

履歴書



1. 氏名：張 鋒 (Cho Ho)
ちよう ほう

2. 学歴：

1978年2月～1982年2月 南京理工大学 数学・力学学科入学 卒業
1984年9月～1987年2月 同濟大学 大学院力学学科 博士前期課程 修了
1987年9月～1989年11月 同濟大学 地下系 博士後期課程 中退
1992年4月～1995年3月 京都大学 大学院工学研究科交通土木工学専攻 博士後期課程 修了

3. 職歴：

1982年2月～1984年9月；1987年2月～1987年9月 蘇州大学 助教
1995年4月～1998年3月 中央復建コンサルタンツ(株) 係長
1998年4月～1999年3月 国立 名古屋工業大学 助手
1999年4月～2005年3月 国立 岐阜大学 助教授
2005年4月～ 国立 名古屋工業大学 教授
2006年4月～2008年3月 国立 名古屋工業大学 都市社会工学科 学科長
2011年11月～2014年3月 国立名古屋工業大学 高度防災工学センター長

4. 学位：平成7年3月23日 博士（工学）京都大学

論文題目：「CONSTITUTIVE MODELS FOR GEOLOGIC MATERIALS AND THEIR APPLICATION TO EXCAVATION PROBLEMS」

5. 加入学会名：地盤工学会（1992年～）、土木学会（1991年～）、地震学会（2002年～）、材料学会（2002年～）、国際地盤工学会（1995年～）

6. 社会活動：

1999年～2002年 土木学会 地震工学委員会・杭基礎耐震検討小委員会 委員
2000年～2000年 土木学会 地震工学委員会・レベル2地震動による液状化研究小委員会 委員
1999年～2001年 地盤工学会 調査部 部員
2000年～2002年 地盤工学会 施工過程を考慮した地盤の変形・破壊予測に関する研究委員会 委員
1999年 地盤工学会 中部支部 幹事長
1999年 地盤工学会 中部支部第4部会 委員長
1999年～2005年 日本道路公団 中部支社管内のり面対策検討委員会 委員
2002年～2006年 地盤工学会 国際部 部員
2003年～2005年 国際地盤工学会 TC34 国内委員会 委員
2003年～2012年 地盤工学会 中部支部 評議員

| | |
|-------------|--|
| 2003年～2005年 | JCI 中部支部技術評価・支援機構 委員 |
| 2003年～2004年 | (財)名古屋高速道路 軟弱地盤構造検討委員会 副委員長 |
| 2004年～2007年 | 地盤工学会 「地盤工学会論文報告集」編集委員会 委員 |
| 2004年～2007年 | 地盤工学会 基礎構造の設計に関わる新技術評価に関する研究委員会 委員 |
| 2004年～2007年 | 地盤工学会 IT 推進委員会 部員 |
| 2005年～2009年 | 地盤工学会 中部支部 副支部長 |
| 2009年～2011年 | 地盤工学会 会誌部 講座小委員会 委員長 |
| 2009年～2016年 | NEXCO 中日本 入札技術総合評価 技術審査員 |
| 2010年～ | 国土交通省 中部地方整備局 新技術活用評価会議 議員 |
| 2012年 | 地盤工学会 中部支部 支部長 |
| 2013年 | 材料学会 東海支部 支部長 |
| 2014年～2017年 | 地盤工学会 Soils and Foundations 編集委員会 幹事委員 |
| 2015年～2018年 | 電中研「人工バリアと周辺岩盤の長期挙動評価手法の構築」評価検討委員会 委員長 |
| 2016年～ | 名古屋高速道路公社 入札監視委員 |
| 2018年～2022年 | 材料学会 理事 |
| 2020年～ | 国際環境地盤工学会 (International Society of Environmental Geotechnology) 副会長 |

7. **連絡先** : 〒466-8555 名古屋市昭和区御器所町 大学院工学研究科
Tel: (052)735-7923; E-mail : cho.ho@nitech.ac.jp

8. **賞罰** :

- **地盤工学会論文賞** (地盤工学会論文報告集、Soils and Foundations), 2003年3月18日, 「**F. Zhang and** M. Kimura, 2002. Numerical prediction of the dynamic behaviors of RC group-pile foundation, Soils and Foundations, Vol. 42, No.3, 77-92」
- **地盤工学会論文賞** (地盤工学会論文報告集、Soils and Foundations), 2011年3月16日, 「H. M. Shahin, T. Nakai, **F. Zhang**, M. Kikumoto & E. Nakahara, 2011. Behavior of Ground and Response of Existing Foundation Due to Tunneling, Vol. 51, No.3, 395-409」
- **土木学会論文賞** 2007年4月24日, 「斜杭を有する群杭基礎の地震時の力学特性 (総合題目)」
- **日本材料学会 支部功労賞** 2014年度

9. **専門分野** : 地盤力学・岩盤工学・耐震工学 (**大分類**)

細分類 :

- 飽和・不飽和土, 軟岩・改良土の構成式
- 地盤工学に関する数値解析
- 杭基礎, 基礎・地盤・上部構造物一体系の耐震評価
- 高レベル核廃棄物の地層処分
- 海底岩盤高精度モデルの構築とデコルマ形成メカニズムの解明

研究業績目録

著書・専門書

1. New Frontier in Computational Geotechnics, Proc. 1st International Workshop on New Frontiers in Computational Geotechnics, Banff, Canada, 共著者：A. Yashima, **F. Zhang** and R. G. Wan, 2003 年 9 月, 岐阜新聞社, ISBN4-87797-056-8 C3051.
2. New Frontier in Computational Geotechnics, Proc. 2nd International Workshop on New Frontiers in Computational Geotechnics, Fortaleza, Brazil, 共著者： **F. Zhang**, M. M. Farias and A. Yashima, 2005 年 6 月, 岐阜新聞社, ISBN4-87797-107-6 C3051.
3. New Frontier in Computational Geotechnics, Proc. 3rd International Workshop on New Frontiers in Computational Geotechnics, Xi'an, China, 共著者： **F. Zhang**, A. Yashima and H. H. Zhu, 2007 年 6 月, 岐阜新聞社, ISBN 978-4-87797-121-2 C3051.
4. New Frontier in Computational Geotechnics, Proc. 4th International Workshop on New Frontiers in Computational Geotechnics, Pittsburgh, USA, 共著者： **F. Zhang**, J. S. Lin and A. Yashima, 2009 年 8 月, 岐阜新聞社, ISBN 978-4-87797-149-6 C3051.
5. New Frontier in Computational Geotechnics, Proc. 5th International Workshop on New Frontiers in Computational Geotechnics, Brisbane, Australia, 共著者：H. MD. Shahin, D. M Pedroso, **F. Zhang** and A. Yashima, 2011 年 6 月, 岐阜新聞社, ISBN 978-4-87797-177-9 C3051.
6. New Frontier in Computational Geotechnics, Proc. 6th International Workshop on New Frontiers in Computational Geotechnics, Takayama, Japan, 共著者：H. MD. Shahin, **F. Zhang** and A. Yashima, 2013 年 8 月, 岐阜新聞社, ISBN 978-4-87797-190-8 C3051.
7. 計算土力学, 单著、**張 鋒**、2007 年 10 月, 人民交通出版社(中国), ISBN 978-7-114-06713-6.

Keynote Speech (till 2015)

1. 「群杭基礎の耐震性能評価」、張 鋒、第 20 回横浜国立大学地盤工学セミナー、2003 年 11 月 29 日
2. 「地盤・群杭基礎の相互作用」、張 鋒、第 24 回地盤工学若手セミナー、2004 年 10 月 16 日
3. Invited speaker, “Mechanical behavior of soft sedimentary rock, testing and modeling”, **F. ZHANG**, International Workshop on Constitutive Modelling-Development, Implementation, Evaluation, and Application, January 12-13, 2007, Hong Kong.
4. Keynote speaker, “Numerical Simulation of Vibration Damping Effect of Soilbag”, **F. ZHANG**, APCOM'07 in conjunction with EPMESC XI, December 3-6, 2007, Kyoto, JAPAN.
5. Keynote speaker, “A constitutive model for soils considering overconsolidation, structure and anisotropy”, **F. ZHANG**, International Conference on PLASTICITY 2008, January 3-8, 2008, Kona, Hawaii, USA.
6. Keynote speaker, 核廃料深埋処理の数値分析 (Numerical analysis for the nuclear waste disposal in sedimentary rock mass)、**F. ZHANG**, 2010 中国水工岩土大会、上海、2010 年 8 月 25 日。
7. Keynote speaker, “Judgement of the state of sand based on confining pressure and void ratio”, **F. ZHANG**, International Symposium on Recent Advances and Challenges in Soil Dynamics and Special Soil Mechanics, Harbin, China, July 25-26, 2015.
8. Keynote speaker, “Geologic repository of high-level nuclear waste”, **F. ZHANG**, International Symposium on Systematic Approaches to Environmental Sustainability in Transportation, Fairbanks, Alaska, USA, August 2-5, 2015.

9. Special lecture, "Judgement of the state of sand based on confining pressure and void ratio", *F. ZHANG*, 6th Japan-China Geotechnical Symposium, Sapporo, Japan, September 1, 2015.
10. Keynote speaker, "Unified description of clean sand", *F. ZHANG*, 3rd International Workshop on Long-Term Behaviour and Environmentally Friendly Rehabilitation Technologies of Dams, Hohai University, Nanjing, China, October 17-19, 2015.
11. Special lecture, "Unified description of clean sand and its application in seismic assessment of reinforced-soil retaining wall", *F. ZHANG*, 1st International Workshop on Seismic Design of Embankment, Tokyo, Japan, December 2, 2015.

Invited speech (till 2015)

1. “3D dynamic finite element analysis on soil-structure interaction with a soil-pile foundation-superstructure system considering strong nonlinear behavior of soil and structure”, University of Calgary, Canada, April, 18, 2002.
2. “Elasto-viscoplastic behavior of soft sedimentary rock and its modeling with t_{ij} intermediate-stress-dependency concept and subloading surface”, Bristol University, UK, June 20, 2005.
3. 「地盤・構造物一体系の動的挙動の FEM による数値シミュレーション」、E-defense, Japan, Sep. 21, 2005.
4. 「地盤～杭動的相互作用に関する FEM を用いた数値解析の試み」、E-defense, Japan, March 20, 2006.
5. 「地盤調査、室内試験の重要性」、同濟大学、Aug. 20, 2007.
6. 「有限変形を考慮する地盤の液状化解析」、岡山大学 (Okayama University)、日本、March 5, 2007.
7. 「地盤・構造物一体系の動的挙動の FEM による数値シミュレーションおよびその精度」、岡山大学 (Okayama University)、日本、Jan. 22-23, 2008.
8. 「地盤災害とその数値シミュレーション」、東海旅客鉄道、日本、Dec. 6, 2009.
9. 「ひずみ軟化、時間依存性及び温度効果を考慮した軟岩の構成式」、清水建設技術研究所、日本、March 3, 2010.
10. “Mechanical behavior of sand subjected to different loading under different drained conditions and its unified description with elastoplastic model”, Queensland University, Australia, March 19, 2010.
11. 「地盤工学諸問題に関わる材料の構成式の開発」、鉄道総合研究所、日本、Dec. 16, 2010.
12. 「地盤工学諸問題に関わる材料の構成式の開発」、地域地盤環境研究所 (Geo-Research Institute)、日本、Oct. 21, 2010.
13. 堆積岩の熱弾粘塑性模型及在核廃料深埋処理の数値分析中的应用 (Thermo-elasto-viscoplastic model of sedimentary rock mass and its application in the numerical analysis for the nuclear waste disposal), 光華講座教授講演 I、Aug. 29, 2010.
14. 「使用統一状態変量的飽和・不飽和土の弾粘塑性模型 (Constitutive model for unsaturated-saturated soil using unified state variables)」, 光華講座教授講演 II、Aug. 30, 2010.
15. 「岩盤の長期安定性の予測 - ひずみ軟化、時間依存性及び温度効果を考慮した堆積軟岩の構成式 -」、地盤工学会四国支部特別講演、May 21, 2010.
16. 「地盤工学諸問題に関わる材料の構成式の開発」、中南大学、Dec. 27, 2010.
17. 「使用統一状態変量的飽和・不飽和土の弾粘塑性模型 (Constitutive model for unsaturated-saturated soil using unified state variables)」, 北京航空航天大学、中国、March 30, 2011.
18. 「砂の統一的な解釈の試み」、大成建設技術研究所、日本、June 17, 2011.
19. 「高レベル核廃棄物地層処分の THM 解析」、京都大学、日本、July 13, 2011.
20. 「Unified description of sand behavior and its application in describing re-liquefaction of sandy ground in 3.11 Great East Japan Earthquake」、大連理工大学、中国、September 17, 2012.
21. 「Unified description of sand and its application to liquefaction in multi-earthquake vibration」、華南理工大学、中国、December 27, 2012.
22. 「Unified description of Toyoura sand under different loading and drainage conditions」、The University of Newcastle、Australia、February 26, 2013.
23. 「Constitutive model for unsaturated-saturated soil and its application in slope failure analysis based

