Masoumeh Soltani

Assistant Professor

College: Faculty of Engineering

Department: Civil Engineering

Education

Degree	Graduated in	Major	University
BSc	2007	Civil Engineering	K. N. Toosi University of Technology
MSc	2009	Structural Engineering	K. N. Toosi University of Technology
Ph.D	2014	Structural Engineering	K. N. Toosi University of Technology

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenured	Full Time	9

Subjects Taught

Courses Taught:

- Statics
- Mechanics of Materials I & II
- Dynamics
- Design of Steel Structures I & II
- Finite Element Method (Gr.)
- Stability of Structures (Gr.)
- Dynamics of Structures (Gr.)

Papers in Conferences

1. M. Soltani, B. Asgarian, A.R. Hadavnd khani ,Upheaval buckling analysis of subsea pipeline by considering the effect of seabed friction using the power series method ,International Conference on Coasts, Ports, and Marine Structures- ICOPMAS 2016 ,Tehran ,2016.
2. M. Soltani, B. Asgarian, A. Sistani ,Elastic instability of non-prismatic Timoshenko beams by the

power series method ,The 2016 Structures Congress ,Jeju, Korea ,2016 8 28.
3. M. Soltani, A. Sistani, B. Asgarian ,Free vibration analysis of beams with variable flexural rigidity resting on one or two parameter elastic foundations using finite difference method ,The 2016 Structures Congress ,Jeju, Korea ,2016 8 28.
4. M. Soltani, B. Asgarian, F. Mohri ,Finite element method for stability analysis of tapered thin-walled beams under lateral loads ,Advances in Structural Engineering and Mechanics (ASEM13) ,Jeju, Korea ,2013.
5. M. Soltani, B. Asgarian, F. Mohri ,Finite element method for stability and vibration analyses of thin-walled beams with arbitrary cross-section ,Advances in Structural Engineering and Mechanics (ASEM13) ,Jeju, Korea ,2013.
6. B. Asgarian, M. Soltani ,Lateral-Torsional Buckling of Non-Prismatic Thin walled Beams with Non-Symmetric Cross-Section ,Twelfth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-12) ,Hong Kong, China ,2011.
7. B. Asgarian, M. Soltani ,Vibration and Stability Analysis of Non-Prismatic Timoshenko Beams on Elastic Foundation ,Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2009) ,Rhodes, Greece ,2009.
8. B. Asgarian, M. Soltani ,Stability Analysis of Non-Prismatic Columns ,Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2009) ,Rhodes, Greece ,2009.

Papers in Journals

1. A Soltani, M.H Momenian, O Civalek,Stability analysis of sandwich double nanobeam-system with varying cross-section interconnected by Kerr-type three-parameter elastic layer,Thin–Walled Structures,2024.
2. A Soltani, M Soltani, O Civalek,Stability analysis of nanoscale non-uniform sandwich I-section beams with AFG core and two metal face-sheets under flexural loadings,Waves in Random and Complex Media,2023.
3. R Abolghasemian, M Soltani, AR Ghasemi,Evaluation of the Influence of Axial Loading on the Lateral Buckling Resistance of Tapered Laminated Composite I-Section Beam-Columns,Iranian Journal of Science and Technology, Transactions of Mechanical Engineering,2023.
4. M. Soltani,Buckling Analysis of Sandwich Timoshenko Nanobeams with AFG Core and Two Metal Face-Sheets,Mechanics of Advanced Composite Structures,2023.
5. E. Aghaei, M. Soltani, A. Soltani, R. Dimitri, F. Tornabene,An innovative formulation for buckling analysis of nano-tapered Timoshenko beams with axially varying materials,Journal of Computational Applied Mechanics,2023.
6. M. Soltani, R. Abolghasemian, AR. Ghasemi, M. Shafieirad, Z. Abbasi, AH Amiri Mehra,Laminated optimization of non-uniform I-shaped beams under transversely loading with clamped-free boundary conditions,Structures,2023.
7. M. Soltani, A. Soltani,An Efficient Approach into Finite Element Method for Lateral Buckling Analysis of Fiber-Metal Laminates Tapered I-Beams,Periodica Polytechnica: Civil Engineering,2022.
8. M. Soltani, R. Abolghasemian, M. Shafieirad, Z. Abbasi, AH Amiri Mehra, AR Ghasemi,Multi-objective optimization of lateral stability strength of transversely loaded laminated composite beams with varying I-section,Journal of Composite Materials,2022.
9. M. Soltani, A. Soltani, O.Civalek,Interaction of the lateral buckling strength with the axial load for FG micro-sized I-section beam–columns,Thin-Walled Structures,2022,ISI.
10. M. Soltani, A. Soltani,Comparative study on the lateral stability strength of laminated composite and fiber-metal laminated I-shaped cross-section beams,Journal of Computational Applied Mechanics,2022.
11. M. Soltani, F. Atoufi,Non-local Finite Element Formulation for Stability Analysis of Thin-Walled Nanobeams with Varying I-section,Acta Mechanica,2022,ISI.

