

Farhad Behnamfar

(Updated: 30 May 2022)

Work Address

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Education

Tohoku University, Sendai, Japan

PhD in Civil Engineering/Structural – Specialization: Soil-Structure Interaction (Sep. '97)
Dissertation subject: **Dynamic Response of Structures Considering Cross-Interaction Subject to Random Incident Waves**

University of Tehran

MSc in Civil Engineering/Structural (Sep. '90)

Thesis subject: **Approximate and Exact Methods for Dynamic Analysis of Base-Isolated Structures**

BSc in Civil Engineering (Sep. '88)

Professional Affiliations

Iranian Earthquake Engineering Association
Earthquake Engineering Research Institute (EERI)

Professional Experience

Department of Civil Engineering, Isfahan University of Technology (IUT)

Professor (From October 2021), Associate Professor (Nov. 2013 to October 2021),

Assistant Professor (Sep. 2003 to Nov. 2013),

Department of Structural Engineering, International Institute of Earthquake Engineering and Seismology (IIEES)

Assistant Professor (Sep. 1998 to Sep. 2003)

Current responsibilities include:

1. **Research:** in various aspects of earthquake engineering analysis and design especially performance based design and nonlinear static and dynamic analysis of structures. Supervising MSc and PhD students, with complete listing at <https://behnamfar.iut.ac.ir/Theses> and <https://behnamfar.iut.ac.ir/theses-under>.
2. **Teaching:**
Undergraduate: Dynamics, Strength of Materials, Earthquake Engineering.
Graduate (M.Sc.): Dynamics of Structures, Earthquake Engineering, Seismic Risk Analysis, Earthquake Resistant Design, Seismic Rehabilitation.
Graduate (Ph.D.): Soil-Structure Interaction, Advanced Dynamics of Structures, Boundary Elements Method.

3. **Industry:**

- Head of one of four working teams assessing the seismic vulnerability of various industrial structures of Tehran refinery from May 2001. The project fulfilled in August 2002.
- Head of one of three working teams assessing the seismic vulnerability of Shiraz petrochemical complex from December 2002 till December 2003.
- Technical manager of the project on seismic evaluation of the schools of Tehran district 1 from June 2003 to June 2005.
- Invited researcher for earthquake engineering studies, Wupertal University, Wupertal, Germany, 2006.
- Member of the team on “Seismic Microzonation of Kashan City”, 2008-2009.
- Project manager of an analytical and experimental research work on seismic resistant precast concrete moment frames, 2008-2010.
- Manager of the project ‘Seismic Evaluation & Strengthening of Esfahan Power Plant and Shahrekord Power House’, 2009-2012.
- Manager of the project ‘Seismic Evaluation & Strengthening of Boushehr Province Gas Stations’, 2012-2014.
- Manager of the project “Seismic Strengthening of Ancient Closed-Roof Traditional Bazars of Isfahan”, 2014, under a contract with Isfahan municipality.

4. **Building Codes:**

- Member of the technical committee for revision of the Iranian Code for Seismic Design of Buildings, from October 2019 till now.
- Member of the technical committee preparing the manual of seismic vulnerability assessment and rehabilitation of existing buildings under a grant from the Iranian planning and management organization from September 2000. The manual was prepared in July 2002.
- Member of the technical committee for subsequent revisions of the manual of seismic vulnerability assessment and rehabilitation of existing buildings, from February 2005 till now.
- Member of the technical committee preparing the manual of rapid seismic evaluation of existing buildings, from July 2003 to July 2006.
- Member of the technical committee preparing the code of practice for seismic vulnerability assessment and rehabilitation of existing bridges, 2005-2007.
- Member of the technical committee preparing the seismic design code for petroleum facilities for the Iranian oil ministry, from August 2002.
- Member of the technical committee preparing the manual of seismic vulnerability assessment and rehabilitation of existing network of electric power distribution under a grant from the Iranian planning and management organization, 2006-2010.
- Technical manager of the committee on preparing the handbook of seismic vulnerability assessment and rehabilitation of existing buildings under a

grant from the Iranian planning and management organization from November 2005 to July 2007.

