

Seyed Mehdi Zahrai

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Cyclic Behavior of SCBFs with Through-Gusset Plate Connections and Concrete-Filled Tube Columns. <i>Journal of Earthquake Engineering</i> , 2022, 26, 3885-3913.	1.4	5
2	Proposed Modification for ADAS Damper to Eliminate Axial Force and Improve Seismic Performance. <i>Journal of Earthquake Engineering</i> , 2022, 26, 5130-5152.	1.4	12
3	Improving nonlinear behavior and tensile and compressive strengths of sustainable lightweight concrete using waste glass powder, nanosilica, and recycled polypropylene fiber. <i>Nonlinear Engineering</i> , 2022, 11, 58-70.	1.4	26
4	Improving semi-active vibration control of an 11-story structure with non-linear behavior and floating fuzzy logic algorithm. <i>Structures</i> , 2022, 39, 132-146.	1.7	3
5	Effect of waste glass powder, microsilica and polypropylene fibers on ductility, flexural and impact strengths of lightweight concrete. <i>International Journal of Structural Integrity</i> , 2022, 13, 511-533.	1.8	22
6	Cyclic behavior of CBFs having vertical pipe and box fuses with different aspect ratios. <i>Innovative Infrastructure Solutions</i> , 2022, 7, .	1.1	1
7	Compressive behavior and design of octagonal rubberized concrete-filled double steel tubular stub columns stiffened by headed studs. <i>Structures</i> , 2022, 42, 104-124.	1.7	9
8	Comparing cyclic behaviour of RBS, DFC and proposed rigid connections in a steel moment frame with CFT column. <i>Australian Journal of Civil Engineering</i> , 2021, 19, 164-183.	0.6	0
9	Sensitivity Analysis of Tubular-Web Reduced Beam Section Connections Under Cyclic Loading. <i>International Journal of Steel Structures</i> , 2021, 21, 100-117.	0.6	5
10	Effect of bolted shear connectors on the axial load-bending moment interaction capacity of CFT columns. <i>Structures</i> , 2021, 29, 92-106.	1.7	6
11	Numerical study of visco-hyperelastic damper with high axial damping rubber subjected to harmonic loading. <i>Structures</i> , 2021, 29, 1550-1561.	1.7	10
12	Drift-based seismic design procedure for Buckling Restrained Braced Frames. <i>Structures</i> , 2021, 30, 62-74.	1.7	3
13	Experimental study on brace to HSS column connection using through-gusset plate. <i>Engineering Structures</i> , 2021, 234, 111948.	2.6	10
14	Performance of typical plan concrete buildings under progressive collapse. <i>Structures</i> , 2021, 31, 1163-1172.	1.7	14
15	Improving seismic behavior using a hybrid control system of friction damper and vertical shear panel in series. <i>Structures</i> , 2021, 31, 369-379.	1.7	19
16	Effect of glass powder & polypropylene fibers on compressive and flexural strengths, toughness and ductility of concrete: An environmental approach. <i>Structures</i> , 2021, 33, 4616-4628.	1.7	66
17	Full-scale tests on two-story SCBFs with Through-Gusset Plate in brace-to-CFT column connections. <i>Journal of Constructional Steel Research</i> , 2021, 187, 106946.	1.7	3
18	Numerical and experimental study on the behavior of drilled flange steel beam to CFT column connections. <i>Structures</i> , 2020, 28, 726-740.	1.7	9

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19	Seismic performance of simple steel frames with buckling-restrained knee braces & SMA to reduce residual displacement. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 137, 106268.	1.9	8
20	Evaluating ultra low cycle fatigue based on ductile fracture model in double core BRBs. <i>Engineering Structures</i> , 2020, 223, 111158.	2.6	4
21	Hysteretic behavior of link beams with different cross-sections and stiffener arrangements. <i>Journal of Constructional Steel Research</i> , 2020, 170, 106084.	1.7	7
22	Investigation of Seismic Performance of (RBS) and Drilled Flange Connection (DFC) Containing rhombus Shaped Hole in Steel Moment Frames. <i>Australian Journal of Civil Engineering</i> , 2020, 18, 246-262.	0.6	3
