Heung-Fai Lam

List of Publications by Year in Descending Order

45 papers	1,405 citations	25 h-index	37 g-index
47 ext. papers	1,622 ext. citations	4.8 avg, IF	5.23 L-index

#	Paper	IF	Citations
45	A Bayesian methodology for detection of railway ballast damage using the modified Ludwik nonlinear model. *Engineering Structures*, **2021**, 236, 112047	4.7	7
44	A feasibility study on void detection of cement-emulsified asphalt mortar for slab track system utilizing measured vibration data. *Engineering Structures*, **2021**, 245, 112349	4.7	2
43	An Efficient Markov Chain Monte Carlo Method for Bayesian System Identification of Tower Structures. *Lecture Notes in Civil Engineering*, **2020**, 975-983	0.3	
42	Assessment and optimization of the power performance of twin vertical axis wind turbines via numerical simulations. *Renewable Energy*, **2020**, 147, 43-54	8.1	25
41	Time-domain Markov chain Monte Carlo-based Bayesian damage detection of ballasted tracks using nonlinear ballast stiffness model. *Structural Health Monitoring*, **2020**, 147592172096695	4.4	6
40	Comparative study of the performances of a bio-inspired flexible-bladed wind turbine and a rigid-bladed wind turbine in centimeter-scale. *Energy*, **2020**, 213, 118835	7.9	3
39	Bayesian model updating of a 20-story office building utilizing operational modal analysis results. *Advances in Structural Engineering*, **2019**, 22, 3385-3394	1.9	6
38	Markov chain Monte Carlo-based Bayesian model updating of a sailboat-shaped building using a parallel technique. *Engineering Structures*, **2019**, 193, 12-27	4.7	20
37	An innovative Bayesian system identification method using autoregressive model. *Mechanical Systems and Signal Processing*, **2019**, 133, 106289	7.8	5
36	Power performance assessment of H-rotor vertical axis wind turbines with different aspect ratios in turbulent flows via experiments. *Energy*, **2019**, 173, 121-132	7.9	17
35	Markov chain Monte Carlo-based Bayesian method for structural model updating and damage detection. *Structural Control and Health Monitoring*, **2018**, 25, e2140	4.5	32
34	Operational modal identification and finite element model updating of a coupled building following Bayesian approach. *Structural Control and Health Monitoring*, **2018**, 25, e2089	4.5	19
33	An efficient adaptive sequential Monte Carlo method for Bayesian model updating and damage detection. *Structural Control and Health Monitoring*, **2018**, 25, e2260	4.5	18
32	Numerical Modeling of Magnetic Nanoparticle and Carrier Fluid Interactions Under Static and Double-Shear Flows. *IEEE Nanotechnology Magazine*, **2017**, 16, 798-805	2.6	10
31	Bayesian operational modal analysis and Markov chain Monte Carlo-based model updating of a factory building. *Engineering Structures*, **2017**, 132, 314-336	4.7	52
30	Bayesian structural model updating using ambient vibration data collected by multiple setups. *Structural Control and Health Monitoring*, **2017**, 24, e2023	4.5	27
29	Identification of rail-sleeper-ballast system through time-domain Markov chain Monte Carlo-based Bayesian approach. *Engineering Structures*, **2017**, 140, 421-436	4.7	24

