## Zhong-xian Liu

List of Publications by Year in descending order

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Version: 2024-02-01

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

#	Article	IF	Citations
1	Mechanical anisotropy of ultra-high performance fibre-reinforced concrete for 3D printing. Cement and Concrete Composites, 2022, 125, 104310.	10.7	54
2	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
3	3D-printing ultra-high performance fiber-reinforced concrete under triaxial confining loads. Additive Manufacturing, 2022, 50, 102568.	3.0	10
4	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
5	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
6	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
7	Microstructure and mechanical behaviour of 3D printed ultra-high performance concrete after elevated temperatures. Additive Manufacturing, 2022, 58, 103032.	3.0	3
8	Investigation on the mechanical characteristics of multiscale mono/hybrid steel fibre-reinforced dry UHPC. Cement and Concrete Composites, 2022, 133, 104681.	10.7	9
9	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
10	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
11	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
12	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
13	Seismic response of tunnel near fault fracture zone under incident SV waves. Underground Space (China), 2021, 6, 695-708.	7.5	11
14	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
15	Indirect boundary element method for modelling 2â€D 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
16	Calibration of CSCM model for numerical modeling of UHPCFTWST columns against monotonic lateral loading. Engineering Structures, 2021, 240, 112396.	5.3	17
17	Simulation of Spatially Correlated Multipoint Ground Motions in a Saturated Alluvial Valley. Shock and Vibration, 2021, 2021, 1-11.	0.6	0
18	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

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19	Comparative study on square and rectangular UHPFRC-Filled steel tubular (CFST) columns under axial compression. Structures, 2021, 34, 2054-2068.	3.6	17
20	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
21	Development and preliminary mix design of ultra-high-performance concrete based on geopolymer. Construction and Building Materials, 2021, 308, 125110.	7.2	43
22	Amplification Effect of Ground Motion in Offshore Meandering Sedimentary Valley. Shock and Vibration, 2021, 2021, 1-27.	0.6	2
23	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
24	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
25	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
26	Scattering of Plane <i>P</i> <sub>1</sub> Wave by an Inclusion in a Three-Dimension Poroelastic Half-Space. Mathematical Problems in Engineering, 2020, 2020, 1-16.	1.1	0
27	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
28	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
29	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
30	Experimental investigation on the dynamic behaviors of UHPFRC after exposure to high temperature. Construction and Building Materials, 2019, 227, 116679.	7.2	26
31	Numerical Experiments on Triaxial Compression Strength of Soil-Rock Mixture. Advances in Civil Engineering, 2019, 2019, 1-15.	0.7	9
32	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
33	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
34	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
35	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
36	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

3

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37	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
38	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
39	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
40	Numerical study of ultra-high-performance steel fibre–reinforced concrete columns under monotonic push loading. Advances in Structural Engineering, 2018, 21, 1234-1248.	2.4	12
41	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
42	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
43	Study of Material Composition Effects on the Mechanical Properties of Soil-Rock Mixtures. Advances in Civil Engineering, 2018, 2018, 1-10.	0.7	9
44	Experimental and numerical studies of ultra-high performance concrete targets against high-velocity projectile impacts. Engineering Structures, 2018, 173, 166-179.	5.3	98
45	The method of fundamental solution for 3â€D 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
46	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
47	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
48	Experimental investigation of seismic behavior of ultra-high performance steel fiber reinforced concrete columns. Engineering Structures, 2017, 152, 129-148.	5.3	62
49	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
50	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
51	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
52	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
53	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
54	Dynamic Green× <sup>3</sup> s 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

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55	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
56	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
57	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
58	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
59	Diffraction of plane P waves around an alluvial valley in poroelastic half-space. Earthquake Science, 2010, 23, 35-43.	0.9	6
60	Diffraction of plane SV waves by a cavity in poroelastic half-space. Earthquake Engineering and Engineering Vibration, 2009, 8, 29-46.	2.3	37
61	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
62	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
63	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
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