

Satish Nagarajaiah

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.

204
papers

8,082
citations

47
h-index

83
g-index

225
ext. papers

9,697
ext. citations

3.9
avg, IF

6.73
L-index

#	Paper	IF	Citations
204	Near-infrared photoluminescence of Portland cement.. <i>Scientific Reports</i> , 2022 , 12, 1197	4.9	0
203	CNN and Convolutional Autoencoder (CAE) based real-time sensor fault detection, localization, and correction. <i>Mechanical Systems and Signal Processing</i> , 2022 , 169, 108723	7.8	5
202	Measurement and identification of the nonlinear dynamics of a jointed structure using full-field data, Part I: Measurement of nonlinear dynamics. <i>Mechanical Systems and Signal Processing</i> , 2022 , 166, 108401	7.8	5
201	Measurement and identification of the nonlinear dynamics of a jointed structure using full-field data; Part II - Nonlinear system identification. <i>Mechanical Systems and Signal Processing</i> , 2022 , 166, 108402	7.8	4
200	Spatiotemporal compressive sensing of full-field Lagrangian continuous displacement response from optical flow of edge: Identification of full-field dynamic modes. <i>Mechanical Systems and Signal Processing</i> , 2022 , 164, 108232	7.8	6
199	Frequency-dependency/independency analysis of damping magnification effect provided by tuned inerter absorber and negative stiffness amplifying damper considering soil-structure interaction. <i>Mechanical Systems and Signal Processing</i> , 2022 , 172, 108965	7.8	4
198	Fragility analysis and inelastic seismic performance of steel braced-core-tube frame outrigger tall buildings with passive adaptive negative stiffness damped outrigger. <i>Journal of Building Engineering</i> , 2022 , 52, 104428	5.2	1
197	Computer vision-based real-time cable tension estimation in Dubrovnik cable-stayed bridge using moving handheld video camera. <i>Structural Control and Health Monitoring</i> , 2021 , 28, e2713	4.5	10
196	Bridge damage detection from the equivalent damage load by multitype measurements. <i>Structural Control and Health Monitoring</i> , 2021 , 28, e2709	4.5	2
195	Developing a semi-active adjustable stiffness device using integrated damage tracking and adaptive stiffness mechanism. <i>Engineering Structures</i> , 2021 , 238, 112036	4.7	3
194	Multi-objective optimal design and seismic performance of negative stiffness damped outrigger structures considering damping cost. <i>Engineering Structures</i> , 2021 , 229, 111615	4.7	17
193	A unified analysis of negative stiffness dampers and inerter-based absorbers for multimode cable vibration control. <i>Journal of Sound and Vibration</i> , 2021 , 494, 115814	3.9	23
192	Structural identification with physics-informed neural ordinary differential equations. <i>Journal of Sound and Vibration</i> , 2021 , 508, 116196	3.9	11
191	Semi-active control of walking-induced vibrations in bridges using adaptive tuned mass damper considering human-structure-interaction. <i>Engineering Structures</i> , 2021 , 244, 112743	4.7	11
190	Optimal design of supplemental negative stiffness damped outrigger system for high-rise buildings resisting multi-hazard of winds and earthquakes. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021 , 218, 104761	3.7	8
189	Inerter dampers with linear hysteretic damping for cable vibration control. <i>Engineering Structures</i> , 2021 , 247, 113069	4.7	6
188	Tracking of Stiffness Variation in Structural Members Using Input Error Function Observers. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 11857	2.6	