5. **Editorship:**

- Guest editor, *Frontiers in Built Environment*, <https://www.frontiersin.org/research-topics/20410/energy-dissipation-systems-and-seismic-fuses>.
- Editor of the civil engineering section of *International Journal of Engineering*, www.ije.ir.
- Member of the editorial board of *Journal of Sharif University of Technology*, <http://sjce.journals.sharif.edu/journal/editorial.board?lang=en>.
- Reviewer of several international journals including: *Engineering Structures*, *Constructional Steel Research*, *Structural Design of Tall and Special Buildings*, *Soil Dynamics and Earthquake Engineering*, *Earthquake Engineering and Engineering Vibration*, *Bulletin of Earthquake Engineering*, *Journal of Earthquake Engineering*, *Tunneling and Underground Space Technology*, etc.

6. **Consulting:**

- Member of a team for seismic evaluation of a 56-story residential tower in Tehran, spanned from Feb. 2001 to Dec. 2002.
- Technical manager of the project on seismic evaluation and rehabilitation of a number of Tehran-Ahvaz railway bridges, August 2003 till Aug. 2005.
- Technical manager of the project on repair and strengthening of a number of earthquake damaged buildings of Bam city, 2005-2007.
- Technical manager of different seismic evaluation and rehabilitation projects on hospitals, schools, bridges, communication systems, Gas distribution networks, electrical substations, 2003-2011.
- Senior advisor, structural engineering consultants, from Oct. 97 till now.

Publications:

1) Journal publications:

1. Behnamfar F., Fazili Nezhad H. (2022). "Comparison of seismic fragility of special moment frames in recent editions of ASCE 7 and ACI 318 regulations," *Journal of Numerical Methods in Civil Engineering* (Accepted).
2. Mehrbod A.H., Behnamfar F., Aziminejad A., Hashemol-Hosseini H. (2022). "Seismic vulnerability assessment of stone arch bridges by nonlinear dynamic analysis using discrete element method," *International Journal of Architectural Heritage* (Accepted).
3. Behnamfar F., Hosseini-Rad A., Mesr Habiby Y. (2022). "A procedure for damage-based seismic design of moment frame structures," *Bulletin of Earthquake Engineering* (Accepted).
4. Shams A.H., Behnamfar, F. (2022). "Nonlinear seismic behavior of torsional buildings designed based on force and displacement procedures," *Iranian Journal of Science and Technology, Transactions of Civil Engineering* (Accepted).
5. Panahi M., Behnamfar, F. (2022). "Comparison of the lateral behavior of precast concrete frames equipped with and without steel shear wall using cyclic analysis,"

Bulletin of Earthquake Science and Engineering (Accepted) (In Persian with English abstract).