12. M. Soltani،A Novel Approach for Lateral Buckling Assessment of Double Tapered Thin-Walled Laminated Composite I-Beams،Mechanics of Advanced Composite Structures،شماره صفحات ۱۱-۲۳،۲۰۲۲،Scopus, ISC.
13. M. Soltani, A. Soltani,An analytical solution for stability analysis of unrestrained tapered thin-walled FML profile,Numerical Methods in Civil Engineering,Vol. 1,No. 6,2021,ISC.
14. M. Soltani, F. Atoufi, F. Mohri , R. Dimitri, F. Tornabene,Nonlocal Analysis of the Flexural–Torsional Stability for FG Tapered Thin-Walled Beam-Columns,Nanomaterials,Vol. 8,No. 11,2021,ISI.
15. M. Soltani, F. Atoufi, F. Mohri , R. Dimitri, F. Tornabene,Nonlocal elasticity theory for lateral stability analysis of tapered thin-walled nanobeams with axially varying materials,Thin–Walled Structures,Vol. 159,2021,ISI.
16. M. Soltani,Flexural-torsional stability of sandwich tapered I-beams with a functionally graded porous core,Numerical Methods in Civil Engineering,Vol. 4,pp. 8-20,2020,ISC.
17. M. Soltani,Finite Element Modelling for Buckling Analysis of Tapered Axially Functionally Graded Timoshenko Beam on Elastic Foundation,Mechanics of Advanced Composite Structures,2020,Scopus, ISC.
18. M. Soltani, B. Asgarian,Exact Stiffness Matrices for Lateral–Torsional Buckling of Doubly Symmetric Tapered Beams with Axially Varying Material Properties,Iranian Journal of Science and Technology, Transactions of Civil Engineering,2020,ISI.
19. M. Soltani, A. Gholamizadeh,Size-dependent buckling analysis of non-prismatic Timoshenko nanobeams made of FGMs rested on Winkler foundation,Numerical Methods in Civil Engineering,Vol. 3,2018,ISC.
20. M. Soltani, B. Asgarian,Lateral-torsional stability analysis of a simply supported axially functionally graded beam with a tapered I-section,Mechanics of Composite Materials,Vol. 56,2020,ISI.
21. M. Soltani, S. Asil Gharebaghi, F. Mohri,Lateral stability analysis of steel tapered thin-walled beams under various boundary conditions,Numerical Methods in Civil Engineering,Vol. 3,pp. 13-25,2018,ISC.
22. M. Soltani, M. Mohammadi, B. Asgarian,Effect of Winkler elastic foundation on free vibration of tapered beam based on non-local elasticity theory,Journal of Structural and Construction Engineering,2019,ISC.
23. M. Soltani, B. Asgarian, F. Mohri,Improved finite element model for lateral stability analysis of axially functionally graded non-prismatic I-beams,International Journal of Structural Stability and Dynamics,2019,ISI.
24. M. Soltani, B. Asgarian, F. Jafarzadeh,Finite difference method for buckling analysis of tapered Timoshenko beam made of functionally graded material,AUT Journal of Civil Engineering,2019,ISC.
25. M. Soltani, M. Mohammadi,Stability analysis of non-local Euler-Bernoulli beam with exponentially varying cross-section resting on Winkler-Pasternak foundation,Numerical Methods in Civil Engineering,Vol. 3,No. 2,2018,ISC.
26. M. Soltani, B. Asgarian,New hybrid approach for free vibration and stability analyses of axially functionally graded Euler-Bernoulli beams with variable cross-section resting on uniform Winkler-Pasternak foundation,Latin American Journal of Solids and Structures,Vol. 16,2019,ISI.
27. M. Soltani, B. Asgarian, V. Jafari Deligani,Elastic instability and free vibration analyses of axially functionally graded Timoshenko beams with variable cross-section,Journal of Structural and Construction Engineering,2019,ISC.
28. M. Soltani, B. Asgarian,Stability and free vibration analyses of non-prismatic columns using the combination of Power series expansions and Galerkin’s method,Amirkabir Journal of Civil Engineering,2018,ISC.
29. M. Soltani, B. Asgarian,Finite Element Formulation for Linear Stability Analysis of Axially Functionally Graded Non-prismatic Timoshenko Beam,International Journal of Structural Stability and Dynamics,2019,ISI.
30. M. Soltani, A. Sistani, B. Asgarian,Determination of Elastic Buckling Load of Tapered Columns Using a Novel Analytical Method Based on Maclaurin Expansion,Journal of Steel and Structures,Vol.

