## Babak Moaveni

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

77	1,777	25	41
papers	citations	h-index	g-index
82	2,160 ext. citations	3.3	5.23
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
77	Digital Twinning of Modeling for Offshore Wind Turbine Drivetrain Monitoring: A Numerical Study. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2023</b> , 135-137	0.3	
76	Hierarchical Bayesian Model Updating for Nonlinear Structures Using Response Time Histories. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2022</b> , 91-95	0.3	
75	Joint parameter-input estimation for virtual sensing on an offshore platform using output-only measurements. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 170, 108814	7.8	О
74	Hierarchical Bayesian modeling framework for model updating and robust predictions in structural dynamics using modal features. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 170, 108784	7.8	2
73	Optimal sensor placement for parameter estimation and virtual sensing of strains on an offshore wind turbine considering sensor installation cost. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 169, 108787	7.8	1
72	Bayesian model updating and class selection of a wing-engine structure with nonlinear connections using nonlinear normal modes. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 165, 108337	7.8	2
71	Nonlinear model updating through a hierarchical Bayesian modeling framework. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 392, 114646	5.7	О
70	Fatigue Life Analysis of Main Shaft Bearings in Wind Turbines Using Strain Measurements Collected on Blades. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2021</b> , 185-192	0.3	
69	Strain predictions at unmeasured locations of a substructure using sparse response-only vibration measurements. <i>Journal of Civil Structural Health Monitoring</i> , <b>2021</b> , 11, 1113	2.9	2
68	Detecting Demolished Buildings after a Natural Hazard Using High Resolution RGB Satellite Imagery and Modified U-Net Convolutional Neural Networks. <i>Remote Sensing</i> , <b>2021</b> , 13, 2176	5	0
67	Mechanics-based model updating for identification and virtual sensing of an offshore wind turbine using sparse measurements. <i>Structural Control and Health Monitoring</i> , <b>2021</b> , 28, e2647	4.5	7
66	Post-earthquake damage identification of an RC school building in Nepal using ambient vibration and point cloud data. <i>Engineering Structures</i> , <b>2021</b> , 227, 111413	4.7	7
65	Nonlinear dynamic tests of a reinforced concrete frame building at different damage levels. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2020</b> , 49, 924-945	4	4
64	Nonlinear Model Updating Using Recursive and Batch Bayesian Methods. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2020</b> , 279-286	0.3	
63	Two-Stage Hierarchical Bayesian Framework for Finite Element Model Updating. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2020</b> , 383-387	0.3	
62	Accounting for Modeling Errors and Inherent Structural Variability through a Hierarchical Bayesian Model Updating Approach: An Overview. <i>Sensors</i> , <b>2020</b> , 20,	3.8	5
61	A Bayesian Inversion Approach for Site Characterization Using Surface Wave Measurements. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2020</b> , 159-161	0.3	

## (2018-2020)

60	Estimating Fatigue in the Main Bearings of Wind Turbines Using Experimental Data. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2020</b> , 163-171	0.3	2	
59	Bayesian Model Updating of a Five-Story Building Using Zero-Variance Sampling Method. Conference Proceedings of the Society for Experimental Mechanics, <b>2020</b> , 149-151	0.3		
58	Augmented Sequential Bayesian Filtering for Parameter and Modeling Error Estimation of Linear Dynamic Systems. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2020</b> , 163-165	0.3		
57	Adaptive Kalman filters for nonlinear finite element model updating. <i>Mechanical Systems and Signal Processing</i> , <b>2020</b> , 143, 106837	7.8	24	
56	Vibration Monitoring of Two Long-Span Floors Equipped with Tuned Mass Dampers. <i>International Journal of Structural Stability and Dynamics</i> , <b>2019</b> , 19, 1950101	1.9	3	
55	Bayesian seismic strong-motion response and damage estimation with application to a full-scale seven story shear wall structure. <i>Engineering Structures</i> , <b>2019</b> , 186, 146-160	4.7	19	
54	Structural Identification of a Five-Story Reinforced Concrete Office Building in Nepal. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 235-237	0.3	1	
53	Model Updating and Damage Assessment of a RC Structure Using an Iterative Eigenvalue Problem. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 355-358	0.3		
52	Structural Identification for Dynamic Strain Estimation in Wind Turbine Towers. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 239-245	0.3	2	
51	Bayesian Model Updating of a Damaged School Building in Sankhu, Nepal. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 235-244	0.3	1	
50	Model Updating of a Wing-Engine Structure with Nonlinear Connections. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 373-374	0.3		
49	Hierarchical Bayesian Calibration and Response Prediction of a 10-Story Building Model. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 153-165	0.3	1	
48	Accounting for amplitude of excitation in model updating through a hierarchical Bayesian approach: Application to a two-story reinforced concrete building. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 123, 68-83	7.8	21	
47	Modeling Error Estimation and Response Prediction of a 10-Story Building Model Through a Hierarchical Bayesian Model Updating Framework. <i>Frontiers in Built Environment</i> , <b>2019</b> , 5,	2.2	15	
46	Uncertainty quantification and propagation in dynamic models using ambient vibration measurements, application to a 10-story building. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 107, 502-514	7.8	21	
45	Crowdsensing Framework for Monitoring Bridge Vibrations Using Moving Smartphones. <i>Proceedings of the IEEE</i> , <b>2018</b> , 106, 577-593	14.3	54	
44	System identification and modeling of a dynamically tested and gradually damaged 10-story reinforced concrete building. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2018</b> , 47, 25-47	4	24	
43	Post-earthquake Field Measurement-Based System Identification and Finite Element Modeling of an 18-Story Masonry-Infilled RC Building. <i>Lecture Notes in Civil Engineering</i> , <b>2018</b> , 746-757	0.3	1	

