

# Prof. Dr.-Ing. Wu, Wei

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<b>Position</b>	Professor and director
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<b>Nationality</b>	German

## Education

<b>1986 – 1993</b>	Geotech. Eng. (Dr.-Ing.), Karlsruhe University, Germany
<b>1982 – 1985</b>	Geotech. Eng., (MSc), Xian University of Technology, China
<b>1978 – 1982</b>	Civil Eng. (Bachelor), Wuhan University, China

## Employment

<b>2003 -</b>	Professor & director, BOKU, Vienna, Austria
<b>2002 - 2003</b>	Project manager, Electrowatt Infra Ltd, Zurich, Switzerland
<b>1993 - 2002</b>	Senior engineer, Lahmeyer International Ltd, Frankfurt, Germany
<b>1992 – 1986</b>	Assistant, Karlsruhe University, Germany

## Service to research community

- Editor-in-chief: Acta Geotechnica (founding editor-in-chief)  
<https://www.springer.com/journal/11440>
- Editor-in-chief: Springer Series in Geomechanics and Geoengineering  
<https://www.springer.com/series/8069>
- Chairman of Board, Otto Pregl Foundation for Fundamental Geotechnical Research, Vienna, Austria (starting capital about 3 million Euro)  
<https://boku.ac.at/en/baunat/igt/otto-pregl-stiftung>
- Member of the Engineering Panel of the Research Grant Council of Hong Kong from 2021
- Panel member of the Polish Science Foundation from 2016 to 2020, and since 2024
- Panel member for the National Science Foundation of Romania since 2024
- Convener of several conferences, e.g. China-Europe Conference on Geotechnical Engineering, Vienna, 2018; International Symposium on Particle-Based Continuum Methods and their Applications in Geomechanics, Vienna, 2019
- Editor of 5 books

## Prize and award

- Advanced Grant, the European Research Council, 2024
- Gold medal, Technical University of Brno, Czech Republic, 2024

## Patent

A device for charging concrete in tremie pipe, European Patent Office, 2023

## Teaching activities in English and German

Undergraduate and graduate courses, e.g. soil mechanics, advanced soil mechanics, geotechnical engineering, underground constructions, slope engineering, geoenvironmental engineering. Supervision of more than thirty PhD theses and more than one hundred MSc theses.

## Research expertise

I have coordinated several large research projects as PI with project partners across Europe and the world funded by the European Commission. My strength lies in the initiation and coordination of multidisciplinary research projects. My personal expertise includes the following fields:

- Geomechanics, granular materials
- Foundation engineering
- Tunneling and underground construction
- Landslide and debris flow
- Soil bioengineering: interaction between soil and plant
- Geo-energy and energy storage
- Constitutive model and numerical simulations

## Engineering practice

I had worked with engineering companies in Germany and Switzerland with experience of more than ten years between 1992 and 2003 as senior engineer and project manager with leading engineering companies in Europe, Lahmeyer International Ltd (now Tractebel) in Germany and Electrowatt Ltd (now Pöyry) in Switzerland. I participated in numerous high profiles projects around the world such as

- High speed rail-link between Frankfurt and Cologne, Germany
- Highway project, Cotapata-Santa Barbara, Bolivia
- Metro and airport Athens, Greece
- Foundation works, Potsdamer Platz, Berlin, Germany
- Egnatia Odos, Greece
- Metro Bangkok, Thailand
- Capital airport rehabilitation, Kuwait
- Gotthard Base Tunnel, Switzerland

## Selected research projects

**Project title:** Modeling transient granular flow

Funding: European Research Council (<https://erc.europa.eu/sites/default/files/2024-04/erc-2023-adg-results-pe.pdf>)

Budget: 2.5 Million Euro (own budget 2.5 M€)

My role: PI

Duration: 2024 – 2029

**Project title:** Localization in Geophysics, Geohazards and Geoengineering

Funding: European Commission (<https://cordis.europa.eu/project/id/101129729>)

Budget: 1.5 Million Euro (own budget 0.5 M€)

Partners: 9 partners from 8 European countries

My role: PI

Duration: 2024 – 2028

**Project title:** High-fidelity multiscale modelling of debris flows

Funding: Austrian Science Foundation (<https://boku.ac.at/baunat/newsitem/76976>)

Budget: 400,000 Euro

My role: PI

Duration: 2023 – 2027

**Project title:** Fracture across scales and materials, processes and discipline

Funding: European Commission (<https://cordis.europa.eu/project/id/734485>)

