Optimizasyon Yöntemi Kullanarak Çelik Kafes Enerji İletim Hattı Direklerinin Bilgisayar Destekli Boyut ve Şekil Optimizasyonu, Patent, CHAPTER E Constructed Constructions (Construction), The Invention Registration Number: TR 2017 13765 B , Standard Registration, 2022

## Contractual Researches

Hasancebi O., ELEN ENERJİ ÜRETİMİ SANAYİ VE TİCARET A.Ş., Doğançay HES – Pamukova TM Arası Tesis Edilen Enerji İletim Hattının Atlama Direklerinin İncelenmesi, 2021 - 2021

Hasancebi O., Kutlu Mühendislik Turizm Ltd. Şti., Safiye Hüseyin Elbi KYK Yurt Binalarında Oluşan Hasarın Değerlendirilmesi, 2020 - 2020

Hasancebi O., TRT (Türkiye Radyo ve Televizyonları Kurumu), TRT Avaz Kanal Koordinatörlüğü PVC Kaplı Yükseltilmiş Döşeme Plaklarının Malzeme Testleri, 2019 - 2019

Hasancebi O., KORDA Enerji Üretim A.Ş., Denizli RES TM – Tavas TM Arası Tesis Edilen Enerji İletim Hattında Oluşan Hasarın Değerlendirilmesi, 2019 - 2019

Hasançebi O., CANDENİZ SİGORTA, Yozgat İli, Sorgun İlçesinde Bulunan Yığma Binada Oluşan Hasarın Değerlendirilmesi, 2018 - 2018

Hasançebi O., SAYHAN MÜHENDİSLİK, PTT Hadımköy Lojistik Merkezine ait Lojistik ve Kargo İşleme Merkez Binaları Projelerinin İncelenmesi, 2018 - 2018

Hasançebi O., L TASARIM MİMARLIK, Tümgeneral Daniş Karabelen Kışlası Kondisyon Kulesi Projelerinin Değerlendirilmesi, 2018 - 2018

Hasançebi O., KORDSA TEKNİK TEKSTİL A.Ş., Hatay Mobilyacılar İhtisas Sanayi Sitesi yapıları sentetik fiber donatılı betonarme döşeme hesap raporlarının incelenmesi-2, 2018 - 2018

Hasançebi O., KORDSA TEKNİK TEKSTİL A.Ş., Hatay Mobilyacılar İhtisas Sanayi Sitesi yapıları sentetik fiber donatılı betonarme döşeme hesap raporlarının incelenmesi-1, 2018 - 2018

HASANÇEBİ O., Aliağa LNG Terminali Deniz Yap. Teknik Hasapları Değ. Dan. Projesi, 2017 - 2017

Hasançebi O., İ4 İnşaat Yazılım Arge Enerji Şirketi, Çankırı Kültür Merkezi Binasının Betonarme ve Çelik Konstrüksiyon Yapıları Hakkında Görüş ve Değerlendirme, 2017 - 2017

Hasançebi O., GORKA GRUP, Orgeneral Doğu Aktulga Kışlasında Bulunan Su Deposunun Yapısal ve Teknik İncelemesi, 2017 - 2017

Hasançebi O., EUROCON-ABAT-YTY-NESMA İŞ ORTAKLIĞI, Malatya 2'nci Kara Havacılık Alay Komutanlığı Bakım Hangarına Ait Statik Hesap Raporlarının Değerlendirilmesi, 2017 - 2017

HASANÇEBİ O., SAKARYA TARİHİ MİLLİ PARKI PANOROMİK MÜZESİ, 2017 - 2017

HASANÇEBİ O., Antakya Mobilyacıları İhtisas Sanayi Sitesi İlave Çelik Binaları, 2017 - 2017

HASANÇEBİ O., Yapısal Sağlık İzleme, ölçüme dayalı yapısal değerlendirme, web tabanlı programlama ve sensör/alet geliştirilmesi, 2017 - 2017

HASANÇEBİ O., Antakya Mobilyacıları İhtisas Sanayi Çelik Bina Projeleri Hakkında Danışmanlık, 2016 - 2017