187	Review of Bridge Structural Health Monitoring Aided by Big Data and Artificial Intelligence: From Condition Assessment to Damage Detection. <i>Journal of Structural Engineering</i> , 2020 , 146, 04020073	3	117
186	Apparent-weakening by adaptive passive stiffness shaping along the height of multistory building using negative stiffness devices and dampers for seismic protection. <i>Engineering Structures</i> , 2020 , 220, 110754	4.7	11
185	Measurement of full-field displacement time history of a vibrating continuous edge from video. <i>Mechanical Systems and Signal Processing</i> , 2020 , 144, 106847	7.8	25
184	Recursive Nonlinear Identification of a Negative Stiffness Device for Seismic Protection of Structures with Geometric and Material Nonlinearities. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020 , 315-322	0.3	
183	Seismic Response Prediction of Multiple Base-Isolated Structures for Monitoring 2020 , 33-41		
182	An Output-Only Bayesian Identification Approach for Nonlinear Structural and Mechanical Systems. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020 , 431-437	0.3	
181	Dynamic Characteristics and Responses of Damped Outrigger Tall Buildings Using Negative Stiffness. <i>Journal of Structural Engineering</i> , 2020 , 146, 04020273	3	20
180	Identification of full-field dynamic modes using continuous displacement response estimated from vibrating edge video. <i>Journal of Sound and Vibration</i> , 2020 , 489, 115657	3.9	16
179	Vision and Deep Learning-Based Algorithms to Detect and Quantify Cracks on Concrete Surfaces from UAV Videos. <i>Sensors</i> , 2020 , 20,	3.8	22
178	Study on adaptive-passive eddy current pendulum tuned mass damper for wind-induced vibration control. <i>Structural Design of Tall and Special Buildings</i> , 2020 , 29, e1793	1.8	12
177	Automatic detection and damage quantification of multiple cracks on concrete surface from video. <i>International Journal of Sustainable Materials and Structural Systems</i> , 2020 , 4, 292	0.6	2
176	On the effectiveness of principal component analysis for decoupling structural damage and environmental effects in bridge structures. <i>Journal of Sound and Vibration</i> , 2019 , 457, 280-298	3.9	23
175	Data-driven semi-supervised and supervised learning algorithms for health monitoring of pipes. <i>Mechanical Systems and Signal Processing</i> , 2019 , 131, 524-537	7.8	30
174	Longitudinal Displacement Behavior and Girder End Reliability of a Jointless Steel-Truss Arch Railway Bridge during Operation. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 2222	2.6	5
173	Semi-supervised structural linear/nonlinear damage detection and characterization using sparse identification. <i>Structural Control and Health Monitoring</i> , 2019 , 26, e2306	4.5	19
172	Adjustable template stiffness device and SDOF nonlinear frequency response. <i>Nonlinear Dynamics</i> , 2019 , 96, 1559-1573	5	9
171	A novel unscented Kalman filter for recursive state-input-system identification of nonlinear systems. <i>Mechanical Systems and Signal Processing</i> , 2019 , 127, 120-135	7.8	48
170	Seismic protection of SDOF systems with a negative stiffness amplifying damper. <i>Engineering Structures</i> , 2019 , 190, 128-141	4.7	43

169	Bayesian seismic strong-motion response and damage estimation with application to a full-scale seven story shear wall structure. <i>Engineering Structures</i> , 2019 , 186, 146-160	4.7	19
168	Vibration-based structural health monitoring under changing environmental conditions using Kalman filtering. <i>Mechanical Systems and Signal Processing</i> , 2019 , 117, 1-15	7.8	50
167	Sparsity-based approaches for damage detection in plates. <i>Mechanical Systems and Signal Processing</i> , 2019 , 117, 333-346	7.8	16
166	Simplified optimal design of MDOF structures with negative stiffness amplifying dampers based on effective damping. <i>Structural Design of Tall and Special Buildings</i> , 2019 , 28, e1664	1.8	23
165	Sparse structural system identification method for nonlinear dynamic systems with hysteresis/inelastic behavior. <i>Mechanical Systems and Signal Processing</i> , 2019 , 117, 813-842	7.8	40
164	Nonlinear structural control using integrated DDA/ISMP and semi-active tuned mass damper. <i>Engineering Structures</i> , 2019 , 181, 589-604	4.7	18
163	Noncontact Strain Mapping Using Laser-Induced Fluorescence from Nanotube-Based Smart Skin. <i>Journal of Structural Engineering</i> , 2019 , 145, 04018238	3	4
162	Study of a novel adaptive passive stiffness device and its application for seismic protection. <i>Journal of Sound and Vibration</i> , 2019 , 443, 559-575	3.9	10
161	Dual-layer nanotube-based smart skin for enhanced noncontact strain sensing. <i>Structural Control and Health Monitoring</i> , 2019 , 26, e2279	4.5	5
160	Behavior Analysis and Early Warning of Girder Deflections of a Steel-Truss Arch Railway Bridge under the Effects of Temperature and Trains: Case Study. <i>Journal of Bridge Engineering</i> , 2019 , 24, 05018013	2.7	29
159	Data-Driven Approach to Structural Health Monitoring Using Statistical Learning Algorithms. <i>Intelligent Systems, Control and Automation: Science and Engineering</i> , 2018 , 295-305	0.6	7
158	Effectiveness of Negative Stiffness System in the Benchmark Structural-Control Problem for Seismically Excited Highway Bridges. <i>Journal of Bridge Engineering</i> , 2018 , 23, 04018001	2.7	13
157	Bayesian structural identification of a hysteretic negative stiffness earthquake protection system using unscented Kalman filtering. <i>Structural Control and Health Monitoring</i> , 2018 , 25, e2203	4.5	25
156	Development of a rotation-based negative stiffness device for seismic protection of structures. <i>JVC/Journal of Vibration and Control</i> , 2017 , 23, 853-867	2	23
155	Robust data transmission and recovery of images by compressed sensing for structural health diagnosis. <i>Structural Control and Health Monitoring</i> , 2017 , 24, e1856	4.5	32
154	Modeling and harnessing sparse and low-rank data structure: a new paradigm for structural dynamics, identification, damage detection, and health monitoring. <i>Structural Control and Health Monitoring</i> , 2017 , 24, e1851	4.5	64
153	Bayesian estimation of acoustic emissions source in plate structures using particle-based stochastic filtering. <i>Structural Control and Health Monitoring</i> , 2017 , 24, e2005	4.5	11
152	Full-field, high-spatial-resolution detection of local structural damage from low-resolution random strain field measurements. <i>Journal of Sound and Vibration</i> , 2017 , 399, 75-85	3.9	16