23	Through gusset connection for two-story X-braced frames, a numerical study. <i>Structures</i> , 2020, 27, 285-296.	1.7	4
24	Analytical and numerical studies on reducing lateral restraints in conventional & all steel Buckling Restrained Braces. <i>Journal of Building Engineering</i> , 2020, 32, 101513.	1.6	8
25	Experimental Study of High Axial Damping Rubber (HADR) in New Viscoelastic Dampers. <i>Journal of Testing and Evaluation</i> , 2020, 48, 4387-4401.	0.4	2
26	Using two-stage method in reinforced concrete bridge piers for damage quantification. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2019, 172, 422-436.	0.4	5
27	Semi-active seismic control of buildings using MR damper and adaptive neural-fuzzy intelligent controller optimized with genetic algorithm. <i>JVC/Journal of Vibration and Control</i> , 2019, 25, 273-285.	1.5	39
28	Improving Seismic Behavior of MRFs by U-shaped Hysteretic Damper Along Diagonal Brace. <i>International Journal of Steel Structures</i> , 2019, 19, 543-558.	0.6	7
29	Numerical Study on the Impact of Out-of-Plane Eccentricity on Lateral Behavior of Concentrically Braced Frames. <i>International Journal of Steel Structures</i> , 2019, 19, 341-350.	0.6	4
30	Seismic performance of chevron braced frames with shape memory alloy vertical shear link. <i>Structural Design of Tall and Special Buildings</i> , 2019, 28, e1658.	0.9	7
31	Cyclic Performance Evaluation of Hollow Structural Section (HSS) and Concrete-Filled Tube (CFT) Braces. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950140.	1.5	10
32	Innovative adaptive viscous damper to improve seismic control of structures. <i>JVC/Journal of Vibration and Control</i> , 2019, 25, 1833-1851.	1.5	9
33	Multiobjective optimal placement of active tendons to control irregular multistory buildings with soil-structure interaction. <i>Structural Design of Tall and Special Buildings</i> , 2019, 28, e1581.	0.9	8
34	Proposed design procedure for gusset plate dimensions and force distribution at its interfaces to beam and column. <i>Engineering Structures</i> , 2019, 178, 554-572.	2.6	12
35	Application of a Comprehensive Seismic Retrofit Procedure for Steel Buildings Using Nonlinear Viscous Dampers. <i>International Journal of Civil Engineering</i> , 2019, 17, 1261-1279.	0.9	5
36	Cyclic Testing of Multilevel Pipe in Pipe Damper. <i>Journal of Earthquake Engineering</i> , 2019, 23, 1695-1718.	1.4	20

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37	A variably baffled tuned liquid damper to reduce seismic response of a five-storey building. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2018, 171, 306-315.	0.4	4
38	Cyclic Performance of an Elliptical-Shaped Damper with Shear Diaphragms in Chevron Braced Steel Frames. Journal of Earthquake Engineering, 2018, 22, 1209-1232.	1.4	10
39	Semi-active seismic control of an 11-DOF building model with TMD+MR damper using type-1 and -2 fuzzy algorithms. JVC/Journal of Vibration and Control, 2018, 24, 2938-2953.	1.5	65
40	Effect of rotationally restrained and Pasternak foundation on buckling of an orthotropic rectangular Mindlin plate. Mechanics of Advanced Materials and Structures, 2018, 25, 592-599.	1.5	6
41	Fuzzy control of asymmetric plan buildings with active tuned mass damper considering soil-structure interaction. Soil Dynamics and Earthquake Engineering, 2018, 115, 838-852.	1.9	40
42	Seismic reliability-based design of inelastic base-isolated structures with lead-rubber bearing systems. Soil Dynamics and Earthquake Engineering, 2018, 115, 589-605.	1.9	22
43	Bending, second-order and buckling analysis of non-prismatic beam-columns by differential quadrature method. Applied Mathematical Modelling, 2018, 63, 362-373.	2.2	2
44	Proposed Relationship for Proper Shear Strength of Elliptical Damper Based on Its Geometrical Parameters. International Journal of Steel Structures, 2018, 18, 880-890.	0.6	4
