

Iman Hajirasouliha

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8424922/publications.pdf>

Version: 2024-02-01

139
papers

3,702
citations

109311

35
h-index

175241

52
g-index

140
all docs

140
docs citations

140
times ranked

1869
citing authors

#	ARTICLE	IF	CITATIONS
1	A new ductile moment-resisting connection for precast concrete frames in seismic regions: An experimental investigation. <i>Engineering Structures</i> , 2014, 70, 144-157.	5.3	190
2	Strength and deformability of waste tyre rubber-filled reinforced concrete columns. <i>Construction and Building Materials</i> , 2011, 25, 218-226.	7.2	180
3	Composites with recycled rubber aggregates: Properties and opportunities in construction. <i>Construction and Building Materials</i> , 2018, 188, 884-897.	7.2	112
4	Seismic behaviour of deficient RC frames strengthened with CFRP composites. <i>Engineering Structures</i> , 2010, 32, 3075-3085.	5.3	105
5	Development of more efficient cold-formed steel channel sections in bending. <i>Thin-Walled Structures</i> , 2016, 101, 1-13.	5.3	101
6	Deflection behaviour of FRP reinforced concrete beams and slabs: An experimental investigation. <i>Composites Part B: Engineering</i> , 2012, 43, 2125-2134.	12.0	100
7	Behaviour of unconfined and FRP-confined rubberised concrete in axial compression. <i>Construction and Building Materials</i> , 2017, 147, 388-397.	7.2	87
8	Hysteretic performance of a new blind bolted connection to concrete filled columns under cyclic loading: An experimental investigation. <i>Engineering Structures</i> , 2013, 46, 535-546.	5.3	78
9	Experimental investigation of local-flexural interactive buckling of cold-formed steel channel columns. <i>Thin-Walled Structures</i> , 2018, 125, 245-258.	5.3	75
10	Local-flexural interactive buckling of standard and optimised cold-formed steel columns. <i>Journal of Constructional Steel Research</i> , 2018, 144, 106-118.	3.9	71
11	Optimum design of cold-formed steel beams using Particle Swarm Optimisation method. <i>Journal of Constructional Steel Research</i> , 2016, 122, 80-93.	3.9	70
12	An efficient performance-based seismic design method for reinforced concrete frames. <i>Earthquake Engineering and Structural Dynamics</i> , 2012, 41, 663-679.	4.4	68
13	Deep learning-based procedure for structural design of cold-formed steel channel sections with edge-stiffened and un-stiffened holes under axial compression. <i>Thin-Walled Structures</i> , 2021, 166, 108076.	5.3	67
14	Strength and deflection behaviour of cold-formed steel back-to-back channels. <i>Engineering Structures</i> , 2018, 177, 641-654.	5.3	58
15	Optimum seismic design of concentrically braced steel frames: concepts and design procedures. <i>Journal of Constructional Steel Research</i> , 2005, 61, 151-166.	3.9	55
16	Performance-based seismic design of flexible-base multi-storey buildings considering soil-structure interaction. <i>Engineering Structures</i> , 2016, 108, 90-103.	5.3	54
17	Experimental study of cold-formed steel built-up columns. <i>Thin-Walled Structures</i> , 2020, 149, 106291.	5.3	53
18	New Lateral Force Distribution for Seismic Design of Structures. <i>Journal of Structural Engineering</i> , 2009, 135, 906-915.	3.4	50

