

Resume and Professional Record (as of April 1, 2017)

Name: Junichi KOSEKI

Birth: April 22, 1962 - Tokyo, Japan

Affiliation: Professor, Department of Civil Engineering, The University of Tokyo

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Education: B. Eng., Univ. Tokyo (1985)
M. Eng., Univ. Tokyo (1987)
D. Eng., Univ. Tokyo (1994)

Experience: 1987-1994: Researcher and Senior Researcher, Public Works
Research Institute, Ministry of Construction, Japan
1991-1992: Visiting Engineer, Massachusetts Institute of Technology, USA
1994-2003: Associate Professor, Institute of Industrial Science, University of
Tokyo
2003-2014: Professor, Institute of Industrial Science, University of Tokyo
2014-current: Professor, Department of Civil Engineering, University of Tokyo
2007-2008: Chief of Research Department, IIS, University of Tokyo
2010-2011: Adviser to the President, University of Tokyo
2012-2013: Head of Department of Civil Engineering, Graduate School,
University of Tokyo

Specialty: Laboratory stress-strain testing of soils
Deformation and strength properties of geomaterials
Dynamic behavior and seismic design of earth structures
Soil liquefaction and its countermeasure

Awards: June 2000: C. A. Hogentogler Award from Committee D-18 on Soil and Rock,
ASTM for the paper "A triaxial testing system to evaluate stress-strain
behavior of soils for wide range of strain and strain rate" co-authored with
Santucci de Magistris, F. et al.

June 2004: C. A. Hogentogler Award from Committee D-18 on Soil and Rock, ASTM for the paper “Comparison of Young’s moduli of dense sand and gravel measured by dynamic and static methods” co-authored with AnhDan, L.Q. et al.

May 2007: Best Paper Award from Japanese Geotechnical Society for the paper “Reliability-based seismic deformation analysis of reinforced soil slopes” co-authored with Shinoda, M. et al.

March 2009: Excellent Paper Award from Taiwan Geotechnical Society for the paper “Study on resistant mechanism of aseismic countermeasure for geosynthetic-reinforced wall and leaning type retaining wall” co-authored with Nakajima, S. et al.

May 2009: Best Paper Award from Japanese Geotechnical Society for the paper “Evaluation of tensile strength of cement-treated sand based on several types of laboratory tests” co-authored with Namikawa, T.

May 2010: Best Paper Award from Japanese Geotechnical Society for the paper “Aging effects on small strain shear moduli and liquefaction properties of in-situ frozen and reconstituted sandy soils” co-authored with Kyota, T. et al.

2010-2011; Mercer Lecturer on “Use of geosynthetics to improve seismic performance of earth structures,” endorsed jointly by the International Society for Soil Mechanics and Geotechnical Engineering and the International Geosynthetics Society

December 2011: Technical Award from Japan Chapter of International Geosynthetics Society for the report “Shaking table tests on railway ballasts reinforced by geotextiles” co-authored with Kobayashi, M. et al.

May 2012: Service Award from Japanese Geotechnical Society

June 2012: Best English Paper Award from Japanese Geotechnical Society for the paper “Seismic earth pressure exerted on retaining walls under a large seismic load” co-authored with Watanabe, K. and Tateyama, M.

December 2015: Best Geosynthetics International Paper for 2014 for the paper “Performance of reinforced soil walls during the 2011 Tohoku earthquake” co-authored with Kuwano, J. and Miyata, Y.

December 2015: 2015 Best Paper Award from Editorial Committee of Transportation Infrastructure Geotechnology

May 2016: 2015 ASCE Outstanding Reviewer for Journal of Geotechnical and Geoenvironmental Engineering

June 2016: Best Japanese Paper Award from Japanese Geotechnical Society for the paper “Study on effect of embedment of sheetpile for aseismic

countermeasure of retaining wall -Simulation on case histories during the 1995 Hyogo ken-Nanbu earthquake-" co-authored with Nakajima, S., Watanabe, K. and Tateyama, M.