- on fully coupled soil-water-air 3-phase field theory」、同济大学、中国、March 14, 2013.
24. 「Try for a unified description of sand and its applications to boundary value problems」、台湾大学、April 24, 2015.
 25. 「Constitutive models and boundary value problems」、哈尔滨工业大学、中国、May 4, 2014.
 26. 「Geologic repository of nuclear waste: Element tests, field tests, constitutive model, field equation and numerical simulation」、清华大学、中国、November 4, 2014.
 27. Invited speaker, “Rational constitutive model for unsaturated-saturated soils and its application to slope failure problem with soil-water coupling FE-FD method”, *F. ZHANG*, International conference of 3rd AP-UNSAT2015, Unsaturated Soils: Research & Applications, Guilin, China, 23-26 Oct 2015.

論文リスト (Journal, 査読付論文)

1. Q. C. Zhao and **F. Zhang**, 1988, The Method of Coating Caustics and Its Application in Fracture Mechanics, *Journal of Tongji University (Quarterly)*, Vol. 16, No.4, 485-492 (in Chinese).
2. T. Adachi, F. Oka, A. Yashima, and **F. Zhang**, 1991, Finite element analysis with strain-softening constitutive model, *Proc. 7th Int. Conf. on Computer Methods and Advances in Geomechanics*, Cairn, Balkema, Beer, Booker & Carter (eds), 535-540.
3. 足立記尚・大西有三・岡二三生・**張 鋒**, 1991. 岩盤不連続面の硬化—軟化型構成式, *ダム工学*, Vol.3, 34-40.
4. T. Adachi, F. Oka, A. Yashima, and **F. Zhang**, 1991, A FEM analysis of strain localization using a non-local strain-softening plasticity, *Proc. 3rd Int. Conf. on Constitutive Laws for Engineering Materials, Theory and Application*, Tucson, Balkema, 625-628.
5. T. Adachi, **F. Zhang**, Y. Matsushita, and T. Hashimoto, 1993, Shallow tunnel in soft rock with NATM, *Proc. 1st Int. Symp. Geotechnical Engineering of Hard Soils-Soft Rocks*, Athens, Anagnostopoulos et al. (eds), Balkema, 1365-1372.
6. T. Adachi, F. Oka, and **F. Zhang**, 1993, Finite element analysis for constitutive model with strain softening, *Computational Mechanics*, Valliappan et al. (eds), Balkema, 325-330.
7. T. Adachi, M. Kimura, and **F. Zhang**, 1994, Analyses on ultimate behavior of lateral loading cast-in-place concrete piles by three-dimensional elasto-plastic FEM, *Proc. 8th Int. Conf. Computer Method and Advance in Geomechanics*, Siriwardane & Zaman (eds), Balkema, Vol.3, 2279-2284.
8. T. Adachi, F. Oka, and **F. Zhang**, 1994, An elasto-viscoplastic constitutive model with strain softening and its application to the progressive failure of a cut slope, *AMD-Vol.183/MD-Vol.50, Material Instabilities, Theory and Applications*, ASME, 203-217.
9. T. Adachi, F. Oka, A. Yashima, and **F. Zhang**, 1994, Analysis of earth tunnel by strain softening constitutive model, *Proc. 13th ICSMGE*, Vol.2, 879-882.
10. M. Kimura, T. Adachi, H. Kamei, and **F. Zhang**, 1995, 3-D finite element analysis of the ultimate behavior of laterally loaded cast-in-place piles, *Proc. 5th Int. Symp. Numerical Models in Geomechanics*, Pande & Pietruszczak (eds), Davos, Swaziland, Balkema, 589-594.
11. T. Adachi, J. Liu, A. Koike and **F. Zhang**, 1996, Finite element analysis of Biot's consolidation in slope excavation based on a constitutive model with strain softening, *Proc. 7th Int. Symp. Landslides*, Senneset (eds), Trondheim, Norway, Balkema, 1131-1136.
12. M. Kimura and **F. Zhang**, 1997, Seismic evaluation of pile foundation, *Proc. 6th Int. Symp. Numerical Models in Geomechanics*, Pietruszczak & Pande (eds), Montreal, Balkema, 545-548.
13. M. Kimura, **F. Zhang**, K. Natsukawa and R. Tanaka, 1997, Evaluation of the Interaction between Pile-foundation and Ground in Dynamic Analysis with Nonlinear Springs, *Proc. 9th Int. Conf. Computer Method and Advance in Geomechanics*, Yuan (eds), Wuhan, Balkema, Vol.3, 2155-2158.
14. 足立紀尚・岡二三生・**張 鋒**, 1998, ひずみ軟化型弾・粘塑性構成式、第44回地盤工学シンポジウム論文集、47-54
15. T. Adachi, F. Oka and **F. Zhang**, 1998, An elasto-viscoplastic constitutive model with strain softening, *Soils and Foundations*, Vol. 38, No.2, 27-35, DOI: https://doi.org/10.3208/sandf.38.2_27.
16. M. Kimura and **F. Zhang**, 1998, Seismic evaluation of pile foundation by 3-D finite element analyses, *Proc. 7th Int. Conf. & Exhibition on Piles and Deep Foundations*, 5.21.1-5.21.8.
17. **F. Zhang**, M. Kimura and T. Nakai, 1998, Field tests and numerical analyses on pile foundation

- undergone lateral cyclic loading, *Proc. 8th KKNN Seminar on Civil Engineering*, Swaddiwudhipong et al. (eds), Singapore, 314-319.
18. M. Kimura, **F. Zhang**, and T. Inoue, 1998, Investigation on the behavior of pile foundation undergone cyclic lateral loading by 3-D finite element analysis (DGPILE-3D), *Proc. 3rd Int. Geotechnical Seminar, Deep Foundation on Bored and Auger Piles*, Van Impe (eds), 145-150.
 19. M. Kimura and **F. Zhang**, 1999, Seismic evaluation of pile foundation by static and dynamic 3-D finite element analyses, *Proc. the 11th Asian Regional Conference of Int. Society for Soil Mechanics and Geotechnical Engineering*, Seoul, Vol. 1, 507-510.
 20. T. Adachi, F. Oka, H. Osaki, H. Fukui and **F. Zhang**, 1999, Soil-water coupling analysis of progressive failure of cut slope using a strain softening model, *Proc. Int. Conf. on Slope Stability Engineering (IS-Shikoku)*, Yagi et al. (eds), Matsuyama, Japan, Balkema, Vol.1, 333-338.
 21. M. Kimura and **F. Zhang**, 2000, Dynamic Behavior of Group-Pile Foundation by Three-Dimensional Elasto-Plastic Finite Element Analyses, *Proc. 12th World Conference on Earthquake Engineering (12th WCEE)*, Auckland, New Zealand, 1409.1-8
 22. M. Kimura and **F. Zhang**, 2000, Seismic evaluation of pile foundations with three different methods based on three-dimensional elasto-plastic finite element analysis, *Soils and Foundations*, Vol. 40, No.5, 113-132, DOI: https://doi.org/10.3208/sandf.40.5_113.
 23. **F. Zhang**, M. Kimura, T. Nakai and T. Hoshikawa, 2000, Mechanical behavior of pile foundations subjected to cyclic lateral loading up to the ultimate state, *Soils and Foundations*, Vol. 40, No.5, 1-18, DOI: https://doi.org/10.3208/sandf.40.5_1.
 24. **F. Zhang**, M. Kimura and R. Furuta, 2000, Dynamic behavior of group-pile foundation, *Proc. the 4th Japan conference on structural safety and reliability (JCOSSAR2000)*, 301-308.
 25. **F. Zhang**, A. Yashima, M. Kimura and R. Uzuoka, 2000, 3-D FEM Analysis of Laterally Cyclic Loaded Group-Pile Foundation Based on an Axial-Force Dependent Hysteretic Model For RC, *Proc. Int. Conf. on Geotechnical and Geological Engineering (GeoEng2000)*, Melbourne, Balkema, CD-ROM.
 26. T. Boonyatee, M. Kimura & **F. Zhang**, 2000, Three-dimensional finite element analysis of static load test, *Proc. the Int. Symp. of Application of Stress-Wave Theory to Piles*, Niyama & Beim (eds), Balkema, 563-566.
 27. A. Yashima, **F. Zhang**, R. Uzuoka and H. Sawada, 2001, 3-D finite element liquefaction analysis of a petroleum tank-ground-foundation system based on a kinematic hardening elastoplastic model, *Proc. 4th Int. Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics*, San Diego, Balkema, 4.10, CD-ROM.
 28. R. Uzuoka, T. Kubo, A. Yashima and **F. Zhang**, 2001, Numerical study on 3-dimensional behavior of a damaged pile foundation during 1995 Hyogo-Ken Nanbu earthquake, *Proc. 4th Int. Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics*, San Diego, Balkema, 6.22, CD-ROM.
 29. **F. Zhang**, A. Yashima and R. Uzuoka, 2001, 3-D liquefaction analysis of reclaimed ground with tank and foundation, *Proc. 10th Int. Conf. on Computer Methods and Advances in Geomechanics*, Desai et al. (eds), Tucson, Balkema, Vol. 2, 1145-1149.
 30. T. Adachi, F. Oka, H. Kobayashi, S. Kimoto and **F. Zhang**, 2001, Progressive failure of cut slope in anisotropic ground, *Proc. 10th Int. Conf. on Computer Methods and Advances in Geomechanics*,

