

# Stefan Hurlebaus

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

2,097  
citations

236925

25  
h-index

243625

44  
g-index

70  
all docs

70  
docs citations

70  
times ranked

1573  
citing authors

#	ARTICLE	IF	CITATIONS
1	Semiactive nonlinear control of a building with a magnetorheological damper system. <i>Mechanical Systems and Signal Processing</i> , 2009, 23, 300-315.	8.0	132
2	Application of semi-active control strategies for seismic protection of buildings with MR dampers. <i>Engineering Structures</i> , 2010, 32, 3040-3047.	5.3	121
3	Summary Review of GPS Technology for Structural Health Monitoring. <i>Journal of Structural Engineering</i> , 2013, 139, 1653-1664.	3.4	121
4	Optimal design of superelastic friction base isolators for seismic protection of highway bridges against near-field earthquakes. <i>Earthquake Engineering and Structural Dynamics</i> , 2011, 40, 273-291.	4.4	100
5	Evaluation of the performance of a sliding-type base isolation system with a NiTi shape memory alloy device considering temperature effects. <i>Engineering Structures</i> , 2010, 32, 238-249.	5.3	97
6	Seismic assessment of bridge structures isolated by a shape memory alloy/rubber-based isolation system. <i>Smart Materials and Structures</i> , 2011, 20, 015003.	3.5	92
7	Adaptive control of base-isolated structures against near-field earthquakes using variable friction dampers. <i>Engineering Structures</i> , 2011, 33, 3143-3154.	5.3	84
8	Robot-Assisted Bridge Inspection. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2011, 64, 77-95.	3.4	84
9	Active and Semi-Active Adaptive Control for Undamaged and Damaged Building Structures Under Seismic Load. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2012, 27, 48-64.	9.8	80
10	Probabilistic Seismic Demand Models and Fragility Estimates for Reinforced Concrete Highway Bridges with One Single-Column Bent. <i>Journal of Engineering Mechanics - ASCE</i> , 2010, 136, 1340-1353.	2.9	72
11	Model-Based Multi-input, Multi-output Supervisory Semi-active Nonlinear Fuzzy Controller. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2010, 25, 387-393.	9.8	70
12	A probabilistic damage detection approach using vibration-based nondestructive testing. <i>Structural Safety</i> , 2012, 38, 11-21.	5.3	61
13	Probabilistic demand model and performance-based fragility estimates for RC column subject to vehicle collision. <i>Engineering Structures</i> , 2014, 74, 86-95.	5.3	57
14	Re-centering variable friction device for vibration control of structures subjected to near-field earthquakes. <i>Mechanical Systems and Signal Processing</i> , 2011, 25, 2849-2862.	8.0	55
15	Model-based analysis of dispersion curves using chirplets. <i>Journal of the Acoustical Society of America</i> , 2006, 119, 2122-2130.	1.1	54
16	Application of an SMA-based hybrid control device to 20-story nonlinear benchmark building. <i>Earthquake Engineering and Structural Dynamics</i> , 2012, 41, 1831-1843.	4.4	54
17	Target-less computer vision for traffic signal structure vibration studies. <i>Mechanical Systems and Signal Processing</i> , 2015, 60-61, 571-582.	8.0	48
18	Semi-active adaptive control of seismically excited 20-story nonlinear building. <i>Engineering Structures</i> , 2013, 56, 2107-2118.	5.3	43