151	Negative stiffness device for seismic protection of smart base isolated benchmark building. <i>Structural Control and Health Monitoring</i> , 2017 , 24, e1968	4.5	44
150	An offline approach for output-only Bayesian identification of stochastic nonlinear systems using unscented Kalman filtering. <i>Journal of Sound and Vibration</i> , 2017 , 397, 222-240	3.9	37
149	Blind identification of full-field vibration modes of output-only structures from uniformly-sampled, possibly temporally-aliased (sub-Nyquist), video measurements. <i>Journal of Sound and Vibration</i> , 2017 , 390, 232-256	3.9	75
148	Performance Comparison between Passive Negative-Stiffness Dampers and Active Control in Cable Vibration Mitigation. <i>Journal of Bridge Engineering</i> , 2017 , 22, 04017054	2.7	30
147	Sparse and low-rank methods in structural system identification and monitoring. <i>Procedia Engineering</i> , 2017 , 199, 62-69		1
146	Dimensional Analysis of Inelastic Structures with Negative Stiffness and Supplemental Damping Devices. <i>Journal of Structural Engineering</i> , 2017 , 143, 04016184	3	18
145	Dynamic Imaging: Real-Time Detection of Local Structural Damage with Blind Separation of Low-Rank Background and Sparse Innovation. <i>Journal of Structural Engineering</i> , 2016 , 142, 04015144	3	28
144	Quantum-Behaved Particle Swarm Optimization-Based Structural Modal Parameter Identification Under Ambient Excitation. <i>International Journal of Structural Stability and Dynamics</i> , 2016 , 16, 1550008	1.9	5
143	Closed-form criterion for convergence and stability of pseudo-force method for nonlinear dynamic analysis. <i>Nonlinear Dynamics</i> , 2016 , 86, 1035-1046	5	1
142	Strain sensing and structural health monitoring using nanofilms and nanocomposites 2016 , 303-326		2
141	Coupled horizontal-vertical stability of bearings under dynamic loading. <i>Earthquake Engineering and Structural Dynamics</i> , 2016 , 45, 913-934	4	16
140	Real-Time Output-Only Identification of Time-Varying Cable Tension from Accelerations via Complexity Pursuit. <i>Journal of Structural Engineering</i> , 2016 , 142, 04015083	3	45
139	A study on semi-active Tuned Liquid Column Dampers (sTLCDs) for structural response reduction under random excitations. <i>Journal of Sound and Vibration</i> , 2016 , 362, 1-15	3.9	40
138	Harnessing data structure for recovery of randomly missing structural vibration responses time history: Sparse representation versus low-rank structure. <i>Mechanical Systems and Signal Processing</i> , 2016 , 74, 165-182	7.8	53
137	Improved independent component analysis based modal identification of higher damping structures. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016 , 88, 402-416	4.6	10
136	Toward Practical Non-Contact Optical Strain Sensing Using Single-Walled Carbon Nanotubes. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, M3012-M3017	2	9
135	Equivalent bilinear elastic single degree of freedom system of multi-degree of freedom structure with negative stiffness. <i>Journal of Sound and Vibration</i> , 2016 , 365, 1-14	3.9	18
134	Negative Stiffness Device for Seismic Protection of Structures: Shake Table Testing of a Seismically Isolated Structure. <i>Journal of Structural Engineering</i> , 2016 , 142, 04016005	3	36

