



井 合 進 教 授

(2017年4月 京都大学名誉教授)

# 井 合 進 教 授 略 歴

## (学歴・職歴)

昭和 27年 1月 15日	東京都大田区に生まれる
45年 4月	東京大学教養学部理科一類入学
49年 3月	東京大学工学部土木工学科卒業
49年 4月	運輸省港湾技術研究所構造部耐震構造研究室研究員
55年 10月	カナダ国ブリティッシュコロンビア大学客員研究員
57年 4月	運輸省港湾技術研究所構造部主任研究官
平成 元年 4月	運輸省港湾技術研究所構造部地盤震動研究室長
10年 10月	米国南カリフォルニア大学客員研究員（平成11年1月まで）
10年 10月	運輸省港湾技術研究所構造部地震防災研究室長
13年 4月	独立行政法人港湾空港技術研究所特別研究官（防災）
14年 5月	京都大学防災研究所教授（地盤災害研究部門地盤防災解析研究分野）

## (受賞等歴)

平成 7年 5月	地盤工学会研究業績賞受賞 「飽和砂地盤－構造物系の変形に関する研究」
平成 7年 11月	1994年プラカッシュ賞（米国プラカッシュ財団）受賞 Significant Contributions to Geotechnical Earthquake Engineering
平成 8年 4月	科学技術庁長官表彰 研究功績賞 受賞 「地震時の地盤の液状化の数値解析理論に関する研究」
平成 11年 5月	地盤工学会賞（論文賞）受賞 「港湾構造物の有効応力解析」
平成 19年 5月	土木学会関西支部技術賞特別賞「チャート式耐震診断システムの開発」
平成 21年 5月	土木学会技術開発賞 「多様な構造形式に対応した「沿岸構造物のチャート式耐震診断システム」の開発」

## (学会・委員等歴)

昭和 57年 4月	土木学会地震（耐震）工学委員会委員（平成27年3月まで）
58年 4月	地盤工学会論文報告集編集委員会委員（昭和60年3月まで）
60年 10月	国際地盤工学会TC 4 コアメンバー（平成4年9月まで）
平成 9年 10月	国際航路協会PIANC/MarCom/WG34委員長（平成12年12月まで）
13年 10月	土木学会地震工学委員会国際小委員会委員長（平成17年3月まで）
14年 4月	ISO/TC98/SC3/WG10コンビーナー（平成17年3月まで）
21年 10月	国際地盤工学会TC303委員長（現在に至る）

# 井 合 進 教 授 研 究 業 績

## 論 文 (査読論文)

発表年	論文名	発表誌名	共著者
1980	Observation of earthquake response of ground with horizontal and vertical seismometer arrays (2nd report)	Proc. 7th World Conference on Earthquake Engineering, Vol.2, pp.475-482	Tsuchida, H., Noda, S., Kurata, E.
1980	Analysis of liquefactions during the 1978 Off-Miyagi prefecture earthquake	Proc. 7th World Conference on Earthquake Engineering, Vol.3, pp.211-218	Tsuchida, H., Hayamshi, S.
1980	Performance of artificial offshore islands under wave and earthquake loading – field data and analysis-	Proc. 14th Offshore Technology Conference, pp.661-671	Finn, W.D.L., Ishihara, K.
1988	液状化を考慮した水－構造物－地盤系の地震応答解析	第33回土質工学シンポジウム, 昭和63年度発表論文集, 土質工学会, pp.13-18	浦上 武
1988	Development of an earthquake simulator for the PHRI centrifuge, International Conference on Geotechnical Centrifuge Modelling	Centrifuge88, Balkema, pp.111-114	Inatomi, M., Kazama, M., Kitazume, M., Terashi, M.
1989	有効応力解析－FLIPによる解析	地盤と土構造物の地震時の挙動に関するシンポジウム発表論文集, 土質工学会, pp.94-103	
1989	Similitude for shaking table tests on soil-structure-fluid model in 1g gravitational field	Soils and Foundations, Vol.29, No.1, pp.105-118	
1989	A liquefaction criterion based on field performances around seismograph stations	Soils and Foundations, Vol.29, No.2, pp.52-68	Tsuchida, H., Koizumi, K.
1989	Diagrams considering well resistance for designing spacing ratio of gravel drains, Discussion	Soils and Foundations, Vol.29, No.4, pp.135-136	Matsunga, Y.
1989	Effective stress analysis of anchored sheet pile quay walls	Proc. 4th International Conference on Soil Dynamics and Earthquake Engineering, Soil Dynamics and Liquefaction, pp.277-292	Matsunaga, Y., Urakami, T.
1989	Performance of quaywall during 1987 Chiba earthquake	Earthquake Geotechnical Engineering, Proc. Discussion Session on Influence of Local Conditions on Seismic Response, 12th International Conference on Soil Mechanics and Foundation Engineering, pp.63-66	Matsunaga, Y., Urakami, T.

