Zhigang Cao

List of Publications by Year
in descending order

31 papers	624 citations	516710 16 h-index	610901 24 g-index
31 all docs	31 docs citations	31 times ranked	352 citing authors

#	Article	IF	Citations
1	Prediction of Soil–Water Retention Curves of Road Base Aggregate with Various Clay Fine Contents. Applied Sciences (Switzerland), 2022, 12, 3624.	2.5	3
2	Experimental investigation into the shakedown state of unsaturated road base aggregate at various fine contents and matric suctions. Engineering Geology, 2022, 306, 106744.	6.3	2
3	Solution of the Ultimate Bearing Capacity at the Tip of a Pile in Anisotropic Discontinuous Rock Mass Based on the Hoek–Brown Criterion. International Journal of Geomechanics, 2021, 21, .	2.7	5
4	Real-time monitoring for road-base quality with the aid of buried piezoelectric sensors. Journal of Intelligent Material Systems and Structures, 2021, 32, 2231-2243.	2.5	5
5	A constitutive model for the accumulated strain of unsaturated soil under high-cycle traffic loading. International Journal for Numerical and Analytical Methods in Geomechanics, 2021, 45, 990-1004.	3.3	7
6	Analytical layer element with a circular cavity and its application in predicting ground vibrations from surface and underground moving sources. Computers and Geotechnics, 2021, 137, 104262.	4.7	6
7	Experimental study on particle breakage of carbonate gravels under cyclic loadings through large-scale triaxial tests. Transportation Geotechnics, 2021, 30, 100632.	4.5	22
8	Resilient behavior of coarse granular materials in three-dimensional stress state. Canadian Geotechnical Journal, 2020, 57, 1280-1293.	2.8	15
9	Solution of the ultimate bearing capacity at the tip of a pile in inclined rocks based on the Hoek-Brown criterion. International Journal of Rock Mechanics and Minings Sciences, 2020, 125, 104140.	5.8	7
10	Resilient behavior of coarse granular materials in three dimensional anisotropic stress state. Engineering Geology, 2020, 279, 105848.	6.3	12
11	The effects of suction history on the cyclic behavior of unsaturated road base filling materials. Engineering Geology, 2020, 276, 105775.	6.3	8
12	Resilient and permanent deformation of unsaturated unbound granular materials under cyclic loading by the large-scale triaxial tests. Acta Geotechnica, 2020, 15, 3343-3356.	5.7	28
13	Nonstationary vibration responses of a three-dimensional tunnel-soil system excited by moving stochastic loads. Computers and Geotechnics, 2020, 125, 103658.	4.7	6
14	The wave function method for calculation of vibrations from a twin tunnel in a multi-layered half-space. Soil Dynamics and Earthquake Engineering, 2019, 125, 105716.	3.8	14
15	An analytical solution to investigate the dynamic impact of a moving surface load on a shallowly-buried tunnel. Soil Dynamics and Earthquake Engineering, 2019, 126, 105816.	3.8	6
16	Analytical wave function method for modelling a twin tunnel embedded in a saturated poroelastic full-space. Computers and Geotechnics, 2019, 114, 103114.	4.7	7
17	Analytical solution for calculating vibrations from twin circular tunnels. Soil Dynamics and Earthquake Engineering, 2019, 117, 312-327.	3.8	28
18	The influence of pore-fluid in the soil on ground vibrations from a tunnel embedded in a layered half-space. Journal of Sound and Vibration, 2018, 419, 227-248.	3.9	23

#	Article	IF	Citations
19	Influence of Grain Gradation on Permanent Strain of Unbound Granular Materials under Low Confining Pressure and High-Cycle Loading. International Journal of Geomechanics, 2018, 18, .	2.7	32
20	A combined method to predict the long-term settlements of roads on soft soil under cyclic traffic loadings. Acta Geotechnica, 2018, 13, 1215-1226.	5.7	26
21	Numerical analysis and comparison of soil freezing schemes for replacement of shield tail brush in long-distance tunnel engineering. European Journal of Environmental and Civil Engineering, 2018, 22, s316-s332.	2.1	4
22	Long-term behavior of clay-fouled unbound granular materials subjected to cyclic loadings with different frequencies. Engineering Geology, 2018, 243, 118-127.	6.3	53
23	Long term cyclic behavior of unsaturated granular soils. Transportation Geotechnics, 2018, 17, 48-55.	4.5	24
24	Effects of moisture content on the cyclic behavior of crushed tuff aggregates by large-scale tri-axial test. Soil Dynamics and Earthquake Engineering, 2017, 95, 1-8.	3.8	48
25	Closed-Form Analytical Solution for Vibrations from a Tunnel Embedded in a Saturated Poroelastic Half-Space. Journal of Engineering Mechanics - ASCE, 2017, 143, .	2.9	25
26	An analytical model for vibration prediction of a tunnel embedded in a saturated full-space to a harmonic point load. Soil Dynamics and Earthquake Engineering, 2016, 86, 25-40.	3.8	25
27	Road surface permanent deformations with a shallowly buried steel-reinforced high-density polyethylene pipe under cyclic loading. Geotextiles and Geomembranes, 2016, 44, 28-38.	4.6	17
28	Dynamic response of a tunnel buried in a saturated poroelastic soil layer to a moving point load. Soil Dynamics and Earthquake Engineering, 2015, 77, 348-359.	3.8	34
29	Dynamic responses of a saturated poroelastic half-space generated by a moving truck on the uneven pavement. Soil Dynamics and Earthquake Engineering, 2015, 69, 172-181.	3.8	32
30	Effects of the dynamic wheel–rail interaction on the ground vibration generated by a moving train. International Journal of Solids and Structures, 2010, 47, 2246-2259.	2.7	43
31	Dynamic response of pavements on poroelastic half-space soil medium to a moving traffic load. Computers and Geotechnics, 2009, 36, 52-60.	4.7	57