133	Structural monitoring and identification of civil infrastructure in the United States. <i>Structural Monitoring and Maintenance</i> , 2016 , 3, 51-69		32
132	Output only structural modal identification using matrix pencil method. <i>Structural Monitoring and Maintenance</i> , 2016 , 3, 395-406		3
131	Semi-active control of vibrations of spar type floating offshore wind turbines. <i>Smart Structures and Systems</i> , 2016 , 18, 683-705		34
130	Developing a smart structure using integrated DDA/ISMP and semi-active variable stiffness device. <i>Smart Structures and Systems</i> , 2016 , 18, 955-982		7
129	Introduction to advanced nanocomposites in civil, structural, and construction engineering 2016 , 1-5		1
128	Strain-sensing smart skin 2016 , 353-375		2
127	Cable vibration control with both lateral and rotational dampers attached at an intermediate location. <i>Journal of Sound and Vibration</i> , 2016 , 377, 38-57	3.9	33
126	The solution structure of the Duffing oscillator's transient response and general solution. <i>Nonlinear Dynamics</i> , 2015 , 81, 621-639	5	6
125	Experimental Shake Table Testing of an Adaptive Passive Negative Stiffness Device within a Highway Bridge Model. <i>Earthquake Spectra</i> , 2015 , 31, 2163-2194	3.4	23
124	. <i>Journal of Strain Analysis for Engineering Design</i> , 2015 , 50, 505-512	1.3	17
123	Apparent Weakening in SDOF Yielding Structures Using a Negative Stiffness Device: Experimental and Analytical Study. <i>Journal of Structural Engineering</i> , 2015 , 141, 04014130	3	35
122	An analytical method for analyzing symmetry-breaking bifurcation and period-doubling bifurcation. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015 , 22, 780-792	3.7	12
121	Numerical simulations of a highway bridge structure employing passive negative stiffness device for seismic protection. <i>Earthquake Engineering and Structural Dynamics</i> , 2015 , 44, 973-995	4	30
120	Study of a piecewise linear dynamic system with negative and positive stiffness. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015 , 22, 1084-1101	3.7	19
119	Data compression of very large-scale structural seismic and typhoon responses by low-rank representation with matrix reshape. <i>Structural Control and Health Monitoring</i> , 2015 , 22, 1119-1131	4.5	14
118	Output-only modal identification by compressed sensing: Non-uniform low-rate random sampling. <i>Mechanical Systems and Signal Processing</i> , 2015 , 56-57, 15-34	7.8	66
117	Asymmetric Solutions of SDOF System with Wire Rope Vibration Isolator Subjected to Harmonic Excitation. <i>International Journal of Structural Stability and Dynamics</i> , 2015 , 15, 1450089	1.9	5
116	Performance Evaluation of Negative Stiffness Devices for Seismic Response Control of Bridge Structures via Experimental Shake Table Tests. <i>Journal of Earthquake Engineering</i> , 2015 , 19, 249-276	1.8	37