Budget: 1.1 Million Euro (own budget 0.2 M€)

Partners: 11 partners from 8 European countries

My role: Co-PI

Duration: 2017 – 2023

**Project title:** Towards geohazards resilient infrastructure under changing climates

Funding: European Commission (<https://cordis.europa.eu/project/id/778360>)

Budget: 2.2 Million Euro (own budget 0.4 M€)

Partners: 10 partners from 6 European countries

My role: Co-PI

Duration: 2017 – 2023

**Project title:** Multiscale Modelling of Landslides and Debris Flows

Funding: European Commission ([www.mumolade.com/](http://www.mumolade.com/))

Budget: 4.3 Million Euro (own budget 1.2 M€)

Partners: 13 partners from 7 European countries

My role: PI

Duration: 2012 – 2016

**Project title:** Geotechnical control in quality and environment during road construction

Funding: Construction Company Porr AG

Budget: 1.2 Million Euro

My role: PI

Duration: 2006 – 2020

**Project title:** Reinforced Vegetation Numerical Evaluation of Slopes

Funding: European Commission (<https://cordis.europa.eu/project/id/324466>)

Budget: 0.8 Million Euro (own budget 0.4 M€)

Partners: 4 partners from 3 European countries

My role: PI

Duration: 2013 – 2016

**Project title:** Integrated Risk Assessment of Hydrologically-Driven Landslides  
**Funding:** European Commission (<https://cordis.europa.eu/project/id/295225>)  
**Budget:** 250,000 Euro  
**Partners:** 3 partners from China, India and Mexico  
**My role:** PI  
**Duration:** 2014 – 2017

**Project title:** Numerical and experimental studies of failure initiation in unsaturated slopes  
**Funding:** Austrian Science Foundation ([web.stanford.edu/~borja/nsffwf/](http://web.stanford.edu/~borja/nsffwf/))  
**Budget:** 320,000 Euro  
**Partner:** Prof. Borja, Stanford University, USA  
**My role:** PI  
**Duration:** 2009 – 2013

**Project title:** DEM simulation for industrial and scientific applications  
**Funding:** European Commission (FP7) (<https://cordis.europa.eu/project/id/238577>)  
**Budget:** 3.2 Million Euro (own budget 0.4 M€)  
**Partners:** 12 partners from 7 European countries  
**My role:** Co-PI  
**Duration:** 2009 – 2014

### Edited books

- Wu W, Wang YT, Recent Geotechnical Research at BOKU, Springer, 2024
- Wu W, Desiderata Geotechnica, Springer, 2019
- Wu W, Recent Advances in Geotechnical Research, Springer, 2019
- Wu W, Recent Advances in Modeling Landslides and Debris Flows, Springer 2015
- Wu W and Yu HS, Modern Trends in Geomechanics, Springer Berlin, 2006

### Publications in peer reviewed journals

1. Wani S, Kandasami RK, Wu W, MS-IS hypoplastic model considering stiffness degradation under cyclic loading conditions, Int. J. Numerical and Analytical Methods in Geomechanics, in press
2. Wang YD, Wu, W, A SPH model bridging solid-like and fluid-like behaviour in granular materials, Int. J. Numerical and Analytical Methods in Geomechanics, in press
3. Wang YD, Wu W, Numerical model for solid-like and fluid-like behaviour of granular flows, Acta Geotechnica, 19, 6483-6494, 2024
4. Yue C, Xu CS, Wu W, Wang RQ, Du XL, Failure mechanisms of saturated sand under different loading frequencies: Experimental observation and constitutive modelling, Computers and Geotechnics, 170, 106309, 2024
5. Wang S, Fang HJ, Kang X, Li DQ, Wu W, Simhypo-sand: a simple hypoplastic model for granular materials and SPH implementation. Acta Geotech. (2024) online
6. Wu M, Zhao, Z, Wu W, Cai G. Detection of volatile organic compounds by membrane interface probe: Multiphase numerical model for in-situ test evaluation. Computers and Geotechnics, 173, 106491, 2024
7. Wang Y, Wu W. Hypoplastic model for solid-like and fluid-like granular flows. Computers and Geotechnics. 172, 106466. 2024