発表年	論文名	発表誌名	共著者
1989	水一地盤一構造部系における有効応力解析法の適用性の検討	第34回土質工学シンポジウム発表論文集, 土質工学会, pp.99-106	松永康男
1989	地盤・構造物系の地震応答解析における主応力軸の回転について	第34回土質工学シンポジウム発表論文集, 土質工学会, pp.107-114	亀岡知弘
1990	Similitude for shaking table tests on soil-structure-fluid model in 1g gravitational field, Discussion (Closure)	Soils and Foundations, Vol.30, No.2, pp.153-154	
1990	高盛土におけるアレー観測と解析	第8回日本地震工学シンポジウム論文集, pp.463-468	倉田栄一
1990	アレー観測による実体波の伝播速度と方向	第8回日本地震工学シンポジウム論文集, pp.553-558	浦上 武・森 好生
1990	Soil improvement area against liquefaction	Proc. 8th Japan Earthquake Engineering Symposium, pp.867-872	Matsunaga, Y.
1990	液状化による矢板岸壁の変形の数値解析	第8回日本地震工学シンポジウム論文集, pp.1179-1184	亀岡知弘
1991	A numerically robust modeling of cyclic mobility	Proc. 7th International Conference on Computer Methods and Advances in Geomechanics, Cairns, pp. 827~832.	
1991	Effective stress analysis of a sheet pile quay wall	Proc. 2nd International Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Paper No. 4.14, pp. 649~656.	Kameoka, T.
1991	Mechanism of uplift of underground structures due to liquefaction	Proc. International Symposium on Natural Disaster Reduction and Civil Engineering, Osaka, JSCE, pp. 297~306.	Matsunaga, Y.
1991	液状化に関する一斉計算（1. 概要, 2. 解析条件, 3. 各種解析法の比較）（委員会報告）	地盤の液状化対策に関するシンポジウム発表論文集, 土質工学会., pp.77-88	鈴木吉夫・三藤正明
1991	液状化に関する一斉計算（各種解析法の比較）（委員会報告）	地盤の液状化対策に関するシンポジウム発表論文集, 土質工学会, pp.185-190	
1991	液状化に関する一斉計算（FLIPによる解析）（委員会報告）	地盤の液状化対策に関するシンポジウム発表論文集, 土質工学会, pp.135-144	松永康男

発表年	論文名	発表誌名	共著者
1991	フィリピン地震－バギオの被害－	地盤の液状化対策に関するシンポジウム発表論文集, 土質工学会, pp.299-302	
1992	What has been learned and what should be done	Proc. 10th World Conference on Earthquake Engineering, pp. 6983~6984.	
1992	A multiple shear mechanism model for sand	Proc. 10th World Conference on Earthquake Engineering, pp. 2549~2554.	Matsunaga Y., Kameoka T., Inatomi T.
1992	Strain space plasticity model for cyclic mobility	Soils and Foundations, Vol.32, No.2, pp.1-15	Matsunaga, Y., Kameoka, T.
1992	Analysis of undrained cyclic behavior of sand under anisotropic consolidation	Soils and Foundations, Vol.32, No.2, pp.16-20	Matsunaga, Y., Kameoka, T.
1992	Analysis of earthquake induced damage to quay walls	Retaining Structures, Institution of Civil Engineers, pp. 790~799.	Kameoka, T.
1993	Evaluation of seismic sheet pile wall design	Proc. 4th Canadian Conference on Marine Geotechnical Engineering, pp. 293~310.	Finn, W.D.L.
1993	Numerical (Class A) prediction of Model No. 1	Proc. International Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, pp. 109~127.	Kameoka, T., Matsunaga, Y.
1993	Numerical (Class A) prediction of Model No. 2	Proc. International Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, pp. 369~375.	Kameoka, T., Matsunaga, Y.
1993	Numerical (Class A) prediction of Model No. 11	Proc. International Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, pp. 939~946.	Kameoka, T., Matsunaga, Y.