6. Ghandil M., Tajmir Riahi H., and Behnamfar F. (2022). "Introduction of a new metallic-yielding piston damper for seismic control of structures," *Journal of Constructional Steel Research*, 194: 107299.
7. Behnamfar F., Arman S., and Zibasokhan H. (2022). "Steel rings as seismic fuses for enhancing ductility of cross braced frames," *Earthquake Engineering and Engineering Vibration* (Accepted).
8. Behnamfar F., Eslami S., Sayyadpour H. (2022). "Evaluation of the YPS method for Regular RC Buildings Designed Based on the Iranian Standard 2800," *Amirkabir Journal of Civil Engineering* (Accepted).
9. Faraj Mohammadi M., Behnamfar F., and Mohammadi S. J. (2022). "Effects of Urban Tunnel Excavation in Tehran in Response to Existing Static and Dynamic Structures in Terms of Soil and Structure Interaction," *Amirkabir Journal of Civil Engineering* (Accepted).
10. Mostafaei H. and Behnamfar F. (2022). "Wedge movement effects on the nonlinear behavior of an arch dam subjected to seismic loading," *International Journal of Geomechanics*, 22(3): 04021289.
11. Nazaralizadeh H., Ronagh H., Memarzadeh P., Behnamfar F. (2021). "A practical design approach to bolted end-plate vertical-slits RWS connection," *Bulletin of Earthquake Engineering*, doi: 10.1007/s10518-021-01238-2.
12. Abbasnia Marzouni H. and Behnamfar F. (2021). "Nonlinear Response Study and a Rotational Spring Model for Degrading Cyclic Behavior of Interior Reinforced Concrete Connections," *Journal of Earthquake Engineering* (Accepted). doi: 10.1080/13632469.2020.1756989.
13. Akhoondi M.R. and Behnamfar F. (2021). "Seismic fragility curves of steel structures including soil-structure interaction and variation of soil parameters," *Soil Dynamics and Earthquake Engineering*, Vol. 143, 106609.
14. Beyki Milajerdi M. and Behnamfar F. (2021). "Soil-structure interaction analysis using neural networks optimized by genetic algorithm," *Geomechanics and Geoengineering* (Accepted). DOI: 10.1080/17486025.2021.1940313.
15. Morsali, V., Behnamfar, F. (2021). "Seismic Damage Based Design of Steel Moment Frames," *European Journal of Environmental and Civil Engineering*, Vol. 25, No. 9, pp 1591-1608.
16. Mohammadi E. and Behnamfar F. (2021). "An equation to estimate maximum normal strain of buried steel pipes at bend area under propagating waves in sands," *Scientia Iranica* (Accepted).
17. Sheikh Bahaei P., Behnamfar F., Kabiri Samani A. (2021). "Dynamic response of cylindrical water storage tanks made by ECC compared to normal concrete," *Earthquakes and Structures*, Vol. 20, No. 5, pp 513-529.
18. Bagheri G., Ashtari P., Behnamfar F. (2021). "Rigid-Plastic Analysis of Seismic Resistant T-Frame considering Moment-Shear Interaction," *Shock and Vibration*, Vol. 2021, Article ID 8844039, 12 pages.
19. Mostafaei H., Behnamfar F., Kelishadi M., Aghababaie M. (2021). "The effects of friction coefficient on the nonlinear behavior of an arch dam with jointed foundation," *Numerical Methods in Civil Engineering*, Vol. 5, No. 4, 36-45.