45	Experimental study on damage detection of RC bridge piers under ambient vibration. Journal of Vibroengineering, 2018, 20, 1087-1098.	0.5	3
46	Response modification factor due to ductility of screen-grid ICF wall system in high seismic risk zones. KSCE Journal of Civil Engineering, 2017, 21, 258-264.	0.9	8
47	Slack free connections to improve seismic behavior of tension-only braces: An experimental and analytical study. Engineering Structures, 2017, 136, 54-67.	2.6	18
48	Iterative step-by-step procedure for optimal placement and design of viscoelastic dampers to improve damping ratio. Structural Design of Tall and Special Buildings, 2017, 26, e1361.	0.9	8
49	Reducing seismic vibrations of typical steel buildings using new multi-level yielding pipe damper. International Journal of Steel Structures, 2017, 17, 983-998.	0.6	14
50	Seismic Design and Performance of Ductile End-Diaphragms in Slab-on-Girder Steel Bridges with Flexible Substructure. Journal of Bridge Engineering, 2017, 22, 04017098.	1.4	2
51	Analytical study on seismic behavior of proposed hybrid tension-only braced frames. Structural Design of Tall and Special Buildings, 2017, 26, e1310.	0.9	7
52	Increasing plastic hinge length using two pipes in a proposed web reduced beam section, an experimental and numerical study. Steel and Composite Structures, 2017, 23, 421-433.	1.3	8
53	Tubular Web Reduced Beam Section (TW-RBS) connection, a numerical and experimental study and result comparison. Steel and Composite Structures, 2017, 23, 571-583.	1.3	4
54	Tubular Web RBS Connection to Improve Seismic Behavior of Moment Resisting Steel Frames. Scientia Iranica, 2017, .	0.3	3

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55	Experimental and numerical evaluation of proposed precast concrete connections. <i>Structural Concrete</i> , 2016, 17, 959-971.	1.5	21
56	Contribution of pre-slacked cable braces to dynamic stability of non-ductile frames; an analytical study. <i>Engineering Structures</i> , 2016, 117, 305-320.	2.6	15
57	Innovative multi-level control with concentric pipes along brace to reduce seismic response of steel frames. <i>Journal of Constructional Steel Research</i> , 2016, 127, 120-135.	1.7	22
58	Seismic control of irregular multistory buildings using active tendons considering soil-structure interaction effect. <i>Soil Dynamics and Earthquake Engineering</i> , 2016, 89, 100-115.	1.9	28
59	Large-scale seismic isolation through regulated liquefaction: a feasibility study. <i>Earthquake Engineering and Engineering Vibration</i> , 2016, 15, 579-595.	1.1	3
60	Cyclic testing of tubular web RBS connections in deep beams. <i>Journal of Constructional Steel Research</i> , 2016, 117, 214-226.	1.7	28
61	Using AP2RC & P1RB micro-silica gels to improve concrete strength and study of resulting contamination. <i>Advances in Concrete Construction</i> , 2016, 4, 195-206.	0.4	17
62	Experimental study on innovative tubular web RBS connections in steel MRFs with typical shallow beams. <i>Structural Engineering and Mechanics</i> , 2016, 57, 785-808.	1.0	14
63	Effect of stiffener arrangement on hysteretic behavior of link-to-column connections. <i>Structural Engineering and Mechanics</i> , 2016, 57, 1051-1064.	1.0	5
64	Effect of higher order terms of Maclaurin expansion in nonlinear analysis of the Bernoulli beam by single finite element. <i>Structural Engineering and Mechanics</i> , 2016, 58, 949-966.	1.0	1
65	Cable-pulley brace to improve story drift distribution of MRFs with large openings. <i>Steel and Composite Structures</i> , 2016, 21, 863-882.	1.3	3
66	Toward buckling free tension-only braces using slack free connections. <i>Journal of Constructional Steel Research</i> , 2015, 115, 329-345.	1.7	9
67	Seismic behavior of steel frames with lightweight-low strength industrialized infill walls. <i>Earthquake and Structures</i> , 2015, 9, 1273-1290.	1.0	2