- Desai et al. (eds), Tucson, Balkema, Vol. 2, 1531-1535.
31. **F. Zhang** and A. Yashima, 2001, New approach for assessing long-term stability of tunnel and remedial work, *Proc. 16th ICSMGE*, Vol. 3, 1435-1438.
 32. **F. Zhang**, A. Yashima, T. Adachi and F. Oka, 2001, A fundamental study on a trapdoor in sandy ground using FEM with a strain softening model, *Proc. Regional conference on Geotechnical Engineering in Soft Ground*, Liu & Liao (eds.), Shanghai, Tongji University Press, 575-580.
 33. T. Adachi, F. Oka, M. Kimura, K. Kishida, M. Kikumoto, T. Takeda & **F. Zhang**, 2001, Numerical simulation of centrifuge test of trapdoor by 3-D FEM, *Proc. Int. Conf. on Modern Tunneling Science and Technology (IS-Kyoto 2001)*, Adachi et al. (eds), Kyoto, Balkema, Vol.1, 147-152.
 34. 渦岡 良介・久保 哲夫・八嶋 厚・**張 鋒**, 2001, 不飽和層への浸透現象を考慮した液状化解析, *土木学会論文集*, No.694, III-57, 153-163, DOI: https://doi.org/10.2208/jscej.2001.694_153.
 35. A. Yashima, **F. Zhang**, H. Shigematsu, A. Endo, K. Nishida and S. Sakamoto, 2001, Geotechnical study of ALMA site foundation in the Cerro Chascón science preserve, *Publication of National Astronomy Observation of Japan*, Vol.6, 65-74.
 36. **F. Zhang**, A. Yashima, K. Sawada, T. Sumi, T. Adachi and F. Oka, 2001, Numerical analysis of a large-scale slope failure, *Proc. 5th Int. Conf. of APCOM, Computer Mechanics-New frontiers for New Millennium*, Valliappan and Khalili (eds), Elsevier, 527-532.
 37. T. Adachi, F. Oka, H. Nakajima and **F. Zhang**, 2001, Soil-water coupled analysis of cut slope stability with elasto-viscoplastic model, *Proc. 5th Int. Conf. of APCOM, Computer Mechanics-New frontiers for New Millennium*, S. Valliappan and Khalili (eds), Elsevier, 307-316.
 38. **F. Zhang** and M. Kimura, 2002, Numerical prediction of the dynamic behaviors of RC group-pile foundation, *Soils and Foundations*, Vol. 42, No.3, 77-92, DOI: https://doi.org/10.3208/sandf.42.3_77.
 39. 森伸一郎・三浦房紀・**張 鋒**・岸下 崇祐・岩上 憲一・砂坂善雄, 2002, 杭基礎構造物の一斉地震応答解析, *構造工学論文集*, Vol.48A, 457-468.
 40. **張 鋒**・八嶋 厚・木村 亮・景山 学・片山 辰雄, 2002, 埋立礫材の新しいサンプリング手法と室内試験に基づいた群杭基礎水平載荷試験の数値解析, *土木学会論文集*, No.715, III-60, 227-236, DOI: https://doi.org/10.2208/jscej.2002.715_227.
 41. 木村 亮・牧野 洋志・大川 賢紀・亀井 宏之・**張 鋒**, 2002, 斜杭を有する群杭基礎の静的水平支持力特性, *土木学会論文集*, No.722, III-61, 97-107, DOI: https://doi.org/10.2208/jscej.2002.722_97.
 42. **F. Zhang**, M. Kimura and C. W. Lu, 2002, 3-D dynamic finite element analysis on group-pile foundation based on an axial-force dependent model for RC, *Proc. 5th European Conference on Numerical Methods in Geotechnical Engineering*, Mestat (eds.), 1009-1016.
 43. 渦岡良介・仙頭紀明・八嶋厚・**張 鋒**, 2002, 護岸近傍に位置する杭基礎建物の3次元有効応力解析, *日本地震工学会論文集*, 第2巻, 第2号, 1-14.
 44. R. Uzuoka, A. Yashima, **F. Zhang** and M. Takagi, 2002, 3-D dynamic liquefaction analysis on a damaged group-pile foundation, *Proc. 5th European Conference on Numerical Methods in Geotechnical Engineering*, Mestat (eds.), 1017-1024.
 45. K. Okawa, H. Kamei, M. Kimura and **F. Zhang**, 2002, Dynamic behavior of a group-pile foundation with inclined piles in loose sand, *Proc. Int. Conf. Physical modeling in geotechnics (ICPMG'02)*,

- Phillips (eds.), 729-734.
46. K. Sawada, H. Kato, A. Yashima and **F. Zhang**, 2002, Analytical study of grains rotation using tij sand model based on Cosserat continuum theory, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 175-182.
 47. C. W. Lu, F. Oka and **F. Zhang** 2002, Mechanical behavior of single and group piles before and after liquefaction, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 147-156.
 48. **F. Zhang**, A. Yashima, M. Higuchi and M. Kimura, 2002, 3-D Analysis on dynamic behavior of jacket-type foundation with inclined piles, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 123-128.
 49. G.L. Ye, A. Yashima and **F. Zhang**, 2002, 3-D finite element analysis of a large-scale slope failure due to heavy rain, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 99-106.
 50. R. Furuta, A. Yashima, and **F. Zhang**, 2002, A cyclic elasto-plastic constitutive model for sand and its application in liquefaction analysis, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 33-42.
 51. A. M. Sarr, A. Yashima and **F. Zhang**, 2002, Strain softening with negative dilatancy for highly structured geomaterials, *Proc. 1st International Workshop on New Frontiers in Computational Geotechnics*, Yashima et al. (ed.), 43-52.
 52. 大川賢紀・亀井宏之・張鋒・木村 亮, 2002, 軟弱地盤における動的相互作用を考慮した斜杭群杭基礎の耐震性評価, 第11回日本地震工学シンポジウム論文集, 343-350.
 53. 渦岡良介・芝崎水無子・風間基樹・八嶋厚・張鋒, 2002, 液状化地盤中の杭の地盤反力評価に対する 3次元有効応力解析の適用性, 第11回日本地震工学シンポジウム論文集, 1055-1060.
 54. **F. Zhang**, A. Yashima, T. Sumi, H. Ono, G. L. Ye and A. M. Sarr, 2003, NUMERICAL SIMULATION OF PROGRESSIVE FAILURE OF SLOPE, *Proc. 1st World Forum of Chinese Scholars in Geotechnical Engineering (GEO-WCS2003)*, Tongji University Press, Zhu et al (eds), 196-207.
 55. **F. Zhang**, A. Yashima, H. Osaki, T. Adachi and F. Oka, 2003, Numerical simulation of progressive failure in cut slope using a soil-water coupled analysis based on a strain-soften model, *Soils and Foundations*, Vol. 43, No.5, 119-131. DOI: https://doi.org/10.3208/sandf.43.5_119
 56. **F. Zhang**, A. Yashima, G. L. Ye, T. Adachi and F. Oka, 2003, An elastoplastic strain-softening constitutive model for soft rock considering the influence of intermediate stress, *Soils and Foundations*, Vol. 43, No.5, 107-117, DOI: https://doi.org/10.3208/sandf.43.5_107.
 57. **F. Zhang**, A. Yashima, S. Matsuda, Y. Sekine & H. Hyodo, 2003, Evaluation of the remedial works for cracked tunnels in creep-behaved ground, *Proc. 12th Asian Regional Conference of Int. Society for Soil Mechanics and Geotechnical Engineering*, Singapore, Leung et al. (eds), 895-898.
 58. **F. Zhang**, A. Yashima & Y. Noda, 2003, Dynamic behavior of group pile with simplified model and full model, *Proc. the Sino-Japanese Symposium on Geotechnical Engineering, Beijing*, Yu & Akagi (eds), 80-87.
 59. 大川 賢紀・亀井 宏之・木村 亮・張鋒, 2003, 斜杭を有する群杭基礎の動的挙動に関する実験的検討, *土木学会論文集*, No.729, III-62, 31-42, DOI:

- https://doi.org/10.2208/jscej.2003.729_31.
60. 大川 賢紀・亀井 宏之・張 鋒・木村 亮, 2004, 一体系動的解析手法による斜杭群杭基礎の動的挙動に関する数値シミュレーション, *土木学会論文集*, No.771, III-68, 33-50, DOI: https://doi.org/10.2208/jscej.2004.771_33.
 61. G. L., Ye, H., Miyaguchi, Y., Huang, H., Sawada, **F. Zhang** & A. Yashima, 2004, Dynamic behavior of group-pile foundation evaluated by simplified model and sophisticated model, *Proc. 13th WCEE*, Vancouver, Paper No. 28, CD-ROM.
 62. K. Sawada, A., Yashima, **F. Zhang**, R., Furuta, T., Yoshida, 2004, Experimental And Numerical Studies on The Change in Ground Stiffness Before And After Liquefaction, *Proc. 13th WCEE*, Vancouver, Paper No. 601, CD-ROM.
 63. F., Oka, C.W. Lu, R. Uzuoka, **F. Zhang**, 2004, Numerical Study of Structure-Soil- Group Pile Foundations Using An Effective Stress Based Liquefaction Analysis Method, *Proc. 13th WCEE*, Vancouver, Paper No. 3338, CD-ROM.
 64. Y. Huang, **F. Zhang**, A. Yashima, K. Sawada, G. L. Ye and N. Kubota, 2004, Three-Dimensional Numerical Simulation of Pile-Soil Seismic Interaction in Saturated Deposits with Liquefiable Sand and Soft Clay, *Proc. 6th World Congress on Computational Mechanics*, Yao et al. (ed.), Springer, ISBN 7-89494-512-9, CD-ROM, M-274.
 65. R. Uzuoka, M. Kazama, **F. Zhang**, A. Yashima and F. Oka, 2004, Prediction of Earth Pressures on a Pile Group Due to Liquefaction-induced Ground Flow, *Proc. 6th World Congress on Computational Mechanics*, Yao et al. (ed.), Springer, ISBN 7-89494-512-9, CD-ROM, M-271.
 66. K. Sawada, S. Moriguchi, A. Yashima, **F. Zhang** and R. Uzuoka, 2004, Large deformation analysis in geomechanics using CIP method, *JSCE*, Series B, Vol.47, No.4, 735-743.
 67. G. L., Ye, K., Naito, K., Sawada, **F. Zhang** & A., Yashima, 2004, Experimental study on soft sedimentary rock under plane-strain compression and creep tests, *Proc. Int. Symp. of ISRM on 3rd ARMS 2004*, Ohnishi et al. (ed.), Millpress, 865-870.
 68. Y. Huang, K. Sawada, S. Moriguchi, A. Yashima & **F. Zhang**, 2004, Finite element analysis of a reinforced soil dike, *Proc. 2nd International Workshop on New Frontiers in Computational Geotechnics*, Fortaleza, Brazil, Zhang et al. (ed.), 55-58.
 69. H. Aung, **F. Zhang**, A. Yashima, K. Naito and G. L. Ye, 2004, Strain softening time dependency of soft sedimentary rock and its modeling, *Proc. 2nd International Workshop on New Frontiers in Computational Geotechnics*, Fortaleza, Brazil, Zhang et al. (ed.), 135-144.
 70. **F. Zhang**, A. Yashima, T. Nakai, G. L. Ye and H. Aung, 2005, An elasto-viscoplastic model for soft sedimentary rock based on tij concept and subloading surface, *Soils and Foundations*, Vol.45, No.1, 65-73.
 71. G.L. Ye, **F. Zhang**, A. Yashima, T. Sumi and T. Ikemura, 2005, Numerical analyses on progressive failure of slope due to heavy rain with 2D and 3D FEM, *Soils and Foundations*, Vol.45, No.2, 1-17, DOI: https://doi.org/10.3208/sandf.45.2_1.
 72. 今井政人・岡二三生・中島伸一郎・張 鋒, 2005, 薄肉鋼管—ソイルセメント複合構造体の圧縮変形特性とそのモデル化, *土木学会論文集*, No.792, III-71, 103-120, DOI: https://doi.org/10.2208/jscej.2005.792_103.
 73. A. Yashima, **F. Zhang** & G. L. Ye, 2005, Progressive failure of slope due to tunnel excavation and