#	ARTICLE	IF	CITATIONS
19	Analytical and experimental study on the seismic performance of cold-formed steel frames. <i>Journal of Constructional Steel Research</i> , 2018, 143, 18-31.	3.9	49
20	Compressive behaviour of concrete columns confined with steel-reinforced grout jackets. <i>Composites Part B: Engineering</i> , 2018, 138, 222-231.	12.0	46
21	Development of optimum cold-formed steel sections for maximum energy dissipation in uniaxial bending. <i>Engineering Structures</i> , 2018, 161, 55-67.	5.3	45
22	General Seismic Load Distribution for Optimum Performance-Based Design of Shear-Buildings. <i>Journal of Earthquake Engineering</i> , 2012, 16, 443-462.	2.5	44
23	Optimum strength distribution for seismic design of tall buildings. <i>Structural Design of Tall and Special Buildings</i> , 2008, 17, 331-349.	1.9	43
24	Cross-sectional optimization of cold-formed steel channels to Eurocode 3. <i>Engineering Structures</i> , 2015, 101, 641-651.	5.3	43
25	Experimental study of the cross-sectional capacity of cold-formed steel built-up columns. <i>Thin-Walled Structures</i> , 2020, 155, 106958.	5.3	43
26	Full-Scale Shaking Table Tests on a Substandard RC Building Repaired and Strengthened with Post-Tensioned Metal Straps. <i>Journal of Earthquake Engineering</i> , 2014, 18, 187-213.	2.5	42
27	Experimental investigation on the dynamic response of RC flat slabs after a sudden column loss. <i>Engineering Structures</i> , 2015, 99, 28-41.	5.3	42
28	Multi-level performance-based design optimisation of steel frames with nonlinear viscous dampers. <i>Bulletin of Earthquake Engineering</i> , 2021, 19, 5015-5049.	4.1	42
29	Toward more rational criteria for determination of design earthquake forces. <i>International Journal of Solids and Structures</i> , 2006, 43, 2631-2645.	2.7	41
30	A simplified model for seismic response prediction of concentrically braced frames. <i>Advances in Engineering Software</i> , 2010, 41, 497-505.	3.8	41
31	Topology optimization for the seismic design of truss-like structures. <i>Computers and Structures</i> , 2011, 89, 702-711.	4.4	40
32	Performance-based optimisation of RC frames with friction wall dampers using a low-cost optimisation method. <i>Bulletin of Earthquake Engineering</i> , 2018, 16, 5017-5040.	4.1	40
33	Seismic performance of cold-formed steel bolted moment connections with bolting friction-slip mechanism. <i>Journal of Constructional Steel Research</i> , 2019, 156, 122-136.	3.9	38
34	Ultra-lightweight engineered cementitious composite using waste recycled hollow glass microspheres. <i>Journal of Cleaner Production</i> , 2020, 249, 119331.	9.3	38
35	Development of optimum cold-formed steel beams for serviceability and ultimate limit states using Big Bang-Big Crunch optimisation. <i>Engineering Structures</i> , 2019, 195, 172-181.	5.3	35
36	Efficient design of cold-formed steel bolted-moment connections for earthquake resistant frames. <i>Thin-Walled Structures</i> , 2020, 150, .	5.3	35