Professional Memberships:

1985-current: Japanese Geotechnical Society
1985-current: Japan Society of Civil Engineers
1996-current: International Geosynthetics Society
2001-current: Japan Society for Earthquake Engineering
2003-current: American Society for Testing and Materials
2004-current: Membrane Structures Association of Japan
2016-current: Japan Society of Dam Engineers

Professional Activities:

1994-1999: Editorial committee for Soils and Foundations, the Japanese Geotechnical Society
1995: Panelist at 1st International Conference on Earthquake Geotechnical Engineering (IS-Tokyo 95') (Tokyo, Japan)
1999: Panelist at 2nd International Symposium on Pre-failure Deformation Characteristics of Geomaterials (IS-Torino 99') (Torino, Italy)
2001-2003: Editorial committee for Journal of Geotechnical Engineering, Japan Society of Civil Engineers
2001: Panelist at 15th International Conference on Soil Mechanics and Geotechnical Engineering (Istanbul)
2003: General reporter at 12th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (Singapore)
2003: Keynote lecturer at 3rd International Symposium on Deformation Characteristics of Geomaterials (Lyon, France)
2003-2005: Editorial committee for Journal of Japan Society for Earthquake Engineering
2005: Panelist at 16th International Conference on Soil Mechanics and Geotechnical Engineering (Osaka, Japan)
2006: Keynote Lecturer at 8th International Symposium on Geosynthetics (Yokohama, Japan)
2006: Panelist at KGS-AGS Joint Workshop, 2006 Fall Geotechnical Engineering Conference (Daegu, Korea)
2006-2007: Ad hoc alliance member of committee on construction of secure and safe society against global changes of natural disasters, Science Council of

Japan

2006-2010: Secretary of the Japanese Geotechnical Society

2006-: Member of editorial board for Journal of GeoEngineering, Taiwan Geotechnical Society

2006-: Member of editorial board for Geosynthetics International, International Geosynthetics Society

2006-2009: Core member of TC29 on laboratory stress strain strength testing of geomaterials, International Society for Soil Mechanics and Geotechnical Engineering

2006: Head of Damage Survey Team of Japanese Geotechnical Society on 2006 Mid-Java earthquake, Indonesia

2007: Keynote Lecturer at 3rd China-Japan Geotechnical Symposium (Chongqing, China)

2007: Panelist at 5th International Symposium on Earth Reinforcement (IS-Kyusyu 07') (Fukuoka, Japan)

2007: Keynote Lecturer at 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (Kolkata, India)

2008: Keynote Lecturer at 4th International Symposium on Deformation Characteristics of Geomaterials (Atlanta, USA)

2008: Keynote Lecturer at International Workshop on Contributions of Geotechnical Engineering to Sustainable Civil Constructions (Bandung, Indonesia)

2008-2010: Editor in chief for Journal of Japan Society of Civil Engineers, Division C

2009: Theme Lecturer at International Conference on Performance-Based Design in Earthquake Geotechnical Engineering (Tsukuba, Japan)

2009-2012: Member of Investigatory Advisory Board on Assessment of Seismic Safety, Nuclear Safety Commission of Japan

2009-2011: Associate editor for Journal of Civil Engineering, Korean Society of Civil Engineers

2009-2013: Secretary of TC101 on laboratory stress strain strength testing of geomaterials, International Society for Soil Mechanics and Geotechnical Engineering

2013-2017: Chair of TC101 on laboratory stress strain strength testing of geomaterials, International Society for Soil Mechanics and Geotechnical Engineering

2013: Keynote lecturer at the International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (Bologna, Italy)

2014-2015: Editorial committee for Soils and Foundations, the Japanese Geotechnical Society

2016-: Editor in chief for monthly journal in Japanese “Engineering for Dams”

2016-: Vice president of Japanese Geotechnical Society

2016-: Council member of International Geosynthetics Society

Authored/edited books and proceedings in English:

1. Critical Urban Infrastructure Handbook, CRC Press, 2014.12 (co-authored with Hamada M. et al., Section IV)
2. Soil Stress-strain behavior: Measurement, Modeling and Analysis, Springer, 2007 (co-edited with Ling, H. et al.)
3. Underground Construction Technology in Japan, Japanese Geotechnical Society, 2006.8 (co-authored with Akagi H. et al., chapter 3, CD-ROM)
4. Proceedings of 8th International Conference on Geosynthetics, 2006 (co-edited with Kuwano, J.)
5. Geomechanics: Testing, Modeling and Simulation, Geotechnical Special Publication, No. 143, ASCE, 2005 (co-edited with Yamamuro, J.)