HASANÇEBİ O., Muğla ili, Elegance Otel'in önünde bulunan mevcut güneşlenme iskelesinin teknik incelemesi, 2016 - 2017

HASANÇEBİ O., Bartın İli, Amasra İlçesi, Kalaycı Köyü'ndeki bir binada oluşan hasarın incelemesi, 2016 - 2016

HASANÇEBİ O., Konya 154 Kv Erenköy GIS Trafo Merkez Binası Mevcut Bina Değerlendirme ve Deprem Güvenliği Hakkında Danışmanlık, 2016 - 2016

HASANÇEBİ O., İnşası Devam Eden Gaziantep İli Olimpik Yüzme Havuzunun Teknik İncelemesi, 2016 - 2016

HASANÇEBİ O., Çankırı İli Hükümet Konağı Yapım İş'i'nde Oluşan Göçüğün Değerlendirilmesi, 2016 - 2016

HASANÇEBİ O., Yukarı Kaleköy Barajı ve HES çelik portal yapısına ait hesap raporunun ve imalat resimlerinin incelenerek onaylanması, 2015 - 2015

HASANÇEBİ O., Kemerköy İskelesi Teknik Hesap Raporunun İncelenmesi, 2015 - 2015

HASANÇEBİ O., Atılım Üniversitesine bağlı "Eğlenceli Bilim Merkezi" binasında çıkan yangında oluşan yapısal hasarın değerlendirilmesi hakkında görüş raporu, 2015 - 2015

HASANÇEBİ O., Ankara Yenimahalle-Şentepe Telefelik Projesi, İstasyon-2 Giriş Yaya Köprüsüne Ait Çelik Hesap Raporunun İncelenmesi, 2015 - 2015

HASANÇEBİ O., Malatya İli, Merkez İlçesi, Hüseyin Bey Mahallesi, 309, 310 ve 311 nolu parsellerde bulunan binalar için hazırlanan bilirkişi ve depremsellik inceleme raporlarının değerlendirilmesi, 2015 - 2015

HASANÇEBİ O., 154 kV, 2x1272 MCM İletkenli (Karaman TM - Gezende TM) BRŞ. -Mut RES E.İ Hattına ait yıkılan iki direğin incelenmesi, 2015 - 2015

HASANÇEBİ O., Nusrat - Gökçedağ Arası Demiryolu Yenilene İnşaatı İşinde İnşa Edilecek 4 Adet Betonarme İstinat Duvar Projesinin İncelenmesi, 2014 - 2014

HASANÇEBİ O., TEİAŞ A.Ş. PROJESİ, 2014 - 2014

HASANÇEBİ O., Söke-Akbük enerji nakil hattı üzerinde kullanılacak P Serisi direklere ait radye temel projelerinin incelenmesi, 2013 - 2013

HASANÇEBİ O., CP4+32 Köşede Durdurucu Tip Direğe Ait Statik Hesap Raporunun İncelenmesi, 2013 - 2013

HASANÇEBİ O., Gebze 85+290 tren köprüsü yapısal değerlendirme danışmanlığı, , 2013, 2013 - 2013

HASANÇEBİ O., İstanbul Yolu Ek Hizmet Binaları Yapısal Güçlendirme ve Yenileme Projesi Mimarlık ve Mühendislik Hizmetleri için Danışmanlık, 2013 - 2013

HASANÇEBİ O., Mersin Spor Salonu Antreman Sahası Çatısı Çelik Makaslarında Oluşan Göçmenin Tespiti ve Onarım Projelerinde Danışmanlık, 2013 - 2013

## Activities in Scientific Journals

International Journal of Optimization in Civil Engineering, Committee Member, 2011 - Continues

International Journal of Engineering and Applied Sciences, Publication Committee Member, 2009 - Continues

## Memberships / Tasks in Scientific Organizations

The Centre of Excellence for Fundamental Studies in Civil Engineering, Member, 2010 - Continues

Universal Association of Civil, Structural and Environmental Engineers , Member, 2014 - 2017, Turkey