115	Blind modal identification of output-only non-proportionally-damped structures by time-frequency complex independent component analysis. <i>Smart Structures and Systems</i> , 2015 , 15, 81-97		13
114	Cable with discrete negative stiffness device and viscous damper: passive realization and general characteristics. <i>Smart Structures and Systems</i> , 2015 , 15, 627-643		69
113	3D BASIS Origins, Novel Developments and Its Impact in Real Projects Around the World. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2015 , 5-27	0.2	2
112	Study on semi-active tuned mass damper with variable damping and stiffness under seismic excitations. <i>Structural Control and Health Monitoring</i> , 2014 , 21, 890-906	4.5	67
111	Blind denoising of structural vibration responses with outliers via principal component pursuit. <i>Structural Control and Health Monitoring</i> , 2014 , 21, 962-978	4.5	37
110	Numerical investigation of coexisting high and low amplitude responses and safe basin erosion for a coupled linear oscillator and nonlinear absorber system. <i>Journal of Sound and Vibration</i> , 2014 , 333, 3490-3504	3.9	22
109	Experimental investigation of vibration attenuation using nonlinear tuned mass damper and pendulum tuned mass damper in parallel. <i>Nonlinear Dynamics</i> , 2014 , 78, 2699-2715	5	33
108	Dynamic Lateral Stability of Elastomeric Seismic Isolation Bearings. <i>Journal of Structural Engineering</i> , 2014 , 140,	3	19
107	Simulated Bilinear-Elastic Behavior in a SDOF Elastic Structure Using Negative Stiffness Device: Experimental and Analytical Study. <i>Journal of Structural Engineering</i> , 2014 , 140, 04013049	3	50
106	Structural damage identification via a combination of blind feature extraction and sparse representation classification. <i>Mechanical Systems and Signal Processing</i> , 2014 , 45, 1-23	7.8	75
105	Data Compression of Structural Seismic Responses via Principled Independent Component Analysis. <i>Journal of Structural Engineering</i> , 2014 , 140, 04014032	3	20
104	Output-Only Structural Health Monitoring for Deepwater Risers: Experimental Study of Wavelet Modified SOBI and Distributed Force Index Algorithm. <i>International Journal of Structural Stability and Dynamics</i> , 2014 , 14, 1440010	1.9	8
103	"Smart Skin" optical strain sensor using single wall carbon nanotubes 2014 ,		3
102	Actuator and sensor failure detection using direct approach. <i>Structural Monitoring and Maintenance</i> , 2014 , 1, 213-230		1
101	Blind identification of damage in time-varying systems using independent component analysis with wavelet transform. <i>Mechanical Systems and Signal Processing</i> , 2014 , 47, 3-20	7.8	83
100	Experimental study on bridge structural health monitoring using blind source separation method: arch bridge. <i>Structural Monitoring and Maintenance</i> , 2014 , 1, 69-87		10
99	Smart tuned mass dampers: recent developments. <i>Smart Structures and Systems</i> , 2014 , 13, 173-176		8
98	A frequency tracking semi-active algorithm for control of edgewise vibrations in wind turbine blades. <i>Smart Structures and Systems</i> , 2014 , 13, 177-201		14

97	Adaptive-length pendulum smart tuned mass damper using shape-memory-alloy wire for tuning period in real time. <i>Smart Structures and Systems</i> , 2014 , 13, 203-217		17
96	Adaptive length SMA pendulum smart tuned mass damper performance in the presence of real time primary system stiffness change. <i>Smart Structures and Systems</i> , 2014 , 13, 219-233		14
95	Family of smart tuned mass dampers with variable frequency under harmonic excitations and ground motions: closed-form evaluation. <i>Smart Structures and Systems</i> , 2014 , 13, 319-341		32
94	Observer-based structural damage detection using genetic algorithm. <i>Structural Control and Health Monitoring</i> , 2013 , 20, 520-531	4.5	16
93	Time-Frequency Blind Source Separation Using Independent Component Analysis for Output-Only Modal Identification of Highly Damped Structures. <i>Journal of Structural Engineering</i> , 2013 , 139, 1780-1793	3	88
92	Attenuation of a linear oscillator using a nonlinear and a semi-active tuned mass damper in series. <i>Journal of Sound and Vibration</i> , 2013 , 332, 154-166	3.9	42
91	Hardening Duffing oscillator attenuation using a nonlinear TMD, a semi-active TMD and multiple TMD. <i>Journal of Sound and Vibration</i> , 2013 , 332, 674-686	3.9	32
90	Adaptive Negative Stiffness: New Structural Modification Approach for Seismic Protection. <i>Journal of Structural Engineering</i> , 2013 , 139, 1112-1123	3	132
89	Negative Stiffness Device for Seismic Protection of Structures. <i>Journal of Structural Engineering</i> , 2013 , 139, 1124-1133	3	161
88	Blind modal identification of output-only structures in time-domain based on complexity pursuit. <i>Earthquake Engineering and Structural Dynamics</i> , 2013 , 42, 1885-1905	4	60
87	Output-only modal identification with limited sensors using sparse component analysis. <i>Journal of Sound and Vibration</i> , 2013 , 332, 4741-4765	3.9	118
86	Nonlinear elastic and inelastic spectra with inherent and supplemental damping. <i>Earthquake Engineering and Structural Dynamics</i> , 2013 , 42, n/a-n/a	4	4
85	Adaptive Negative Stiffness: A New Structural Modification Approach for Seismic Protection. <i>Advanced Materials Research</i> , 2013 , 639-640, 54-66	0.5	13
84	Time-frequency methods for structural health monitoring of deepwater risers subjected to vortex induced vibrations 2013 ,		1
83	Strain paint: noncontact strain measurement using single-walled carbon nanotube composite coatings. <i>Nano Letters</i> , 2012 , 12, 3497-500	11.5	42
82	Semi-active vibration suppression of a space truss structure using a fault tolerant controller. <i>JVC/Journal of Vibration and Control</i> , 2012 , 18, 1436-1453	2	20
81	Direct adaptive neural controller for the active control of earthquake-excited nonlinear base-isolated buildings. <i>Structural Control and Health Monitoring</i> , 2012 , 19, 370-384	4.5	16
80	Fatigue Estimation in Deepwater Risers Based on Wavelets and Second Order Blind Identification 2012 ,		1