20. Behnamfar F., Tavakoli B. (2021). "Developing a method for multi-modal shear-based pushover analysis," *Asian Journal of Civil Engineering*, 22: 217–228.
21. Shafiei Varzaneh M., Behnamfar F. (2021). "Effect of opening on the lateral stiffness of masonry walls with and without ties," *Amirkabir J. Civil Eng.*, 52(12), 1-12 (In Persian with English abstract).
22. Madani B., Behnamfar F. (2021). "Parametric Study of Structure-Soil-Structure Interaction in Time and Frequency Domains," *Amirkabir J. Civil Eng.*, 52(11), 1-17 (In Persian with English abstract).
23. Kermani, M., Saadatpour, M. M., Behnamfar, F., Ghandil, M. (2020). "Effects of Seismic Pounding between Adjacent Structures Considering Structure-Soil-Structure Interaction," *Scientia Iranica A*, 27(5), 2230-2246.
24. Kazemi M.S., Behnamfar F. (2020). "Active control of structures based on an arbitrary damage index distribution," *Amirkabir J. Civil Eng.*, 4(3), 385-396.
25. Mostafaei H., Behnamfar F., Alembagheri M. (2020). "Nonlinear analysis of stability of rock wedges in the abutments of an arch dam due to seismic loading," *Structural Monitoring and Maintenance*, Vol. 7, No. 4, 295-317.
26. Davarpanah M., Ronagh H., Memarzadeh P., Behnamfar F. (2020). "Cyclic behavior of welded elliptical-shaped RWS moment frame," *Journal of Constructional Steel Research*, Vol. 175, 106319 (pp. 1-17).
27. Nazaralizadeh H., Ronagh H., Memarzadeh P., Behnamfar F. (2020). "Cyclic performance of bolted end-plate RWS connection with vertical slits," *Journal of Constructional Steel Research*, Vol. 173, 106236 (pp. 1-18).
28. Davarpanah M., Ronagh H., Memarzadeh P., Behnamfar F. (2020). "Cyclic behaviour of elliptical-shaped reduced web section connection," *Structures*, Vol. 24, 955-973.
29. Shirzadi M., Behnamfar F., Asadi P. (2020). "Effects of soil-structure interaction on inelastic response of torsionally- coupled structures," *Bulletin of Earthquake Engineering*, Vol. 18: 1213-1243.
30. Soltanabadi R., Mamazizi A., Behnamfar F. (2020). "Evaluating the performance of chevron braced frame with RSCD viscoplastic damper," *Engineering Structures*, Vol. 206, 110190.
31. Behnamfar F., Babaei A.H., Ghandil M. (2020). "Smoothed response spectra including soil-structure interaction effects," *Earthquake Engineering and Engineering Vibration*, 19(1): 37-51, January.
32. Haghollahi S., Behnamfar F. (2020). "Performance Evaluation of Special RC Moment Frames against Collapse Considering Soil–Structure Interaction," *International Journal of Geomechanics*, ASCE, 20(2): 04019176.
33. Behnamfar, F. Soltanabadi, R. (2020). "Analytical studies on a combined rubber-steel damper for repairable steel moment connections," *Journal of Earthquake Engineering*, 24:1, 37-58.
34. Mostafaei H., Behnamfar F. (2019) "Effect of the vertical earthquake component on nonlinear behavior of an arch dam having a foundation with discontinuities," *Numerical Methods in Civil Engineering*, Vol. 4, No. 2, 69-78.
35. Andalibi M., Behnamfar F. (2019). "An approximate method for separated spectral analysis of connected buildings with added damping," *Structural Design of Tall and Special Buildings*, 28(10):1-17 (July).

36. ZibaSokhan H., Behnamfar F., Azhari M. (2019). "Experimental study of a new pure bending yielding dissipater," *Bulletin of Earthquake Engineering*, 17: 4389-4410.
37. Farahani D., Behnamfar F., Sayyadpour H. (2019). "Effect of pounding on nonlinear seismic response of torsionally coupled steel structures resting on flexible soil," *Engineering Structures*, 195: 243-262.
38. Farahani D., Behnamfar F., Sayyadpour H., Ghandil M. (2019). "Seismic impact between adjacent torsionally coupled buildings," *Soil Dynamics and Earthquake Engineering*, 117: 81-95.
39. Hajimehrabi, H., Behnamfar, F., Kabiri Samani, A., Goudarzi, M.A. (2019). "Fragility curves for baffled concrete cylindrical liquid-storage tanks," *Soil Dynamics and Earthquake Engineering*, Vol. 119, 187-195.
40. Behnamfar, F., Talebi Velni, M. (2019). "A rapid screening method for selection and modification of ground motions for time history analysis," *Earthquakes and Structures*, Vol. 16, No. 1, 29-39.
41. Behnamfar, F., Naseri-Dehkordi, A. (2019). "Modal nonlinear static analysis of structures based on story shears," *Amirkabir University Journal of Civil Engineering*, 3(1), 119-128.
42. Shakeri, E., Behnamfar, F. (2019). "A survey on parameters affecting the lateral behavior of composite shear walls," *Journal of Amirkabir University of Technology*, 51(1), 67-76 (In Persian with English abstract).
43. Faraj Mohammadi, M., Behnamfar, F., Ouria, A. (2018). "Effects of Deep Excavation on Seismic Vulnerability of Existing Steel Framed Structures," *Modarres Scientific-Research Journal of Civil Engineering*, Vol. 18, No. 4 (In Persian with English abstract).
44. Hadi, M., Behnamfar, F., Arman, S. (2018). "A Shear-based Adaptive Pushover Procedure for Moment-resisting Frames," *AUT Journal of Civil Engineering*, Vol. 2, No. 2, 183-194.
45. Nikbakht, R., Behnamfar, F. (2018). "Response Spectra of Structures under Subway Induced Vibrations," *International Journal of Engineering, Transactions C: Aspects*, Vol. 31, No. 12, December: 2009-2015.
46. Sabet Rasekh, M., Behnamfar, F. (2018). "Displacement-based design of torsional buildings considering two-way nonlinearities," *Journal of Sharif University of Technology* (Accepted) (In Persian with English abstract).
47. Behnamfar, F., Pouyan, F., Omid, M. and Zibasokhan, H. (2018). "Effect of uplift on behavior of steel structures and response modification factors," *Journal of Amirkabir University of Technology*, 50 (2): 315-326 (In Persian with English abstract).
48. BiabanNavard, M., Behnamfar, F., and Zibasokhan, H. (2018). "Cyclic behavior of battened and laced columns and proposing a substitute super-element," *Journal of Amirkabir University of Technology*, 50 (1): 97-110 (In Persian with English abstract).
49. Heydari, M., Behnamfar, F., and Zibasokhan, H. (2018). "A macro-model for nonlinear analysis of 3D reinforced concrete shear walls," *International Journal of Engineering, Transactions B: Applications*, 31 (2), 220-227.
50. Karimi, M., Behnamfar, F. (2018). "A three-dimensional drift pushover method for unsymmetrical plan buildings," *Bulletin of Earthquake Engineering*, No. 11, Vol. 16: 5397-5424, Nov.