- its numerical simulation, *Proc. 16th ICSMGE*, Vol.2, 2611-2615.
74. 大川 賢紀・亀井 宏之・張 鋒・樋口美紀恵・木村 亮, 2005, 斜杭を有する鋼管杭基礎の地震時の支持性能, *土木学会論文集*, No.806, III-73, 1-12, DOI: https://doi.org/10.2208/jscej.2005.806_1.
 75. Y. Huang, A. Yashima, **F. Zhang** and R. Uzuoka, 2005, Numerical simulation of mitigation for liquefaction by ground improvement and structural enhancement, *Proc. 2nd China-Japan Geotechnical Symposium*, Shanghai, China, Huang et al. (ed.), 91-96.
 76. G. L. Ye, **F. Zhang**, A. Yashima, K. Naito & H. Aung, 2005, An investigation into the mechanical behavior of sedimentary soft rock in plane-strain test, *Proc. 2nd China-Japan Geotechnical Symposium*, Shanghai, China, Huang et al. (ed.), 196-203.
 77. M. Kimura, S. Tamatani, K. Isobe and **F. Zhang**, 2005, Numerical prediction of long-term displacements of group-pile foundation in clayed ground considering construction process, *Proc. 2nd China-Japan Geotechnical Symposium*, Shanghai, China, Huang et al. (ed.), 525-532.
 78. B. Ye, H. Yokawa, T. Kondo, A. Yashima and **F. Zhang**, 2005, Experimental study on dynamic interaction between group-pile foundation and sandy ground with shaking table tests, *Proc. 2nd China-Japan Geotechnical Symposium*, Shanghai, China, Huang et al. (ed.), 579-586.
 79. Y. Huang, K. Sawada, S. Moriguchi, A. Yashima and **F. Zhang**, 2006, Numerical assessment of the effect of reinforcement on the performance of reinforced soil dikes, *Geotextiles and Geomembranes*, No.24, 169-174, DOI: <https://doi.org/10.1016/j.geotexmem.2005.11.005>.
 80. B. Ye, H. Yokawa, T. Kondo, A. Yashima, **F. Zhang**, and Yamada, H. 2006, Investigation on Stiffness Recovery of Liquefied Sandy Ground after Liquefaction using Shaking-Table Tests, Soil and Rock Behavior and Modeling, *ASCE Geotechnical Special Publication* No.150, 482-489, DOI: [https://doi.org/10.1061/40862\(194\)64](https://doi.org/10.1061/40862(194)64).
 81. **F. Zhang**, A. Yashima, G. L. Ye, H. Aung, K. Naito and T. Nakai, 2006, Elasto-Viscoplastic Behavior of Soft Sedimentary Rock, Tests and Its Modeling, Geomechanics II, *Proc. 2nd Japan-U.S. Workshop on Testing, Modeling, and Simulation in Geomechanics*, *ASCE Geotechnical special publication*, 148-161, <https://ascelibrary.org/doi/10.1061/40870%28216%2912>.
 82. Y. Huang, A. Yashima, **F. Zhang**, and K. Sawada, 2006, Numerical simulation for earthquake liquefaction of soil embankments, *Computational Methods*, *Proc. ICCM2006*, Liu et al (eds), Springer, 269-274.
 83. M. Kikumoto, T. Nakai, **F. Zhang**, M. Hinokio, A. Yagyū & H. Kyokawa, 2006, Extension of subloading tij model to structured soils, *Proc. IS-Yamaguchi, Geomechanics and Geotechnics of Particulate Media*, Hyodo et al (eds), Balkema, 305-311.
 84. R. Uzuoka, M. Cubrinovski, **F. Zhang**, A. Yashima and F. Oka, 2006, Validation of 3-D dynamic soil-water coupled analyses for liquefaction-induced earth pressure on a pile group, *Proc. 3rd International Workshop on New Frontiers in Computational Geotechnics*, IWS-Xi'an, Zhang et al. (ed.), 45-50.
 85. B. Ye, G.L. Ye, **F. Zhang** and A. Yashima, 2006, Numerical simulation on repeated processes of liquefaction and consolidation in sandy ground, *Proc. 3rd International Workshop on New Frontiers*

- in *Computational Geotechnics*, IWS-Xi'an, Zhang et al. (ed.), 51-56.
86. M. Kikumoto, T. Nakai, **F. Zhang**, M. Hinokio, A. Yagyū and H. Kyokawa, 2006, Isotropic hardening model for soil considering induced anisotropy using modified stress, *Proc. 3rd International Workshop on New Frontiers in Computational Geotechnics*, IWS-Xi'an, Zhang et al. (ed.), 115-120.
 87. Uzuoka, R., Cubrinovski, M., **Zhang, F.**, Yashima, A., Oka, F., 2006, Accuracy of prediction with effective stress analysis for liquefaction-induced earth pressure on a pile group, *Proc. Workshop on Geotechnical Earthquake Engineering*, November, Christchurch, New Zealand, 120-132.
 88. K. Sawada, **F. Zhang** and A. Yashima, 2006, Rotation of Granular material in laboratory tests and its simulation using tij-Cosserat continuum theory, *Computational Methods*, Liu et al.(eds), Springer, 1701-1706.
 89. R. Uzuoka, B. N. Sento, M. Kazama, **F. Zhang**, A. Yashima and F. Oka, 2007, Three-dimensional numerical simulation of earthquake damage to group-piles in a liquefied ground, *Soil Dynamics and Earthquake Engineering*, Vol.27, No.5, 395-413, DOI: <https://doi.org/10.1016/j.soildyn.2006.10.003>.
 90. **F. Zhang**, G. L. Ye, K. Naito, H. Aung and A. Yashima, 2007, Mechanical behavior of soft sedimentary rock--Testing and modeling, *Proc. International Workshop on Constitutive Modelling-Development, Implementation, Evaluation and Application*, Hong Kong, Yin et al (eds), 228-237.
 91. B. Ye, G. L. Ye, **F. Zhang** and A. Yashima, 2007, Experiment and numerical simulation of repeated liquefaction-consolidation of sand, *Soils and Foundations*, Vol.47, No.3, 547-558, DOI: <https://doi.org/10.3208/sandf.47.547>.
 92. **F. Zhang**, B. Ye, T. Noda, M. Nakano and K. Nakai, 2007, Explanation of Cyclic mobility of soils: approach by stress-induced anisotropy, *Soils and Foundations*, Vol.47, No.4, 635-648, DOI: <https://doi.org/10.3208/sandf.47.635>.
 93. G. L. Ye, **F. Zhang**, K. Naito, H. Aung and A. Yashima, 2007, Test on soft sedimentary rock under different loading paths and its interpretation, *Soils and Foundations*, Vol.47, No.5, 897-909, DOI: <https://doi.org/10.3208/sandf.47.897>.
 94. N. Iwata, T. Nakai, **F. Zhang**, T. Inoue and H. Takei, 2007, Influences of 3D effects, wall deflection process and wall deflection mode in retaining wall problems, *Soils and Foundations*, Vol.47, No.4, 685-699, DOI: <https://doi.org/10.3208/sandf.47.685>.
 95. H. Aung, K. Naito, M. Iwata, B. Ye, A. Yashima and **F. Zhang**, 2007, Tests on shear strength and creep behavior of sedimentary soft rock under triaxial and plane-strain conditions, *Proc. 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering*, Kolkata, Vol.1, 533-536.
 96. T. Nakai, **F. Zhang**, M. Kikumoto, H.M. Shahin, H. Takei & M. Niinomi, 2007, Influence of existing load on excavation problems – model tests and numerical simulation, *Proc. 10th Int. Symp. on Numerical Models in Geomechanics*, Rhodes, Greece, Ponde et al (eds), Balkema, 611-617.
 97. M. Kikumoto, H. Kyokawa, T. Nakai, **F. Zhang** & M. Hinokio, 2007, Description of induced anisotropy of soils using isotropic hardening rule in modified stress space, *Proc. 10th Int. Symp. on*

- Numerical Models in Geomechanics*, Rhodes, Greece, Ponde et al (eds), Balkema, 85-91.
98. B. Ye, A. Yashima, G. L. Ye and **F. Zhang**, 2007, Repeated liquefaction and consolidation of sand, tests and numerical simulation considering finite deformation, *Proc. 10th Int. Symp. on Numerical Models in Geomechanics*, Rhodes, Greece, Ponde et al (eds), Balkema, 729-735.
99. 村松大輔・**張鋒**・H. M. Shahin, 2007, 土のう補強材地盤の有限変形を伴う支持力特性の数値シミュレーション, *地盤工学ジャーナル*, Vol. 2, No. 1, 11-23, DOI: <https://doi.org/10.3208/jgs.2.11>.
100. 磯部公一・木村亮・張鋒・河野謙治・原田典佳・楨野健・桑嶋健, 2007, 既設渡河橋梁基礎を補強した鋼管矢板基礎の補強メカニズムに関する有限要素解析, *土木学会論文集 C*, Vol.63, No.2, 516-529, DOI: <https://doi.org/10.2208/jscejc.63.516>.
101. T. Nakai, **F. Zhang**, M. Hinokio, H.M. Shahin, M. Kikumoto, Yonaha and A. Nishio, 2007, Bearing capacity of reinforced foundation subjected to pull-out loading: 3D model tests and numerical simulation, *Proc. Int. Symp. on New Horizons in Earth Reinforcement*, Otani et al (eds), Balkema, 457-463.
102. D. Muramatsu, **F. Zhang** and H. M. Shahin, 2007, Numerical simulation on bearing capacity of soilbag-reinforced ground considering finite deformation, *Proc. Int. Symp. on New Horizons in Earth Reinforcement*, Otani et al (eds), Balkema, 465-471.
103. H. Kyokawa¹, T. Nakai, **F. Zhang** and M. Kikumoto, 2007, A method of modeling of geomaterials considering density and bonding of soils, *Proc. International conference of APCOM'07 in conjunction with EPMESC XI*, MS29-1-3, CDROM.
104. B. Ye, D. Muramatsu, **F. Zhang** and T. Nakai, 2007, Numerical Simulation of Vibration Damping Effect of Soilbag, *Proc. International conference of APCOM'07 in conjunction with EPMESC XI*, MS29-4-1, CDROM.
105. T. Nakai, **F. Zhang**, H.M. Shahin and M. Kikumoto, 2007, Behavior of ground in excavation problems -MODEL TESTS AND NUMERICAL SIMULATIONS-, *Proc. International Conference on New frontiers in Chinese and Japanese Geotechniques*, Yao et al (eds), 3-20, China Communications Press.
106. T. Nakai, **F. Zhang**, H. Kyokawa and M. Kikumoto, 2007, A simple modeling of structured soils, *Proc. International Conference on New frontiers in Chinese and Japanese Geotechniques*, Yao et al (eds), 435-447, China Communications Press.
107. G. L. Ye, B Ye, **F. Zhang**, M. Fukuda and J Nagaya, 2007, A unified approach for finite element modeling of static and dynamic behaviors of SCP improved ground, *Proc. International Conference on New frontiers in Chinese and Japanese Geotechniques*, Yao et al (eds), 706-717, China Communications Press.
108. Ye G.L., **Zhang F.**, Yashima A., Aung H. and Naito K. 2007, Influence of Membrane and Filter Paper on Plane-Strain Testing of Soft Sedimentary Rock, *Geotechnical Testing Journal*, Vol.30, No.6, 442-453, DOI: <https://doi.org/10.1520/GTJ100889>.
109. C. W. Lu, F. Oka and **F. Zhang**, 2007, Analysis of soil-pile-structure interaction in a two-layer