Journal papers in English:

1. Enomoto, T., Koseki, J., Tatsuoka, F. and Sato, T.: Creep failure of natural gravelly soil and its simulation, Geotechnique, 66(11), 865-877, 2016. <http://www.icevirtuallibrary.com/doi/10.1680/jgeot.15.P.144>
2. Enomoto, T., Koseki, J., Tatsuoka, F. and Sato, T.: Rate-dependent behavior of undisturbed gravelly soil, Soils and Foundations, 56(3), 547-558, 2016. <http://dx.doi.org/10.1016/j.sandf.2016.04.018>
3. Wananabe, K., Sawada, R. and Koseki, J.: Uplift mechanism of open-cut tunnel in liquefied ground and simplified method to evaluate the stability against uplifting, Soils and Foundations, 56(3), 412-426, 2016. <http://dx.doi.org/10.1016/j.sandf.2016.04.008>
4. Deng, J.L., Xu, Q. and Koseki, J.; How the toe loading suppresses the movements of an instable slope: Mechanisms revealed from triaxial compression tests under varied strain, Engineering Geology, Vol. 209, pp. 93-105, 2016.5
5. Araki, H., Koseki, J. and Sato, T.: Tensile strength of compacted rammed earth materials, Soils and Foundations, Vol. 56, No. 2, pp. 189-204, 2016.4. [doi:10.1016/j.sandf.2016.02.003](https://doi.org/10.1016/j.sandf.2016.02.003)
6. Wang, H., Koseki, J., Sato, T., Chiaro, G. and Tan Tian, J.: Effect of saturation on liquefaction resistance of iron ore fines and two sandy soils, Soils and Foundations, Vol. 56, No. 4, pp. 732-744, 2016.8
7. Wang, H., Sato, T., Koseki, J., Chiaro, G. and Tan Tian, J.: A system to measure volume

- change of unsaturated soils in undrained cyclic triaxial tests, *Geotechnical Testing Journal*, ASTM, Vol.39, No.4, 2016.7 DOI: 10.1520/GTJ20150125
8. Enomoto, T., Koseki, J., Tatsuoka, F. and Sato, T.: Creep failure of sands exhibiting various viscosity types and its simulation, *Soils and Foundations*, Vol.55, No.6, 2015.12. <http://dx.doi.org/10.1016/j.sandf.2015.10.002>
 9. Koseki, J., Wakamatsu, K., Sawada, S. and Matsushita, K.: Liquefaction-induced damage to houses and its countermeasures at Minami-Kurihashi in Kuki city during the 2011 Tohoku Earthquake, Japan, *Soil Dynamics and Earthquake Engineering*, Vol. 79, pp.391-400, 2015.8 <http://dx.doi.org/10.1016/j.soildyn.2015.07.014>
 10. De Silva, L.I.N, Koseki, J., Chiaro, G. and Sato, T.: A stress–strain description of saturated sand under undrained cyclic torsional shear loading, *Soils and Foundations*, Vol.55, No.3, pp.559-574, 2015.6 <http://dx.doi.org/10.1016/j.sandf.2015.04.008>
 11. Towhata, I., Maruyama, S., Kasuda, K., Koseki, J., Wakamatsu, K., Kiku, H., Kiyota, T., Yasuda, S., Taguchi, Y., Aoyama, S. and Hayashida, T.: Liquefaction in the Kanto region during the 2011 off the pacific coast of Tohoku earthquake, *Soils and Foundations*, Vol.54, No.4, 859-873, 2014.8
 12. De Silva, L.I.N, Koseki, J., Wahyudi, S. and Sato, T.: Stress-dilatancy relationships of sand in the simulation of volumetric behavior during cyclic torsional shear loadings, *Soils and Foundations*, 54(4), 845-858, 2014.8
 13. Lenart, S., Koseki, J., Miyashita, Y. and Sato, T.: Large-scale triaxial tests of dense gravel material at low confining pressure, *Soils and Foundations*, 54(1), 45-55, 2014.2
 14. Kuwano, J., Miyata, Y. and Koseki, J.: Performance of reinforced soil walls during the 2011 Tohoku Earthquake, *Geosynthetics International*, Vol.21, No.3, pp.179-196, 2014.6
 15. Tatsuoka, F., Tateyama, M., Koseki, J. and Yonezawa, T.: Geosynthetic-reinforced soil structures for railways in Japan, *Transportation Infrastructure Geotechnology*, 1(1), 3-53, 2014.3
 16. Koseki, J., Mikami, T. and Sato, T.: Deformation characteristics of granular materials in cyclic one-dimensional loading tests, *Transportation Infrastructure Geotechnology*, 1(1), 54-67, 2014.3
 17. Koseki, J. and Shibuya, S.: Mitigation of disasters by earthquakes, tsunamis and rains by means of geosynthetic-reinforced soil retaining walls and embankments, Keynote Lecture of International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures, Bologna, Italy, *Transportation Infrastructure Geotechnology*, 1(3-4), 231-261, 2014.12
 18. Tatsuoka, F., Tateyama, M., Koseki, J. and Yonezawa, T.: Geosynthetic-reinforced soil structures for railways in Japan, *Transportation Infrastructure Geotechnology*, 1(1), 3-53, 2014.3
 19. Tatsuoka, F., Tateyama, M., Koseki, J. and Yonezawa, T.: Geosynthetic-reinforced soil structures for railways: twenty five year experiences in Japan, *Geotechnical Engineering Journal of the SEAGS & AGSSEA* 44(1), 2014.3
 20. Kiyota, T., Koseki, J. and Sato, T.: Relationship between limiting shear strain and reduction