51. Moradi, R., Behnamfar, F., Hashemi, S. (2018). "Mechanical model for cylindrical flexible concrete tanks undergoing lateral excitation," *Soil Dynamics and Earthquake Engineering*, 106, 148-162.
52. Behnamfar, F., Najar, M. (2018). "Combined dynamic actuator-shake table test with optimized input energy," *Journal of Engineering Mechanics, ASCE*, 144 (3): 1-6.
53. Soltanabadi, R., Behnamfar, F. (2018). "Experimental studies on a combined damper for repairable steel moment connections," *International Journal of Steel Structures*, 18 (1), pp 211-224, March.
54. Yazdabad, M., Behnamfar, F., Samani, A.K. (2018). "Seismic behavioral fragility curves of concrete cylindrical water tanks for sloshing, cracking, and wall bending," *Earthquakes and Structures*, 14 (2): 95-102.
55. Jafari, A., Kabiri-Samani, A., Behnamfar, F., (2018). "Flow-induced horizontal and vertical vibrations of sluice gates due to different hydraulic conditions," *Water Management, Proceedings of the Institution of Civil Engineers*, 171(3), 152-162.
56. Behnamfar, F., Fathollahi, A. (2017). "Soft Soil Seismic Design Spectra Including Soil-Structure Interaction," *International Journal of Engineering, Transactions A: Basics*, 30 (10), 1443-1450.
57. Soleimani, E., Behnamfar, F. (2017). "New moment-rotation equation for welded steel beam-to-column connections," *International Journal of Steel Structures*, 17 (2): 1-23.
58. Behnamfar, F., Mirhosseini, M., Alibabaei, H. (2017). "Seismic behavior of structures considering uplift and soil structure interaction," *Advances in Structural Engineering*, 20 (11): 1712-1726.
59. Behnamfar, F., Mohajeri, A.H., (2017). "Response amplification factors and dynamic behavior of tube and outrigger systems of tall buildings on flexible soil," *Journal of Amirkabir University of Technology*, 49 (4): 723-732 (In Persian with English abstract).
60. Shafiei Varzaneh, M., Behnamfar, F. (2017) "Effect of opening on the lateral behavior of masonry walls with and without concrete ties," *Sharif Science & Research Journal, Sharif University of Technology* (In Persian with English abstract).
61. Behnamfar, F., Nooraei, M., Talebi Velni, M., (2017). "A three-step method for earthquake record selection for dynamic analysis of structures," *Journal of Amirkabir University of Technology*, 49 (1): 127-138 (In Persian with English abstract).
62. Ghandil, M., Behnamfar, F. (2017). "Ductility demands of MRF structures on soft soils considering soil-structure interaction," *Soil Dynamics and Earthquake Engineering*, 92, 203-214, Jan. 2017.
63. Jahangiri, A., Behnamfar, F. and Jahangiri, M. (2016). "Introducing the innovative post-tensioned connection with the rigid steel node," *KSCE Journal of Civil Engineering*, 21(4): 1247-1255.
64. Behnamfar, F., Artoonian, R., Ghandil, M. (2016). "Nonlinear modelling and seismic behavior of precast concrete structures with steel shear walls," *Bulletin of the New Zealand Society for Earthquake Engineering*, 49 (4), 293-304, Dec. 2016.
65. Behnamfar, F., Moghtaderi-Esfahani, A., Nikbakht, R., Ghandil, M. (2016). "Analysis of structural vibrations due to passage of underground trains," *International Journal of Engineering*, 29 (6), 742-751, June 2016.
66. Rajabipour, A., Behnamfar, F. (2016). "A fire ignition model and its application for estimating loss due to damage of the urban gas network in an earthquake," *International Journal of Engineering*, 29 (11), 1507-1519, Nov. 2016.