79	A New Structural Modification Approach for Seismic Protection Based on Adaptive Negative Stiffness Device: Conceptual Analysis 2011 ,		1
78	Control of flapwise vibrations in wind turbine blades using semi-active tuned mass dampers. <i>Structural Control and Health Monitoring</i> , 2011 , 18, 840-851	4.5	113
77	The strain sensing and thermal/mechanical behavior of flexible multi-walled carbon nanotube/polystyrene composite films. <i>Carbon</i> , 2011 , 49, 3928-3936	10.4	52
76	Real time detection of stiffness change using a radial basis function augmented observer formulation. <i>Smart Materials and Structures</i> , 2011 , 20, 035013	3.4	14
75	Semi-Active Algorithm for Edgewise Vibration Control in Floating Wind Turbine Blades 2010 ,		3
74	Multiscale Wavelet-LQR Controller for Linear Time Varying Systems. <i>Journal of Engineering Mechanics - ASCE</i> , 2010 , 136, 1143-1151	2.4	12
73	Fault-tolerant adaptive control of nonlinear base-isolated buildings using EMRAN. <i>Engineering Structures</i> , 2010 , 32, 2477-2487	4.7	23
72	Flexible piezoelectric ZnO-paper nanocomposite strain sensor. <i>Small</i> , 2010 , 6, 1641-6	11	281
71	Sensor Failure Detection Using Interaction Matrix Formulation 2010 , 199-210		
70	Optimal Offloading Configuration of Spread-Moored FPSOs. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 2009 , 131,	1.5	3
69	Variation of Supplemental Stiffness and Damping Using Adjustable Passive Fluid Spring and Damper in Scissor Jack System 2009 ,		1
68	Output only modal identification and structural damage detection using time frequency & wavelet techniques. <i>Earthquake Engineering and Engineering Vibration</i> , 2009 , 8, 583-605	2	154
67	Benchmark structural control problem for a seismically excited highway bridge Part III: Phase II Sample controller for the fully base-isolated case. <i>Structural Control and Health Monitoring</i> , 2009 , 16, 549-563	4.5	39
66	Benchmark structural control problem for a seismically excited highway bridge Part I: Phase I Problem definition. <i>Structural Control and Health Monitoring</i> , 2009 , 16, 509-529	4.5	63
65	Adaptive passive, semiactive, smart tuned mass dampers: identification and control using empirical mode decomposition, hilbert transform, and short-term fourier transform. <i>Structural Control and Health Monitoring</i> , 2009 , 16, 800-841	4.5	150
64	Strain sensing using a multiwalled carbon nanotube film. <i>Journal of Strain Analysis for Engineering Design</i> , 2009 , 44, 555-562	1.3	60
63	On-Line Learning Failure-Tolerant Neural-Aided Controller for Earthquake Excited Structures. <i>Journal of Engineering Mechanics - ASCE</i> , 2008 , 134, 258-268	2.4	8
62	Online Identification of Linear Time-varying Stiffness of Structural Systems by Wavelet Analysis. <i>Structural Health Monitoring</i> , 2008 , 7, 21-36	4.4	60

