Zhong-xian Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8864613/publications.pdf

Version: 2024-02-01

64 papers	1,028 citations	430874 18 h-index	477307 29 g-index
65 all docs	65 docs citations	65 times ranked	369 citing authors

#	Article	IF	Citations
1	Experimental and numerical studies of ultra-high performance concrete targets against high-velocity projectile impacts. Engineering Structures, 2018, 173, 166-179.	5.3	98
2	Experimental investigation of seismic behavior of ultra-high performance steel fiber reinforced concrete columns. Engineering Structures, 2017, 152, 129-148.	5.3	62
3	Mechanical anisotropy of ultra-high performance fibre-reinforced concrete for 3D printing. Cement and Concrete Composites, 2022, 125, 104310.	10.7	54
4	The scattering of plane P, SV waves by twin lining tunnels with imperfect interfaces embedded in an elastic half-space. Tunnelling and Underground Space Technology, 2019, 85, 319-330.	6.2	53
5	Development and preliminary mix design of ultra-high-performance concrete based on geopolymer. Construction and Building Materials, 2021, 308, 125110.	7.2	43
6	The indirect boundary integral equation method for the broadband scattering of plane P, SV and Rayleigh waves by a hill topography. Engineering Analysis With Boundary Elements, 2019, 98, 184-202.	3.7	41
7	Diffraction of plane SV waves by a cavity in poroelastic half-space. Earthquake Engineering and Engineering Vibration, 2009, 8, 29-46.	2.3	37
8	Experimental investigation on the cyclic behaviors of ultra-high-performance steel fiber reinforced concrete filled thin-walled steel tubular columns. Thin-Walled Structures, 2019, 140, 1-20.	5.3	37
9	Scattering of plane P 1 waves and dynamic stress concentration by a lined tunnel in a fluid-saturated poroelastic half-space. Tunnelling and Underground Space Technology, 2017, 67, 71-84.	6.2	35
10	An indirect boundary element method to model the 3-D scattering of elastic waves in a fluid-saturated poroelastic half-space. Engineering Analysis With Boundary Elements, 2016, 66, 91-108.	3.7	32
11	A three-dimensional indirect boundary integral equation method for the scattering of seismic waves in a poroelastic layered half-space. Engineering Analysis With Boundary Elements, 2022, 135, 167-181.	3.7	28
12	IBIEM modelling of the amplification of seismic waves by a three-dimensional layered alluvial basin. Geophysical Journal International, 2016, 204, 999-1023.	2.4	26
13	Experimental investigation on the dynamic behaviors of UHPFRC after exposure to high temperature. Construction and Building Materials, 2019, 227, 116679.	7.2	26
14	The multi-domain FMM-IBEM to model elastic wave scattering by three-dimensional inclusions in infinite domain. Engineering Analysis With Boundary Elements, 2015, 60, 95-105.	3.7	25
15	A three-dimensional indirect boundary integral equation method for modeling elastic wave scattering in a layered half-space. International Journal of Solids and Structures, 2019, 169, 81-94.	2.7	22
16	Protective effect of unbonded prestressed ultra-high performance reinforced concrete slab against gas explosion in buried utility tunnel. Chemical Engineering Research and Design, 2021, 149, 370-384.	5.6	22
17	Wave function expansion method for the scattering of SH waves by two symmetrical circular cavities in two bonded exponentially graded half spaces. Engineering Analysis With Boundary Elements, 2019, 106, 389-396.	3.7	21
18	The IBIEM Solution to the Scattering of Plane SV Waves around a Canyon in Saturated Poroelastic Half-Space. Journal of Earthquake Engineering, 2015, 19, 956-977.	2.5	20

