Sungsik Yoon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2856402/publications.pdf

Version: 2024-02-01

		331670	330143
53	1,450	21	37
papers	citations	h-index	g-index

54	54	54	1358
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Broadband energy-harvesting using a two degree-of-freedom vibrating body. Applied Physics Letters, 2011, 98, .	3.3	172
2	Application of Crack Identification Techniques for an Aging Concrete Bridge Inspection Using an Unmanned Aerial Vehicle. Sensors, 2018, 18, 1881.	3.8	162
3	Characterization of actuation properties of magnetorheological elastomers with embedded hard magnetic particles. Journal of Intelligent Material Systems and Structures, 2012, 23, 1049-1054.	2.5	87
4	Application of MR Elastomers for Improving Seismic Protection of Base-Isolated Structures. IEEE Transactions on Magnetics, 2011, 47, 2901-2904.	2.1	67
5	Comparative Field Study of Cable Tension Measurement for a Cable-Stayed Bridge. Journal of Bridge Engineering, 2013, 18, 748-757.	2.9	67
6	Assessment of speckle-pattern quality in digital image correlation based on gray intensity and speckle morphology. Optics and Lasers in Engineering, 2017, 91, 62-72.	3.8	65
7	Modeling of Magneto-Rheological Elastomers for Harmonic Shear Deformation. IEEE Transactions on Magnetics, 2012, 48, 3080-3083.	2.1	62
8	Seismic Performance Analysis of A Smart Base-isolation System Considering Dynamics of MR Elastomers. Journal of Intelligent Material Systems and Structures, 2011, 22, 1439-1450.	2.5	60
9	A New Building-Integrated Wind Turbine System Utilizing the Building. Energies, 2015, 8, 11846-11870.	3.1	52
10	Feasibility Study on a New Energy Harvesting Electromagnetic Device Using Aerodynamic Instability. IEEE Transactions on Magnetics, 2009, 45, 4376-4379.	2.1	49
11	Feasibility Study of Micro-Wind Turbines for Powering Wireless Sensors on a Cable-Stayed Bridge. Energies, 2012, 5, 3450-3464.	3.1	40
12	Dynamic Characterization of Magneto-Rheological Elastomers in Shear Mode. IEEE Transactions on Magnetics, 2009, 45, 3930-3933.	2.1	39
13	Uniaxial/biaxial flexure strengths and elastic properties of resin-composite block materials for CAD/CAM. Dental Materials, 2019, 35, 389-401.	3.5	37
14	A tunable rotational energy harvester for low frequency vibration. Applied Physics Letters, 2011, 99, .	3.3	34
15	Feasibility Test of Adaptive Passive Control System Using MR Fluid Damper with Electromagnetic Induction Part. Journal of Engineering Mechanics - ASCE, 2010, 136, 254-259.	2.9	30
16	Seismic fragility analysis of a buried pipeline structure considering uncertainty of soil parameters. International Journal of Pressure Vessels and Piping, 2019, 175, 103932.	2.6	28
17	Instant bridge visual inspection using an unmanned aerial vehicle by image capturing and geo-tagging system and deep convolutional neural network. Structural Health Monitoring, 2021, 20, 1760-1777.	7.5	28
18	Traffic Safety Evaluation for Railway Bridges Using Expanded Multisensor Data Fusion. Computer-Aided Civil and Infrastructure Engineering, 2016, 31, 749-760.	9.8	26

