Quan Gu

List of Publications by Year
in descending order

41 papers	442 citations	759055 12 h-index	794469 19 g-index
44 all docs	44 docs citations	44 times ranked	278 citing authors

#	Article	IF	Citations
1	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.	3.4	58
2	Effect of buckling-restrained brace model parameters on seismic structural response. Journal of Constructional Steel Research, 2014, 98, 100-113.	1.7	37
3	Handling of Constraints in Finite-Element Response Sensitivity Analysis. Journal of Engineering Mechanics - ASCE, 2009, 135, 1427-1438.	1.6	30
4	OpenSees-SNOPT Framework for Finite-Element-Based Optimization of Structural and Geotechnical Systems. Journal of Structural Engineering, 2012, 138, 822-834.	1.7	25
5	A Practical Wheel-Rail Interaction Element for Modeling Vehicle-Track-Bridge Systems. International Journal of Structural Stability and Dynamics, 2019, 19, 1950011.	1.5	23
6	A practical bond-based peridynamic modeling of reinforced concrete structures. Engineering Structures, 2021, 244, 112748.	2.6	23
7	Machine Learning–Based Hysteretic Lateral Force-Displacement Models of Reinforced Concrete Columns. Journal of Structural Engineering, 2022, 148, .	1.7	21
8	A practical numerical substructure method for seismic nonlinear analysis of tall building structures. Structural Design of Tall and Special Buildings, 2017, 26, e1377.	0.9	18
9	Integrating OpenSees with other software - with application to coupling problems in civil engineering. Structural Engineering and Mechanics, 2011, 40, 85-103.	1.0	17
10	Parameters affecting laterally loaded piles in frozen soils by an efficient sensitivity analysis method. Cold Regions Science and Technology, 2016, 121, 42-51.	1.6	16
11	Response sensitivity analysis for plastic plane problems based on direct differentiation method. Computers and Structures, 2017, 182, 392-403.	2.4	14
12	Direct differentiation method for response sensitivity analysis of a bounding surface plasticity soil model. Soil Dynamics and Earthquake Engineering, 2013, 49, 135-145.	1.9	13
13	Refined dynamic progressive collapse analysis of RC structures. Bulletin of Earthquake Engineering, 2018, 16, 1293-1322.	2.3	12
14	Seismic performance of bridges with ECC-reinforced piers. Soil Dynamics and Earthquake Engineering, 2021, 146, 106753.	1.9	12
15	A practical three-dimensional wheel-rail interaction element for dynamic response analysis of vehicle-track systems. Computers and Structures, 2021, 254, 106581.	2.4	11
16	Multi-scale response sensitivity analysis based on direct differentiation method for concrete structures. Composites Part B: Engineering, 2019, 157, 295-304.	5.9	10
17	Finite element response sensitivity analysis of three-dimensional soil-foundation-structure interaction (SFSI) systems. Earthquake Engineering and Engineering Vibration, 2018, 17, 555-566.	1.1	9
18	Response sensitivity studies of a cable-stayed bridge with shape memory alloy damping system considering temperature effects. Engineering Structures, 2021, 244, 112772.	2.6	9

#	Article	IF	Citations
19	New Multidimensional Visualization Technique for Limit-State Surfaces in Nonlinear Finite-Element Reliability Analysis. Journal of Engineering Mechanics - ASCE, 2010, 136, 1390-1400.	1.6	8
20	Seismic Response Sensitivity Analysis of Coupled Dam-Reservoir-Foundation Systems. Journal of Engineering Mechanics - ASCE, 2016, 142, .	1.6	8
21	Seismic Analysis of 10 MW Offshore Wind Turbine with Large-Diameter Monopile in Consideration of Seabed Liquefaction. Energies, 2022, 15, 2539.	1.6	8
22	Moving Safety Evaluation of High-speed Train on Post-earthquake Bridge Utilizing Real-time Hybrid Simulation. Journal of Earthquake Engineering, 2023, 27, 284-313.	1.4	7
23	A Modified Numerical Substructure Method for Dynamic Analysis of Vehicle–Track–Bridge Systems. International Journal of Structural Stability and Dynamics, 2020, 20, 2050134.	1.5	6
24	A modified multi-yield-surface plasticity model: Sequential closest point projection method. Computers and Geotechnics, 2015, 69, 378-395.	2.3	5
25	Performance and Risk Assessment of Soil-Structure Interaction Systems Based on Finite Element Reliability Methods. Mathematical Problems in Engineering, 2014, 2014, 1-16.	0.6	4
26	A practical and efficient coupling method for large scale soil–structure interaction problems. Soil Dynamics and Earthquake Engineering, 2015, 76, 44-57.	1.9	4
27	Consistent Tangent Stiffness of a Three-Dimensional Wheel–Rail Interaction Element. International Journal of Structural Stability and Dynamics, 0, , .	1.5	4
28	An Effective Tangent Stiffness of Train–Track–Bridge Systems Based on Artificial Neural Network. Applied Sciences (Switzerland), 2022, 12, 2735.	1.3	4
29	A Novel Moving Load Integration Method for Real-Time Hybrid Shaking Table Test of High-Speed Maglev Vehicle–Bridge Interaction System. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	4
30	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.	1.5	3
31	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.	1.4	3
32	Integration of Peridynamic Theory and OpenSees for Solving Problems in Civil Engineering. CMES - Computer Modeling in Engineering and Sciences, 2019, 120, 471-489.	0.8	3
33	A Practical Stress Correction Method for Improving Stability of State-Based Peridynamics Based on Stress Equilibrium Equation. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	3
34	Simulation of highly nonlinear materials based on a stabilized non-ordinary state-based peridynamic model. Soil Dynamics and Earthquake Engineering, 2022, 157, 107250.	1.9	3
35	Extension of the DP-RS-Sim Hybrid Method to Time-Variant Structural Reliability Analysis. AIP Conference Proceedings, 2008, , .	0.3	1
36	Numerical Algorithms for Calculating Temperature, Layered Stress, and Critical Current of Overhead Conductors. Mathematical Problems in Engineering, 2020, 2020, 1-14.	0.6	1

#	Article	IF	Citations
37	A practical method for seismic response analysis of nonlinear soil-structure interaction systems. Advances in Structural Engineering, 2021, 24, 2131-2147.	1.2	1
38	Accurate Response Sensitivity Analysis of a Thermomechanical Constitutive Model for Superelastic SMAs. Journal of Engineering Mechanics - ASCE, 2021, 147, 04021026.	1.6	1
39	A novel machine learning based tangent stiffness calculation method for 3D wheel-rail interaction element. Advances in Structural Engineering, 2022, 25, 2043-2057.	1.2	1
40	Refined Simulation of Cracked Reinforced Concrete Beams Based on Enhanced Bond-Based Peridynamics. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	1
41	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.	1.4	0