## Wanqing Shen

## List of Publications by Year in descending order

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Evaluation and improvement of macroscopic yield criteria of porous media having a Drucker-Prager

Influences of micro-pores and meso-pores on elastic and plastic properties of porous materials. European Journal of Mechanics, A/Solids, 2018, 72, 407-423.
2.1

26
19
20

Some micromechanical models of elastoplastic behaviors of porous geomaterials. Journal of Rock Mechanics and Geotechnical Engineering, 2017, 9, 1-17.
3.7

22

A damage model of mechanical behavior of porous materials: Application to sandstone. International Journal of Damage Mechanics, 2018, 27, 1325-1351.
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22

A Novel Approach to Enhance the Urease Activity of <i>Sporosarcina pasteurii</i> and its Application
21 on Microbial-Induced Calcium Carbonate Precipitation for Sand. Geomicrobiology Journal, 2019, 36,
$1.0 \quad 18$ 819-825.

22 Improved criteria for ductile porous materials having a Green type matrix by using Eshelby-like
2.1 velocity fields. Theoretical and Applied Fracture Mechanics, 2013, 67-68, 14-21.

> Multi-scale modeling of time-dependent behavior of claystones with a viscoplastic compressible porous matrix. Mechanics of Materials, $2014,79,25-34$.
$1.7 \quad 16$

24 A microâ€"macro model for porous geomaterials with inclusion debonding. International Journal of Damage Mechanics, 2015, 24, 1026-1046.
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| 25 | A micro-mechanics based viscoplastic model for clayey rocks. Computers and Geotechnics, 2017, 8 92-102. |
| :---: | :---: |
| 26 | An approximate strength criterion of porous materials with a pressure sensitive and tension-compression asymmetry matrix. International Journal of Engineering Science, 2018, 132, 1-1 |
| 27 | A constitutive model for anisotropic clay-rich rocks considering micro-structural composition. International Journal of Rock Mechanics and Minings Sciences, 2022, 151, 105029. |
| 28 | Approximate plastic yield criteria of geomaterials with pores and grains embedded in a porous matr International Journal of Plasticity, 2022, 153, 103275. |
| 29 | Numerical homogenization of elastic properties and plastic yield stress of rock-like materials with voids and inclusions at same scale. European Journal of Mechanics, A/Solids, 2020, 81, 103958. |

Homogenization of saturated double porous media with Eshelby-like velocity field. Acta Geophysica, 2014, 62, 1146-1162.
1.0

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A multi-scale model of plasticity and damage for rock-like materials with pores and inclusions.
International Journal of Rock Mechanics and Minings Sciences, 2021, 138, 104579.

Prediction of TBM cutterhead speed and penetration rate for high-efficiency excavation of hard rock
32 tunnel using CNN-LSTM model with construction big data. Arabian Journal of Geosciences, 2022, 15, 1.
0.6

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Shakedown of porous material with Drucker-Prager dilatant matrix under general cyclic loadings.
3.1

13
33 Composite Structures, 2019, 220, 566-579.

Macroscopic Yield Criterion for Ductile Materials Containing Randomly Oriented Spheroidal Cavities.
International Journal of Damage Mechanics, 2011, 20, 1198-1216.
2.4

11

Influence of pore pressure on plastic deformation and strength of limestone under compressive
stress. Acta Geotechnica, 2019, 14, 535-545.
2.9

Shakedown analysis of a hollow sphere by interior-point method with non-linear optimization.
International Journal of Mechanical Sciences, 2020, 175, 105515.

An elasticâ€"plastic model for porous rocks with two populations of voids. Computers and
Geotechnics, 2016, 76, 194-200.

A macroscopic criterion of shakedown limit for ductile porous materials subjected to general cyclic loadings. Mechanics of Materials, 2017, 115, 76-87.

Insight of molecular simulation to better assess deformation and failure of clay-rich rocks in
39 compression and extension. International Journal of Rock Mechanics and Minings Sciences, 2021, 138,
$2.6 \quad 10$
104589.

40 Contribution of atomistic study to better understand water saturation effect on mechanical behavior of clayey rocks in triaxial compression. Computers and Geotechnics, 2022, 146, 104738.
2.3

A numerical study of effective mechanical behaviors of rock like materials based on Fast Fourier
Transform. Mechanics of Materials, 2016, 92, 275-288.

A microstructure-based constitutive model for cement paste with chemical leaching effect.
Mechanics of Materials, 2020, 150, 103571.

Prediction of plastic yield surface for porous materials by a machine learning approach. Materials
Today Communications, 2020, 25, 101477.

Micromechanical modeling of mortar as a matrixâ€inclusion composite with drying effects.
International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 1034-1047.

Macroscopic criteria for Green type porous materials with spheroidal voids: application to double
porous materials. International Journal for Numerical and Analytical Methods in Ceomechanics, 2017,
41, 1453-1473.

A micro-mechanics-based elasticâ€"plastic model for porous rocks: applications to sandstone and chalk.
Acta Geotechnica, 2018, 13, 329.

A micromechanics-based enhanced plastic damage model including localization analysis for
heterogeneous geomaterials. Computers and Geotechnics, 2020, 122, 103512.

A novel true triaxial test device with a high-temperature module for thermal-mechanical property
48 characterization of hard rocks. European Journal of Environmental and Civil Engineering, 2023, 27, 1697-1714.

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\begin{aligned}
& 49 \text { A micromechanical study of drying and carbonation effects in cement-based materials. Continuum } \\
& \text { Mechanics and Thermodynamics, 2015, 27, 49-61. }
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A micromechanicsâ€based model for concrete materials subjected to carbonation. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 1203-1218.
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Plastic modeling of porous rocks in drained and undrained conditions. Computers and Geotechnics, 2020, 117, 103277.

A homogenized macroscopic criterion for shakedown analysis of ductile porous media with kinematical hardening matrix. European Journal of Mechanics, A/Solids, 2020, 82, 104015.

An elastoplastic damage constitutive model for rock-like materials with a fractional plastic flow
rule. International Journal of Rock Mechanics and Minings Sciences, 2022, 156, 105140.

Exact elastic solution of the axisymmetric and deviatoric loaded hollow sphere. International Journal of Pressure Vessels and Piping, 2018, 162, 40-45.