8. Bi Z, Wu W, Zhang L, Peng C. Uncertainty Analysis of Post-Failure Behavior in Landslides Based on SPH Method and Generalized Geotechnical Random Field Theory. *Computers and Geotechnics*. 171, 106363, 2024
9. Qian H, Xu C, Wu W, Du X. A hypoplastic model considering grain breakage and wetting effect for granular material. *Computers and Geotechnics*. 171, 106329, 2024
10. Yue C, Xu C, Wu W, Wang R, Du X. Failure mechanisms of saturated sand under different loading frequencies: Experimental observation and constitutive modelling. *Computers and Geotechnics*. 170, 106309, 2024
11. Su Z, Wang S, Li D, Sheng J, Wu, W. SPH–DEM modeling overtopping failure of earthfill dams. *Acta Geotechnica*. 19(2), 2024
12. Zhu C, Wu W, Peng C, Wang S, Wei X. SPH implementation of a critical state-based hypoplastic model for granular materials in large-deformation problems. *Computers and Geotechnics*. 166, 2024
13. Liao D, Yang ZX, Wang S, Wu W. A hypoplastic model for cemented sand under monotonic and cyclic loading. *Canadian Geotechnical Journal*. 61(5), 2024
14. Wang, Y; Borja, RI; Wu, W; Dynamic strain localization into a compaction band via a phase-field approach. *Journal of the Mechanics and Physics of Solids*, 105228, 2023
15. Bi Z, Wu W, Zhang L, Peng C. Uncertainty Analysis of Post-Failure Behavior in Landslides Based on SPH Method and Generalized Geotechnical Random Field Theory. *Computers and Geotechnics*, 171, 2024
16. Qian H, Wu W, Du X, Xu C. A Hypoplastic Constitutive Model for Granular Materials with Particle Breakage. *International Journal of Geomechanics*. 23(6), 2023
17. Liu S, Wang Y, Wu W. A modified phase-field model for cohesive interface failure in quasi-brittle solids. *International Journal of Mechanical Sciences*. 252, 2023
18. Qian H, Wu W, Xu C, Liao D, Du X. An extended hypoplastic constitutive model considering particle breakage for granular material. *Computers and Geotechnics*. 159, 2023
19. Wang Y, Wu W. A bond-level energy-based peridynamics for mixed-mode fracture in rocks. *Computer Methods in applied Mechanics and Engineering*. 141, 2023
20. Su X, Wu W, Tang H, Huang L, Xia D, Lu S. Physicochemical effect on soil in sliding zone of reservoir landslides. *Engineering Geology*. 324, 2023
21. Wang H, Zou J, Wu W, Ni W. Assessing unsaturated permeability of loess under multiple rainfalls. *Engineering Geology*. 324, 2023
22. Qian H, Wu W, Xu C, Du X. A hypoplastic model for hydrate-bearing sand considering hydrate saturation and grain breakage. *International Journal For Numerical and analytical Methods in Geomechanics*. 47(16), 2023
23. Ashour T, Korjenic A, Abdelfattah A, Sesto E, Wu W. Shrinkage Behavior of Stabilized Earth Bricks Reinforced with Wheat and Barley Straw. *Sustainability*. 15(23), 2023
24. He Y, Liao H, Wu W, Wang S. Hypoplastic modeling of inherent anisotropy in normally and overconsolidated clays. *Acta Geotechnica*. 18(12), 2023
25. Chen Z, Liu J, Yu C, Wang S, Wu W. Analytical solutions to thermal gradient enhanced diffusion of organic contaminants through unsaturated composite liner: considering the existence of capillary fringe. *Acta Geotechnica*. 18(9), 2023
26. Yuan W, Liu M, Zhang X, Wang H, Zhang W, Wu W. Stabilized smoothed particle finite element method for coupled large deformation problems in geotechnics. *Acta Geotechnica*. 18(3), 2023
27. Liu J, Chen Z, Yu C, Wang S, Wu W, Xie S. Analytical solution for contaminant transport through a GCL-enhanced composite cutoff wall system. *Computers and Geotechnics*. 164, 2023
28. Zhu C, Peng C, Wu W. Smoothed particle hydrodynamics modelling of particle-size segregation in granular flows. *Journal of Fluid Mechanics*. 977, 2023