61	Current Directions of Structural Health Monitoring and Control in USA. <i>Advances in Science and Technology</i> , 2008 , 56, 277-286	0.1	12
60	Fault Tolerant Neural Aided Controller for Multi Degree of Freedom Structures Experiencing Online Sensor Failure. <i>Advances in Science and Technology</i> , 2008 , 56, 247-252	0.1	3
59	H_{∞} structural damage detection filter design using an iterative linear matrix inequality approach. <i>Smart Materials and Structures</i> , 2008 , 17, 035019	3.4	14
58	Non Linear System Identification of Offshore Floating Structures 2008 ,		1
57	Reconstructing structural changes in a dynamic system from experimentally identified state-space models. <i>Journal of Mechanical Science and Technology</i> , 2008 , 22, 103-112	1.6	18
56	Smart base-isolated benchmark building part IV: Phase II sample controllers for nonlinear isolation systems. <i>Structural Control and Health Monitoring</i> , 2008 , 15, 657-672	4.5	36
55	A wavelet-based time-varying adaptive LQR algorithm for structural control. <i>Engineering Structures</i> , 2008 , 30, 2470-2477	4.7	47
54	Structural damage detection using decentralized controller design method. <i>Smart Structures and Systems</i> , 2008 , 4, 779-794		17
53	Structures with Semiactive Variable Stiffness Single/Multiple Tuned Mass Dampers. <i>Journal of Structural Engineering</i> , 2007 , 133, 67-77	3	133
52	Seismic control of smart base isolated buildings with new semiactive variable damper. <i>Earthquake Engineering and Structural Dynamics</i> , 2007 , 36, 729-749	4	36
51	Linear-Matrix-Inequality-Based Robust Fault Detection and Isolation Using the Eigenstructure Assignment Method. <i>Journal of Guidance, Control, and Dynamics</i> , 2007 , 30, 1831-1835	2.1	31
50	Flexibility-based structural damage identification using Gauss-Newton method 2007 ,		3
49	Detecting Sensor Failure via Decoupled Error Function and Inverse Input/Output Model. <i>Journal of Engineering Mechanics - ASCE</i> , 2007 , 133, 1222-1228	2.4	32
48	OPTIMAL CONTROL OF STRUCTURES 2007 , 221-244		14
47	Seismic response control of smart sliding isolated buildings using variable stiffness systems: an experimental and numerical study. <i>Earthquake Engineering and Structural Dynamics</i> , 2006 , 35, 177-197	4	97
46	Smart base isolated buildings with variable friction systems: H_{∞} controller and SAIVF device. <i>Earthquake Engineering and Structural Dynamics</i> , 2006 , 35, 921-942	4	40
45	Semiactive Lyapunov Controller for Phase II Seismic Isolated Highway Bridge Benchmark 2006 , 1		3
44	Online Actuator Failure Detection Using Direct Approach 2006 , 1		

43	Benchmark Structural Control Problem for a Seismically Excited Highway Bridge 2006 , 1		6
42	Structural Health Monitoring using ARMarkov Observers. <i>Journal of Intelligent Material Systems and Structures</i> , 2006 , 17, 469-481	2.3	29
41	Sensor failure detection using interaction matrix formulation 2006 , 6174, 430		1
40	Smart base-isolated benchmark building. Part II: phase I sample controllers for linear isolation systems. <i>Structural Control and Health Monitoring</i> , 2006 , 13, 589-604	4.5	113
39	Structural control benchmark problem: smart base isolated building subjected to near fault earthquakes. <i>Structural Control and Health Monitoring</i> , 2006 , 13, 571-572	4.5	18
38	Smart base-isolated benchmark building. Part I: problem definition. <i>Structural Control and Health Monitoring</i> , 2006 , 13, 573-588	4.5	145
37	Nonlinear, seismic response spectra of smart sliding isolated structures with independently variable MR dampers and variable stiffness SAIVS system. <i>Structural Engineering and Mechanics</i> , 2006 , 24, 375-393		6
36	Experimental Study of Sliding Base-Isolated Buildings with Magnetorheological Dampers in Near-Fault Earthquakes. <i>Journal of Structural Engineering</i> , 2005 , 131, 1025-1034	3	55
35	Short time Fourier transform algorithm for wind response control of buildings with variable stiffness TMD. <i>Engineering Structures</i> , 2005 , 27, 431-441	4.7	152
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