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19	Localization of notches with Lamb waves. Journal of the Acoustical Society of America, 2003, 114, 677-685.	1.1	41
20	Smart Layer for Damage Diagnostics. Journal of Intelligent Material Systems and Structures, 2004, 15, 729-736.	2.5	37
21	Control of a Seismically Excited Benchmark Building Using Linear Matrix Inequality-Based Semiactive Nonlinear Fuzzy Control. Journal of Structural Engineering, 2010, 136, 1023-1026.	3.4	33
22	A Comparative Study on the Seismic Performance of Superelastic-Friction Base Isolators against Near-Field Earthquakes. Earthquake Spectra, 2012, 28, 1147-1163.	3.1	33
23	Fuzzy control of piezoelectric friction dampers for seismic protection of smart base isolated buildings. Bulletin of Earthquake Engineering, 2010, 8, 1435-1455.	4.1	31
24	Adaptive Control to Mitigate Damage Impact on Structural Response. Journal of Intelligent Material Systems and Structures, 2010, 21, 607-619.	2.5	30
25	Development of a Bridge Bumper to Protect Bridge Girders from Overheight Vehicle Impacts. Computer-Aided Civil and Infrastructure Engineering, 2008, 23, 415-426.	9.8	28
26	Probabilistic Capacity Models and Fragility Estimates for Reinforced Concrete Columns Incorporating NDT Data. Journal of Engineering Mechanics - ASCE, 2009, 135, 1384-1392.	2.9	25
27	Automated methodology to locate notches with Lamb waves. Acoustics Research Letters Online: ARLO, 2001, 2, 97-102.	0.7	24
28	Robot-assisted bridge inspection after Hurricane Ike. , 2009, , .		24
29	MIMO fuzzy identification of building-MR damper systems. Journal of Intelligent and Fuzzy Systems, 2011, 22, 185-205.	1.4	24
30	Deterioration data of a large-scale reinforced concrete specimen with severe ASR/DEF deterioration. Construction and Building Materials, 2016, 124, 20-30.	7.2	23
31	ASR/DEF related expansion in structural concrete: Model development and validation. Construction and Building Materials, 2016, 128, 238-247.	7.2	22
32	Nondestructive evaluation of grout defects in internal tendons of post-tensioned girders. NDT and E International, 2018, 99, 23-35.	3.7	21
33	Magnetic flux leakage technique to detect loss in metallic area in external post-tensioning systems. Engineering Structures, 2019, 201, 109765.	5.3	20
34	Non-destructive testing methods to identify voids in external post-tensioned tendons. KSCE Journal of Civil Engineering, 2012, 16, 388-397.	1.9	17
35	Displacement-Based Compatibility Strut-and-Tie Method and Application to Monotonic and Cyclic Loading. Journal of Structural Engineering, 2016, 142, .	3.4	16
36	Simulating behaviour of large reinforced concrete beam-column joints subject to ASR/DEF deterioration and influence of corrosion. Engineering Structures, 2020, 222, 111064.	5.3	15

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37	Wind-induced traffic signal structure response: Experiments and reduction via helical arm strakes. <i>Engineering Structures</i> , 2014, 76, 245-254.	5.3	14
38	Damage avoidance solution to mitigate wind-induced fatigue in steel traffic support structures. <i>Journal of Constructional Steel Research</i> , 2017, 138, 298-307.	3.9	13
39	Experimental Behavior of Large Reinforced Concrete Specimen with Heavy ASR and DEF Deterioration. <i>Journal of Structural Engineering</i> , 2018, 144, .	3.4	13
40	Use of Ultrasonic Tomography to Detect Structural Impairment in Tunnel Linings. <i>Transportation Research Record</i> , 2014, 2407, 20-31.	1.9	12
41	Inspection of Voids in External Tendons of Posttensioned Bridges. <i>Transportation Research Record</i> , 2010, 2172, 115-122.	1.9	11
42	Smart Structures in Engineering Education. <i>Journal of Professional Issues in Engineering Education and Practice</i> , 2012, 138, 86-94.	0.9	11
43	Dual-probe laser interferometer for structural health monitoring. <i>Journal of the Acoustical Society of America</i> , 2006, 119, 1923-1925.	1.1	10
44	Adaptive Reliability Analysis of Reinforced Concrete Bridges Subject to Seismic Loading Using Nondestructive Testing. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2015, 1, .	1.7	10
45	Fragility analysis of wind-excited traffic signal structures. <i>Engineering Structures</i> , 2015, 101, 652-661.	5.3	10
46	Modeling ASR/DEF Expansion Strains in Large Reinforced Concrete Specimens. <i>Journal of Structural Engineering</i> , 2018, 144, 04018085.	3.4	10
47	Performance of D-Regions Affected by Alkali-Silica Reaction: Experimental and Analytical Study. <i>Journal of Structural Engineering</i> , 2017, 143, .	3.4	8
48	LASER TECHNIQUES TO CHARACTERIZE THE EFFECT OF GEOMETRY ON ACOUSTIC EMISSION SIGNALS. <i>Nondestructive Testing and Evaluation</i> , 1998, 14, 21-37.	2.1	7
49	Nondestructive Evaluation of External Post-Tensioning Systems to Detect Grout Defects. <i>Journal of Structural Engineering</i> , 2019, 145, .	3.4	7
50	Iterative damage index method for structural health monitoring. <i>Structural Monitoring and Maintenance</i> , 2014, 1, 89-110.	1.7	7
51	Inspection Guidelines for Bridge Post-Tensioning and Stay Cable Systems Using NDE Methods. , 2017, , .		7
52	Seismic response control of a large civil structure equipped with magnetorheological dampers. , 2009, , .		6
53	Effective Repair Grouting Methods and Materials for Filling Voids in External Posttensioned Tendons. <i>Transportation Research Record</i> , 2010, 2172, 3-10.	1.9	6
54	Deflection of FRP Prestressed Concrete Beams. <i>Journal of Composites for Construction</i> , 2018, 22, .	3.2	6