発表年	論文名	発表誌名	共著者
1993	Numerical (Class A) prediction of Model No. 12	Proc. International Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, pp. 1035~1040.	Kameoka, T., Matsunaga, Y.
1993	Finite element analysis of earthquake induced damage to anchored sheet pile quay walls	Soils and Foundations, Vol.33, No.1, pp.71-91	Kameoka, T.
1993	Micromechanical background to a strain space multiple mechanism model for sand	Soils and Foundations, Vol.33, No.1, pp.102-117	
1993	Three dimensional formulation and objectivity of a strain space multiple mechanism model for sand	Soils and Foundations, Vol.33, No.1, pp.192-199	
1993	Concept of effective strain in constitutive modeling of granular materials	Soils and Foundations, Vol.33, No.2, pp.171-180	
1993	Strain space plasticity model for cyclic mobility, Closure	Soils and Foundations, Vol.33, No.3, pp.150-152	Matsunaga, Y., Kameoka, T.
1993	粒状体の状態を示すいくつかの指標について	粒状体の力学シンポジウム発表論文集, 土質工学会, pp.9-12	
1994	A new look at the stress dilatancy relation in Cam-Clay model	Soils and Foundations, Vol.34, No.2, pp.1-12	
1994	1993年釧路沖地震での岸壁の液状化対策の効果について	第9回日本地震工学シンポジウム論文集, pp.757-762	松永康男・森田年一・桜井博孝
1994	Area of ground compaction against soil liquefaction	Proc. 13th International Conference on Soil Mechanics and Foundation Engineering, New Delhi, pp. 1075~1078.	
1994	Performance of quay Walls during the 1993 Kushiro-Oki Earthquake	Performance of Ground and Soil Structures during Earthquakes, 13th International Conference on Soil Mechanics and Foundation Engineering, pp. 69~74.	Matsunaga, Y., Morita, T., Sakurai, H.

発表年	論文名	発表誌名	共著者
1994	Analysis of non-coaxiality by multi-mechanism model	Proc. 8th International Conference on Computer Methods and Advances in Geomechanics, Morgantown, pp. 599~604.	Kameoka, T., Towhata, I.
1994	Spiky ground response during a strong earthquake	Proc. 10th European Conference on Earthquake Engineering, pp. 123~128.	Morita, T., Kameoka T., Miyata, M.
1994	The effects of site conditions on ground motions	Proc. 10th European Conference on Earthquake Engineering, pp. 2607~2612.	Finn, W.D.L., Matsunaga, Y.
1994	飽和砂地盤における地震動の增幅について	軟弱地盤における地震動増幅シンポジウム発表論文集, 土質工学会, pp. 203-210	森田年一・松永康男・宮田正史・桜井博孝
1995	Response of a dense sand deposit during 1993 Kushiro-Oki earthquake	Soils and Foundations, Vol.35, No.1, pp.115-131	Morita, T., Kameoka, T., Matsunaga, Y., Abiko, K.
1995	General Report – Session III, Liquefaction and Ground Failure	Proc. of 3rd International Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, pp. 1163~1168.	Ledbetter, R. H., Figueroa, L., Muraleetharan, K., Yasuda, S.
1995	Earthquake response of saturated sandy ground	IS-Tokyo '95, Proc. 1st International Conference on Earthquake Geotechnical Engineering, pp. 599~604.	Morita, T., Miyata, M., Sakurai H.
1996	Performance of caisson type quay walls at Kobe port	Special Issue on Geotechnical Aspects of the January 17 1995 Hyogoken-Nambu Earthquake, Soils and Foundations, pp.119-136	Inagaki, H., Sugano, T., Yamazaki, H., Inatomi, T.
1996	Analysis of damage to quay walls during 1995 Great Hanshin earthquake, Japan	Proc. 11th World Conference on Earthquake Engineering, CD-ROM, Paper444.	Ichii, K., Morita, T.
1996	Lessons learned from the performance of caisson type quay walls at 1995 Great Hanshin earthquake	Proc. 11th World Conference on Earthquake Engineering, CD-ROM, Paper2079.	Ichii, K., Morita, T.