68	Using friction dampers in retrofitting a steel structure with masonry infill panels. <i>Steel and Composite Structures</i> , 2015, 19, 309-325.	1.3	12
69	Cyclic testing of chevron braced steel frames with IPE shear panels. <i>Steel and Composite Structures</i> , 2015, 19, 1167-1184.	1.3	22
70	Quasi-static cyclic tests on super-lightweight EPS concrete shear walls. <i>Engineering Structures</i> , 2014, 65, 62-75.	2.6	37
71	Towards lateral performance of CBF with unwanted eccentric connection: A finite element modeling approach. <i>KSCE Journal of Civil Engineering</i> , 2014, 18, 1421-1428.	0.9	4
72	Experimental and analytical investigations on seismic behavior of ductile steel knee braced frames. <i>Steel and Composite Structures</i> , 2014, 16, 1-21.	1.3	17

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73	Optimum parameters of tuned liquid column-gas damper for mitigation of seismic-induced vibrations of offshore jacket platforms. <i>Structural Control and Health Monitoring</i> , 2013, 20, 422-444.	1.9	40
74	Analytical study on cyclic behavior of chevron braced frames with shear panel system considering post-yield deformation. <i>Canadian Journal of Civil Engineering</i> , 2013, 40, 633-643.	0.7	10
75	Evaluation of hysteretic behavior of eccentrically braced frames with zipper-strut upgrade. <i>Journal of Constructional Steel Research</i> , 2013, 83, 10-20.	1.7	10
76	Study of an innovative two-stage control system: Chevron knee bracing & shear panel in series connection. <i>Structural Engineering and Mechanics</i> , 2013, 47, 881-898.	1.0	9
77	Optimum geometry of tuned liquid column-gas damper for control of offshore jacket platform vibrations under seismic excitation. <i>Earthquake Engineering and Engineering Vibration</i> , 2012, 11, 579-592.	1.1	28
78	Numerical studies of the conventional impact damper with discrete frequency optimization and uncertainty considerations. <i>Scientia Iranica</i> , 2012, 19, 166-178.	0.3	12
79	Experimental investigation of utilizing TLD with baffles in a scaled down 5-story benchmark building. <i>Journal of Fluids and Structures</i> , 2012, 28, 194-210.	1.5	53
80	Effectiveness-robustness objectives in MTMD system design: An evolutionary optimal design methodology. <i>Structural Control and Health Monitoring</i> , 2010, 17, 218-236.	1.9	39
81	Effect of impact damper on SDOF system vibrations under harmonic and impulsive excitations. <i>Journal of Physics: Conference Series</i> , 2009, 181, 012066.	0.3	4
82	Studying the Rehabilitation of Existing Structures Using Compound System of Cables and Shape Memory Alloys. , 2009, , .		8
83	Impact of seismic excitation characteristics on the efficiency of tuned liquid column dampers. <i>Earthquake Engineering and Engineering Vibration</i> , 2006, 5, 235-243.	1.1	3
84	Displacement-based energy dissipation systems for steel bridges diaphragms. <i>Journal of Constructional Steel Research</i> , 2002, 58, 801-817.	1.7	12
85	Cyclic Testing of Ductile End Diaphragms for Slab-on-Girder Steel Bridges. <i>Journal of Structural Engineering</i> , 1999, 125, 987-996.	1.7	36
86	Ductile End-Diaphragms for Seismic Retrofit of Slab-on-Girder Steel Bridges. <i>Journal of Structural Engineering</i> , 1999, 125, 71-80.	1.7	39
87	Energy dissipating stiff diaphragms for steel bridges in seismic regions. <i>Journal of Constructional Steel Research</i> , 1998, 46, 42-43.	1.7	3
88	Impact of Diaphragms on Seismic Response of Straight Slab-on-Girder Steel Bridges. <i>Journal of Structural Engineering</i> , 1998, 124, 938-947.	1.7	37
89	Effect of Severe Corrosion on Cyclic Ductility of Steel. <i>Journal of Structural Engineering</i> , 1997, 123, 1478-1486.	1.7	23
90	Improvement of Seismic Performance of Beam-column Connection With Replaceable Drilled Attachment Parts. <i>Periodica Polytechnica: Civil Engineering</i> , 0, , .	0.6	2