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55	Power Line Monitoring. Proceedings of the American Control Conference, 2007, , .	0.0	5
56	Tension Stiffening in Prestressed Concrete Beams Using Moment-Curvature Relationship. Journal of Structural Engineering, 2012, 138, 1075-1078.	3.4	5
57	FRP Slab Capacity Using Yield Line Theory. Journal of Composites for Construction, 2014, 18, 04014021.	3.2	5
58	A temperature- and strain-rate-dependent model of NiTi shape memory alloys for seismic control of bridges. Proceedings of SPIE, 2009, , .	0.8	4
59	Simulation of repair grout flow in external tendon system. KSCE Journal of Civil Engineering, 2012, 16, 1250-1257.	1.9	4
60	Systematic Assessment of Nondestructive Evaluation Techniques for Post-Tensioning and Stay Cable Systems. Journal of Infrastructure Systems, 2019, 25, .	1.8	4
61	Assessment of modal parameters considering measurement and modeling errors. Smart Structures and Systems, 2015, 15, 717-733.	1.9	4
62	Fuzzy Control of Large Civil Structures Subjected to Natural Hazards. , 2009, , 3-20.		3
63	Nondestructive Evaluation of Non-Strand Defects in Stay Cable Specimens. Transportation Research Record, 2018, 2672, 101-112.	1.9	2
64	Alkali-silica reaction, delayed ettringite formation and corrosion effects on a bridge pier. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2022, 175, 35-49.	0.6	2
65	Closure to "Deflection of FRP Prestressed Concrete Beams" by Shobeir Pirayeh Gar, John B. Mander, and Stefan Hurlebaus. Journal of Composites for Construction, 2019, 23, 07019002.	3.2	1
66	Enhanced damage index method using torsion modes of structures. Smart Structures and Systems, 2013, 12, 427-440.	1.9	1
67	Calculating the Eigenfrequency of Rotating Acoustic Annulus Inside Labyrinth Seals of Turbomachines. Journal of Engineering for Gas Turbines and Power, 2005, 127, 178-181.	1.1	0
68	Optimum design of bridges with superelastic-friction base isolators against near-field earthquakes. , 2010, , .		0
69	Adequacy of Manitoba concrete bridge rail during truck platoon impacts and associated occupant risks. International Journal of Crashworthiness, 2022, 27, 232-242.	1.9	0
70	A Base Study to Investigate MASH Conservativeness of Occupant Risk Evaluation. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2020, 6, .	1.1	0