#	Article	IF	Citations
19	Finite element analysis of cyclic lateral responses for large diameter monopiles in clays under different loading patterns. Computers and Geotechnics, 2021, 134, 104104.	4.7	20
20	Dynamic Green×³s function for a three-dimensional concentrated load in the interior of a poroelastic layered half-space using a modified stiffness matrix method. Engineering Analysis With Boundary Elements, 2015, 60, 51-66.	3.7	18
21	The fast multi-pole indirect BEM for solving high-frequency seismic wave scattering by three-dimensional superficial irregularities. Engineering Analysis With Boundary Elements, 2018, 90, 86-99.	3.7	17
22	Calibration of CSCM model for numerical modeling of UHPCFTWST columns against monotonic lateral loading. Engineering Structures, 2021, 240, 112396.	5.3	17
23	Comparative study on square and rectangular UHPFRC-Filled steel tubular (CFST) columns under axial compression. Structures, 2021, 34, 2054-2068.	3.6	17
24	Diffraction of plane P waves by a canyon of arbitrary shape in poroelastic half-space (I): Formulation. Earthquake Science, 2009, 22, 215-222.	0.9	16
25	Two-dimensional FM-IBEM solution to the broadband scattering of elastic waves in a fluid-saturated poroelastic half-space. Engineering Analysis With Boundary Elements, 2019, 104, 300-319.	3.7	16
26	Diffraction of plane P waves by a canyon of arbitrary shape in poroelastic half-space (II): Numerical results and discussion. Earthquake Science, 2009, 22, 223-230.	0.9	12
27	The diffraction of Rayleigh waves by a fluid-saturated alluvial valley in a poroelastic half-space modeled by MFS. Computers and Geosciences, 2016, 91, 33-48.	4.2	12
28	Numerical study of ultra-high-performance steel fibreâ€“reinforced concrete columns under monotonic push loading. Advances in Structural Engineering, 2018, 21, 1234-1248.	2.4	12
29	Dynamic interaction of twin vertically overlapping lined tunnels in an elastic half space subjected to incident plane waves. Earthquake Science, 2016, 29, 185-201.	0.9	11
30	Seismic response of tunnel near fault fracture zone under incident SV waves. Underground Space (China), 2021, 6, 695-708.	7.5	11
31	Seismic Interaction between a Lined Tunnel and a Hill under Plane SV Waves by IBEM. International Journal of Structural Stability and Dynamics, 2019, 19, 1950004.	2.4	10
32	The method of fundamental solutions for the elastic wave scattering in a double-porosity dual-permeability medium. Applied Mathematical Modelling, 2021, 97, 721-740.	4.2	10
33	3D-printing ultra-high performance fiber-reinforced concrete under triaxial confining loads. Additive Manufacturing, 2022, 50, 102568.	3.0	10
34	Study of Material Composition Effects on the Mechanical Properties of Soil-Rock Mixtures. Advances in Civil Engineering, 2018, 2018, 1-10.	0.7	9
35	Numerical Experiments on Triaxial Compression Strength of Soil-Rock Mixture. Advances in Civil Engineering, 2019, 2019, 1-15.	0.7	9
36	A 2.5D IBEM to investigate the 3D seismic response of 2D topographies in a multi-layered transversely isotropic half-space. Engineering Analysis With Boundary Elements, 2020, 113, 382-401.	3.7	9