42	An application of finite element model updating for damage assessment of a two-story reinforced concrete building and comparison with lidar. <i>Structural Health Monitoring</i> , <b>2018</b> , 17, 1129-1150	4.4	36
41	Bayesian model updating of nonlinear systems using nonlinear normal modes. <i>Structural Control and Health Monitoring</i> , <b>2018</b> , 25, e2258	4.5	20
40	Performance of Medium-to-High Rise Reinforced Concrete Frame Buildings with Masonry Infill in the 2015 Gorkha, Nepal, Earthquake. <i>Earthquake Spectra</i> , <b>2017</b> , 33, 197-218	3.4	30
39	Effects of variability in ambient vibration data on model updating and damage identification of a 10-story building. <i>Engineering Structures</i> , <b>2017</b> , 151, 540-553	4.7	25
38	Probabilistic damage identification of a designed 9-story building using modal data in the presence of modeling errors. <i>Engineering Structures</i> , <b>2017</b> , 131, 542-552	4.7	32
37	Nonlinear model calibration of a shear wall building using time and frequency data features. <i>Mechanical Systems and Signal Processing</i> , <b>2017</b> , 85, 236-251	7.8	23
36	Structural Identification of an 18-Story RC Building in Nepal Using Post-Earthquake Ambient Vibration and Lidar Data. <i>Frontiers in Built Environment</i> , <b>2017</b> , 3,	2.2	16
35	Comparative Study on Modal Identification of a 10 Story RC Structure Using Free, Ambient and Forced Vibration Data. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2017</b> , 267-276	0.3	O
34	Effects of Prediction Error Bias on Model Calibration and Response Prediction of a 10-Story Building. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2016</b> , 279-291	0.3	5
33	Accounting for environmental variability, modeling errors, and parameter estimation uncertainties in structural identification. <i>Journal of Sound and Vibration</i> , <b>2016</b> , 374, 92-110	3.9	55
32	Hierarchical Bayesian Model Updating for Probabilistic Damage Identification. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2015</b> , 55-66	0.3	4
31	Probabilistic identification of simulated damage on the Dowling Hall footbridge through Bayesian finite element model updating. <i>Structural Control and Health Monitoring</i> , <b>2015</b> , 22, 463-483	4.5	74
30	Hierarchical Bayesian model updating for structural identification. <i>Mechanical Systems and Signal Processing</i> , <b>2015</b> , 64-65, 360-376	7.8	118
29	System and Damage Identification of Civil Structures <b>2015</b> , 3732-3740		
28	Nonlinear finite element model updating of an infilled frame based on identified time-varying modal parameters during an earthquake. <i>Journal of Sound and Vibration</i> , <b>2014</b> , 333, 6057-6073	3.9	35
27	Damage assessment through structural identification of a three-story large-scale precast concrete structure. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2014</b> , 43, 61-76	4	33
26	Uncertainty analysis of system identification results obtained for a seven-story building slice tested on the UCSD-NEES shake table. <i>Structural Control and Health Monitoring</i> , <b>2014</b> , 21, 466-483	4.5	31
25	Nonlinear Identification of a Seven-Story Shear Wall Building Based on Numerically Simulated Seismic Data. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2014</b> , 245-254	0.3	4