## Scientific Refereeing

Technopark, ODTÜ Teknoloji Transfer Ofisi (ODTÜ TTO) , Turkey, October 2021

Technopark, ICOTEC MÜHENDİSLİK LTD. ŞTİ., Turkey, August 2021

Technopark, PROTA YAZILIM BİLİŞİM A.Ş., Turkey, February 2021

Technopark, MİTAŞ ENDÜSTRİ A.Ş., Turkey, January 2021

JOURNAL OF STRUCTURAL ENGINEERING-ASCE, SCI Journal, October 2020

## Tasks In Event Organizations

Hasançebi O., International Conference on Structural Optimization Technology ICSOT , Scientific Congress, Kuala-Lumpur, Malaysia, Aralık 2023

Hasançebi O., 16th. International Conference on Structural Analysis and Methods (ICSAME) , Scientific Congress, Amsterdam, Netherlands, Aralık 2023

Hasançebi O., 16. International Conference on Structural Design Optimization, Scientific Congress, Singapore, Eylül 2022

Hasançebi O., 15. International Conference on Structural Optimization and Technology, Scientific Congress, Rome, Italy, Aralık 2021

Hasançebi O., 3. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi , Scientific Congress, Ankara, Turkey, Ekim 2021

Hasançebi O., ICAIBDEA International Conference on Artificial Intelligence (AI) and Big Data in Engineering Applications, Scientific Congress, İstanbul, Turkey, Haziran 2021

Hasançebi O., ICASFA 2021: 15. International Conference on Advanced Structures and Failure Analysis, Scientific Congress, Lisbon, Portugal, Şubat 2021

Hasançebi O., 14. International Conference on Optimization of Structures, Scientific Congress, Tokyo, Japan, Ekim 2020

Hasançebi O., 6th International Conference on Harmony Search, Soft Computing and Applications, Scientific Congress, İstanbul, Turkey, Nisan 2020

Hasançebi O., 2. Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, Scientific Congress, Antalya, Turkey, Aralık 2019

Hasançebi O., 8. Uluslararası Çelik Yapılar Sempozyumu, Scientific Congress, Konya, Turkey, Ekim 2019

Hasançebi O., International Civil Engineering and Architectural Conference 2019, Scientific Congress, Trabzon, Turkey, Nisan 2019

## Scientific Research / Working Group Memberships

Special And Tall Structures Research Center, Middle East Technical University, Turkey, www., 2011 - Continues

Earthquake Engineering Research Center, Middle East Technical University, Turkey, www., 2009 - Continues

Applied, Innovative And Interdisciplinary Research Lab, Middle East Technical University, Turkey, www., 2009 - Continues

## Metrics

Publication: 80

Citation (WoS): 1993

Citation (Scopus): 2525

H-Index (WoS): 26

H-Index (Scopus): 28

## Invited Talks

Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Conference, Orta Doğu Teknik Üniversitesi, Turkey, October 2019

## Awards

Hasaebi O., ODTÜ Performans Ödülü 2017, Orta Doğu Teknik Üniversitesi, January 2017

Hasaebi O., En iyi konferans makale ödülü (International Conference On Civil And Architectural Engineering Conference), International Conference On Civil And Architectural Engineering Conference, July 2015

Hasaebi O., ODTÜ Performans Ödülü 2015, Orta Doğu Teknik Üniversitesi, January 2015

Hasaebi O., Mustafa Parlar Yılın Tezi Ödülü (Danışman), Orta Doğu Teknik Üniversitesi, June 2014

Hasaebi O., ODTÜ Performans Ödülü 2014, Orta Doğu Teknik Üniversitesi, January 2014

Hasaebi O., ODTÜ Performans Ödülü 2012, Orta Doğu Teknik Üniversitesi, January 2012

Hasaebi O., ODTÜ Performans Ödülü 2010, Orta Doğu Teknik Üniversitesi, January 2010

## Non Academic Experience

METU, Assistant Professor

METU, Instructor/Reader

Drexel University, Post-Doctorate Research Associate

METU, Assistant