#	ARTICLE	IF	CITATIONS
37	An investigation on the accuracy of pushover analysis for estimating the seismic deformation of braced steel frames. <i>Journal of Constructional Steel Research</i> , 2006, 62, 343-351.	3.9	32
38	Experimental Study of Cold-Formed Steel Built-Up Beams. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	32
39	Shape optimization of cold-formed steel beam-columns with practical and manufacturing constraints. <i>Journal of Constructional Steel Research</i> , 2019, 155, 249-259.	3.9	30
40	A Practical Method for Optimum Seismic Design of Friction Wall Dampers. <i>Earthquake Spectra</i> , 2017, 33, 1033-1052.	3.1	29
41	Adaptive low computational cost optimisation method for performance-based seismic design of friction dampers. <i>Engineering Structures</i> , 2019, 198, 109549.	5.3	29
42	Local Buckling in Cold-Formed Steel Moment-Resisting Bolted Connections: Behavior, Capacity, and Design. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	29
43	Optimum lateral load distribution for seismic design of nonlinear shear-buildings considering soil-structure interaction. <i>Soil Dynamics and Earthquake Engineering</i> , 2016, 88, 356-368.	3.8	28
44	Experimental Investigation of Cross-Sectional Bending Capacity of Cold-Formed Steel Channels Subject to Local-Distortional Buckling Interaction. <i>Journal of Structural Engineering</i> , 2019, 145, .	3.4	27
45	A practical methodology for optimum seismic design of RC frames for minimum damage and life-cycle cost. <i>Engineering Structures</i> , 2020, 202, 109896.	5.3	27
46	Optimum drilled flange moment resisting connections for seismic regions. <i>Journal of Constructional Steel Research</i> , 2015, 112, 325-338.	3.9	26
47	Steel-Reinforced Grout (SRG) strengthening of shear-critical RC beams. <i>Construction and Building Materials</i> , 2019, 216, 68-83.	7.2	26
48	Development of a monolithic-like precast beam-column moment connection: Experimental and analytical investigation. <i>Engineering Structures</i> , 2020, 205, 110057.	5.3	26
49	Seismic performance evaluation of deficient steel moment-resisting frames retrofitted by vertical link elements. <i>Structures</i> , 2020, 26, 724-736.	3.6	26
50	An improved replacement oscillator approach for soil-structure interaction analysis considering soft soils. <i>Engineering Structures</i> , 2018, 167, 26-38.	5.3	24
51	Practical method for optimal rehabilitation of steel frame buildings using buckling restrained brace dampers. <i>Soil Dynamics and Earthquake Engineering</i> , 2019, 123, 242-251.	3.8	24
52	Seismic reliability analysis and estimation of multilevel response modification factor for steel diagrid structural systems. <i>Journal of Building Engineering</i> , 2020, 29, 101168.	3.4	24
53	Design and Optimization of Cold-Formed Steel Sections in Bolted Moment Connections Considering Bimoment. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	24
54	Direct displacement-based seismic design of flexible-base structures subjected to pulse-like ground motions. <i>Engineering Structures</i> , 2018, 168, 276-289.	5.3	23

#	ARTICLE	IF	CITATIONS
55	Simplified Method for Optimal Design of Friction Damper Slip Loads by Considering Near-Field and Far-Field Ground Motions. Journal of Earthquake Engineering, 2021, 25, 1851-1875.	2.5	23
56	Optimisation of cold-formed steel beams for best seismic performance in bolted moment connections. Journal of Constructional Steel Research, 2021, 181, 106621.	3.9	23
57	Multi-Directional Base Isolation System for Coupled Horizontal and Vertical Seismic Excitations. Journal of Earthquake Engineering, 2022, 26, 1145-1170.	2.5	22
58	Structural Size Optimization of Single and Built-Up Cold-Formed Steel Beam-Column Members. Journal of Structural Engineering, 2021, 147, .	3.4	22
59	Behavior and Design of Cold-Formed Steel Bolted Connections Subjected to Combined Actions. Journal of Structural Engineering, 2021, 147, .	3.4	22
60	A simplified Nonlinear Sway-Rocking model for evaluation of seismic response of structures on shallow foundations. Soil Dynamics and Earthquake Engineering, 2016, 81, 14-26.	3.8	21
61	Optimum energy based seismic design of friction dampers in RC structures. Structures, 2020, 27, 2550-2562.	3.6	21
62	Strengthening of short splices in RC beams using Post-Tensioned Metal Straps. Materials and Structures/Materiaux Et Constructions, 2016, 49, 133-147.	3.1	20
63	A practical probabilistic earthquake hazard analysis tool: case study Marmara region. Bulletin of Earthquake Engineering, 2020, 18, 2523-2555.	4.1	20
64	Seismic retrofitting of RC buildings using CFRP and post-tensioned metal straps: shake table tests. Bulletin of Earthquake Engineering, 2017, 15, 3321-3347.	4.1	19
65	Estimation of seismic response parameters and capacity of irregular tunnel-form buildings. Bulletin of Earthquake Engineering, 2019, 17, 5217-5239.	4.1	19
66	Cold-formed steel beam-to-column bolted connections for seismic applications. Thin-Walled Structures, 2022, 172, 108876.	5.3	19
67	More efficient design of reduced beam sections (RBS) for maximum seismic performance. Journal of Constructional Steel Research, 2021, 183, 106728.	3.9	18
68	Accurate prediction of cyclic hysteresis behaviour of RBS connections using Deep Learning Neural Networks. Engineering Structures, 2021, 247, 113156.	5.3	18
69	Influence of masonry infill on the seismic performance of concentrically braced frames. Journal of Constructional Steel Research, 2013, 88, 150-163.	3.9	17
70	Coupled element and structural level optimisation framework for cold-formed steel frames. Journal of Constructional Steel Research, 2020, 168, 105867.	3.9	17
71	Effects of uncertainties on seismic behaviour of optimum designed braced steel frames. Steel and Composite Structures, 2016, 20, 317-335.	1.3	17
72	Performance evaluation of curved damper truss moment frames designed using equivalent energy design procedure. Engineering Structures, 2021, 226, 111363.	5.3	16