- of shear moduli due to liquefaction in large strain torsional shear tests, *Soil Dynamics and Earthquake Engineering*, Vol. 49, pp.122-134, 2013.6
21. Enomoto, T., Qureshi, O.H., Sato, T. and Koseki, J.: Strength and deformation characteristics and small strain properties of undisturbed gravelly soils, *Soils and Foundations*, Vol. 53, No. 6 pp.961-965, 2013.12
 22. Kachi, T., Kobayashi, M., Seki, M. and Koseki, J.: Reinforcement of railway ballasted track with geosynthetic bags for preventing derailment, *Geosynthetic International*, Vol. 20, No. 5, pp.316-331, 2013.10
 23. Chiaro, G., Kiyota, T. and Koseki, J.: Strain localization characteristics of loose saturated Toyoura sand in undrained cyclic torsional shear tests with initial static shear, *Soils and Foundations*, Vol.53, No.1, pp.23-34, 2013.2
 24. Chiaro, G., Koseki, J. and De Silva, L.I.N.: A density- and stress-dependent elasto-plastic model for sands subjected to monotonic torsional shear loading, *Geotechnical Engineering Journal of SEAGS & AGSSEA*, 44(2), pp.18-26, 2013.6
 25. Namikawa, T. and Koseki, J.: Effects of spatial correlation on compression behavior of a cement-treated column, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 139, No. 8, pp.1346-1359, 2013
 26. Koseki, J., Koda, M., Matsuo, S., Takasaki, H. and Fujiwara, T.: Damage to railway earth structures and foundations caused by the 2011 off the Pacific Coast of Tohoku Earthquake, *Soils and Foundations*, Vol. 52, No.5, pp.872-889, 2012.10
 27. Chiaro, G., Koseki, J. and Sato, T.: Effects of initial static shear on liquefaction and large deformation properties of loose saturated Toyoura sand in undrained cyclic torsional shear tests, *Soils and Foundations*, Vol.52, No.3, pp.498-510, 2012.6
 28. Nishimura, T., Koseki, J., Fredlund, D.G. and Rahardjo, H.: Microporous membrane technology for measurement of soil-water characteristic curve, *Geotechnical Testing Journal*, Vol.35, No.1, 2012.1
 29. Koseki, J.: Use of geosynthetics to improve seismic performance of earth structures, *Geotextiles and Geomembranes*, Vol. 34, pp.51-68, 2012.
 30. Lenart, S., Koseki, J. and Miyashita, Y.: Soil liquefaction in the Tone river basin during the 2011 Earthquake off the pacific coast of Tohoku, *ACTA GEOTECHNICA SLOVENICA*, Vol. 9, pp.5-15, 2012.2
 31. Modoni, G., Koseki, J. and AnhDan, L.Q.: Cyclic stress-strain response of compacted gravel, *Geotechnique*, Vol. 61, No. 6, pp.473-485, 2011.
 32. Maqbool, S. and Koseki, J.: Improvement and application of a P- wave measurement system for laboratory specimens of sand and gravel, *Soils and Foundations*, Vol. 51, No. 1, pp.41-52, 2011.
 33. Watanabe, K., Koseki, J. and Tateyama, M.: Seismic earth pressure exerted on retaining walls under a large seismic load, *Soils and Foundations*, Vol. 51, No. 3, pp.379-394, 2011.
 34. Deng, J.L., Miyashita, Y., Sato, T., Kuwano, R. and Koseki, J.: Effects of system compliance on liquefaction behavior of thin sandy layer in undrained cyclic triaxial test, *Soils and Foundations*, Vol. 51, No. 3, pp.549-558, 2011.

