Zhiqiang Chen

List of Publications by Year
in descending order

58 papers	1,258 citations	566801 15 h-index	360668 35 g-index
59 all docs	59 docs citations	59 times ranked	1063 citing authors

#	Article	IF	Citations
1	Improved Image Analysis for Evaluating Concrete Damage. Journal of Computing in Civil Engineering, 2006, 20, 210-216.	2.5	190
2	Pixel-level crack delineation in images with convolutional feature fusion. Structural Control and Health Monitoring, 2019, 26, e2286.	1.9	130
3	Zernike–moment measurement of thin–crack width in images enabled by dual–scale deep learning. Computer-Aided Civil and Infrastructure Engineering, 2019, 34, 367-384.	6.3	105
4	Quantitative Identification of Near-Fault Pulse-Like Ground Motions Based on Energy. Bulletin of the Seismological Society of America, 2013, 103, 2591-2603.	1.1	101
5	Damage spectra for the mainshock–aftershock sequence-type ground motions. Soil Dynamics and Earthquake Engineering, 2013, 45, 1-12.	1.9	92
6	Seismic soil–foundation–structure interaction observed in geotechnical centrifuge experiments. Soil Dynamics and Earthquake Engineering, 2013, 48, 162-174.	1.9	80
7	The damage investigation of inelastic SDOF structure under the mainshock–aftershock sequence-type ground motions. Soil Dynamics and Earthquake Engineering, 2014, 59, 30-41.	1.9	80
8	Experimental and Finite Element Analytical Investigation of Seismic Behavior of Full-Scale Masonry Infilled RC Frames. Journal of Earthquake Engineering, 2016, 20, 1171-1198.	1.4	58
9	Nonlinear dynamic foundation and frame structure response observed in geotechnical centrifuge experiments. Soil Dynamics and Earthquake Engineering, 2013, 50, 117-133.	1.9	48
10	Image-Based Framework for Concrete Surface Crack Monitoring and Quantification. Advances in Civil Engineering, 2010, 2010, 1-18.	0.4	33
11	Optical techniques for multiscale damage assessment. Geomatics, Natural Hazards and Risk, 2013, 4, 49-70.	2.0	33
12	Lifecycle Multihazard Framework for Assessing Flood Scour and Earthquake Effects on Bridge Failure. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2016, 2, .	1.1	26
13	Dynamic performance and damage evaluation of a scoured double-pylon cable-stayed bridge under ship impact. Engineering Structures, 2020, 216, 110772.	2.6	26
14	Collaborative Mobile-Cloud Computing for Civil Infrastructure Condition Inspection. Journal of Computing in Civil Engineering, 2015, 29, .	2.5	18
15	Urban Damage Estimation Using Statistical Processing of Satellite Images. Journal of Computing in Civil Engineering, 2007, 21, 187-199.	2.5	17
16	Development of Radio-Frequency Sensor Wake-Up with Unmanned Aerial Vehicles as an Aerial Gateway. Sensors, 2019, 19, 1047.	2.1	15
17	Probabilistic Urban Structural Damage Classification Using Bitemporal Satellite Images. Earthquake Spectra, 2010, 26, 87-109.	1.6	14
18	Scale–Space Data Augmentation for Deep Transfer Learning of Crack Damage from Small Sized Datasets. Journal of Nondestructive Evaluation, 2020, 39, 1.	1.1	14

