

Mustafa GÃ¼l

List of Publications by Year in descending order

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Version: 2024-02-01

73
papers

2,153
citations

257101

24
h-index

243296

44
g-index

73
all docs

73
docs citations

73
times ranked

1513
citing authors

#	ARTICLE	IF	CITATIONS
1	Statistical pattern recognition for Structural Health Monitoring using time series modeling: Theory and experimental verifications. <i>Mechanical Systems and Signal Processing</i> , 2009, 23, 2192-2204.	4.4	235
2	A cost effective solution for pavement crack inspection using cameras and deep neural networks. <i>Construction and Building Materials</i> , 2020, 256, 119397.	3.2	134
3	Structural health monitoring and damage assessment using a novel time series analysis methodology with sensor clustering. <i>Journal of Sound and Vibration</i> , 2011, 330, 1196-1210.	2.1	119
4	Indirect health monitoring of bridges using Mel-frequency cepstral coefficients and principal component analysis. <i>Mechanical Systems and Signal Processing</i> , 2019, 119, 523-546.	4.4	102
5	Densely connected deep neural network considering connectivity of pixels for automatic crack detection. <i>Automation in Construction</i> , 2020, 110, 103018.	4.8	90
6	Damage detection under varying temperature using artificial neural networks. <i>Structural Control and Health Monitoring</i> , 2017, 24, e1998.	1.9	78
7	Ambient Vibration Data Analysis for Structural Identification and Global Condition Assessment. <i>Journal of Engineering Mechanics - ASCE</i> , 2008, 134, 650-662.	1.6	76
8	Conceptual damage-sensitive features for structural health monitoring: Laboratory and field demonstrations. <i>Mechanical Systems and Signal Processing</i> , 2008, 22, 1650-1669.	4.4	74
9	Damage Assessment with Ambient Vibration Data Using a Novel Time Series Analysis Methodology. <i>Journal of Structural Engineering</i> , 2011, 137, 1518-1526.	1.7	73
10	Nonparametric analysis of structural health monitoring data for identification and localization of changes: Concept, lab, and real-life studies. <i>Structural Health Monitoring</i> , 2012, 11, 613-626.	4.3	67
11	Vibration-Based Structural Damage Identification under Varying Temperature Effects. <i>Journal of Aerospace Engineering</i> , 2018, 31, .	0.8	65
12	Automated finite element model updating of a scale bridge model using measured static and modal test data. <i>Engineering Structures</i> , 2015, 102, 66-79.	2.6	64
13	A crowdsourcing-based methodology using smartphones for bridge health monitoring. <i>Structural Health Monitoring</i> , 2019, 18, 1602-1619.	4.3	59
14	Monitoring building energy consumption, thermal performance, and indoor air quality in a cold climate region. <i>Sustainable Cities and Society</i> , 2014, 13, 57-68.	5.1	58
15	Vibration-Based Damage Detection of Bridges under Varying Temperature Effects Using Time-Series Analysis and Artificial Neural Networks. <i>Journal of Bridge Engineering</i> , 2017, 22, .	1.4	48
16	Criteria-based ranking of green building design factors according to leading rating systems. <i>Energy and Buildings</i> , 2018, 178, 347-359.	3.1	48
17	Optimisation of community shared solar application in energy efficient communities. <i>Sustainable Cities and Society</i> , 2018, 43, 221-237.	5.1	47
18	Multi-level feature fusion in densely connected deep-learning architecture and depth-first search for crack segmentation on images collected with smartphones. <i>Structural Health Monitoring</i> , 2020, 19, 1726-1744.	4.3	46