35. Deng, J.L., Kameya, H., Miyashita, Y., Kuwano, J., Kuwano, R. and Koseki, J.: Study on dip slope failure at Higashi Takezawa induced by 2004 Niigata-ken Chuetsu Earthquake, *Soils and Foundations*, Vol. 51, No. 5, pp.929-943, 2011.
36. Deng, J.L., Kameya, H., Miyashita, Y., Kuwano, J., Kuwano, R. and Koseki, J.: Study on a failed dip slope with a thin sandy layer in 2004 Niigata-ken Chuetsu Earthquake, *Engineering Geology*, Vol. 123, No. 4, pp.302-314, 2011.
37. Koseki, J., Hong, K., Nakajima, S., Mulmi, S., Watanabe, K. and Tateyama, M.: Negative pore air pressure generation in backfill of retaining walls during earthquakes and its effect on seismic earth pressure, *Soils and Foundations*, Vol. 50, No. 5, pp.747-755, 2010.
38. Koseki, J. and Kawaguchi, T.: Observation of geometerial behavior, *Soils and Foundations*, Vol. 50, No. 6, pp.847-860, 2010.
39. Deng, J.L. Tsutsumi, Y., Kameya, H. and Koseki, J.: A modified procedure to evaluate earthquake-induced displacement of slopes containing a weak layer, *Soils and Foundations*, Vol. 50, No.3, pp. 413-420, 2010.
40. Kiyota, T., Koseki, J. and Sato, T.: Comparison of liquefaction-induced ground deformation between results from undrained cyclic torsional shear tests and observations from previous model tests and case studies, *Soils and Foundations*, Vol. 50, No.3, pp. 421-429, 2010.6
41. Maqbool, S. and Koseki, J.: Large scale triaxial tests to study effects of compaction energy and large cyclic loading history on shear behavior of gravel, *Soils and Foundations*, Vol. 50, No. 5, pp.633-644, 2010.
42. Nakajima, S., Koseki, J., Watanabe, K. and Tateyama, M.: Simplified procedure to evaluate earthquake-induced residual displacements of geosynthetic-reinforced soil retaining walls, *Soils and Foundations*, Vol. 50, No. 5, pp.659-677, 2010.
43. Nakajima, S., Koseki, J., Watanabe, K. and Tateyama, M.: A simplified procedure to evaluate earthquake-induced residual displacements of conventional type retaining walls, *Soils and Foundations*, Vol.49, No.2, pp.287-303, 2009.
44. Kiyota T., Koseki, J., Sato, T. and Kuwano, R.: Aging effects on small strain shear moduli and liquefaction properties of in-situ frozen and reconstituted sandy soils, *Soils and Foundations*, Vol.49, No.2, pp.259-274, 2009.
45. Kiyota T., Koseki, J., Sato, T. and Tsutsumi, Y.: Effects of sample disturbance on small strain characteristics and liquefaction properties of Holocene and Pleistocene sandy soils, *Soils and Foundations*, Vol.49, No.4, pp.509-523, 2009.
46. Nakajima, S., Koseki, J., Watanabe, K. and Tateyama, M.: Study on resistant mechanism of aseismic countermeasure for GRS wall and leaning type retaining wall, *Journal of GeoEngineering*, Taiwan Geotechnical Society, Vol.3, No.3, pp.121-129, 2008.
47. Kiyota, T., Sato, T., Koseki, J. and Abadi, M. M.: Behavior of liquefied sands under extremely large strain levels in cyclic torsional shear tests, *Soils and Foundations*, Vol.48, No.5, pp.727-739, 2008.
48. HongNam, N., Koseki, J. and Sato, T.: Effect of specimen size on quasi-elastic properties of Toyoura sand in hollow cylinder triaxial and torsional shear tests *Geotechnical Testing Journal*, ASTM, Vol.31 No.2, 2008.