発表年	論文名	発表誌名	共著者
1996	Estimation of differential settlements due to liquefaction	Proc. 11th World Conference on Earthquake Engineering, CD-ROM, Paper387.	Miyata, M., Matsunaga Y.
1997	One gravity model testing, Discussion	Soils and Foundations, Vol. 37, No. 1, pp. 137.	
1997	地震時のケーソン岸壁の変形照査	土木学会海岸工学論文集第44巻, pp.1006~1010	稻垣紘史
1997	Seismic performance of caisson walls on loose saturated sand foundation	Proc. 14th International Conference on Soil Mechanics and Foundation Engineering, Hamburg, pp. 987~990.	Ichii, K., Morita, T., Miyata, M.
1997	Excess pore water pressures behind quay walls	Geotechnical Special Publication No.64, ASCE, pp.11-25	Ichii, K.
1997	A study of seismic behavior of a caisson quay wall	Numerical Models in Geomechanics, NUMOG VI, Balkema, pp.555~560.	Liu, H., Ichii, K., Morita, T.
1998	Effective stress analyses of port structures	Special Issue on Geotechnical Aspects of the January 17 1995 Hyogoken-Nambu Earthquake, No.2, Soils and Foundations, pp.97-114	Ichii, K., Liu, H., Morita, T.
1998	高盛土の地震応答解析	第10回日本地震工学シンポジウム論文集, pp.1557-1562	一井康二・佐藤幸博・桑島隆一
1998	Seismic analysis and performance of retaining structures, State-of-the-art	Geotechnical Earthquake Engineering and Soil Dynamics III, Geotechnical Special Publication No.75, ASCE, pp.1020-1044	
1998	Rigid and flexible retaining walls during Kobe earthquake, State-of-the-art	Proc. 4th International Conference on Case Histories in Geotechnical Engineering, pp. 108~127.	
1998	地盤の流動を考慮した設計の考え方	地震時の地盤・土構造物の流動性と永久変形に関するシンポジウム発表論文集, 地盤工学会, pp.87-131	佐藤 博・沢田俊一・松谷正憲・森崎 啓・平山光信
1998	護岸構造物の残留変形解析—FLIPによる解析—	地震時の地盤・土構造物の流動性と永久変形に関するシンポジウム発表論文集, 地盤工学会, pp.247-256	沢田俊一・小堤 治

発表年	論文名	発表誌名	共著者
1998	FLUSH-Lによる解析	地震時の地盤・土構造物の流動性と永久変形に関するシンポジウム発表論文集, 地盤工学会, 269-274	小堤 治・木山正明
1998	The effects of irregular subsoil layer geometry on liquefaction prediction	Proc. 2nd International Symposium on the Effects of Surface Geology on Seismic Motion, Balkema, pp. 815~822.	Ichii, K.
1998	Nonlinear site response and its evaluation and prediction, State-of-the-art	Proc. 2nd International Symposium on the Effects of Surface Geology on Seismic Motion, Balkema, pp. 71~90.	Yoshida, N.
1999	Soil-structure interaction studies through shaking table tests, Theme lecture	Proc. 2nd International Conference on Earthquake Geotechnical Engineering, Balkema,, pp. 927~940	Sugano, T.
1999	Earthquake response analysis of a high embankment on an existing hill slope	Proc. 2nd International Conference on Earthquake Geotechnical Engineering, Balkema, pp. 697~702.	Ichii, K., Sato Y., Kuwajima R.
1999	Performance of the high seismic resistant quay wall	Proc. 2nd International Conference on Earthquake Geotechnical Engineering, Balkema, pp.347-352	Ichii, K., Morita, T.
2000	Performance of the quay wall with high seismic resistance	土木学会論文集, 第1部, No.654/I-52, pp.39-50/Journal of Structural Mechanics and Earthquake Engineering, JSCE, Vol.17, No.2, pp.163s-174s	Ichii, K., Morita, T.
2000	都市臨海部における地震被害予測のリアルタイム地震防災への適用について	第2回リアルタイム地震防災シンポジウム論文集, 土木学会, pp.85-90	赤倉康寛・一井康二・高橋宏直
2000	Recent developments in the understanding of earthquake site response and associated seismic code implementation	International Conference on Geotechnical and Geological Engineering, GeoEng2000, pp.186-219	Dobry, R.

発表年	論文名	発表誌名	共著者
2000	Shake table testing on seismic performance of gravity quay walls	Proc. 12th World Conference on Earthquake Engineering, CD-ROM. Paper2680, pp.1-8.	Sugano, T.
2000	Analysis of liquefaction induced residual deformation for two types of quay walls: analysis by FLIP	Proc. 12th World Conference on Earthquake Engineering, CD-ROM, Paper2486, pp.1-8.	Sawada, S., Ozutsumi, O.
2000	Evaluation of the seismic performance of gravity type quay wall using effective stress analyses	Proc. 12th World Conference on Earthquake Engineering, CD-ROM, Paper1784, pp.1-8.	Ichii, K., Sato, Y., Liu, H.
2000	Residual deformation analysis of sheet pile quay wall and backfill ground at Showa-Ohashi site by simplified method	Proc. 12th World Conference on Earthquake Engineering, CD-ROM. Paper2487, pp.1-8.	Ozutsumi, O., Yuu, K., Kiyama, M.
2000	Performance of waterfront structures, Kocaeli, Turkey, Earthquake of August 17, 1999, Reconnaissance Report	Earthquake Spectra, Supplement A to Vol.16, EERI, pp.295-310	Boulanger, R.W.
2001	Performance-based seismic design for port structures	International Conference on Safety, Risk and Reliability-Trends in Engineering, IABSE, pp.197-202	Yokota, H., Yamamoto, S.
2001	Recent studies on seismic analysis and design of retaining structures, State-of-the-art	Proc. 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering, and Soil Dynamics, CD-ROM, Paper SOAP-4, pp.1-28	
2001	Adjustment method of the hysteresis damping for multiple shear spring model	Proc. 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, CD-ROM, Paper 1.68, pp.1-8	Ozutsumi, O.
2001	Effective stress analysis for evaluating the effect of the sand compaction pile method during the 1995 Hyogoken-Nambu earthquake	Proc. 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, CD-ROM, Paper 4.42, pp.1-8	Miwa, S., Nozu, M., Ozutsumi, O., Yashima, A. and Yasuda, S.
2001	有効応力解析プログラム「F L I P」による地盤の初期応力条件を考慮した矢板式岸壁の地震応答解析	第46回地盤工学シンポジウム発表論文集, pp.13-18	龍田昌毅・小堤 治・溜幸生・山本祐司・酒井久和・足立雅樹・金子浩士・森 浩章