#	ARTICLE	IF	CITATIONS
73	Seismic reliability assessment of RC tunnel-form structures with geometric irregularities using a combined system approach. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 139, 106356.	3.8	15
74	Constrained optimization of anti-symmetric cold-formed steel beam-column sections. <i>Engineering Structures</i> , 2021, 228, 111452.	5.3	15
75	Performance-based assessment of CFS strap-braced stud walls under seismic loading. <i>Journal of Constructional Steel Research</i> , 2021, 183, 106731.	3.9	15
76	Innovative self-centering systems using shape memory alloy bolts and energy dissipating devices. <i>Journal of Constructional Steel Research</i> , 2022, 190, 107127.	3.9	15
77	A practical grid generation procedure for the design of free-form structures. <i>Computers and Structures</i> , 2018, 196, 292-310.	4.4	14
78	Design-oriented models for concrete columns confined by steel-reinforced grout jackets. <i>Construction and Building Materials</i> , 2018, 178, 313-326.	7.2	14
79	Tensile stress-strain characteristics of rubberised concrete from flexural tests. <i>Construction and Building Materials</i> , 2020, 236, 117591.	7.2	14
80	Seismic reliability analysis of steel moment-resisting frames retrofitted by vertical link elements using combined series-parallel system approach. <i>Bulletin of Earthquake Engineering</i> , 2021, 19, 831-862.	4.1	14
81	Reliability analysis and multi-level response modification factors for buckling restrained braced frames. <i>Journal of Constructional Steel Research</i> , 2020, 171, 106137.	3.9	14
82	Multilevel seismic demand prediction for acceleration-sensitive non-structural components. <i>Engineering Structures</i> , 2019, 200, 109713.	5.3	13
83	Optimal design of cold roll formed steel channel sections under bending considering both geometry and cold work effects. <i>Thin-Walled Structures</i> , 2020, 157, 107020.	5.3	13
84	Life-cycle cost based design of bridge lead-rubber isolators in seismic regions. <i>Structures</i> , 2020, 27, 383-395.	3.6	13
85	Experimental and numerical investigation of a proposed monolithic-like precast concrete column-foundation connection. <i>Engineering Structures</i> , 2021, 246, 113090.	5.3	13
86	Effect of stressed-skin action on optimal design of cold-formed steel square and rectangular-shaped portal frame buildings. <i>International Journal of Steel Structures</i> , 2016, 16, 299-307.	1.3	12
87	Nonlinear behaviour of reinforced concrete flat slabs after a column loss event. <i>Advances in Structural Engineering</i> , 2018, 21, 2169-2183.	2.4	12
88	Effects of soil-structure interaction and lateral design load pattern on performance-based plastic design of steel moment resisting frames. <i>Structural Design of Tall and Special Buildings</i> , 2019, 28, e1624.	1.9	12
89	Multi-level Response Modification Factor Estimation for Steel Moment-Resisting Frames Using Endurance-Time Method. <i>Journal of Earthquake Engineering</i> , 2022, 26, 4812-4832.	2.5	12
90	Experimental and numerical investigations of cold-formed austenitic stainless steel unlippped channels under bearing loads. <i>Thin-Walled Structures</i> , 2020, 152, 106768.	5.3	12