## (2010-2014)

24	Bayesian FE Model Updating in the Presence of Modeling Errors. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2014</b> , 119-133	0.3	3
23	Design and Deployment of a Continuous Monitoring System for the Dowling Hall Footbridge. <i>Experimental Techniques</i> , <b>2013</b> , 37, 15-26	1.4	34
22	Finite-Element Model Updating for Assessment of Progressive Damage in a 3-Story Infilled RC Frame. <i>Journal of Structural Engineering</i> , <b>2013</b> , 139, 1665-1674	3	59
21	Nonlinear Finite Element Model Updating of a Large-Scale Infilled Frame Structures Based on Instantaneous Modal Parameters. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2013</b> , 85-90	0.3	2
20	Special Issue on Real-World Applications of Structural Identification and Health Monitoring Methodologies. <i>Journal of Structural Engineering</i> , <b>2013</b> , 139, 1637-1638	3	17
19	Uncertainty Quantification in the Assessment of Progressive Damage in a 7-Story Full-Scale Building Slice. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2013</b> , 139, 1818-1830	2.4	46
18	System Identification of a Three-Story Precast Concrete Parking Structure. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2013</b> , 299-305	0.3	
17	Probabilistic Damage Identification of the Dowling Hall Footbridge Using Bayesian FE Model Updating. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2013</b> , 43-51	0.3	4
16	Deterministic-stochastic subspace identification method for identification of nonlinear structures as time-varying linear systems. <i>Mechanical Systems and Signal Processing</i> , <b>2012</b> , 31, 40-55	7.8	30
15	Effects of changing ambient temperature on finite element model updating of the Dowling Hall Footbridge. <i>Engineering Structures</i> , <b>2012</b> , 43, 58-68	4.7	78
14	Experimental Modal Analysis of a Full-Scale Seven-Story Shear Wall Based on Nonlinear Seismic Response. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2012</b> , 369-373	0.3	
13	Bayesian FE Model Updating of the Dowling Hall Footbridge. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2012</b> , 283-285	0.3	
12	Nonlinear Structural Identification of a Three-Story Infilled Frame Using Instantaneous Modal Parameters. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2012</b> , 669-674	0.3	3
11	Environmental effects on the identified natural frequencies of the Dowling Hall Footbridge. <i>Mechanical Systems and Signal Processing</i> , <b>2011</b> , 25, 2336-2357	7.8	155
10	System Identification Study of a 7-Story Full-Scale Building Slice Tested on the UCSD-NEES Shake Table. <i>Journal of Structural Engineering</i> , <b>2011</b> , 137, 705-717	3	92
9	System Identification of a Three-Story Infilled RC Frame Tested on the UCSD-NEES Shake Table. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 135-143	0.3	4
8	Damage Identification of a Three-Story Infilled RC Frame Tested on the UCSD-NEES Shake Table. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 145-154	0.3	4
7	Damage identification study of a seven-story full-scale building slice tested on the UCSD-NEES shake table. <i>Structural Safety</i> , <b>2010</b> , 32, 347-356	4.9	104

6	System Identification of Alfred Zampa Memorial Bridge Using Dynamic Field Test Data. <i>Journal of Structural Engineering</i> , <b>2009</b> , 135, 54-66	3	62
5	Uncertainty and Sensitivity Analysis of Damage Identification Results Obtained Using Finite Element Model Updating. <i>Computer-Aided Civil and Infrastructure Engineering</i> , <b>2009</b> , 24, 320-334	8.4	118
4	Damage Identification of a Composite Beam Using Finite Element Model Updating. <i>Computer-Aided Civil and Infrastructure Engineering</i> , <b>2008</b> , 23, 339-359	8.4	58
3	Modal Identification Study of Vincent Thomas Bridge Using Simulated Wind-Induced Ambient Vibration Data. <i>Computer-Aided Civil and Infrastructure Engineering</i> , <b>2008</b> , 23, 373-388	8.4	49
2	General Realization Algorithm for Modal Identification of Linear Dynamic Systems. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2008</b> , 134, 712-722	2.4	28
1	Dynamic Testing of Alfred Zampa Memorial Bridge. <i>Journal of Structural Engineering</i> , <b>2008</b> , 134, 1006-1	1035	63