67. Behnamfar, F., Sayyadpour, H. (2016). "The near-field method: a modified equivalent linear method for dynamic soil-structure interaction analysis. Part I: Theory and methodology," *Bulletin of Earthquake Engineering*, 14 (8), 2361-2384, Aug. 2016.
68. Sayyadpour, H., Behnamfar, F., El Naggar, M.H. (2016). "The near-field method: a modified equivalent linear method for dynamic soil-structure interaction analysis. Part II: Verification and example application," *Bulletin of Earthquake Engineering*, 14 (8), 2385-2404, Aug. 2016.
69. Behnamfar, F., Taherian, S.M., Sahraei, A. (2016). "Enhanced nonlinear static analysis with the drift pushover procedure for tall buildings," *Bulletin of Earthquake Engineering*, 14 (11), 3025-3046, Nov. 2016.
70. Kermani, H., Behnamfar, F., Morsali, V. (2016). "Seismic Design of Steel Structures Based on Ductility," *International Journal of Engineering, Transactions A*, Vol. 29, No. 1.
71. Behnamfar, F., Fathollahi, A. (2016). "Conversion Factors for Design Spectral Accelerations Including Soil-Structure Interaction," *Bulletin of Earthquake Engineering*, 14 (10), 2731-2755, Oct. 2016.
72. Fazeli, E., Behnamfar, F. (2016). "Material and Geometrical Nonlinear Analysis of Structures Using Improved Applied Element Method (IAEM)," *Numerical Methods in Engineering*, 35 (1), 65-81, Summer 2016 (In Persian with English abstract).
73. Behnamfar, F., Alibabaei, H. (2016). "Classical and non-classical time history and spectrum analysis of soil-structure interaction system," *Bulletin of Earthquake Engineering*, 14 (10), 2731-2755, Oct. 2016.
74. Behnamfar, F., Dorafshan, S., Taheri, A., Hashemi, B.H. (2016). "A method for rapid estimation of dynamic coupling and spectral responses of connected adjacent structures," *The Structural Design of Tall and Special Buildings*, 25 (3), 605-625, Mar. 2016.
75. Zibasokhan, H., Behnamfar, F., Behfarnia, K. (2016). "The new proposed details for moment resisting connections of steel beam to continuous concrete column," *Advances in Structural Engineering*, 19 (1), 156-169, Mar. 2016.
76. Ghandil, M., Behnamfar, F., Vafaeian, M. (2016). "Dynamic responses of structure-soil-structure systems with an extension of the equivalent linear soil modeling," *Soil Dynamics and Earthquake Engineering*, 80, 149-162.
77. Banisheikholeslami, A., Behnamfar, F., Ghandil, M. (2016). "A beam-to-column connection with visco-elastic and hysteretic dampers for seismic damage control," *Journal of Constructional Steel Research*, 117, 185-195.
78. Behnamfar, F., Banizadeh, M. (2016). "Effects of soil-structure interaction on distribution of seismic vulnerability in RC structures," *Soil Dynamics and Earthquake Engineering*, 80, 73-86.
79. Behnamfar, F., Alibabaei, H. (2015). "Correction factors including nonclassical nature of soil-structure interaction spectral analysis," *Journal of Seismology and Earthquake Engineering*, 17(3), 193-201, Mar. 2015.
80. Behnamfar, F., Rafizadeh, H., Omidi, M. (2015). "Innovative connections for precast concrete moment resisting frames," *Bulletin of the New Zealand Society for Earthquake Engineering*, 48, 3, 204-220.
81. Abbasi, H., Behnamfar, F., Fathollahi, A. (2015). "Dynamic analysis of soil-structure interaction using the neural networks and the support vector machines," *Expert Systems with Applications*, 42, 8971-8981.