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19	Frequency Identification of Bridges Using Smartphones on Vehicles with Variable Features. Journal of Bridge Engineering, 2020, 25, .	1.4	31
20	Towards smart cities: crowdsensing-based monitoring of transportation infrastructure using in-traffic vehicles. Journal of Civil Structural Health Monitoring, 2020, 10, 653-665.	2.0	31
21	Bridge mode shape identification using moving vehicles at traffic speeds through nonâ€parametric sparse matrix completion. Structural Control and Health Monitoring, 2021, 28, e2747.	1.9	31
22	Stakeholder studies and the social networks of NetZero energy homes (NZEHs). Sustainable Cities and Society, 2018, 38, 9-17.	5.1	30
23	An improved physical demand analysis framework based on ergonomic risk assessment tools for the manufacturing industry. International Journal of Industrial Ergonomics, 2019, 70, 58-69.	1.5	29
24	Load-match-driven design of solar PV systems at high latitudes in the Northern hemisphere and its impact on the grid. Solar Energy, 2018, 173, 377-397.	2.9	27
25	An energy performance monitoring, analysis and modelling framework for NetZero Energy Homes (NZEHs). Energy and Buildings, 2016, 126, 353-364.	3.1	25
26	A framework for evaluating muscle activity during repetitive manual material handling in construction manufacturing. Automation in Construction, 2017, 79, 39-48.	4.8	25
27	Damage detection of steel girder railway bridges utilizing operational vibration response. Structural Control and Health Monitoring, 2019, 26, e2447.	1.9	24
28	Eliminating Temperature Effects in Damage Detection for Civil Infrastructure Using Time Series Analysis and Autoassociative Neural Networks. Journal of Aerospace Engineering, 2019, 32, .	0.8	24
29	Inverse Filtering for Frequency Identification of Bridges Using Smartphones in Passing Vehicles: Fundamental Developments and Laboratory Verifications. Sensors, 2020, 20, 1190.	2.1	22
30	Damage Detection of Steel-Truss Railway Bridges Using Operational Vibration Data. Journal of Structural Engineering, 2020, 146, .	1.7	22
31	Structural Damage Identification Under Temperature Variations Based on PSOâ€CS Hybrid Algorithm. International Journal of Structural Stability and Dynamics, 2019, 19, 1950139.	1.5	21
32	Investigation of tire derived aggregate as a fill material for highway embankment. International Journal of Geotechnical Engineering, 2014, 8, 182-190.	1.1	19
33	Structural Identification for Performance Prediction Considering Uncertainties: Case Study of a Movable Bridge. Journal of Structural Engineering, 2013, 139, 1703-1715.	1.7	18
34	Data-driven damage identification technique for steel truss railroad bridges utilizing principal component analysis of strain response. Structure and Infrastructure Engineering, 0, , 1-17.	2.0	17
35	Novel Framework for Vibration Serviceability Assessment of Stadium Grandstands Considering Durations of Vibrations. Journal of Structural Engineering, 2018, 144, .	1.7	16
36	Evidence-based ranking of green building design factors according to leading energy modelling tools. Sustainable Cities and Society, 2019, 47, 101491.	5.1	16

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37	Evaluation of the thermal and structural performance of potential energy efficient wall systems for mid-rise wood-frame buildings. <i>Energy and Buildings</i> , 2014, 82, 416-427.	3.1	14
38	Novel Sensor Clustering-Based Approach for Simultaneous Detection of Stiffness and Mass Changes Using Output-Only Data. <i>Journal of Structural Engineering</i> , 2015, 141, .	1.7	14
39	Predicting the energy production by solar photovoltaic systems in cold-climate regions. <i>International Journal of Sustainable Energy</i> , 2018, 37, 978-998.	1.3	14
40	A fixed-order time series model for damage detection and localization. <i>Journal of Civil Structural Health Monitoring</i> , 2016, 6, 763-777.	2.0	13
41	Energy performance and the discrepancy of multiple NetZero Energy Homes (NZEHS) in cold regions. <i>Journal of Cleaner Production</i> , 2018, 172, 106-118.	4.6	13
42	Multi-objective design of grid-tied solar photovoltaics for commercial flat rooftops using particle swarm optimization algorithm. <i>Journal of Building Engineering</i> , 2020, 28, 101080.	1.6	13
43	A Deep Learning and Computer Vision Based Multi-Player Tracker for Squash. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8793.	1.3	11
44	An Enhanced Inverse Filtering Methodology for Drive-By Frequency Identification of Bridges Using Smartphones in Real-Life Conditions. <i>Smart Cities</i> , 2021, 4, 499-513.	5.5	11
45	Critical issues, condition assessment and monitoring of heavy movable structures: emphasis on movable bridges. <i>Structure and Infrastructure Engineering</i> , 2014, 10, 261-276.	2.0	10
46	Evaluating the potential of a rolling deflection measurement system to estimate track modulus. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2018, 232, 14-24.	1.3	10
47	Damage detection framework for truss railway bridges utilizing statistical analysis of operational strain response. <i>Structural Control and Health Monitoring</i> , 2020, 27, e2573.	1.9	10
48	A framework to monitor the integrated multi-source space heating systems to improve the design of the control system. <i>Energy and Buildings</i> , 2014, 72, 398-410.	3.1	9
49	Estimation of vertical bending stress in rails using train-mounted vertical track deflection measurement systems. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2018, 232, 1528-1538.	1.3	9
50	Towards energy-Efficient homes: Evaluating the hygrothermal performance of different wall assemblies through long-term field monitoring. <i>Energy and Buildings</i> , 2016, 121, 43-56.	3.1	8
51	Energy-based target cost modelling for construction projects. <i>Journal of Building Engineering</i> , 2018, 20, 387-399.	1.6	7
52	Continuous Evaluation of Track Modulus from a Moving Railcar Using ANN-Based Techniques. <i>Vibration</i> , 2020, 3, 149-161.	0.9	7
53	Solar photovoltaic optimization for commercial flat rooftops in cold regions. , 2016, , .		6
54	Rapid and Automated Damage Detection in Buildings Through ARMAX Analysis of Wind Induced Vibrations. <i>Frontiers in Built Environment</i> , 2019, 5, .	1.2	6