#	Article	IF	Citations
37	Investigation on the mechanical characteristics of multiscale mono/hybrid steel fibre-reinforced dry UHPC. Cement and Concrete Composites, 2022, 133, 104681.	10.7	9
38	The method of fundamental solution for 3â€Ð wave scattering in a fluidâ€saturated poroelastic infinite domain. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 1866-1889.	3.3	8
39	A fast multipole accelerated indirect boundary element method for broadband scattering of elastic waves in a fluidâ€saturated poroelastic domain. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 2133-2160.	3.3	8
40	Nonlinear seismic response and amplification effect of 3D sedimentary basin based on bounding surface constitutive model. Soil Dynamics and Earthquake Engineering, 2022, 158, 107292.	3.8	8
41	An IBEM solution to the scattering of plane SH-waves by a lined tunnel in elastic wedge space. Earthquake Science, 2015, 28, 71-86.	0.9	7
42	Dynamic behaviors of reinforced NSC and UHPC columns protected by aluminum foam layer against low-velocity impact. Journal of Building Engineering, 2021, 34, 101910.	3.4	7
43	Diffraction of plane P waves around an alluvial valley in poroelastic half-space. Earthquake Science, 2010, 23, 35-43.	0.9	6
44	The method of fundamental solution for elastic wave scattering and dynamic stress concentration in a fluid-saturated poroelastic layered half-plane. Engineering Analysis With Boundary Elements, 2017, 84, 154-167.	3.7	6
45	Three-dimensional IBEM solution to seismic wave scattering by a near-fault sedimentary basin. Engineering Analysis With Boundary Elements, 2022, 140, 220-242.	3.7	6
46	The Diffraction of Rayleigh Waves by Twin Circular Cavities in a Poroelastic Half-Space. Journal of Earthquake Engineering, 2018, 22, 970-987.	2.5	5
47	Scattering of seismic waves by three-dimensional large-scale hill topography simulated by a fast parallel IBEM. Earthquake Engineering and Engineering Vibration, 2020, 19, 855-873.	2.3	5
48	Diffraction of elastic waves by a fluid-filled crack in a fluid-saturated poroelastic half-space. Geophysical Journal International, 2021, 225, 1530-1553.	2.4	4
49	Indirect boundary element method for modelling 2â€Ð poroelastic wave diffraction by cavities and cracks in half space. International Journal for Numerical and Analytical Methods in Geomechanics, 2021, 45, 2048-2077.	3.3	4
50	Three-dimensional preconditioned FM-IBEM solution to broadband-frequency seismic wave scattering in a layered sedimentary basin. Engineering Analysis With Boundary Elements, 2021, 133, 1-18.	3.7	4
51	Three-Dimensional Nonlinear Seismic Response of Immersed Tunnel in Horizontally Layered Site under Obliquely Incident SV Waves. Shock and Vibration, 2019, 2019, 1-17.	0.6	3
52	Interaction between a tunnel and alluvial valley under plane SV waves of earthquakes by IBIEM. European Journal of Environmental and Civil Engineering, 2021, 25, 2217-2235.	2.1	3
53	Simulation of the spatially correlated multiple-station earthquake ground motions of the coupled alluvial valley-hill terrain. Engineering Analysis With Boundary Elements, 2020, 118, 41-53.	3.7	3
54	A fast-multi-pole accelerated method of fundamental solutions for 2-D broadband scattering of SH waves in an infinite half space. Journal of Vibroengineering, 2019, 21, 250-264.	1.0	3

#	Article	IF	Citations
55	Microstructure and mechanical behaviour of 3D printed ultra-high performance concrete after elevated temperatures. Additive Manufacturing, 2022, 58, 103032.	3.0	3
56	Scattering of elastic waves by a 3-D inclusion in a poroelastic half space. Engineering Analysis With Boundary Elements, 2019, 108, 133-148.	3.7	2
57	Amplification Effect of Ground Motion in Offshore Meandering Sedimentary Valley. Shock and Vibration, 2021, 2021, 1-27.	0.6	2
58	Prediction and Modeling for Local Site Amplification Effect of Ground Motion: Exploring Optimized Machine Learning Approaches. Pure and Applied Geophysics, 2022, 179, 1805-1827.	1.9	2
59	The method of fundamental solutions for three-dimensional scattering of elastic waves in layered half space. WIT Transactions on Modelling and Simulation, 2013, , .	0.0	1
60	IBIEM Analysis of Dynamic Response of a Shallowly Buried Lined Tunnel Based on Viscous-Slip Interface Model. Advances in Civil Engineering, 2019, 2019, 1-14.	0.7	0
61	Scattering of Plane P₁ Wave by an Inclusion in a Three-Dimension Poroelastic Half-Space. Mathematical Problems in Engineering, 2020, 2020, 1-16.	1.1	0
62	The FM-IBEM simulation for three dimensional seismic wave scattering by arbitrary layered media. European Journal of Environmental and Civil Engineering, 0, , 1-20.	2.1	0
63	Simulation of Spatially Correlated Multipoint Ground Motions in a Saturated Alluvial Valley. Shock and Vibration, 2021, 2021, 1-11.	0.6	0
64	A probability-based efficient assessment of seismic wave scattering in complex topography with geo-property uncertainty. Waves in Random and Complex Media, 0, , 1-25.	2.7	0