発表年	論文名	発表誌名	共著者
2001	初期応力状態を考慮したモデル化による鋼矢板岸壁の被災事例の有効応力解析	第46回地盤工学シンポジウム, 平成13年度論文集, pp.19-24	三輪 滋・岡 由剛・中山裕章・石倉克真・平岡慎司・松田英一・吉田 晃・小堤治・森 浩章
2001	非排水有効応力地震応答解析における捨石材のモデル化に関する検討	第46回地盤工学シンポジウム, 平成13年度論文集, pp.25-30	佐藤 成・亀山和弘・大塚夏彦・森 浩章・小堤治・安田 進
2001	変相線を越えた応力空間における塑性せん断仕事の負のダイレタンシーへの寄与について	第46回地盤工学シンポジウム, 平成13年度論文集, pp.83-88	小堤 治・島津多賀夫・三輪 滋・中山裕章・溜 幸生・沢田俊一・竹島 康人・森 浩章
2001	河川堤防を対象とした地震時変形解析の適用事例	第46回地盤工学シンポジウム, 平成13年度論文集, pp.89-94	竹島康人・沢田俊一・杉山 弥・小堤 治
2001	Plane strain instability of saturated elasto-plastic soils	Geotechnique, Vol.51, No.5, pp.389-398	Bardet, J.P.
2002	Effective stress analyses of liquefaction-induced deformation in river dikes	Soil Dynamics and Earthquake Engineering 22: 1075-1082.	Ozutsumi, O., S. Sawada, Y., Takeshima, W. Sugiyama and T. Shimazu
2003	Evaluation of earthquake damage to sheet pile type quay walls by effective stress analysis considering initial stress condition	Proc. of Structural Engineering, JSCE 49A: 369-380.	Miwa, S., O. Ozutsumi, T., Ikeda, Y. Oka
2004	Study of the improvement of accuracy for the 2-dimensional effective stress analysis method	Annual Journal of Civil Engineering in the Ocean, JSCE 20: 443-448	Ozutsumi, O., Y. Shiozaki, K., Ichii, S. G. Mori
2005	International standard (ISO) on seismic actions for designing geotechnical works - An overview	Soil Dynamics and Earthquake Engineering 25: 605-615.	
2005	Remediation of liquefiable soils for port structures in Japan - analysis, design and performance	Journal of Earthquake Engineering 9(Special Issue): 77-103.	
2005	Yield and cyclic behaviour of a strain space multiple mechanism model for granular materials	International Journal for Numerical and Analytical Methods in Geomechanics 29(4): 417-442.	O. Ozutsumi
2005	Generalized scaling relations for dynamic centrifuge tests	Géotechnique 55(5): 355-362.	T. Tobita, T. Nakahara
2006	Development of a simple seismic performance evaluation technique for coastal structures	2006 Ocean Development Symposium, JSCE.	Higashijima, M., I. Fujita, K., Ichii, T. Sugano, M. Kitamura