- ground during earthquakes considering liquefaction, *International Journal for Numerical and Analytical Methods in Geomechanics*, 32(8), 863 – 895, DOI: <https://doi.org/10.1002/nag.646>.
110. R. Uzuoka, M. Cubrinovski, H. Sugita, M. Sato, K. Tokimatsu, N. Sento, M. Kazama, **F. Zhang**, A. Yashima and F. Oka, 2008, Prediction of pile response to lateral spreading by 3-D soil-water coupled dynamic analysis: Shaking in the direction perpendicular to ground flow, *Soil Dynamics and Earthquake Engineering*, Vol.28, No.6, 436-452, DOI: <https://doi.org/10.1016/j.soildyn.2007.08.007>.
 111. Y. Huang, A. Yashima, K. Sawada and **F. Zhang**, 2008, Numerical assessment of the seismic response of an earth embankment on liquefiable soils, *Bulletin of Engineering Geology and the Environment*, Vol. 67, 31–39, DOI: <https://doi.org/10.1007/s10064-007-0097-y>.
 112. Y. Huang, **F. Zhang**, A. Yashima & W.M. Ye, 2008, Numerical simulation of mitigation for liquefaction-induced soil deformations in a sandy ground improved by cement grouting, *Environmental Geology*, Vol.55, 1247–1252, DOI: <https://doi.org/10.1007/s00254-007-1069-z>.
 113. N. Iwata, H. M. Shahin, **F. Zhang**, T. Nakai, M. Niinomi & Y.D.S. Geraldni, 2008, Excavation with stepped-twin retaining wall: model tests and numerical simulations, *Proc. 6th Int. Symp. (IS-Shanghai 2008)*, C.W.W. Ng et al (eds), Balkema, 655-661.
 114. **F. Zhang**, K. Okawa, M. Kimura, 2008, Centrifuge model test on dynamic behavior of group-pile foundation with inclined piles and its numerical simulation, *Frontiers of Structure and Civil Engineering*, Springer, Vol.2, No.3, 233–241, DOI: <https://doi.org/10.1007/s11709-008-0033-7>.
 115. H. M. Shahin, T. Nakai, **F. Zhang**, M. Kikumoto, T. Tabata & R. Nakahara, 2008, Ground movement and earth pressure due to circular tunneling: model tests and numerical simulations, *Proc. 6th Int. Symp. (IS-Shanghai 2008)*, C.W.W. Ng et al (eds), Balkema, 709-715.
 116. 村松 大輔, 叶 斌, **張 鋒**, 2009, 土のうの振動低減効果に関する数値シミュレーション, *地盤工学ジャーナル*, Vol. 4, No. 1, 71-80, DOI: <https://doi.org/10.3208/jgs.4.71>.
 117. S. Zhang and **F. Zhang**, 2009, A Thermo-Elasto-Viscoplastic Model for Soft Sedimentary Rock, *Soils and Foundations*, Vol.49, No.4, 583-596, DOI: <https://doi.org/10.3208/sandf.49.583>.
 118. T. Nakai, H. Kyokawa, M. Kikumoto, H. M. Shahin and **F. Zhang**, 2009, One- dimensional and three-dimensional descriptions of elastoplastic behavior in structured clays, *Proc. 4th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Pittsburgh, Zhang et al. (ed.), 3-12.
 119. Y. J. Jin, **F. Zhang**, B. Ye, 2009, Numerical simulation of sand subjected to cyclic loading in undrained conventional triaxial test, *Proc. 4th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Pittsburgh, Zhang et al. (ed.), 19-28.
 120. H. M. Shahin, T. Nakai, **F. Zhang** & M. Kikumoto, E. Nakahara and M. Nagata, 2009, Interaction effects between existing foundations and tunneling-Model tests and numerical simulations, *Proc. 4th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Pittsburgh, Zhang et al. (ed.), 119-126.
 121. **F. Zhang** & Y.J. Jin, 2009, Modeling of Toyoura sand in general loading conditions, *Proc. 4th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Pittsburgh, Zhang

- et al. (ed.), 137-144.
122. Y. Sekine, **F. Zhang**, Y. Tasaka, H. Kurose and T. Ohmori, 2009, Model tests and numerical analysis on the evaluation of long-term stability of existing tunnel, *Proc. 17th ICSMGE*, Vol.2, 1848-1854.
 123. T. Nakai, H. Kyokawa, M. Kikumoto, H.M. Shahin & **F. Zhang**, 2009, Elastoplastic modeling of geomaterials considering the influence of density and bonding, *Proc. Int. Symp. on Prediction and Simulation Methods for Geo-Hazard Mitigation*, Kyoto, Japan, 367-373.
 124. T. Nakai, H.M. Shahin, M. Kikumoto, H. Kyokawa & **F. Zhang**, 2009, Simple and unified method for describing various characteristics of geomaterials -Influence of density, bonding, time effects and others-, *Journal of Applied Mechanics JSCE*, August, vol.12, 371-382.
 125. T. Nakai, H. M. Shahin, **F. Zhang**, M. Hinokio, M. Kikumoto, S. Yonaha, A. Nishio, 2010, Bearing capacity of reinforced foundation subjected to pull-out loading in 2D and 3D conditions, *Geotextiles and Geomembranes*, Vol.28, 268–280, DOI: <https://doi.org/10.1016/j.geotextmem.2009.09.013>.
 126. Y. Jin, B. Ye and **F. Zhang**, 2010, Numerical simulation of sand subjected to cyclic load under undrained conventional triaxial test, *Soils and Foundations*, Vol.50, No.2, 177-194, DOI: <https://doi.org/10.3208/sandf.50.177>.
 127. **F. Zhang**, Y. Jin, B. Ye and 2010, A try to give a unified description of Toyoura standard sand, *Soils and Foundations*, Vol.50, No.5, 679-693, DOI: <https://doi.org/10.3208/sandf.50.679>.
 128. H. M. Shahin, T. Nakai, M. Kikumoto, Y. Uetani and **F. Zhang**, 2010, Interaction effect of retaining wall and existing foundations in braced excavation, *ASCE Geotechnical Special Publication, Deep and Underground Excavation*, Vol. 206, 92-99, <https://ascelibrary.org/doi/10.1061/41107%28380%2913>.
 129. Y. Jin, X. Bao, Y. Kondo and **F. Zhang**, 2010, Soil-water coupling analysis of real-scale field test for 9-pile foundation subjected to cyclic horizontal loading, *ASCE Geotechnical Special Publication, Deep foundation and Geotechnical in situ test*, Vol. 205, 111-118, DOI: [https://doi.org/10.1061/41106\(379\)13](https://doi.org/10.1061/41106(379)13).
 130. T. Nakai, H. M. Shahin, M. Kikumoto, H. Kyokawa and **F. Zhang**, 2010, Unified method for describing various features of stress-strain behavior of geomaterials, *Proc. Geo-Shanghai international conference*, June, 2010, CD-ROM.
 131. M. Kikumoto, T. Nakai, H. M. Shahin, A. Watanabe, K. Ishii and **F. Zhang**, 2010, Mechanical behaviour of geosynthetic-reinforced soil retaining wall, *ASCE Geotechnical Special Publication, Ground Improvement and Geosynthetics*, Vol. 207, 310-317, DOI: [https://doi.org/10.1061/41108\(381\)41](https://doi.org/10.1061/41108(381)41).
 132. Z. F. Xia, G. L. Ye, J. H. Wang, B. Ye and **F. Zhang**, 2010, Fully coupled numerical analysis of repeated shake-consolidation process of earth embankment on liquefiable foundation, *Soil Dynamics and Earthquake Engineering*, Vol.30, No.11, 1309-1318, DOI: <https://doi.org/10.1016/j.soildyn.2010.06.003>.
 133. **F. Zhang**, Y. Jin, X. Bao, Y. Kondo and K. Nakamura, 2010, Soil-water coupling finite element analysis on seismic enhancement effect of group-pile foundation with ground improvement, *Proc.*

- 9th world congress on Computational Mechanics, Sydney, Khalili et al (eds), CD-ROM.
134. S. Zhang, Y.L. Xiong and **F. Zhang**, 2010, Numerical simulation of a fictional deep geological disposal of nuclear waste, *Proc. 5st International Workshop on New Frontiers in Computational Geotechnics*, IWS-Brisbane, Pedroso and Shahin. (eds.), 59-67.
135. H. Nakano, **F. Zhang** and Y. J. Jin, 2010, Model test on creep failure of existing tunnel and its numerical simulation, *Proc. 14th Asian Regional Conference of Int. Society for Soil Mechanics and Geotechnical Engineering*, Hong Kong, J. H. Yin (eds.), No.224, CD-ROM.
136. S. Zhang, H. Nakano, Y. L. Xiong, T. Nishimura and **F. Zhang**, 2010, Temperature- controlled triaxial compression/creep test device for thermodynamic properties of soft sedimentary rock and corresponding theoretical prediction, *Journal of Rock Mechanics and Geotechnical Engineering*, Vol. 2, No. 3, 255-261, DOI: <https://doi.org/10.3724/SP.J.1235.2010.00255>.
137. **F. Zhang**, Y. Jin, B. Ye, 2010, Theoretical description of Toyoura sand, 'Recent developments of geotechnical engineering', *Proc. 4th Japan-China Geotechnical Symposium*, Komiya and Yao (eds), Okinawa, Japan, 148-155.
138. **F. Zhang**, X. H. Bao and T. Kariya, 2010, Modeling of Unsaturated Soil Considering the Effect of Saturation Directly, *Geomechanics and Geotechnics, From Micro to Macro*, Jiang et al. (eds), CRC Press, Vol.1, 41-45.
139. Y. Jin, X. H. Bao, Y. Kondo, **F. Zhang**, 2010, Numerical evaluation of group-pile foundation subjected to cyclic horizontal load, *Frontiers of Structure and Civil Engineering*, Springer, Vol.4, No.2, 196–207, DOI: <https://doi.org/10.1007/s11709-010-0021-6>.
140. **F. Zhang** and T. Ikariya, 2011, A new model for unsaturated soil using skeleton stress and degree of saturation as state variables, *Soils and Foundations*, Vol.51, No.1, 67-81, DOI: <https://doi.org/10.3208/sandf.51.67>.
141. **F. Zhang**, S. Zhang, Y. L. Xiong, H. Nakano and T. Nishimura, 2011, Thermo- hydraulic - mechanical analysis of deep geological disposal of high level nuclear waste, *Proc. 11th International Conference on Computational & Experimental Engineering and Sciences*, Nanjing, China, 18-22 April, CDROM.
142. **F. Zhang**, B. Ye, G. L. Ye, 2011, Unified description of sand behavior, *Frontiers of Structure and Civil Engineering*, Springer, Vol.5, No.2, 121–150, DOI: <https://doi.org/10.1007/s11709-011-0104-z>.
143. B. Ye, D. Muramatsu, G.L. Ye, **F. Zhang** 2011, Numerical assessment of vibration damping effect of soilbags, *Geosynthetics International*, 18(4), 159-168, DOI: <https://doi.org/10.1680/gein.2011.18.4.159>.
144. H. M. Shahin, T. Nakai, **F. Zhang**, M. Kikumoto and E. Nakahara, 2011, Behavior of ground and response of existing foundation due to tunneling, *Soils and Foundations*, Vol.51, No.3, 395-409, <https://doi.org/10.3208/sandf.51.395>.
145. T. Nakai, H. Shahin, M. Kikumoto, H. Kyokawa, **F. Zhang** and M. M. Farias, 2011, A simple and unified one-dimensional model to describe various characteristics of soils, *Soils and Foundations*, Vol.51, No.6, 1129-1148, DOI: <https://doi.org/10.3208/sandf.51.1129>.
146. T. Nakai, H. Shahin, M. Kikumoto, H. Kyokawa, **F. Zhang** and M. M. Farias, 2011, A simple and