49. Koseki, J., Yoshimine, M., Hara, T., Kiyota, T., Wicaksono, R.I., Goto, S. and Agustian, Y.: Damage survey report on May 27, 2006, Mid Java Earthquake, Indonesia, *Soils and Foundations*, Vol.47, No.5, pp.973-989, 2007.
50. Maqbool S. and Koseki, J.: Large-scale plane strain compression tests on compacted gravel with active and passive controls, *Soils and Foundations*, Vol.47, No.6, pp.1063-1074, 2007.
51. Namikawa T., Koseki, J. and Suzuki, K.: Finite element analysis of lattice-shaped ground improvement by cement-mixing for liquefaction mitigation, *Soils and Foundations*, Vol.47, No.3, pp.559-576, 2007.
52. Namikawa, T. and Koseki, J.: Evaluation of tensile strength of cement-treated sand based on several types of laboratory tests, *Soils and Foundations*, Vol.47, No.4, pp.657-674, 2007.
53. Koseki, J., Sasaki, T., Wada, N., Hida, J., Endo, M. and Tsutsumi, Y.: Damage to earth structures for national highways by the 2004 Niigata-ken Chuetsu earthquake, *Soils and Foundations*, Vol.46, No.6, pp.739-750, 2006.
54. AnhDan, L.Q., Tatsuoka, F. and Koseki, J.: Viscous effects on the stress-strain behavior of gravelly soil in drained triaxial compression, *Geotechnical Testing Journal*, ASTM, Vol.29, No.4, pp.330-340, 2006.
55. AnhDan, L.Q., Koseki, J. and Sato, T.: Evaluation of quasi-elastic properties of gravel using a large-scale true triaxial apparatus, *Geotechnical Testing Journal*, ASTM, Vol.29, No.5, pp.374-384, 2006.
56. Shirato, M., Fukui, J. and Koseki, J.: Current status of ductility design of abutment foundations against large earthquakes, *Soils and Foundations*, Vol.46, No.3, pp.377-396, 2006.
57. Shirato, M., Koseki, J., Fukui, J. and Kimura, Y.: Effects of stress-dilatancy behavior of soil on load transfer hysteresis in soil-pile interaction, *Soils and Foundations*, Vol.46, No.3, pp.281-298, 2006.
58. Shirato, M., Koseki, J. and Fukui, J.: A new nonlinear hysteretic rule for Winkler type soil-pile interaction springs that considers loading pattern dependency, *Soils and Foundations*, Vol.46, No.2, pp.173-188, 2006.
59. Shinoda, M., Horii, K., Yonezawa, T., Tateyama, M. and Koseki, J.: Reliability-based seismic deformation analysis of reinforced soil slopes, *Soils and Foundations*, Vol.46, No.4, pp.477-490, 2006.
60. Namikawa T. and Koseki, J.: Experimental determination of softening relations for cement-treated sand, *Soils and Foundations*, Vol.46, No.4, pp.491-504, 2006.
61. AnhDan, L.Q. and Koseki, J.: Small strain behaviour of dense gravel and sand by true triaxial tests, *Soils and Foundations*, Vol. 45, No. 3, pp.21-38, 2005.
62. HongNam, N. and Koseki, J.: Quasi-elastic deformation properties of Toyoura sand in cyclic triaxial and torsional loadings, *Soils and Foundations*, Vol. 45, No. 5, pp.19-38, 2005.
63. Koseki, J., Yoshida, T. and Sato, T.: Liquefaction properties of Toyoura sand in cyclic torsional shear tests under low confining stress, *Soils and Foundations*, Vol. 45, No. 5, pp.103-113, 2005.
64. Watanabe K., Koseki, J. and Tateyama, M.: Application of high speed digital CCD camera