発表年	論文名	発表誌名	共著者
2006	Soil non-linearity and effects on seismic site response	Proc. 3rd International Symposium on the Effects of Surface Geology on Seismic Motion, Grenoble, France.	T. Tobita
2006	Soil-pile interaction in horizontal plane	Geotechnical Special Publication 145, ASCE: 38-49.	T. Tobita, M. Donahue, M., Nakamichi, H. Kaneko
2006	Reconnaissance report of the 2004 Sumatra-Andaman, Indonesia, Earthquake - Damage to geotechnical works in Band Aceh and Meulaboh	Journal of Natural Disaster Science 28(1): 35-41.	Tobita, T., B. Chairullah, W. Asper
2007	Seismic assessment of coastal structures against combined hazard with Tsunamis	Proc. 8th Pacific Conference on Earthquake Engineering, Singapore.	T. Tobita
2007	Seismic performance and assessment of coastal geotechnical structures	Proc. 16th Southeast Asian Geotechnical Conference, Subang, Malaysia.	T. Tobita
2007	Seismic analysis and design of geotechnical structures	Earthquake Geotechnical Engineering. K. D. Pitsikas, Springer: 303-325.	T. Tobita
2008	Seismic performance evaluation of geotechnical structures	Proc. 2nd International Conference GEDMAR08, Nanjing, China.	T. Tobita
2008	Seismic performance and design of port structures	Geotechnical Earthquake Engineering and Soil Dynamics VI, Geotechnical Special Publication 181, ASCE: 1-16.	T. Tobita, Y. Tamari
2009	Soil-structure interactions analysis for vertical and lateral loaded pile foundations	Proc. 17th International Conference on Soil Mechanics and Geotechnical Engineering, Alexandria.	Hussien, M. N., T. Tobita, K., M. Rollins, E. H. Ramadan
2009	Soil-pile interaction under lateral load	Proc. International Workshop on Soil-foundation-Structure Interaction 2009, Auckland, Taylor & Francis Group, London.	T. Tobita, M. N. Hussien, K., M. Rollins, O. Ozutsumi

発表年	論文名	発表誌名	共著者
2010	Nonlinear seismic finite element analysis of soil-pile superstructure interaction	Journal of Applied Mechanics, JSCE 13: 601-609.	Hussien, M. N., T. Tobita
2010	Soil-pile separation effect on the performance of a pile group under static and dynamic lateral load	Canadian Geotechnical Journal 47(11): 1234-1246.	Hussien, M. N., T. Tobita, S., K. M. Rollins
2010	Seismic design and performance of retaining structures	Earth Retention Conference III, Geotechnical Special Publication No.208, ASCE: 674-687.	
2010	Soils and foundations during earthquakes	Soils and Foundations 50(6): 937-953.	K. Ichii
2010	Performance-based design of geotechnical structures: recent advances	Proc. 5th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego.	T. Tobita
2010	Numerical analysis of near-field asymmetric vertical motion	Bulletin of the Seismological Society of America 100(4): 1456 - 1469.	Tobita, T., T. Iwata
2010	Numerical analysis of trampoline effect in extreme ground motion	Proc. 5th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego.	Tobita, T., T. Iwata
2011	Vertical loads effect on the lateral pile group resistance in sand	Geomechanics and Geoengineering: An International Journal	Hussien, M. N., T. Tobita
2011	Non-linear response of coupled soil-pile-structure system under sinusoidal excitations with various frequencies	Journal of Applied Mechanics, JSCE 14: I-471-480.	Hussien, M. N., T. Tobita
2011	Influence of vertical loads on lateral pile group response considering soil-pile cap interactions	Journal of Applied Mechanics, JSCE 14: I-271-280.	Hussien, M. N., T. Tobita
2011	Seismic performance of port structures: assessment and remediation	Proc. 7th National Conference on Earthquake Engineering Istanbul.	

発表年	論文名	発表誌名	共著者
2011	Performance based approach for mitigating hazards in coastal areas	Proc. 3rd International Conference on Geotechnical Engineering for Disaster Mitigation and Rehabilitation. S. Wardani, J. Chu, S. Lo, S. Iai and K. Phoon. Semarang: 659-672.	
2011	Nonlinearity in site response: Nonlinear volumetric mechanism	Proc. 4th International Symposium on Effect of Surface Geology on Seismic Motion, Santa Barbara.	T. Tobita, T. Iwata
2011	Dilatancy of granular materials in a strain space multiple mechanism model	International Journal for Numerical and Analytical Methods in Geomechanics 35(3): 360-392.	T. Tobita, O. Ozutsumi, K. Ueda
2011	Application of the generalized scaling law to liquefiable ground	International Journal for Physical Modelling in Geotechnics	Tobita, T., L. von der Tann
2011	Centrifuge modelling of manhole uplift in a liquefied trench	Soils and Foundations 51(6): 1091-1102	Tobita, T., C. G. Kang
2011	Estimation of liquefaction-induced manhole uplift displacements and trench-backfill settlements	Journal of Geotechnical and Geoenvironmental Engineering, ASCE	Tobita, T., G. C. Kang
2013	Evolution of fabric in a strain space multiple mechanism model for granular materials	International Journal for Numerical and Analytical Methods in Geomechanics 37(10): 1326-1336.	T. Tobita, O. Ozutsumi
2013	Induced fabric under cyclic and rotational loads in a strain space multiple mechanism model for granular materials	International Journal for Numerical and Analytical Methods in Geomechanics 37(2): 150-180.	T. Tobita, O. Ozutsumi
2013	Finite strain formulation of a strain space multiple mechanism model for granular materials	International Journal for Numerical and Analytical Methods in Geomechanics 37(9): 1189-1212.	K. Ueda, T. Tobita, O. Ozutsumi