29. Liu J, Chen Z, Yu C, Wang S, Wu W. Effect of retardation and capillarity on organic contaminant diffusion through an unsaturated composite liner: An analytical approach. *International Journal For Numerical and analytical Methods in Geomechanics*. 47(11), 2023
30. Wang Y, Wu W, Peng C. Regularized SPH model for soil-structure interaction with generalized frictional boundary. *International Journal For Numerical and analytical Methods in Geomechanics*. 47(10), 2023
31. Soranzo E, Guardiani C, Wu W. Reinforcement Learning for the Face Support Pressure of Tunnel Boring Machines. *Geosciences*. 13:82, 2023
32. Wu H, Wu W, Liang W, Dai F, Liu H, Xiao Y. 3D DEM modeling of biocemented sand with fines as cementing agents. *International Journal For Numerical and analytical Methods in Geomechanics*. 47(2), 2023
33. Soranzo E, Guardiani C, Chen Y, Wang Y, Wu W. Convolutional neural networks prediction of the factor of safety of random layered slopes by the strength reduction method. *Acta Geotechnica*. 18(6), 2023
34. Świtłała, BM, Carlotta G, Enrico S, Wei W, Machine learning-aided reliability analysis of rainfall-induced landslide of root-reinforced slopes. *Canadian Geotechnical Journal*. 60:1877-94, 2023
35. Alipour M, Wu W, Hypoplastic model with an inner memory surface for sand under cyclic loading. *Computers and Geotechnics*. 162, 2023
36. Cao XL, Wang S, Gong WM, Wu W, Dai GL, Zhou FX, Experimental and theoretical study on dynamic stiffness of floating single pile and pile groups in multi-layered soil, *Soil Dynamics and Earthquake Engineering*, 157, 107282, 2022
37. Guardiani C, Soranzo E, Wu W, Time-dependent reliability analysis of unsaturated slopes under rapid drawdown with intelligent surrogate models, *Acta Geotechnica*, 17(4): 1071-109, 2022
38. He, YQ; Wang, S; Liao, HJ; Wu, W; A hypoplastic constitutive model for structured soils, *Computers and Geotechnics*, 151, 104935, 2022
39. Hill, JM; Bhattacharya, D; Wu, W; Bagnold velocity profile for steady-state dense granular chute flow with base slip, *Rheologica Acta*, 61(3): 207-214, 2022
40. Kang, X; Wang, S; Wu, W; Xu, GL; Residual state rate effects of shear-zone soil regulating slow-to-fast transition of catastrophic landslides, *Engineering Geology*, 304, 106692, 2022
41. Kang, X; Wang, S; Wu, W; Xu, GL; Zhao, JQ; Liu, FS; Soil-water interaction affecting a deep-seated landslide: from field monitoring to experimental analysis, *Bulletin of Engineering Geology and Environment*, 81(3), 119, 2022
42. Liu, SJ; Wang, YT; Peng, C; Wu, W; A thermodynamically consistent phase field model for mixed-mode fracture in rock-like materials, *Computer Methods in Applied Mechanics and Engineering*, 392, 114642, 2022
43. Martinez, A. et al., Bio-inspired geotechnical engineering: principles, current work, opportunities and challenges, *Géotechnique*, 72(8): 687-705, 2022
44. Peng, C; Li, S; Wu, W; An, HC; Chen, XQ; Ouyang, CJ; Tang, H; On three-dimensional SPH modelling of large-scale landslides, *Canadian Geotechnical Journal*, 59(1): 24-39, 2022
45. Soranzo, E; Guardiani, C; Wu, W; The application of reinforcement learning to NATM tunnel design, *Underground Space*, 7(6): 990-1002, 2022
46. Soranzo, E; Guardiani, C; Saif, A; Wu, W; A Reinforcement Learning approach to the location of the non-circular critical slip surface of slopes, *Computers and Geosciences*, 166, 105182, 2022
47. Soranzo, E; Guardiani, C; Wu, W; A soft computing approach to tunnel face stability in a probabilistic framework, *Acta Geotechnica*, 17(4): 1219-1238, 2022