#	Article	IF	Citations
19	Scour-dependent empirical fragility modelling of bridge structures under earthquakes. Advances in Structural Engineering, 2019, 22, 1384-1398.	1.2	12
20	Optimized Estimated Ground Truth for Object-Based Urban Damage Estimation Using Satellite Images from the 2003 Bam, Iran, Earthquake. Earthquake Spectra, 2005, 21, 239-254.	1.6	11
21	Seismic System Identification Using Centrifuge-based Soil-Structure Interaction Test Data. Journal of Earthquake Engineering, 2013, 17, 469-496.	1.4	11
22	Dimensional Analysis of the Pounding Response of an Oscillator Considering Contact Duration. Journal of Engineering Mechanics - ASCE, 2015, 141, .	1.6	11
23	Probabilistic Resilience Measurement for Rural Electric Distribution System Affected by Hurricane Events. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2020, 6, 04020021.	1.1	11
24	Development of Tactile Imaging for Underwater Structural Damage Detection. Sensors, 2019, 19, 3925.	2.1	9
25	Lifetime Resilience Measurement of River-Crossing Bridges with Scour Countermeasures under Multiple Hazards. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	9
26	A texture-based method for classifying cracked concrete surfaces from digital images using neural networks. , 2011, , .		8
27	Experimental and numerical assessment of scoured bridges with protective bonded steel plates against vessel impact. Engineering Structures, 2022, 252, 113628.	2.6	8
28	Structural damage detection using bi-temporal optical satellite images. International Journal of Remote Sensing, 2011, 32, 4973-4997.	1.3	7
29	Nonlinear Dynamic Response and Assessment of Bridges under Barge Impact with Scour Depth Effects. Journal of Performance of Constructed Facilities, 2020, 34, .	1.0	7
30	Deep learning-based condition assessment for bridge elastomeric bearings. Journal of Civil Structural Health Monitoring, 2022, 12, 245-261.	2.0	7
31	Urban damage estimation using statistical processing of satellite images: 2003 Bam, Iran earthquake. , 2005, 5667, 289.		6
32	Mobile Imaging and Computing for Intelligent Structural Damage Inspection. Advances in Civil Engineering, 2014, 2014, 1-14.	0.4	5
33	Experimental investigation of aerialâ€"ground network communication towards geospatially large-scale structural health monitoring. Journal of Civil Structural Health Monitoring, 2018, 8, 823-832.	2.0	5
34	Mobile Hyperspectral Imaging for Material Surface Damage Detection. Journal of Computing in Civil Engineering, 2021, 35, .	2.5	5
35	Understanding Natural Disaster Scenes from Mobile Images Using Deep Learning. Applied Sciences (Switzerland), 2021, 11, 3952.	1.3	5
36	Geometric Attention Regularization Enhancing Convolutional Neural Networks for Bridge Rubber Bearing Damage Assessment. Journal of Performance of Constructed Facilities, 2021, 35, .	1.0	5

#	Article	IF	Citations
37	SAVEUS: SAving Victims in Earthquakes through Unified Systems. International Journal of Communication Networks and Distributed Systems, 2013, 10, 402.	0.3	4
38	Probabilistic Representation of Structural Integrity of Urban Buildings in Remotely Sensed Images. , 2008, , .		3
39	Failure Risk of 230 kV Electricity Transmission Lines in South Carolina under Hurricane Wind Hazards. , 2012, , .		3
40	Multi-Hazard Life-Cycle Analysis of Flood-Scour Effects on Seismic Bridge Performance. , 2015, , .		3
41	Mainshock-Integrated Aftershock Vulnerability Assessment of Bridge Structures. Applied Sciences (Switzerland), 2020, 10, 6843.	1.3	3
42	Level-of-detail Assessment of Structural Surface Damage using Spatially Sequential Stereo Images and Deep Learning Methods. , 0, , .		3
43	Application of PDE methods for image-based concrete surface damage detection. , 2007, , .		2
44	A Probabilistic Classification Framework for Urban Structural Damage Estimation Using Satellite Images. , 2007, , .		2
45	Image-based monitoring of structural damage: concrete surface cracks. , 2008, , .		2
46	Spatial Path–Energy Optimization for UAV Operation in Arial–Ground Networking. Journal of Computing in Civil Engineering, 2020, 34, 04020008.	2.5	2
47	Lifetime Resilience Migration Quantification Using Nonparametric Distance Metrics and Application for River-Crossing Bridges. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	2
48	Empirical evaluation of dissimilarity measures for use in urban structural damage detection. , 2007, , .		1
49	Effects of Foundation Configuration Variation on Seismic Response of Moment-Frame Buildings. , 2010, , .		1
50	Seismic Spectra and Response Analysis for Raised Access Floor and Computer Equipment Systems Considering Vertical Ground Motions. , 2012, , .		1
51	A dimension splitting and characteristic projection method for three-dimensional incompressible flow. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 127-147.	0.5	1
52	A Virtual Reality Environment for Developing and Testing Autonomous UAV-Based Structural Inspection. Lecture Notes in Civil Engineering, 2023, , 527-535.	0.3	1
53	Collaborative mobile sensing and computing for civil infrastructure condition assessment: framework and applications. Proceedings of SPIE, 2012, , .	0.8	0
54	1-g Scale Hydraulic Flume-based Soil-Fluid-Structure Model Testing and Evaluation of Surging and Scouring Effects. , 2013, , .		0

#	Article	IF	Citations
55	Multi-Hazard Assessment of Seismic and Scour Effects on Rural Bridges with Unknown Foundations. , 2019, , .		0
56	Spectral Quality Evaluation of Reconstructed Hyperspectral Images. , 2021, , .		0
57	Deep Metric Learning for Damage Detection Using Bitemporal Satellite Images. , 2021, , .		0
58	Roles of Remote Sensing Technologies for Disaster Resilience. , 2022, , 121-159.		0