24,2018,ISC.
31. M. Soltani, B. Asgarian,Buckling analysis of axially functionally graded columns with exponentially varying cross-section,Modares Civil Engineering Journal (M.C.E.J),Vol. 18,No. 3,2018,ISC.
32. M. Soltani, B. Asgarian,Determination of Lateral-Torsional Buckling Load of Simply Supported Prismatic Thin-walled Beams with Mono-symmetric Cross-sections Using the Finite Difference Method,Amirkabir Journal of Civil Engineering,Vol. 50,No. 1,pp. 23-33,2018,ISC.
33. M. Soltani,Vibration characteristics of axially loaded tapered Timoshenko beams made of functionally graded materials by the power series method,Numerical Methods in Civil Engineering,Vol. 2,No. 1,pp. 1-14,2017,ISC.
34. M. Soltani, A. Sistani,Elastic Stability of Columns with Variable Flexural Rigidity under Arbitrary Axial Load Using the Finite Difference Method,Numerical Methods in Civil Engineering,Vol. 1,No. 4,pp. 23-31,2017,ISC.
35. M. Soltani, M. Poshtdar, B. Asgarian,Stability Analysis of Cold-Formed Steel Rafters Subjected to Bending and Varying Axial Loads,Journal of Steel and Structures,Vol. 11,pp. 75-90,2016.
36. M. Soltani, F. Mohri,Stability and Vibration Analyses of Tapered Columns Resting on One or Two-Parameter Elastic Foundations,Numerical Methods in Civil Engineering,pp. 57-66,2014,ISC.
37. M. Soltani, B. Asgarian, F. Mohri,Finite Element Method for Stability and Free Vibration Analyses of Non-prismatic Thin-walled Beams,Thin-Walled Structures,pp. 245-261,2014,ISI.
38. M. Soltani, B. Asgarian, F. Mohri,Elastic Instability and Free vibration Analyses of Tapered Thin-walled Beams by Power Series Method,Journal of Constructional Steel Research,pp. 106-126,2014,ISI.
39. B. Asgarian, M. Soltani, F. Mohri,Lateral-torsional buckling of tapered thin-walled beams with arbitrary cross-sections,Thin-Walled Structures,pp. 96-108,2013,ISI.
40. M. Soltani, B. Asgarian,Lateral-Torsional Buckling of Non-Prismatic Thin walled Beams with Non-Symmetric Cross-Section,Procedia Engineering,Vol. 14,pp. 1653-1664,2011.