Quan Gu

List of Publications by Year in Descending Order

38 papers	244 citations	8 h-index	14 g-index
44 ext. papers	348 ext. citations	2.9 avg, IF	3.48 L-index

#	Paper	IF	Citations
38	Machine Learning-Based Hysteretic Lateral Force-Displacement Models of Reinforced Concrete Columns. *Journal of Structural Engineering*, **2022**, 148,	3	2
37	An Effective Tangent Stiffness of Train-Track-Bridge Systems Based on Artificial Neural Network. *Applied Sciences (Switzerland)*, **2022**, 12, 2735	2.6	1
36	Seismic Analysis of 10 MW Offshore Wind Turbine with Large-Diameter Monopile in Consideration of Seabed Liquefaction. *Energies*, **2022**, 15, 2539	3.1	0
35	Simulation of highly nonlinear materials based on a stabilized non-ordinary state-based peridynamic model. *Soil Dynamics and Earthquake Engineering*, **2022**, 157, 107250	3.5	
34	Accurate Response Sensitivity Analysis of a Thermomechanical Constitutive Model for Superelastic SMAs. *Journal of Engineering Mechanics - ASCE*, **2021**, 147, 04021026	2.4	1
33	Seismic performance of bridges with ECC-reinforced piers. *Soil Dynamics and Earthquake Engineering*, **2021**, 146, 106753	3.5	4
32	Efficient Simulation of RC Shear Walls in High-Rise Buildings Using a Practical Multi-Cross-Line-Model. *Journal of Earthquake Engineering*, **2021**, 25, 1732-1761	1.8	0
31	A practical method for seismic response analysis of nonlinear soil-structure interaction systems. *Advances in Structural Engineering*, **2021**, 24, 2131-2147	1.9	
30	A practical bond-based peridynamic modeling of reinforced concrete structures. *Engineering Structures*, **2021**, 244, 112748	4.7	2
29	A practical three-dimensional wheel-rail interaction element for dynamic response analysis of vehicle-track systems. *Computers and Structures*, **2021**, 254, 106581	4.5	7
28	Response sensitivity studies of a cable-stayed bridge with shape memory alloy damping system considering temperature effects. *Engineering Structures*, **2021**, 244, 112772	4.7	3
27	Numerical Algorithms for Calculating Temperature, Layered Stress, and Critical Current of Overhead Conductors. *Mathematical Problems in Engineering*, **2020**, 2020, 1-14	1.1	0
26	A Modified Numerical Substructure Method for Dynamic Analysis of Vehicle-Track-Bridge Systems. *International Journal of Structural Stability and Dynamics*, **2020**, 20, 2050134	1.9	3
25	Integration of Peridynamic Theory and OpenSees for Solving Problems in Civil Engineering. *CMES - Computer Modeling in Engineering and Sciences*, **2019**, 120, 471-489	1.7	3
24	Multi-scale response sensitivity analysis based on direct differentiation method for concrete structures. *Composites Part B: Engineering*, **2019**, 157, 295-304	10	5
23	A Practical Wheel-Rail Interaction Element for Modeling Vehicle-Track-Bridge Systems. *International Journal of Structural Stability and Dynamics*, **2019**, 19, 1950011	1.9	18
22	Refined dynamic progressive collapse analysis of RC structures. *Bulletin of Earthquake Engineering*, **2018**, 16, 1293-1322	3.7	7

21	Finite element response sensitivity analysis of three-dimensional soil-foundation-structure interaction (SFSI) systems. *Earthquake Engineering and Engineering Vibration*, **2018**, 17, 555-566	2	5
20	Response sensitivity analysis for plastic plane problems based on direct differentiation method. *Computers and Structures*, **2017**, 182, 392-403	4.5	6
19	A practical numerical substructure method for seismic nonlinear analysis of tall building structures. *Structural Design of Tall and Special Buildings*, **2017**, 26, e1377	1.8	6
18	Seismic Response Sensitivity Analysis of Coupled Dam-Reservoir-Foundation Systems. *Journal of Engineering Mechanics - ASCE*, **2016**, 142, 04016070	2.4	6
17	Parameters affecting laterally loaded piles in frozen soils by an efficient sensitivity analysis method. *Cold Regions Science and Technology*, **2016**, 121, 42-51	3.8	13
16	A modified multi-yield-surface plasticity model: Sequential closest point projection method. *Computers and Geotechnics*, **2015**, 69, 378-395	4.4	3
15	A practical and efficient coupling method for large scale soil–structure interaction problems. *Soil Dynamics and Earthquake Engineering*, **2015**, 76, 44-57	3.5	2
14	Effect of buckling-restrained brace model parameters on seismic structural response. *Journal of Constructional Steel Research*, **2014**, 98, 100-113	3.8	31
13	Performance Assessment of a Concrete Gravity Dam at Shenwo Reservoir of China Using Deterministic and Probabilistic Methods. *International Journal of Structural Stability and Dynamics*, **2014**, 14, 1440002	1.9	3
12	Development of Collaborative Structure Analysis (CSA) System and Its Application to Investigate Effects of Soil-Structure Interaction. *Journal of Earthquake Engineering*, **2014**, 18, 1151-1169	1.8	
11	Performance and Risk Assessment of Soil-Structure Interaction Systems Based on Finite Element Reliability Methods. *Mathematical Problems in Engineering*, **2014**, 2014, 1-16	1.1	4
10	Direct differentiation method for response sensitivity analysis of a bounding surface plasticity soil model. *Soil Dynamics and Earthquake Engineering*, **2013**, 49, 135-145	3.5	10
9	OpenSees-SNOPT Framework for Finite-Element-Based Optimization of Structural and Geotechnical Systems. *Journal of Structural Engineering*, **2012**, 138, 822-834	3	19
8	Integrating OpenSees with other software - with application to coupling problems in civil engineering. *Structural Engineering and Mechanics*, **2011**, 40, 85-103		12
7	New Multidimensional Visualization Technique for Limit-State Surfaces in Nonlinear Finite-Element Reliability Analysis. *Journal of Engineering Mechanics - ASCE*, **2010**, 136, 1390-1400	2.4	6
6	Finite element response sensitivity analysis of multi-yield-surface J2 plasticity model by direct differentiation method. *Computer Methods in Applied Mechanics and Engineering*, **2009**, 198, 2272-2285	5.7	30
5	Handling of Constraints in Finite-Element Response Sensitivity Analysis. *Journal of Engineering Mechanics - ASCE*, **2009**, 135, 1427-1438	2.4	26
4	Extension of the DP-RS-Sim Hybrid Method to Time-Variant Structural Reliability Analysis. *AIP Conference Proceedings*, **2008**,	0	1

3	Consistent Tangent Stiffness of a Three-Dimensional Wheel–Rail Interaction Element. *International Journal of Structural Stability and Dynamics*,	1.9	3
2	Moving Safety Evaluation of High-speed Train on Post-earthquake Bridge Utilizing Real-time Hybrid Simulation. *Journal of Earthquake Engineering*,1-30	1.8	0
1	A novel machine learning based tangent stiffness calculation method for 3D wheel-rail interaction element. *Advances in Structural Engineering*,136943322210843	1.9	0