#	ARTICLE	IF	CITATIONS
91	Structural performance of reinforced concrete columns subjected to high-temperature and axial loading under different heating-cooling scenarios. <i>Journal of Building Engineering</i> , 2021, 42, 102477.	3.4	12
92	More efficient lateral load patterns for seismic design of steel moment-resisting frames. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2018, 171, 487-502.	0.8	11
93	Seismic performance assessment of eccentrically braced steel frames with energy-absorbing links under sequential earthquakes. <i>Journal of Building Engineering</i> , 2021, 33, 101576.	3.4	11
94	Deterioration and damage identification in building structures using a novel feature selection method. <i>Structures</i> , 2021, 29, 458-470.	3.6	11
95	Bond behaviour of multi-ply steel reinforced grout composites. <i>Construction and Building Materials</i> , 2021, 305, 124750.	7.2	11
96	Performance-based seismic design of moment resisting steel frames: Adaptive optimisation framework and optimum design load pattern. <i>Structures</i> , 2021, 33, 1690-1704.	3.6	11
97	Dynamic column loss analysis of reinforced concrete flat slabs. <i>Engineering Structures</i> , 2019, 198, 109453.	5.3	10
98	Seismic performance assessment of multi-story steel frames with curved dampers and semi-rigid connections. <i>Journal of Constructional Steel Research</i> , 2021, 182, 106666.	3.9	10
99	More efficient design of CFS strap-braced frames under vertical and seismic loading. <i>Journal of Constructional Steel Research</i> , 2021, 185, 106886.	3.9	10
100	Structural performance of RC columns retrofitted with steel-reinforced grout jackets under combined axial and lateral loading. <i>Engineering Structures</i> , 2021, 245, 112946.	5.3	10
101	Optimal distribution of friction dampers to improve the seismic performance of steel moment resisting frames. <i>Structures</i> , 2022, 37, 624-644.	3.6	10
102	A new hybrid method for size and topology optimization of truss structures using modified ALGA and QPGA. <i>Journal of Civil Engineering and Management</i> , 2016, 23, 252-262.	3.5	9
103	Seismic risk assessment for developing countries: Pakistan as a case study. <i>Earthquake Engineering and Engineering Vibration</i> , 2018, 17, 787-804.	2.3	9
104	Reliability of water distribution networks subjected to seismic hazard: Application of an improved entropy function. <i>Reliability Engineering and System Safety</i> , 2020, 197, 106828.	8.9	9
105	Experimental study and calculation of laterally-prestressed confined concrete columns. <i>Steel and Composite Structures</i> , 2017, 23, 517-527.	1.3	9
106	Structural engineering from an inverse problems perspective. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, 20210526.	2.1	9
107	Capacity and design of cold-formed steel warping-restrained beam-column elements. <i>Journal of Constructional Steel Research</i> , 2022, 190, 107139.	3.9	9
108	Vibration control of bridges under simultaneous effects of earthquake and moving loads using steel pipe dampers. <i>JVC/Journal of Vibration and Control</i> , 2019, 25, 2580-2594.	2.6	8