82. Madani, B., Behnamfar, F., Tajmir Riahi, H. (2015). "Dynamic response of structures subjected to pounding and structure-soil-structure interaction," *Soil Dynamics and Earthquake Engineering*, 78, pp 46-60.
83. Omidi, M., Behnamfar, F. (2015). "A numerical model for simulation of RC beam-column connections," *Engineering Structures*, 88, 51–73.
84. Ghandil, M., Behnamfar, F. (2015) "The near-field method for dynamic analysis of structures on soft soils including inelastic soil-structure interaction," *Soil Dynamics and Earthquake Engineering*, 75, 1–17.
85. Saberi, M., Behnamfar, F., Vafaeian, M. (2015). "A Continuum Shell-beam Finite Element Modeling of Buried Pipes with 90-degree Elbow Subjected to Earthquake Excitations," *International Journal of Engineering, Transactions C: Aspects*, 28, 3, 338-349.
86. Behnamfar, F., Shahgholian, R. (2015) "A Comparative Study and Proposal for Enhancement of Rapid Seismic Evaluation of Masonry Buildings," *Sharif Science & Research Journal, Sharif University of Technology*, 31-2 (3/1), 93-103, Fall 2015 (In Persian with English abstract).
87. Forooghi, H., Behnamfar, F., Madani, B. (2014) "Case study for evaluation of dynamic characteristics of adjacent buildings," *Journal of Amirkabir University of Technology*, 48 (3), 291-299, Fall 2016 (In Persian with English abstract).
88. Sahraei A., Behnamfar, F. (2014) "A drift pushover analysis procedure for estimating seismic demands of buildings," *Earthquake Spectra*, 30, 4, 1601–1618.
89. Javaheri-Tafti, M.R., Ronagh, H.R., Behnamfar, F., Memarzadeh, P. (2014) "An experimental investigation on the seismic behavior of cold-formed steel walls sheathed by thin steel plates," *Thin-Walled Structures*, 80, 66–79.
90. Behnamfar, F., Bahmanzad, A. (2014), "Behavior of the Iranian Code-Based Moment Resisting Steel Structures under Near-Field Earthquakes: Proposing a Modified Design Drift," *Sharif Science & Research Journal, Sharif University of Technology*, Vol. 2-29, No. 4, pp 3-15. (In Persian with English abstract).
91. Sharif, V., Behnamfar, F. (2013) "Evaluating the effects of near-field earthquakes on the behavior of moment resisting frames," *Journal of Computational Methods in Civil Engineering*, Vol. 3, No. 2, pp 79-91.
92. Saberi, M., Behnamfar, F., Vafaeian, M. (2013) "A semi-analytical model for estimating seismic behavior of buried steel pipes at bend point under propagating waves," *Bulletin of Earthquake Engineering*, Vol. 11, pp 1373-1402.
93. Najjarzadegan, I., Behnamfar, F. (2013) "Comparison of explicit and implicit integration methods in hybrid simulation using iterative numerical operations on substructures" *Sharif Science & Research Journal, Sharif University of Technology*, Vol. 2-30, No. 2-4, pp 43-51 (In Persian with English abstract).
94. Dorafshan, S., Behnamfar, F., Khamesipour, A., Motosaka, M. (2013) "The condensed hyperelements method of non-vertical consistent boundaries for wave propagation analysis in irregular media," *Earthquake Engineering and Engineering Vibration*, Vol. 12, No. 4, pp 547-559.
95. Behnamfar, F., Afshari, M. (2013), "Collapse Analysis and Strengthening of Stone Arch Bridges Against Earthquake," *International Journal of Architectural Heritage: Conservation, Analysis, and Restoration*, Volume 7, Issue 1, 2013, pages 1-25.