#	Article	IF	Citations
19	Vibration mitigation of highway isolated bridge using MR damper-based smart passive control system employing an electromagnetic induction part. Structural Control and Health Monitoring, 2009, 16, 613-625.	4.0	23
20	A comprehensive framework for seismic risk assessment of urban water transmission networks. International Journal of Disaster Risk Reduction, 2018, 31, 983-994.	3.9	23
21	Investigation of Applicability of Electromagnetic Energy Harvesting System to Inclined Stay Cable Under Wind Load. IEEE Transactions on Magnetics, 2012, 48, 3478-3481.	2.1	22
22	Seismic protection of base-isolated building with nonlinear isolation system using smart passive control strategy. Structural Control and Health Monitoring, 2008, 15, 785-796.	4.0	21
23	Feasibility study on a hybrid mount system with air springs and piezo-stack actuators for microvibration control. Journal of Intelligent Material Systems and Structures, 2012, 23, 515-526.	2.5	20
24	Feasibility study of an adaptive mount system based on magnetorheological elastomer using real-time hybrid simulation. Journal of Intelligent Material Systems and Structures, 2019, 30, 701-707.	2.5	20
25	Multi-resonant energy harvester exploiting high-mode resonances frequency down-shifted by a flexible body beam. Applied Physics Letters, 2012, 101, .	3.3	18
26	Implementation of Modal Control for Seismically Excited Structures using Magnetorheological Dampers. Journal of Engineering Mechanics - ASCE, 2005, 131, 177-184.	2.9	17
27	Accelerated System-Level Seismic Risk Assessment of Bridge Transportation Networks through Artificial Neural Network-Based Surrogate Model. Applied Sciences (Switzerland), 2020, 10, 6476.	2.5	17
28	Digital image correlation in dental materials and related research: A review. Dental Materials, 2021, 37, 758-771.	3.5	16
29	Diagnosis of crack damage on structures based on image processing techniques and R-CNN using unmanned aerial vehicle (UAV). , 2018, , .		14
30	Renewable Energy Potential by the Application of a Building Integrated Photovoltaic and Wind Turbine System in Global Urban Areas. Energies, 2017, 10, 2158.	3.1	13
31	Sub-optimal design procedure of valve-mode magnetorheological fluid dampers for structural control. KSCE Journal of Civil Engineering, 2011, 15, 867-873.	1.9	11
32	Experimental Validation of Visually Servoed Paired Structured Light System (ViSP) for Structural Displacement Monitoring. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1603-1611.	5.8	11
33	Adaptive Markov chain Monte Carlo algorithms for Bayesian inference: recent advances and comparative study. Structure and Infrastructure Engineering, 2019, 15, 1548-1565.	3.7	10
34	Three-dimensional image coordinate-based missing region of interest area detection and damage localization for bridge visual inspection using unmanned aerial vehicles. Structural Health Monitoring, 2021, 20, 1462-1475.	7.5	10
35	Experimental Investigation on a Cable Structure Equipped with an Electrodynamic Damper and Its Monitoring Strategy through Energy Harvesting. Sensors, 2019, 19, 2631.	3.8	9
36	A novel approach to assess the seismic performance of deteriorated bridge structures by employing UAVâ€based damage detection. Structural Control and Health Monitoring, 2022, 29, .	4.0	9

#	Article	IF	Citations
37	Feasibility Study of the Electromagnetic Damper for Cable Structures Using Real-Time Hybrid Simulation. Sensors, 2017, 17, 2499.	3.8	8
38	Improving thermoelectric energy harvesting efficiency by using graphene. AIP Advances, 2016, 6, 055027.	1.3	7
39	Development of temperature-robust damage factor based on sensor fusion for a wind turbine structure. Frontiers of Structural and Civil Engineering, 2015, 9, 42-47.	2.9	5
40	An enhanced tunable rotational energy harvester with variable stiffness system for low-frequency vibration. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 732-736.	2.1	5
41	Flow-Based Optimal System Design of Urban Water Transmission Network under Seismic Conditions. Water Resources Management, 2020, 34, 1971-1990.	3.9	5
42	Design and Experimental Study of an L Shape Piezoelectric Energy Harvester. Shock and Vibration, 2017, 2017, 1-8.	0.6	4
43	Experimental Validation of Normalized Uniform Load Surface Curvature Method for Damage Localization. Sensors, 2015, 15, 26315-26330.	3.8	3
44	The Multiple-Update-Infill Sampling Method Using Minimum Energy Design for Sequential Surrogate Modeling. Applied Sciences (Switzerland), 2018, 8, 481.	2.5	3
45	Optimal decision making in post-hazard bridge recovery strategies for transportation networks after seismic events. Geomatics, Natural Hazards and Risk, 2021, 12, 2629-2653.	4.3	3
46	Performance enhancement of an MRE-based isolator using a multi-layered electromagnetic system. Smart Materials and Structures, 2022, 31, 015028.	3.5	3
47	A new damage quantification approach for shear-wall buildings using ambient vibration data. Frontiers of Structural and Civil Engineering, 2015, 9, 17-25.	2.9	2
48	Characteristic Test and Electromagnetic Analysis of Regenerative Hybrid Electrodynamic Damper for Vibration Mitigation and Monitoring of Stay Cables. Applied Sciences (Switzerland), 2020, 10, 6078.	2.5	2
49	Tunable yo-yo energy harvester with oblique springs. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 3185-3194.	2.1	2
50	Flow-based seismic risk assessment of a water transmission network employing probabilistic seismic hazard analysis. Natural Hazards, 2021, 105, 1231-1254.	3.4	2
51	Improvement of the Eigenvalue-Counting Method Based on the Argument Principle. Journal of Engineering Mechanics - ASCE, 2008, 134, 907-912.	2.9	0
52	PERFORMANCE EVALUATION OF AN MR DAMPER-BASED SEMIACTIVE CONTROL SYSTEM OPERATED BY AN ELECTROMAGNETIC INDUCTION DEVICE. , 2011, , .		0
53	Experimental investigation on the hysteretic dynamics of a regenerative hybrid electrodynamic cable damper. Structure and Infrastructure Engineering, 2024, 20, 407-420.	3.7	0