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55	Development of a Novel Damage Detection Framework for Truss Railway Bridges Using Operational Acceleration and Strain Response. <i>Vibration</i> , 2021, 4, 422-443.	0.9	6
56	Framework for Mapping and Optimizing the Solar Rooftop Potential of Buildings in Urban Systems. <i>Energies</i> , 2022, 15, 1738.	1.6	6
57	A user-centric space heating energy management framework for multi-family residential facilities based on occupant pattern prediction modeling. <i>Building Simulation</i> , 2017, 10, 899-916.	3.0	5
58	Automated energy simulation and analysis for NetZero Energy Home (NZEH) design. <i>Building Simulation</i> , 2017, 10, 285-296.	3.0	5
59	Operational Vertical Bending Stresses in Rail: Real-Life Case Study. <i>Journal of Transportation Engineering Part A: Systems</i> , 2018, 144, 05017012.	0.8	5
60	Thermal resistance of multi-functional panels in cold-climate regions. <i>Journal of Building Engineering</i> , 2021, 33, 101838.	1.6	5
61	Structural damage detection under multiple stiffness and mass changes using time series models and adaptive zero-phase component analysis. <i>Structural Control and Health Monitoring</i> , 2020, 27, e2577.	1.9	4
62	Post-design system control for integrated space heating systems in residential buildings in cold regions. <i>Building and Environment</i> , 2015, 94, 313-324.	3.0	3
63	Quantifying live bending moments in rail using train-mounted vertical track deflection measurements and track modulus estimations. <i>Journal of Civil Structural Health Monitoring</i> , 2017, 7, 637-643.	2.0	3
64	Economy of residential photovoltaic generation and battery energy storage in Alberta, Canada. , 2017, , .		3
65	Load-match-driven design improvement of solar PV systems and its impact on the grid with a case study. , 2017, , .		3
66	Long-term performance and GHG emission offset analysis of small-scale grid-tied residential solar PV systems in northerly latitudes. <i>Advances in Building Energy Research</i> , 2020, , 1-22.	1.1	3
67	Estimations of Vertical Rail Bending Moments from Numerical Track Deflection Measurements Using Wavelet Analysis and Radial Basis Function Neural Networks. <i>Journal of Transportation Engineering Part A: Systems</i> , 2021, 147, .	0.8	2
68	A crowdsensing-based platform for transportation infrastructure monitoring and management in smart cities. , 2022, , 609-624.		2
69	Variations in the Postbuckling Behavior of Straight Pipes Due to Steel Grade and Internal Pressure. <i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2017, 139, .	0.4	1
70	Use of measured accelerations from a passenger rail car to evaluate ride quality and track roughness â€œ A case study. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 0, , 095440972110414.	1.3	1
71	Closure to â€œNovel Sensor Clusteringâ€-Based Approach for Simultaneous Detection of Stiffness and Mass Changes Using Output-Only Dataâ€-by Qipei Mei and Mustafa GÄ¼l. <i>Journal of Structural Engineering</i> , 2016, 142, 07015008.	1.7	0
72	Evaluating and Improving the Energy Performance of School Buildings with a Proposed Real-Time Monitoring System. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
73	ETX: A Flexible Simulation Framework for Design of Transactive Energy Systems. , 2019, , .		0