発表年	論文名	発表誌名	共著者
2013	Tsunami Induced by 2011 Tohoku-Pacific Ocean Earthquake and a Possible Renewal Plan	Geotechnical Predictions and Practice in Dealing with Geohazards. J. Chu, S. Wardani and A. Iizuka, Springer: 3-18.	Ohta, H., Y. Nishida, S. Morioka, A. Iizuka
2014	On the influence of vertical loads on the lateral response of pile foundation	Computers and Geotechnics 55(1): 392-403.	Hussien, M., T. Tobita, K. M.
2014	Rate of dissipation of excess pore water pressure in a liquefiable sand deposit	Soil Liquefaction during Recent Large-Scale Earthquakes. R. Orense, I. Towhata and N. Chouw. Auckland, New Zealand, CRC Press: 69-77.	K. Nagaura
2015	Kinematic and inertial forces in pile foundations under seismic loading	Computers and Geotechnics 69: 166-188.	Hussien, M., M. Karray, T. Tobita
2015	Combined Failure Mechanism of a Breakwater Subject to Tsunami during 2011 East Japan Earthquake	Perspectives on Earthquake Geotechnical Engineering in Honour of Prof. Kenji Ishihara. A. Ansar and M. Sakr, Springer: 177-186.	
2015	Combined failure mechanism of breakwaters and buildings subject to Tsunami during 2011 East japan earthquake	Geotechnics for Catastrophic Flooding Events. S. Iai. Kyoto, Japan, CRC Press: 3-16.	
2015	Liquefaction experiment and analysis projects (LEAP) through a generalized scaling relationship	Geotechnics for Catastrophic Flooding Events. S. Iai. Kyoto, Japan, CRC Press: 95-97.	
2015	Backwards Problem in Geotechnical Earthquake Engineering	Forensic Geotechnical Engineering. V. Rao, Springer: 1-10.	
2015	Strain Space Multiple Mechanism Model for Clay Under Monotonic and Cyclic Loads	6th International Conference on Earthquake Geotechnical Engineering. Christchurch, New Zealand: 264, CD-ROM.	K. Ueda, O. Ozutsumi
2015	Centrifuge model tests and large deformation analyses of a breakwater subject to combined effects of Tsunami	6th International Conference on Earthquake Geotechnical Engineering. Christchurch, New Zealand: 801, CD-ROM.	K. Ueda, T. Tobita

発表年	論文名	発表誌名	共著者
2015	Two-dimensional Effective Stress Analysis on Consolidation of Clay under Highway Embankment and Its Seismic Response after Consolidation	6th International Conference on Earthquake Geotechnical Engineering. Christchurch, New Zealand: 300, CD-ROM.	Ozutsumi, O., T. Nakahara
2015	Over-turning of a building with pile foundation - combined effect of liquefaction and tsunami	6th International Conference on Earthquake Geotechnical Engineering. Christchurch, New Zealand: 291, CD-ROM.	Tobita, T.
2015	Benchmark centrifuge tests and analyses of liquefaction-induced lateral spreading during earthquake	Geotechnics for Catastrophic Flooding Events. S. Iai. Kyoto, Japan: 127-182.	Tobita, T., M. Manzari, O. Ozutsumi, K. Ueda, R. Uzuoka
2015	Finite Deformation Analysis of Dynamic Behavior of Embankment on Liquefiable Sand Deposit Considering Pore Water Flow and Migration	Proc. 6th International Conference on Earthquake Geotechnical Engineering. Christchurch, New Zealand: 215, CD-ROM.	Ueda, K., O. Ozutsumi
2016	Energy-less strain in granular materials - Micromechanical background and modeling	Soils and Foundations 56(3): 391-398.	K. Ueda
2016	Centrifuge model tests and large deformation analyses of a breakwater subject to combined effects of tsunami	Soil Dynamics and Earthquake Engineering 91: 294-303.	Ueda, K., T. Tobita
2017	Performance-based seismic design of geotechnical structures	Developments in Earthquake Geotechnics. S. Iai, Springer: 1-20.	
2017	Soil-foundation-structure-fluid interaction during earthquakes	International Workshop on Seismic Performance of Soil-Foundation-Structure Systems. Auckland, New Zealand.	K. Ueda, T. Tobita
2017	Modelling of cohesive soils: soil element behaviors	Developments in Earthquake Geotechnics. S. Iai, Springer.	Nakahara, T., K. Ueda
2017	Analysis of quay walls during 2011 East Japan Earthquake	Developments in Earthquake Geotechnics. S. Iai, Springer (in printing)	Tashiro, S., K. Sumiya, T., Sakakibara, D. Kyoku, S., Nishiyama, T., Miyazawa, T., Isayama, S., Sato, A., Mori, H., Kaneko, D., Shibata, K., Sugihara, K., Murakami, T., Imono, H., Murakami, E., Kohama and Y. Ohya
2017	Numerical Predictions for Centrifuge Model Tests of a Liquefiable Sloping Ground Using a Strain Space Multiple Mechanism Model Based on the Finite Strain Theory	Soil Dynamics and Earthquake Engineering (in printing): ( <a href="http://dx.doi.org/10.1016/j.soildyn.2016.1011.1015">http://dx.doi.org/10.1016/j.soildyn.2016.1011.1015</a> ).	Ueda, K.