96. Varasteh, A., Behnamfar, F., Salimi M. (2012), "Assessment of the Conventional Control Algorithms and Proposing a Modified Displacement Feedback Control for Performance-Based Design of Structures," *Journal of Computational Methods in Civil Engineering*, Vol. 3, 1 (2012) 35-50.
97. Berahman, F., Behnamfar, F. (2009), "Probabilistic seismic demand model and fragility estimates for critical failure modes of un-anchored steel storage tanks in petroleum complexes," *Journal of the Probabilistic Engineering Mechanics*, Vol. 24, Issue 4, pp 527-536, Oct. 2009.
98. Hashemi, B. H., Behnamfar, F., and Ranjbaran, F. (2008), "Effects of local eccentricity of connecting braces on nonlinear behavior of steel concentric brace connections," *Journal of Seismology & Earthquake Engineering*, Summer 2008, Vol. 10, No. 2, pp. 91-99.
99. Berahman F. & Behnamfar F. (2007), "Seismic fragility curves for un-anchored on-grade steel storage tanks: Bayesian approach," *Journal of Earthquake Engineering*, Imperial College, London, Vol. 11, No. 2, Mar. 2007.
100. Hashemi, B.H., Behnamfar, F., Gharibzadeh, A. (2005), "Performance evaluation of highly important steel moment resisting structures using the Seismic Evaluation Instructions," *Research Letters of Seismology and Earthquake Engineering*, Vol. 8, No. 2-3 (In Persian with English abstract).
101. Hosseinzadeh, N.A., Nateghi-Elahi, F., Behnamfar, F. (2003), "Shake Table Studies on the Soil-Structure Effects in Seismic Response of Adjacent Structures," *Esteghlal Journal*, Isfahan University of Technology, Vol. 22, No. 2 (In Persian with English abstract).
102. Nateghi-Elahi, F., Tabrizi, A.R., Behnamfar, F. (2003), "Study on the Soil-Structure Interaction Effects on the Nonlinear Response of Tall Buildings," *Journal of Ferdowsi University*, Vol. 15, No. 1 (In Persian with English abstract).
103. Behnamfar, F. & Sugimura, Y. (1999), "Dynamic Response of Adjacent Structures Under Spatially Deterministic and Random Propagation of Seismic Waves," *Journal of the Probabilistic Engineering Mechanics*, Vol. 14, No. 1-2, pp 33-44, Oct. '99.
104. Behnamfar, F. & Sugimura, Y. (1998), "Cross-Interaction of Surface and Embedded Structures Subject to Spatial variation of Ground Motion," *Journal of Structural and Construction Engineering*, Trans. of AIJ, Japan, No. 507, pp 69-76, May '98.

2) Conference proceedings:

1. Soltanabadi R., Mamazizi A., Behnamfar F. (2019). "Evaluating the seismic performance of Chevron braced frames accommodated with viscoplastic dampers," 10th National Conference on Steel & Structure, 10-11 Dec., Tehran, Iran.
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11. Heydari, M. & Behnamfar, F. (2015), "A macro-model for nonlinear dynamic analysis of 3D RC shear walls and comparison with the finite elements method," 10th International Congress on Civil Engineering, 5-7 May 2015, University of Tabriz, Tabriz, Iran.
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16. Haghollahi, S. & Behnamfar, F. (2013), "Performance evaluation of special RC moment frames considering soil-structure interaction," 4th International Conference on Concrete and Development, May 2013, Tehran, Iran.
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