- unified three-dimensional model to describe various characteristics of soils, *Soils and Foundations*, Vol.51, No.6, 1149-1168, DOI: <https://doi.org/10.3208/sandf.51.1149>.
147. Y. F. Bao, G. L. Ye, B. Ye and **F. Zhang**, 2012, Seismic evaluation of soil-foundation-superstructure system considering geometry and material nonlinearities of both soils and structures, *Soils and Foundations*, Vol.52, No.2, 257-278, DOI: <https://doi.org/10.1016/j.sandf.2012.02.005>.
148. B. Ye, G.L. Ye, **F. Zhang**, 2012, Numerical modeling of changes in anisotropy during liquefaction using a generalized constitutive model, *Computers and Geotechnics*, 42, 62-72, DOI: <https://doi.org/10.1016/j.compgeo.2011.12.009>.
149. **F. Zhang**, B. Ye, G. L. Ye, 2012, A unified description of Toyoura sand, *Constitutive Modeling of Geomaterials*, Yang et al (eds), Springer Series in Geomechanics & Geoengineering, 663-674.
150. Y. Morikawa, X. H. Bao, **F. Zhang**, H. Sakaguchi and A. Taira, 2012, Mechanism of liquefaction in repeated earthquake vibration, *Proc. 5th China-Japan Geotechnical Symposium*, 386-394.
151. Y. L. Xiong, X. H. Bao and **F. Zhang**, 2012, 2D Numerical simulation of model test on slope failure due to rainfall based on a rational constitutive model for unsaturated soil, *Proc. 5th China-Japan Geotechnical Symposium*, 26-35.
152. Y. L. Xiong, **F. Zhang**, T. Nishimura and Y. Kurimoto, 2012, THM simulation for real-scale field test, *New-Frontiers in Engineering Geology and the Environment, Proc. Int. Symp. on Coastal Engineering, ISCEG-Shanghai*, 153-156.
153. 森河由紀弘・包小華・前田健一・今瀬達也・張鋒, 2012, 余震による再液状化を考慮した液状化評価の重要性, *地盤工学ジャーナル*, Vol.7, No.2, 389-397, DOI: <https://doi.org/10.3208/jgs.7.389>.
154. Y. K. Fu, M. Iwata, W. Q. Ding, **F. Zhang** and A. Yashima, 2012, An elastoplastic model for soft sedimentary rock considering inherent anisotropy and confining-stress dependency, *Soils and Foundations*, Vol.52, No.4, 575-589, DOI: <https://doi.org/10.1016/j.sandf.2012.07.001>.
155. X. H. Bao, Y. Morikawa, Y. Kondo, K. Nakamura and **F. Zhang**, 2012, Shaking table test on reinforcement effect of partial ground improvement for group-pile foundation and its numerical simulation, *Soils and Foundations*, Vol.52, No.6, 1043-1061, DOI: <https://doi.org/10.1016/j.sandf.2012.11.020>.
156. X. H. Bao, Y. Morikawa, K. Maeda, T. Imase and **F. Zhang**, 2012, Liquefaction analysis considering re-liquefaction due to aftershock in the 2011 Great East Japan Earthquake, *Proc. JS-Seoul 2012, International Joint Symposium on Urban Geotechnics for Sustainable Development*, 144-147.
157. S. Zhang, W. Leng, **F. Zhang** and Y. L. Xiong, 2012, A simple thermo-elastoplastic model for geomaterials. *International Journal of Plasticity*, Vol.34, 93-113, DOI: <https://doi.org/10.1016/j.ijplas.2012.01.011>.
158. 今瀬達也・前田健一・三宅達夫・澤田 豊・鶴ヶ崎和博・角田紘子・張鋒, 2012,地震および越流による地盤損傷を考慮した津波力を受ける混成堤の支持力破壊検討, *土木学会論文集B2(海岸工学)*, Vol. 68, No. 2, I_866-I_870, DOI: https://doi.org/10.2208/kaigan.68.I_866.
159. H. H. Zhu, B. Ye, Y. C. Cai and **F. Zhang**, 2013, An elasto-viscoplastic model for soft rock around

- tunnels considering overconsolidation and structure effects, *Computers and Geotechnics*, 50, 6-16, DOI: <https://doi.org/10.1016/j.compgeo.2012.12.004>.
160. Y. L. Xiong, X. H. Bao, S. Zhang and **F. Zhang**, 2013, Finite element analysis on slope failure due to rain fall based on fully coupled soil-water-air 3-phase field theory, *Proc. 6th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Takayama, Shahin et al. (ed.), 153~160.
 161. Y. Morikawa, X. Bao, **F. Zhang**, A. Taira & H. Sakaguchi, 2013, Why an aftershock with a maximum acceleration of 25 gal could make ground liquefied in the 2011 Great East Japan Earthquake, *Proc. 6th International Workshop on New Frontiers in Computational Geotechnics*, IWS-Takayama, Shahin et al. (ed.), 117~122.
 162. Y. L. Xiong, X. H. Bao and **F. Zhang**, 2013, Soil-water-air coupling finite element analysis of model test on slope failure in unsaturated soil, *Geotechnical Engineering Journal of the SEAGS&AGSSEA*, Vol.44, No.2, 1-8.
 163. Y. L. Xiong, **F. Zhang**, T. Nishimura and Y. Kurimoto, 2013, THM simulations for laboratory heating test and real-scale field test, *Proc. 18th ICSMGE*, Paris, Vol.4, 3419-3422.
 164. Y. L. Xiong, X. H. Bao and **F. Zhang**, 2013, 2D numerical simulation of model test on slope failure due to rainfall based on a rational constitutive model for unsaturated soil, *Proc. 5th China-Japan Geotechnical Symposium*, Yao et al. (ed.), Chengdu, 22-29.
 165. Y. Morikawa, X.H. Bao, F. Zhang, H. Sakaguchi and A. Taira, 2013, Mechanism of liquefaction in repeated earthquake vibration, *Proc. 5th China-Japan Geotechnical Symposium*, Yao et al. (ed.), Chengdu, 287-293.
 166. X. H. Bao a, G. L. Ye, B. Ye, Y. Sago, **F. Zhang**, 2014, Seismic performance of SSPQ retaining wall -Centrifuge model tests and numerical evaluation, *Soil Dynamics and Earthquake Engineering*, Vol.61-62, 63-82, DOI: <https://doi.org/10.1016/j.soildyn.2014.01.019>.
 167. Y. L. Xiong, S. Zhang, G. L. Ye, **F. Zhang**, 2014, Modification of thermo- elasto-viscoplastic model for soft rock and its application to THM analysis on heating tests, *Soils and Foundations*, Vol. 54, No.2, 176–196, DOI: <https://doi.org/10.1016/j.sandf.2014.02.009>.
 168. Y. L. Xiong, X. H. Bao, B. Ye, and **F. Zhang**, 2014, Soil-water-air coupling finite element analysis on slope failure in unsaturated ground, *Soils and Foundations*, Vol. 54, No.3, 377–395, DOI: <https://doi.org/10.1016/j.sandf.2014.04.007>.
 169. Y. Morikawa, K. Maeda and **F. Zhang**, 2014, Countermeasure against liquefaction using crushed tile, *Advances in Soil Dynamics and Foundation Engineering, ASCE Geotechnical Special Publication No.240*, 208-218, DOI: <https://doi.org/10.1061/9780784413425.022>.
 170. Y. Morikawa, K. Maeda and **F. Zhang**, 2014, Effectiveness of crashed tile in countermeasure against liquefaction, *3rd International conference on geotechnique, construction material and environment*, Nagoya, 3(1), 211-216.
 171. X. H. Bao a, G. L. Ye, B. Ye and **F. Zhang**, 2014, Seismic Performance of Multi-Story Building with Pile Foundation in Liquefiable Ground Including Post-Earthquake Consolidation Settlement,

- Advances in Soil Dynamics and Foundation Engineering, ASCE Geotechnical Special Publication No.240*, 253-262, DOI: <https://doi.org/10.1061/9780784413425.036>.
172. Y. L. Xiong, S. Zhang, B. Ye, Y. Q. Li and **F. Zhang**, 2014, Thermo- Hydraulic-Mechanical Coupling Analysis on Heating Test in Unsaturated Ground, *Geoenvironmental Engineering, ASCE Geotechnical Special Publication No.241*, 212-221, DOI: <https://doi.org/10.1061/9780784413432.022>.
173. Y. Kurimoto, Y. Yamamoto, H. Sakaguchi and F. Zhang, 2014: Numerical experiments on the influence by shear deformation to the formation of décollement zone, *Proc. International Conference of Computational Engineering and Science for Safety and Environmental Problems, COMPSAFE 2014, Sendai, Japan*, 150-153.
174. **F. Zhang**, Y. L. Xiong, S. Zhang, and B. Ye, 2014, Thermo-hydraulic- mechanical-air coupling finite element method and its application to multi-phase problems, *International Journal of Rock Mechanics and Geotechnical Engineering*, Vol. 6, 77-98, DOI: <https://doi.org/10.1016/j.jrmge.2014.01.010>.
175. Y. L. Xiong, **F. Zhang**, X. H. Bao and B. Ye, 2014, A FE analysis on slope failure in unsaturated ground based on soil-water-air fully coupling theory, *Proc. International Conference on Unsaturated Soils, UNSAT2014*, Khalili et al (eds) , CRC Press, Sydney, 635-641.
176. **F. Zhang**, R. Oka, Y. Morikawa, Y. Mitsui, T. Osada, M. Kato and Y. Wabiko, 2014, Shaking Table Test on Superstructure-Foundation-Ground System in Liquefiable Soil and Its Numerical Verification, *Geotechnical Engineering Journal of the SEAGS&AGSSEA*, Vol.45, No.2, 90-95.
177. Y.Q. Li, L.P. Jing, Y.L. Xiong, L.L. Gu & **F. Zhang**, 2014, 3D dynamic interaction between earth dam and uneven liquefiable sandy ground based on CM model, *Proc. International Conference 14IACMAG, Computer Methods and Recent Advances in Geomechanics*, Oka et al. (eds), © 2015 Taylor & Francis Group, London, ISBN 978-1-138-00148-0, 1409-1414
178. Y. L. Xiong, **F. Zhang** and Y. Q. Li, 2014, Numerical study on thermo-hydro- mechanical-air coupling phenomena in unsaturated ground, *Proc. International Conference 14IACMAG, Computer Methods and Recent Advances in Geomechanics*, Oka et al. (eds), © 2015 Taylor & Francis Group, London, ISBN 978-1-138-00148-0, 1415-1420.
179. X. H. Bao, G.L. Ye, B. Ye and **F. Zhang**, 2014, Liquefaction and post-liquefaction settlement of a building with different pile foundations, *Proc. International Conference 14IACMAG, Computer Methods and Recent Advances in Geomechanics*, Oka et al. (eds), © 2015 Taylor & Francis Group, London, ISBN 978-1-138-00148-0, 1817-1822.
180. G.L. Ye; B. Ye and **F. Zhang**, 2014, Strength and Dilatancy of Overconsolidated Clays in Drained True Triaxial Tests, *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, Vol. 140, No. 4, 2014, CID: 06013006, DOI: [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0001060](https://doi.org/10.1061/(ASCE)GT.1943-5606.0001060)
181. Y. L. Xiong, Y. Kurimoto and **F. Zhang**, 2014, A thermo-elastoplastic constitutive model for unsaturated/saturated geomaterials, *Proc. 8th Asian Rock Mechanics Symposium*, Sapporo, RW1-5, CDROM.