28	Entropy-Based Optimal Sensor Placement for Model Identification of Periodic Structures Endowed with Bolted Joints. *Computer-Aided Civil and Infrastructure Engineering*, **2017**, 32, 1007-1024	8.4	33
27	Study of wake characteristics of a vertical axis wind turbine by two- and three-dimensional computational fluid dynamics simulations. *Renewable Energy*, **2016**, 90, 386-398	8.1	111
26	Fast Bayesian approach for modal identification using free vibration data, Part I Most probable value. *Mechanical Systems and Signal Processing*, **2016**, 70-71, 209-220	7.8	33
25	Turbulence effects on the wake characteristics and aerodynamic performance of a straight-bladed vertical axis wind turbine by wind tunnel tests and large eddy simulations. *Energy*, **2016**, 109, 557-568	7.9	46
24	Investigation into the wake aerodynamics of a five-straight-bladed vertical axis wind turbine by wind tunnel tests. *Journal of Wind Engineering and Industrial Aerodynamics*, **2016**, 155, 23-35	3.7	32
23	Bayesian model updating of a coupled-slab system using field test data utilizing an enhanced Markov chain Monte Carlo simulation algorithm. *Engineering Structures*, **2015**, 102, 144-155	4.7	95
22	Assessing uncertainty in operational modal analysis incorporating multiple setups using a Bayesian approach. *Structural Control and Health Monitoring*, **2015**, 22, 395-416	4.5	35
21	Bayesian structural damage detection of steel towers using measured modal parameters. *Earthquake and Structures*, **2015**, 8, 935-956		29
20	The Bayesian methodology for the detection of railway ballast damage under a concrete sleeper. *Engineering Structures*, **2014**, 81, 289-301	4.7	46
19	Development of a practical algorithm for Bayesian model updating of a coupled slab system utilizing field test data. *Engineering Structures*, **2014**, 79, 182-194	4.7	39
18	Dynamic Analysis of Finite-Length Circular Cylindrical Shells with a Circumferential Surface Crack. *Journal of Engineering Mechanics - ASCE*, **2013**, 139, 1419-1434	2.4	14
17	Full-scale dynamic testing and modal identification of a coupled floor slab system. *Engineering Structures*, **2012**, 37, 167-178	4.7	42
16	A feasibility study on railway ballast damage detection utilizing measured vibration of in situ concrete sleeper. *Engineering Structures*, **2012**, 45, 284-298	4.7	35
15	Application of two-dimensional spatial wavelet transform in the detection of an obstructed crack on a thin plate. *Structural Control and Health Monitoring*, **2012**, 19, 260-277	4.5	22
14	A Bayesian Probabilistic Approach for Crack Characterization in Plate Structures. *Computer-Aided Civil and Infrastructure Engineering*, **2010**, 25, 375-386	8.4	67
13	Development of a virtual testing application for the teaching and learning of structural engineering. *IES Journal Part A: Civil and Structural Engineering*, **2010**, 3, 119-130		2
12	Statistical detection of multiple cracks on thin plates utilizing dynamic response. *Engineering Structures*, **2010**, 32, 3145-3152	4.7	31
11	Statistical detection of structural damage based on model reduction. *Applied Mathematics and Mechanics (English Edition)*, **2009**, 30, 875-888	3.2	6

10	Dynamic reduction-based structural damage detection of transmission tower utilizing ambient vibration data. *Engineering Structures*, **2009**, 31, 2009-2019	4.7	58
9	Experimental characterization of multiple cracks in a cantilever beam utilizing transient vibration data following a probabilistic approach. *Journal of Sound and Vibration*, **2007**, 305, 34-49	3.9	36
8	Structural protection using MR dampers with clipped robust reliability-based control. *Structural and Multidisciplinary Optimization*, **2007**, 34, 431-443	3.6	30
7	Structural Health Monitoring via Measured Ritz Vectors Utilizing Artificial Neural Networks. *Computer-Aided Civil and Infrastructure Engineering*, **2006**, 21, 232-241	8.4	95
6	On the complexity of artificial neural networks for smart structures monitoring. *Engineering Structures*, **2006**, 28, 977-984	4.7	78
5	Analysis and design of the general and outmost-ring stiffened suspen-dome structures. *Engineering Structures*, **2003**, 25, 1685-1695	4.7	61
4	Tangential-projection algorithm for manifold representation in unidentifiable model updating problems. *Earthquake Engineering and Structural Dynamics*, **2002**, 31, 791-812	4	51
3	Numerical investigation of the power and self-start performance of a folding-blade horizontal axis wind turbine with a downwind configuration. *International Journal of Green Energy*,1-24	3	2
2	On the selection of the most plausible non-linear axial stress-strain model for railway ballast under different impulse magnitudes. *Structural Health Monitoring*,147592172110339	4.4	2
1	A data-driven method for real-time compaction quality evaluation of a cement-stabilized base layer. *Advances in Structural Engineering*,136943322210946	1.9	