#	ARTICLE	IF	CITATIONS
109	Trade-off Pareto optimum design of an innovative curved damper truss moment frame considering structural and non-structural objectives. <i>Structures</i> , 2020, 28, 1338-1353.	3.6	8
110	Seismic reliability assessment of steel moment-resisting frames using Bayes estimators. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2023, 176, 306-320.	0.8	8
111	Development of more accurate cyclic hysteretic models to represent RBS connections. <i>Engineering Structures</i> , 2021, 245, 112899.	5.3	8
112	A Multi-hazard Risk Assessment of Buildings in Padang City. <i>Procedia Engineering</i> , 2015, 125, 1094-1100.	1.2	7
113	Axial behaviour of FRP-confined rubberised concrete: An experimental investigation. <i>Construction and Building Materials</i> , 2021, 267, 121023.	7.2	7
114	Buckling behaviour of cold-formed steel sigma and lipped channel beam-column members. <i>Thin-Walled Structures</i> , 2022, 173, 108963.	5.3	7
115	Seismic performance assessment of tunnel form concrete structures under earthquake sequences using endurance time analysis. <i>Journal of Building Engineering</i> , 2021, 40, 102327.	3.4	6
116	Unified design equations for web crippling failure of cold-formed ferritic stainless steel unlipped channel-sections with web holes. <i>Journal of Building Engineering</i> , 2022, 45, 103685.	3.4	6
117	An acceleration-based approach for crack localisation in beams subjected to moving oscillators. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 489-501.	2.6	5
118	Shake Table Tests on Deficient RC Buildings Strengthened Using Post-Tensioned Metal Straps. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2014, , 187-202.	0.2	5
119	Shape optimisation of cold roll formed sections considering effects of cold working. <i>Thin-Walled Structures</i> , 2022, 170, 108576.	5.3	5
120	Analysis of bilinear hysteretic structures with nonlinear fluid viscous dampers using modified stochastic linearization technique. <i>Engineering Structures</i> , 2022, 251, 113555.	5.3	5
121	Special Truss Moment Frames Equipped with Steel Slit Dampers. <i>International Journal of Steel Structures</i> , 2022, 22, 206-224.	1.3	5
122	A low computational cost seismic analyses framework for 3D tunnel-form building structures. <i>Advances in Structural Engineering</i> , 2022, 25, 2938-2952.	2.4	5
123	Development of a novel cost-effective toggle-brace-curveddamper (TBCD) for mid-rise steel structures using multi-objective NSGA II optimization technique. <i>Structural and Multidisciplinary Optimization</i> , 2021, 63, 661-688.	3.5	4
124	Bond of Substandard Laps in Reinforced Concrete Beams Retrofitted with Post-Tensioned Metal Straps. <i>ACI Structural Journal</i> , 2016, 113, .	0.2	4
125	Response modification factors for dual moment-resisting frames with vertical links: Multilevel approach. <i>Advances in Structural Engineering</i> , 2021, 24, 3299-3314.	2.4	4
126	An innovative variable target time method for probabilistic-based seismic performance assessment of multi-storey buildings. <i>Journal of Building Engineering</i> , 2022, 52, 104378.	3.4	4

#	ARTICLE	IF	CITATIONS
127	Structural Design Optimization of All-Steel Buckling-Restrained Braces Using Intelligent Optimizers. International Journal of Steel Structures, 2021, 21, 2055.	1.3	3
128	Analytical Study of the Seismic Performance of Steel-Braced Frames with Masonry Infill. Journal of Structural Engineering, 2016, 142, .	3.4	2
129	Influence of Higher Modes on Strength and Ductility Demands of Soil-Structure Systems. Journal of Earthquake and Tsunami, 2016, 10, 1650006.	1.3	2
130	Optimized Design of Cold-Formed Steel Elements for Serviceability and Ultimate Limit States. Ce/Papers, 2021, 4, 481-486.	0.3	2
131	Performance-based seismic design and assessment of multi-storey CFS strap-braced frames. Engineering Structures, 2022, 261, 114268.	5.3	2
132	A new modified stochastic linearization technique to analyze structures with nonlinear fluid viscous dampers. JVC/Journal of Vibration and Control, 0, , 107754632110195.	2.6	1
133	Behaviour and Design of Cold-Formed Steel Bolted Portal Frame Connections. Ce/Papers, 2021, 4, 432-437.	0.3	1
134	TENSILE BEHAVIOUR OF MULTI-PLY STEEL- REINFORCED GROUT (SRG) COMPOSITES. , 2019, , .		1
135	Estimation of hysteretic energy distribution for energy-based design of structures equipped with dampers. Journal of Building Engineering, 2022, 51, 104221.	3.4	1
136	Estimation of inelastic displacement demands of flexible-based structures on soft soils. International Journal of Earthquake and Impact Engineering, 2016, 1, 81.	0.3	0
137	Numerical Study of Cyclic Performance and Design of a Novel Fan Bracing System. Journal of Earthquake Engineering, 0, , 1-30.	2.5	0
138	Countersunk bolted moment connections in cold-formed steel. , 2016, , 1074-1079.		0
139	A Novel Methodology for Optimum Seismic Performance-based Design of Friction Energy Dissipation Devices. IABSE Symposium Report, 2017, , .	0.0	0