48. Wang, S; Wu, W; Cui, DS; On mechanical behaviour of elastic soils: numerical simulations and constitutive modelling, *Géotechnique*, 72(8): 706-721, 2022
49. Wang, Y; Wu, W; Evans, TM; Wu, HR; Xiao, Y; General friction law for velocity-stress dependent phase transition in granular flow, *Int. J. Numerical and Analytical Methods in Geomechanics*, 46(8): 1525-1543, 2022
50. Xu, GF; Wu, W; Qi, JL; A triaxial creep model for frozen soil based on hypoplasticity, *European J. Environment and Civil Engineering*, 26(7): 2569-2580. 2022
51. Zhu, CW; Peng, C; Wu, W; Wang, C; A multi-layer SPH method for generic water-soil dynamic coupling problems. Part I: Revisit, theory, and validation, *Computer Methods in Applied Mechanics and Engineering*, 396, 115106, 2022
52. Zhu, CW; Peng, C; Wu, W; Lagrangian meshfree particle method (SPH) based simulation for granular flow in a rotating drum with regularized  $\mu(I)$  elastoplastic model. *Powder Technology*, 408, 117699, 2022
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55. Edip, K; Sheshov, V; Wu, W; Bojadjieva, J; Numerical modelling of saturated boundless media with infinite elements, *Acta Geotechnica*, 16(8): 2683-2692. 2021
56. Guo, XG; Peng, C; Wu, W; Wang, YQ; Unified constitutive model for granular-fluid mixture in quasi-static and dense flow regimes, *Acta Geotechnica*, 16(3): 775-78, 2021
57. Hill, JM; Bhattacharya, D; Wu, W; Steady-state similarity velocity profiles for dense granular flow down inclined chutes, *Granular Matter*, 23(2), 27, 2021
58. Peng, C; Basic, M; Blagojevic, B; Basic, J; Wu, W; A Lagrangian differencing dynamics method for granular flow modeling, *Computers and Geotechnics*, 137, 104297, 2021
59. Peng, C; Zhan, L; Wu, W; Zhang, BY; A fully resolved SPH-DEM method for heterogeneous suspensions with arbitrary particle shape, *Powder Technology*, 387: 509-526, 2021
60. Wang, S., Wu, W., A simple hypoplastic model for overconsolidated clays, *Acta Geotechnica*, 16, 21-29, 2021
61. Wang, S; Wu, W; Validation of a simple hypoplastic constitutive model for overconsolidated clays, *Acta Geotechnica*, 16(1): 31-4. 2021
62. Wang, S; Idinger, G; Wu, W; Centrifuge modelling of rainfall-induced slope failure in variably saturated soil, *Acta Geotechnica*, 16(9): 2899-2916, 2021
63. Liu, J., Wang, S., Jiang, M.J., Wu, W., A state-dependent hypoplastic model for methane hydrate-bearing sands, *Acta Geotechnica*, 16, 77-91, 2021
64. Xiao, Y; He, X; Wu, W; Stuedlein, AW; Evans, TM; Chu, J; Liu, HL; van Paassen, LA; Wu, HR; Kinetic biomineralization through microfluidic chip tests, *Acta Geotechnica*, 16(10): 3229-3237, 2021
65. Zhan, L., Peng, C., Zhang, B.Y., Wu, W., A surface mesh represented discrete element method (SMR-DEM) for particles of arbitrary shape, *Powder Technology*, 377, 760-779, 2021
66. Zhang, W; Wang, S; Wu, Y; Wu, W; Bifurcation analysis of shear band in sand under true triaxial conditions with hypoplasticity, *Int. J. Numerical and Analytical Methods in Geomechanics*, 45(7): 934-949, 2021
67. Zhang, W; Zhong, ZH; Peng, C; Yuan, WH; Wu, W; GPU-accelerated smoothed particle finite element method for large deformation analysis in geomechanics, *Computers and Geotechnics*, 129, 103856, 2021