182. Ye B., Ye W. M., **Zhang F.** and Xu L., 2014, A new device for measuring the supercritical CO₂ permeability in porous rock at reservoir conditions, *Proc. 8th Asian Rock Mechanics Symposium*, CCS-3, CDROM.
183. Y. Huang, H. L. Cheng, T. Osada, A. Hosoya, and **F. Zhang**, 2015, Mechanical Behavior of Clean Sand at Low Confining Pressure: Verification with Element and Model Tests, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 06015005, 1-6, DOI: [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0001330](https://doi.org/10.1061/(ASCE)GT.1943-5606.0001330).
184. G. L. Ye, T. Nishimura and **F. Zhang**, 2015, Experimental study on shear and creep behaviour of green tuff at high temperatures, *International Journal of Rock Mechanics & Mining Sciences*, Vol.79, 19-28, DOI: <https://doi.org/10.1016/j.ijrmms.2015.08.005>.
185. Y. Kurimoto, Y Saeda and **F. Zhang**, 2015, Numerical tests on formation mechanism of plate boundary décollement zone due to plate tectonics and earthquake-induced dynamic force, Proc. of the 6th Japan-China Geotechnical Symposium, *Japanese Geotechnical Society Special Publication*, Vol.1, No.3, 11-16, DOI: <https://doi.org/10.3208/jgssp.JPN-09>.
186. 森河由紀弘・田中雄也・前田健一・張鋒, 2015, 水圧消散効果に着目した地中連続排水壁による液状化対策, *土木学会論文集 A2(応用力学)*, Vol.71, No.2 (応用力学論文集 Vol.18), I_437-I_448, DOI: https://doi.org/10.2208/jscejam.71.I_437.
187. L. L. Gu, G. L. Ye, X. H. Bao and **F. Zhang**, 2015, Mechanical behavior of piled-raft foundation for high-speed railway subjected to train loading, *Proc. of International Symposium on Systematic Approaches to Environmental Sustainability in Transportation*, Fairbanks, AK, USA, August 2-5, 3-2, 1-18.
188. B. Ye, W.M. Ye, **F. Zhang** and L. Xu, 2015, A New Device for Measuring the Supercritical CO₂ Permeability in Porous Rocks Under Reservoir Conditions, *Geotechnical Testing Journal*, ASTM, V.38, No.3, 1-8, DOI: <https://doi.org/10.1520/GTJ20140139>.
189. G. J. Burton, J. A. Pineda, D. Sheng, D. W. Airey, **F. Zhang**, 2016: Exploring one-dimensional compression of compacted clay under constant degree of saturation paths, *Géotechnique*, 66(5), 435–440, DOI: <https://doi.org/10.1680/jgeot.14.P.181>
190. **F. Zhang**, Y. Kurimoto, 2016: How to Model the Contractive Behavior of Soil in a Heating Test, *Underground Space*, Vol., No.1, 30-43, DOI: <https://doi.org/10.1016/j.undsp.2016.05.001>
191. F. Ren, **F. Zhang**, C. Xu and G. Wang, 2016: Seismic evaluation of reinforced-soil segmental retaining walls, *Geotextiles and Geomembranes*, Vol. 44, Issue 4, 604-614, DOI: <https://doi.org/10.1016/j.geotextmem.2016.04.002>.
192. L. L. Gu, G. L. Ye, X. H. Bao and **F. Zhang**, 2016: Mechanical behaviour of piled-raft foundations subjected to high-speed train loading, *Soils and Foundations*, Vol.56, No.6, 1035–1054, DOI: <https://doi.org/10.1016/j.sandf.2016.11.008>.
193. K. Hamayoon, Y. Morikawa, R. Oka and **F. Zhang**, 2016: 3D dynamic finite element analyses and 1g shaking table tests on seismic performance of existing group-pile foundation in partially improved grounds under dry condition, *Soil Dynamics and Earthquake Engineering*, Vol.90, 196-210, DOI:

- <https://doi.org/10.1016/j.soildyn.2016.08.032>.
194. X. H. Bao, B. Ye, G. L. Ye and **F. Zhang**, 2016: Co-seismic and post-seismic behavior of a wall type breakwater on a natural ground composed of liquefiable layer, *Natural Hazard*, Vol.83, No.3, 1799–1819, DOI: <https://doi.org/10.1007/s11069-016-2401-2>.
195. 栗本悠平・山本由弦・阪口秀・小枝幸真・張鋒, 2016, 高圧動的載荷を受けた房総産シルト岩と藤森粘土の巨視的・微視的特性に基づくプレート境界断層の初期形成メカニズムに関する一考察, *地盤工学ジャーナル*, Vol.11, No.4, 341-351, DOI: <https://doi.org/10.3208/jgs.11.341>.
196. 栗本悠平・山本由弦・阪口秀・小枝幸真・張鋒, 2016, 地震などの動的外力とプレート沈み込み運動を受けるデコルマの力学挙動に関する数値実験, *地盤工学ジャーナル*, Vol.11, No.4, 353-363, DOI: <https://doi.org/10.3208/jgs.11.353>.
197. 永坂英明・田中良仁・張鋒, 2016, パルス波分解による周波数領域での非線形時刻歴地震応答解析法の提案, *地盤工学ジャーナル*, Vol.11, No.4, 377-390, DOI: <https://doi.org/10.3208/jgs.11.377>.
198. Y. L. Xiong, G. L. Ye, H. H. Zhu, S Zhang and **F. Zhang**, 2016: Thermo-elastoplastic constitutive model for unsaturated soils, *Acta Geotechnica*, Vol.11, 1287–1302, DOI: <https://doi.org/10.1007/s11440-016-0462-8>
199. Y. L. Xiong, G. L. Ye, H. H. Zhu, S. Zhang and **F. Zhang**, 2017: A unified thermo-elasto-viscoplastic model for soft rock, *International Journal of Rock Mechanics & Mining Sciences*, Vol.93, 1-12, DOI: <https://doi.org/10.1016/j.ijrmms.2017.01.006>.
200. H. Kheradi, B. Ye, H. Nishi, R. Oka and F Zhang, 2017: Optimum pattern of ground improvement for enhancing seismic resistance of existing box culvert buried in soft ground, *Tunnelling and Underground Space Technology*, Vol.69, 187–202, DOI: <https://doi.org/10.1016/j.tust.2017.06.022>.
201. Kamiya, N., Yamamoto, Y., Wang, Q., Kurimoto, Y., **Zhang, F.** & Takemura, T. 2017. Major variations in vitrinite reflectance and consolidation characteristics within a post-middle Miocene forearc basin, central Japan. *Tectonophysics*, 710–711, 69–80, DOI: <https://doi.org/10.1016/j.tust.2017.06.022>.
202. Z. Wang, M. R. Shen, L. L. Gu and **F. Zhang**, 2017, Creep behavior and long-term strength of Green Schist under different confining pressures, *Geotechnical Testing Journal*, Vol.40, No.5, 17-29, DOI: <https://doi.org/10.1520/GTJ20170143>.
203. Gu L. L., Ye G. L., Wang Z., Ling X. Z. and **Zhang F.** 2017, Settlement mechanism of piled-raft foundation due to cyclic train loads and its countermeasure, *Earthquake Engineering and Engineering Vibration*, Vol.16, No.3, 499-511, DOI: <https://doi.org/10.1007/s11803-017-0403-z>.
204. F. F. Ren, **F Zhang**, G Wang, Q. H. Zhao and C. Xu, 2017, Dynamic assessment of saturated reinforced-soil retaining wall, *Computers and Geotechnics*, 93, 68-76, <https://doi.org/10.1016/j.compgeo.2017.08.020>.
205. Q. Huang., H. W. Huang, B. Ye, D. M. Zhang, L. L. Gu and **F. Zhang**, 2017: Dynamic response and long-term settlement of a metro tunnel in saturated clay due to moving train load, *Soils and*

- Foundations*, Vol.57, No.6, 1059–1075, DOI: <https://doi.org/10.1016/j.sandf.2017.08.031>.
206. Q. Huang, H.W. Huang, B. Ye, D.M. Zhang, **F. Zhang**, 2017: Evaluation of train-induced settlement for metro tunnel in saturated clay based on an elastoplastic constitutive model, *Underground Space*, Vol.3, 109–124, DOI: <https://doi.org/10.1016/j.undsp.2017.10.001>.
207. H. Kheradi, K. Nagano, H. Nishi and **F. Zhang**, 2018: 1g shaking table tests on seismic enhancement of existing box culvert with partial ground improvement method and its 2D dynamic simulation, *Soils and Foundations*, Vol.58, No.3, 563–581, DOI: <https://doi.org/10.1016/j.sandf.2018.01.002>.
208. N. Kamiya, M. Utsunomiya, Y. Yamamoto, J. Fukuoka, **F. Zhang** and W. Lin, 2018: Formation of excess fluid pressure, sediment fluidization and mass-transport deposits in the Plio-Pleistocene Boso forearc basin, central Japan, *Geological Society*, London, Special Publications, 477, DOI: <https://doi.org/10.1144/SP477.20>.
209. Y. Morikawa, H. Sakaguchi, A. Taira and **H. Cho**, 2018: Numerical analysis on mechanism of liquefaction not only in main earthquake but also in after shock, *International Journal of GEOMATE*, Vol.14, No.45, 58-65, DOI: <https://doi.org/10.21660/2018.45.7264>.
210. F. F. Ren, J. Y. He, **F. Zhang**, G. Wan, Q. H. Zhao, 2018: Numerical investigation of the influence of non-uniform factors on the monotonic/cyclic behaviour of coarse-grained soil, *Computers and Geotechnics*, Vol.103, 115-137, DOI: <https://doi.org/10.1016/j.compgeo.2018.07.002>.
211. Ye B., Ni X.Q., Huang Y., **Zhang F.**, 2018: Unified modeling of soil behaviors before/after flow liquefaction, *Computers and Geotechnics*, Vol.102, 125–135, DOI: <https://doi.org/10.1016/j.compgeo.2018.06.011>.
212. X. Xiong, Z. M. Shi, S. G. Guan, **F. Zhang**, 2018: Failure mechanism of unsaturated landslide dam under seepage loading – Model tests and corresponding numerical simulations, *Soils and Foundations*, Vol.58, No.6, 1133-1152, DOI: <https://doi.org/10.1016/j.sandf.2018.05.012>.
213. Y. L. Xiong, Q. L. Yang, S. Zhang, G. L. Ye, G. B. Liu, R. Y. Zheng and **F. Zhang**, 2019: Thermo-elastoplastic model for soft rock considering effects of structure and density, *Rock Mechanics and Rock Engineering*, Vol.51, 3771–3784, DOI: <https://doi.org/10.1007/s00603-018-1557-3>.
214. H. Kheradi, Y. Morikawa, G. L. Ye and **F. Zhang**, 2019: Liquefaction induced Buckling Failure of Group-Pile Foundation and Countermeasure by Partial Ground Improvement, *ASCE, International Journal of Geomechanics*, 19(5): 04019020, DOI: [https://doi.org/10.1061/\(ASCE\)GM.1943-5622.0001379](https://doi.org/10.1061/(ASCE)GM.1943-5622.0001379).
215. X. Xiong, Y. L. Xiong, T. Tsunemoto, S. Okino, X. Y. Qiu, Y. Kurimoto and **F. Zhang**, 2019: Tests on mechanical behavior of unsaturated decomposed granite and its modelling considering finite deformation, *Soils and Foundations*, Vol.59, No.2, 253-270, DOI: <https://doi.org/10.1016/j.sandf.2018.10.006>.
216. 土井達也, 押田直之, 山田聖治, 室野剛隆, **張鋒**, 2019: 小径杭併用土のう基礎の地震時応答特性に関する実験的研究, *構造工学論文集*, Vol.65A, 164-177, DOI: <https://doi.org/10.11532/structcivil.65A.164>.
217. Z. Wang, L. L. Gu, M. R. Shen, **F. Zhang**, G. K. Zhang, X. Wang, 2019: Shear stress relaxation