- to observe dynamic deformation characteristics of sand, *Geotechnical Testing Journal*, ASTM, Vol.28, No.5, pp.423-435, 2005.
65. AnhDan, L.Q. and Koseki, J.: Effects of large number of cyclic loading on deformation characteristics of dense granular materials, *Soils and Foundations*, Vol.44, No.3, pp.115-123, 2004.6
 66. Watanabe, K., Munaf, Y., Koseki, J., Tateyama, M. and Kojima, K.: Behaviors of several types of model retaining walls subjected to irregular excitation, *Soils and Foundations*, Vol.43, No.5, pp.13-27, 2003.10
 67. Tatsuoka, F., Masuda, T., Siddiquee, M.S.A. and Koseki, J.: Modeling the stress-strain relations of sand in cyclic plane strain loading, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol.129, No.6, pp.450-467, 2003.6
 68. AnhDan L.Q., Koseki, J. and Sato, T.: Comparison of Young's moduli of dense sand and gravel measured by dynamic and static methods, *Geotechnical Testing Journal*, ASTM, Vol.25, No.4, pp.349-368, 2002.12
 69. Koseki, J. and Ohta, A.: Effects of different consolidation conditions on liquefaction resistance and small strain quasi-elastic deformation properties of sands containing fines, *Soils and Foundations*, No. 41, Vol. 6, pp.53-62, 2001.12
 70. Hayano, K., Matsumoto, M., Tatsuoka, F. and Koseki, J.: Evaluation of time-dependent deformation properties of sedimentary soft rock and their constitutive modeling, *Soils and Foundations*, No. 41, Vol. 2, pp.21-38, 2001.4
 71. Koseki, J., Kawakami, S., Nagayama, H. and Sato, T.: Change of small strain quasi-elastic deformation properties during undrained cyclic torsional shear and triaxial tests of Toyoura sand, *Soils and Foundations*, Vol.40, No.3, pp.101-110, 2000.6
 72. Koseki, J., Matsuo, O., Sasaki, T., Saito, K. and Yamashita, M.: Damage to sewer pipes during the 1993 Kushiro-Oki and the 1994 Hokkaido-Toho-Oki earthquakes, *Soils and Foundations*, Vol.40, No.1, pp. 99-111, 2000.2
 73. Santucci de Magistris, F., Koseki, J., Amaya, M., Hamaya, S., Sato, T. and Tatsuoka, F.: A triaxial testing system to evaluate stress-strain behaviour of soils for wide range of strain and strain rate, *Geotechnical Testing Journal*, Vol. 22, pp. 44-60, 1999.
 74. Ogata, T., Kurachi, Y. and Koseki, J.: Scale effects on coefficient of horizontal subgrade reaction considering stress and strain level dependency of deformation characteristics of subsoils, *Journal of Geotechnical Engineering*, Japan Society of Civil Engineers, No.631/III-48, pp.371-381, 1999.9 (in Japanese)
 75. Koseki, J., Matsuo, O. and Tanaka, S.: Uplift of sewer pipes caused by earthquake-induced liquefaction of surrounding soil, *Soils and Foundations*, Vol. 38, No. 3, pp.75-87, 1998.9
 76. Koseki, J., Munaf, Y., Tatsuoka, F., Tateyama, M., Kojima, K. and Sato, T.: Shaking and tilt table tests of geosynthetic-reinforced soil and conventional-type retaining walls, *Geosynthetics International*, Vol. 5, Nos. 1-2, pp. 73-96, 1998.
 77. Koseki, J., Tatsuoka, F., Munaf, Y., Tateyama, M. and Kojima, K.: A modified procedure to evaluate active earth pressure at high seismic loads, *Soils and Foundations*, Special Issue on Geotechnical Aspects of the January 17 1995 Hyogoken-Nambu Earthquake, Vol. 2,

pp.209-216, 1998.9

78. Koseki, J., Matsuo, O. and Koga Y.: Uplift behavior of underground structures caused by liquefaction of surrounding soil during earthquake, *Soils and Foundations*, Vol.37, No.1, pp. 97-108, 1997.3
79. Koseki, J., Matsuo, O., Ninomiya, Y. and Yoshida, Y.: Uplift of sewer manholes during the 1993 Kushiro-oki earthquake, *Soils and Foundations*, Vol.37, No.1, pp.109-121, 1997.3
80. Tatsuoka, F., Kodaka, T., Wang, L., Hayano, K. and Koseki, J.: Deformation characteristics of sedimentary soft rocks, *Journal of Geotechnical Engineering*, Japan Society of Civil Engineers, No.561/III-38, pp.1-17, 1997.3 (in Japanese)
81. Jiang, G. L., Tatsuoka, F., Flora, A. and Koseki, J.: Inherent and stress state-induced anisotropy in very small strain stiffness of a sandy gravel, *Geotechnique*, No.47, Vol. 3, pp. 509-521, 1997.8
82. Tatsuoka, F., Tateyama, M., Uchimura, T. and Koseki, J.: Geosynthetic-Reinforced Soil Retaining Walls as Important Permanent Structures, *Geosynthetics International*, Vol.4, No.2, pp. 81-136, 1997
83. Tatsuoka, F., Tateyama M. and Koseki, J.: Performance of soil retaining walls for railway embankments, *Soils and Foundations*, Special Issue of *Soils and Foundations on Geotechnical Aspects of the January 17 1995 Hyogoken-Nambu Earthquake*, pp.311-324, 1996.1