## 著　書

発表年	著書名	発表誌名	共著者
1989	動的解析と耐震設計,5.2浮遊式構造物	第4巻, 土木学会編, 技報堂pp.279-287	稻富隆昌・上部達生・白石悟・関田欣治・善功企・丸山雅淑
1991	建設技術者のための耐震工学	山海堂	土田肇
1993	埋立地の液状化対策ハンドブック	運輸省港湾局監修, 沿岸開発技術研究センター発刊	善功企・上部達生・山崎浩之・風間基樹
1993	液状化対策の調査・設計から施工まで	土質工学会	飯田毅・石井雄輔・大北康治・古賀康之・小寺秀則・許斐信三・小松憲一・坂井成之・佐々木康・清水恵助・末松直幹・杉村義広・鈴木英世・鈴木吉夫・善功企・田中幸久・土谷尚・坪井英夫・東畑郁生・常田賢一・时任正人・時松孝次・中島秀雄・中島豊・中野雅弘・那須誠・鳴海直信・深田久・二木幹夫・真島正人・松本秀応・三原正哉・宮路貞義・森國夫・安田進・山崎浩之・吉田望
1996	盛土の挙動予測と実際	地盤工学・実務シリーズ2, 地盤工学会	阿江範彦・青山憲明・飯島健・石川芳治・今吉英明・岩永安正・小笠原章・鬼木剛一・古閑潤一・島博保・清水恵助・白川信之・土田孝・鳥井原誠・長尾和之・那須誠・西垣誠・西川純一・根守克己・星野克己・松尾修・三木博史・水本邦男・村田修・森本巖・森本美樹・山崎慶一・横田聖哉
1997	Handbook on Liquefaction Remediation of Reclaimed Land	Balkema, 312p.	Franklin, A.G.
1997	埋立地の液状化対策ハンドブック（改訂版）	運輸省港湾局監修, 沿岸開発技術研究センター発刊	善功企・風間基樹・菊地喜昭・山崎浩之・菅野高弘・上部達生・山本修司
1999	地盤工学ハンドブック	地盤工学会	中瀬明男ほか多数
2000	海岸施設設計便覧2000年版	土木学会	岩田好一郎ほか多数

発表年	著書名	発表誌名	共著者
2001	Seismic Design Guidelines for Port Structures, International Navigation Association (PIANC)	Balkema	Bernal, A., Blazquez, R., Burcharth, H.F., Dickenson, S.E., Ferritto, J., Finn, W.D.L., Ichii, K., McCullough, N.J., Meeuwissen, P.W.H., Memos, C.D., Priestley, M.J.N., Silvestri, F., Simonelli, A.L., Steedman, R.S., Sugano, T
2011	Geotechnics and Earthquake Geotechnics towards Global Sustainability	Springer	Editor
2013	土木・環境系の国際人英語	コロナ社	R. Scott Steedman
2015	Geotechnics for Catastrophic Flooding Events	Balkema	Editor
2017	Developments in Earthquake Geotechnics	Springer	Editor

### 総 説

発表年	論文名	発表誌名	共著者
2003	耐震性能設計に向けて	土と基礎、Vol.51, No.2, pp.1-4	菅野高弘・一井康二
2008	海外の耐震設計－基準類に見る動向	土と基礎、Vol.56, No.7, pp.1-4	
2009	社会経済システムの改編と技術戦略：課題と展望	エネルギー・資源 Vol. 30 No. 2, pp.98-101	
2010	耐震設計	地盤工学会誌, Vol.58, No.1, pp.1-3	
2014	巨大地震における沿岸域の広域複合地盤災害	地盤工学会誌, Vol.62, No.1, pp.1-3	
2016	港湾の耐震におけるいくつかの地盤工学的知見	地盤工学会誌, Vol.64, No.7, pp.1-3	