68. Zhang, W; Zou, JQ; Zhang, XW; Yuan, WH; Wu, W; Interpretation of cone penetration test in clay with smoothed particle finite element method, *Acta Geotechnica*, 16(8): 2593-2607, 2021
69. Zhu, CW; Peng, C; Wu, W; Applications of micropolar SPH in geomechanics, *Acta Geotechnica*, 16(8): 2355-2369, 2021
70. Zhu, CW; Ying, HW; Gong, XN; Wang, X; Wu, W; Analytical solution for wave-induced hydraulic response on subsea shield tunnel, *Ocean Engineering*, 228, 108924, 2021
71. Zhan, L., Peng, C., Zhang, B.Y., Wu, W., A SPH framework for dynamic interaction between soil and rigid body system with hybrid contact method, *Int. J. Numerical and Analytical Methods in Geomechanics*, 44, 1446-1471, 2020
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73. Wang, S., Wang, J.E., Wu, W., Cui, D.S., Su, A.J., Xiang, W., Creep properties of clastic soil in a reactivated slow-moving landslide in the Three Gorges Reservoir Region, China, *Engineering Geology*, 267, 105493, 2020
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75. Liang, J.Y., Lu, D.C., Du, X.L., Wu, W., Ma, C., Non-orthogonal elastoplastic constitutive model for sand with dilatancy, *Computers and Geotechnics*, 118, 103329, 2020
76. Li, S., Peng, C., Wu, W., Wang, S., Chen, X.Q., Chen, J.G., Zhou, G.G., Chitneedi, B.K., Role of baffle shape on debris flow impact in step-pool channel: an SPH study, *Landslides*, 17, 2099-2111, 2020
77. Lei, G.P., Wu, W., Centrifuge study on the effect of pile bending stiffness on the slope stabilised by piles, *Int. J. Physical Modelling in Geomechanics*, 20, 212-223, 2020
78. Ju, H.J., Han, S.J., Kim, K.S., Strauss, A., Wu, W., Multi-potential capacity for reinforced concrete members under pure torsion, *Struct. Eng. Mech.*, 75, 401-41, 2020
79. He, X.Z., Wu, W., Cai, G.Q., Qi, J.L., Kim, J.R., Zhang, D.C., Jiang, M.J., Work-energy analysis of granular assemblies validates and calibrates a constitutive model, *Granular Matter*, 22, 28, 2020
80. He, X.Z., Wu, W., Wang, S., A constitutive model for granular materials with evolving contact structure and contact forces, Part II: constitutive equations, *Granular Matter*, 21, 20, 2019
81. He, X.Z., Wu, W., Wang, S., A constitutive model for granular materials with evolving contact structure and contact forces, Part I: framework, *Granular Matter*, 21, 16, 2019
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83. Liang, J.Y., Lu, D.C., Zhou, X., Du, X.L., Wu, W., Non-orthogonal elastoplastic constitutive model with the critical state for clay, *Computers and Geotechnics*, 116, UNSP 10320, 2019
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- ecoefficient and sustainable soil, concrete, wastewater and pavement reengineering, *Int. J. Low-Carbon Tech.*, 14(3): 440-451, 2019
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  89. Switala, BM; Wu, W; Wang, S; Implementation of a coupled hydro-mechanical model for root-reinforced soils in finite element code, *Computers and Geotechnics*, 112: 197-203, 2019
  90. Tang, Y; Wu, W; Yin, KL; Wang, S; Lei, GP; A hydro-mechanical coupled analysis of rainfall induced landslide using a hypoplastic constitutive model, *Computers and Geotechnics*, 112: 284-292, 2019
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  92. Zhan, L; Peng, C; Zhang, BY; Wu, W; A stabilized TL-WC SPH approach with GPU acceleration for three-dimensional fluid-structure interaction. *J. Fluid Struct.*, 86: 329-353, 2019
  93. He, XZ; Liang, DF; Wu, W; Cai, GQ; Zhao, CG; Wang, S; Study of the interaction between dry granular flows and rigid barriers with an SPH model. *Int. J. Numerical and Analytical Methods Geomech.*, 42(11): 1217-1234, 2018
  94. Motlagh, AT; Ghanbari, A; Maedeh, PA; Wu, W; A new analytical approach to estimate the seismic tensile force of geosynthetic reinforcement respect to the uniform surcharge of slopes. *Earthq. Struct.*, 15(6): 687-699, 2018
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  96. Switala, BM; Wu, W., Numerical modelling of rainfall-induced instability of vegetated slopes. *Géotechnique*, 68(6): 481-491, 2018
  97. Wang, S; Wu, W; Peng, C; He, XZ; Cui, DS; Numerical integration and FE implementation of a hypoplastic constitutive model. *Acta Geotechnica*, 13(6): 1265-1281, 2018
  98. Wang, S; Wu, W; Wang, JG; Yin, Z; Cui, DS; Xiang, W; Residual-state creep of clastic soil in a reactivated slow-moving landslide in the Three Gorges Reservoir Region, China. *Landslides*, 15(12): 2413-2422, 2018
  99. Wang, S; Wu, W; Yin, ZY; Peng, C; He, XZ; Modelling the time-dependent behaviour of granular material with hypoplasticity. *Int. J. Numerical and Analytical Methods Geomech.*, 42(12): 1331-1345, 2018
  100. Xu, GF; Wu, W; Kong, LW; Qi, JL; Hypoplastic Modeling for the Mechanical Behavior of Frozen Soil in Stress Path Testing. *Int. J. Geomech.*, 18(6), 2018
  101. Maedeh, PA; Wu, W; Ghanbari, A; Lin, J; Al Dianty, M; Ghaffari Irdmoosa, K; Shahraki Ghadimi, A; New study on interactional effects of grouting pressure on the displacement of nailing bond. *JME*, 6, 10-24, 2018
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