- behavior of rock discontinuities with different joint roughness coefficient and stress histories, *Journal of Structural Geology* Vol.126, 272–285, DOI: <https://doi.org/10.1016/j.jsg.2019.06.016>.
218. Z. Wang, L. L. Gu, M. R. Shen, **F. Zhang**, G. K. Zhang and S. X. Deng, 2019: Influence of Shear Rate on the Shear Strength of Discontinuities with Different Joint Roughness Coefficients, *ASTM, Geotechnical Testing Journal*, Vol.43, DOI: <https://doi.org/10.1520/GTJ20180291>.
219. **F. Zhang**, Y. L. Xiong, Y. Itani, E. One, 2019: Thermo-elasto-viscoplastic mechanical behavior of manmade rock and its numerical modeling, *Underground Space* Vol.4, 121–132, DOI: <https://doi.org/10.1016/j.undsp.2018.12.003>.
220. Y. L. Xiong, G. L. Ye, Y. Xie, B. Ye, S. Zhang and **F. Zhang**, 2019: A unified constitutive model for unsaturated soil under monotonic and cyclic loading, *Acta Geotechnica*, Vol.14, No.2, 313–328, DOI: <https://doi.org/10.1007/s11440-018-0754-2>.
221. Y. Morikawa¹ and **H. Cho**, 2020: Numerical analysis on mechanism of dewatering as a mitigation method against liquefaction, International Journal of *GEOMATE*, Vol.18, No.66, 68-75, DOI: <https://doi.org/10.21660/2020.66.9407>.
222. N. Kamiya, Y. Yamamoto, **F. Zhang** and W. R. Lin 2020: Vitritine reflectance and consolidation characteristics of the post-middle Miocene forearc basin in central and eastern Boso Peninsula, central Japan: implications for basin subsidence, *Island Arc*, DOI: <https://doi.org/10.1111/iar.12344>.
223. Ma J. N., Xiong X., Yang J. T., Mikami R., Shi Z. M. and **Zhang F.**, 2020: Element tests on hydraulic-mechanical behavior of saturated-unsaturated landslide dam materials, *JGS Special Publication*, Vol.8, No.9, 360-365, DOI: <https://doi.org/10.3208/jgssp.v08.j30>.
224. 神谷奈々・張鋒・福岡純一・加藤優・林為人, 2020:泥質岩の圧密過程におけるひずみ軟化, *材料*, No. 69, No.3, 250-255, DOI: <https://doi.org/10.2472/jsms.69.250>
225. N. Kamiya, **F. Zhang**, J. Fukuoka, Y. Kato, and W. R. Lin, 2020: Strain Softening of Siltstones in Consolidation Process, *Journal of the Society of Materials Science*, Japan, Vol.69, No. 69, No.3, 250-255, DOI: <https://doi.org/10.2472/jsms.69.250>.
226. H. Iwai, X. Q. Ni, B. Ye, N. Nishimura and **F. Zhang**, 2020: A new evaluation index for reliquefaction resistance of Toyoura sand, *Soil Dynamics and Earthquake Engineering*, Vol.136, DOI: <https://doi.org/10.1016/j.soildyn.2020.106206>.
227. X. Q. Ni, B. Ye, G. L. Ye & **F. Zhang**, 2020: Unique determination of cyclic instability state in flow liquefaction of sand, *Marine Georesources & Geotechnology*, DOI: <https://doi.org/10.1080/1064119X.2020.1791289>.
228. X. Q. Ni, B. Ye, & **F. Zhang** X. Q. Feng. 2020. Influence of specimen preparation on the liquefaction behaviors of sand and its mesoscopic explanation. *ASCE-Journal of Geotechnical and Geoenvironmental Engineering*, Vol.147, Issue2, DOI: [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0002456](https://doi.org/10.1061/(ASCE)GT.1943-5606.0002456).
229. L. L. Gu, Z. Wang, A. Hosoya, **F. Zhang**, 2020: Dilatancy and liquefaction behaviour of clean sand at wide range of confining stresses, *Journal of Central South University*, Vol. 27, 2394–2407, DOI: <https://doi.org/10.1007/s11771-020-4457-0>

230. W. X. Zhu, L. L. Gu, S. Mei, K. Nagasaki, N. Chino, **F. Zhang**, 2021, 1g model tests of piled-raft foundation subjected to high-frequency vertical vibration loads, *Soil Dynamics and Earthquake Engineering*, Vol.141, DOI: <https://doi.org/10.1016/j.soildyn.2020.106486>.
231. Q. Huang, Li, D.M. Zhang, H.W. Huang, and **F. Zhang**, 2021, Field Measurement and Numerical Simulation of Train-Induced Vibration from a Metro Tunnel in Soft Deposits, *Advances in Civil Engineering*, Volume 2021, Article ID 6688746, DOI: <https://doi.org/10.1155/2021/6688746>.
232. 安井 俊平, 岩井 裕正, 木村 真郷, **張 鋒**, 2021 : 難透水層を有する海底斜面における地すべり運動に関する研究, 土木学会論文集 A2(応用力学), Vol.76, No.2, I_313-I_323, DOI: https://doi.org/10.2208/jscejam.76.2_I_313.
233. X. Xiong, Y. L. Xiong, and **F. Zhang**, 2021, Modelling the hydraulic/mechanical behaviour of an unsaturated completely decomposed granite under various conditions, *Geomechanics and Engineering*, Vol.25, No.2, 75-87, DOI: <https://doi.org/10.12989/gae.2021.25.2.075>.
234. Y. Lu, W.X. Zhu, G.L. Ye, **F. Zhang**, 2021, A unified constitutive model for cemented/non-cemented soils under monotonic and cyclic loading, *Acta Geotechnica*, DOI: <https://doi.org/10.1007/s11440-021-01348-w>.
235. P. Peng, H. Iwai, E. Ohne, Y. Itani and **F. Zhang**, 2021, Model tests and corresponding numerical simulations on cave model subjected to thermo-mechanical loading, *Underground Space*, Vol.6, DOI: <https://doi.org/10.1016/j.undsp.2021.07.003>.
236. P. Peng., H. Iwai., I. Ohara., T. Iwata. and **F. Zhang**, 2021, Influence of acidic environment and temperature on mechanical behavior of cement-treated Masado and numerical modeling with a thermoelasto-viscoplastic model, *Soils and Foundations*, Vol. 61, No.6, 1481-1499, DOI: <https://doi.org/10.1016/j.sandf.2021.08.009>.
237. X. Q. Ni, B. Ye, Z. Zhang, S. Zhang and **F. Zhang**, 2021, An investigation of the influence of reconsolidation properties on the reliquefaction resistance of sand by element tests, *ASCE-Journal of Geotechnical and Geoenvironmental Engineering*, DOI: [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0002755](https://doi.org/10.1061/(ASCE)GT.1943-5606.0002755).
238. X. Xiong, Y. L. Xiong, S. Okino, R. Mikami, J. Ma and **F. Zhang**, 2021, Element Tests on the Hydraulic/mechanical Behaviour of Unsaturated Decomposed Granite Soil under Various Conditions, *Bulletin of Engineering Geology and the Environment*, DOI: <https://doi.org/10.1007/s10064-021-02495-w>.
239. X. L. Xie, B. Ye, T. Zhao, X. Q. Feng and **F. Zhang**, 2021, Changes in sand mesostructure under repeated seismic liquefaction events during centrifuge tests, *Soil Dynamics and Earthquake Engineering*, Vol.150, November 2021, 106940, DOI: <https://doi.org/10.1016/j.soildyn.2021.106940>.
240. H. Iwai, T Kawasaki and **F Zhang**, 2022, A constitutive model for gas hydrate-bearing soils considering different types of hydrate morphology and prediction of strength-band, *Soils and Foundations*, Vol.62, DOI: <https://doi.org/10.1016/j.sandf.2021.101103>.
241. W. X. Zhu, G. L. Ye, L. L. Gu, **F. Zhang**, 2022, Modeling of monotonic and cyclic behaviors of

- sand under small and normal confining stresses, *Soil Dynamics and Earthquake Engineering*, Vol.156, 107209, DOI: <https://doi.org/10.1016/j.soildyn.2022.107209>.
242. W. X. Zhu, G. L. Ye, L. L. Gu, **F. Zhang**, 2022, 1g model test of piled-raft foundation subjected to vibration load and its simulation considering small confining stress, *Soil Dynamics and Earthquake Engineering*, Vol.156, 107212, DOI: <https://doi.org/10.1016/j.soildyn.2022.107212>.
243. T. Doi, Y. Murono., H. Iwai and **F. Zhang**, 2022: Numerical investigation of dynamic behavior of composite foundation composed of soilbags and piles by 3D elastoplastic FEM, *Soils and Foundations*, Vol.62, No.3, 101158, DOI: <https://doi.org/10.1016/j.sandf.2022.101158>.
244. X. L. Xie, B. Ye, T. Zhao, X. Q. Feng and **F. Zhang**, 2022: Effects of prior non-liquefying undrained cyclic loading on sand liquefaction resistance via discrete element analysis, *Soil Dynamics and Earthquake Engineering*, Vol.161, 107390, <https://doi.org/10.1016/j.soildyn.2022.107390>.
245. Y. D. Xue, Y. P. Cao, M. L. Zhou, **F. Zhang**, K. Shen and F. Jia, 2022: Rock mass fracture maps prediction based on spatiotemporal image sequence modeling, *Computer-aided Civil and Infrastructure Engineering*, 1–19, <https://doi.org/10.1111/mice.12841>.