

# SELECTED PUBLICATIONS

Author or co-author of more than 200 published research article, with many in top engineering journals. A partial list is shown below.

## A. Refereed Chapters in Books

1. Qi, G. Z., Yang, J. C. S., and Amini, F. (1997). "Neural Network for Identification and Control of Civil Engineering Structures", Chapter 7 in a Book entitled Artificial Neural Network for Civil Engineers: Fundamentals and Applications, ASCE, Kartam, Flood, and Garrett, eds, ASCE, New York, N.Y. 92-123.

## B. Refereed Journal Papers

2. Amini, F., Tawfiq, K. S., and Aggour, M. S. (1988). "Cohesionless Soil Behavior under Random Excitation Conditions," Journal of Geotechnical Engineering Div., ASCE, 114(8), 896-914.
3. Aggour, M. S., Taha, M. R., Tawfiq, K. S., and Amini, F. (1989). "Cohesive Soil Behavior under Random Excitation Conditions," Geotechnical Testing Journal, ASTM, June, Vol. 12, No. 2, 135-143.
4. Amini, F. (1990). "Dynamic Soil Properties Using Improved Transfer Function Methods," Journal of Soil Dynamics and Earthquake Engineering, Vol. 9, No. 6, November, 274-279.
5. Amini, F. (1993). "Effect of Confining Pressure on Dynamic Soil Properties Using Improved Transfer Function Estimators," Journal of Soil Dynamics and Earthquake Engineering, Vol. 12, 145-147.
6. Amini, F., (1995). "Time Effects on Dynamic Soil Properties under Random Excitation Conditions," Journal of Soil Dynamics and Earthquake Engineering, Vol. 11, No. 9. pp. 439-443.
7. Amini, F. and Smith, R. L. (1995). "Peak Flow Rates and Volumes Predictions Using Frequency Equivalent Hydrographs," Journal of Water Resources, Planning and Management, ASCE, Vol. 121, No. 5, Sept., 359-364.
8. Qi, G. Z., Chen, H. M. Tsai, K. H., Yang, J. C. S., and Amini, F. (1995). "Neural Networks for Structure Control," Journal of Computing in Civil Engineering, ASCE, Vol. 9, No. 2, April, 168-176.
9. Qi, G. Z., Chen, H. M. Tsai, K. H., Yang, J. C. S., and Amini, F. (1995). "Neural Network for Structural Dynamic Model Identification," Journal of Engineering Mechanics, ASCE, Vol. 121, No. 12, December. 1377-1381.

10. Amini, F., (1995). "Time Effects on Dynamic Soil Properties Under Random Excitation Conditions," Journal of Soil Dynamics and Earthquake Engineering, Vol. 14, No. 6, 439-443.
11. Fahoum, K., Aggour, M. S., and Amini, F., (1996). "Dynamic Properties of Cohesive Soils Treated with Lime," Journal of Geotechnical Engineering, ASCE, Vol. 122, No. 5, May, 382-389.
12. Khalilian, A. and Amini, F. (1996). "A Case of a Residential Foundation Failure and Preservation by Pressure Grouting," Journal of Performance of Constructed Facilities, ASCE, Vol. 10, No. 4, November, 159-163.
13. Amini, F. (1996). Discussion of "System Identification and Its Application to Estimating Soil Properties by S. Glaser," Journal of Geotechnical Engineering, ASCE, Vol. 122, No. 10.
14. Amini, F. (1996). "Effect of Filter Thickness on the Efficiency of Sand Filter Water Quality Structure," Water Quality Research Journal of Canada, Vol. 31, No. 4, Nov., 801-807
15. Amini, F. and Khalilian, A. (1997). "Old Post Office Foundation Failure Investigation," Journal of Performance of Constructed Facilities, ASCE, Vol. 11, No. 1, February, 13-17.
16. Chen, H. M., Qi, G. Z., Yang, J. C. S., and Amini, F. (1998). "Experimental Study of Active Control Using Neural Network," Journal of Structural Control, Vol. 5, No. 1. 27-43.
17. Amini, F. and Truong, H. V. (1998). "Effect of Filter Media Particle Size Distribution on Filtration Efficiency," Water Quality Research Journal of Canada, Vol. 33, No. 4, 589-594.
18. Amini, F. and Qi, G. Z. (2000). "Liquefaction Testing of Layered Silty Sands," Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 126, No. 3, 208-217.
19. Amini, F. and Sama, K. M. (1999). "Behavior of Stratified Sand-Silt-Gravel Mixtures under Seismic Liquefaction Conditions," Journal of Soil Dynamics and Earthquake Engineering, Vol. 18, No. 6, 445-455.
20. Amini, F. (1999). "Effect of Time on Dynamic Properties of Cohesive Soils Using Improved Transfer Function Estimators," Journal of Soil Dynamics and Earthquake Engineering, Vol. 18, No. 6, 457-461.
21. Amini, F. (2002). Closure of "Liquefaction Testing of Layered Silty Sands," Discussion by M. Hussein, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 128, No. 1, in press.
22. Amini, F., Biddlecome, Rahman, S., and Sharpe, M. (2004). "Liquefaction at Depth Visualization," Environmental Modeling and Simulation, CAT Press, Vol. 2, 151-155.

23. Amini, F. & Chakravarty, A. (2004). "Liquefaction Testing of Stratified Sand-Gravel Composites," Geotechnical Testing Journal, ASTM, January, pp. 36-46.
24. Amini, F. & Rahman, S. (2008). "A Systematic and Structured Outcome Assessment Plan for a New Engineering Program," International Journal of Engineering Education, Vol. 24, No. 1, 189-199.
25. Amini, F. (2008). Discussion of "Sample Preparation of Silts for Liquefaction," by A. S. Bradshaw and C. D. Baxter, Geotechnical Testing Journal, ASTM, Vol. 3, No. 6.
26. Chatterjee, J., Amini, F., and Cooley, L. A. (2009). A Comparative Slope Stability Analysis of New Orleans I-Wall Subjected to Hurricane Loading," International Journal of Geotechnical Engineering, Vol. 3, No. 3, 459-467.
27. Chatterjee, J., and Amini, F. (2011). "Slope Stability Analysis of T-Wall Subjected to Hurricanes Loading," International Journal of Geotechnical Engineering, Vol. 5, No. 1. 103-112.
28. Shin, H., Chiarito, V., and Amini, F. (2011). "Measurements of Strain Relief in Concrete Cubes with Slot Cutting," Journal of Applied Sciences Research, Vol. 7, No. 5. .215 1-2163.
29. Li, L., Peng, B., Santos, F., Li, Y., and Amini, F. (2011). "Groundwater Impacts from Leaching of Coal Combustion Products in Roadways Embankment Construction," Journal of ASTM International, Vol. 8, No. 8, 1-12.
30. Chatterjee, J., and Amini, F. (2011). "A Comparative Assessment of Slope Stability of New Orleans I-Wall with gap between the Wall and Layered Cohesive Backfill," Geomechanics and Geoengineering, An International Journal Vol. 6, No. 3, pp. 217-225.
31. Xu, G., Chatterjee, J., and Amini, F. (2011). "A Comparative Slope Stability Analysis of New Orleans Levee Subjected to Hurricane Loading" Electronic Journal of Geotechnical Engineering, Vol. 16/C, 325-336.
32. Amini, F., Xu, Y., and Li, L. (2013). "Two-Dimensional Slope Stability Analysis of Earthen Levee Strengthened by Articulated Concrete Block System under Hurricane Overtopping Flow Conditions." International Journal of Geotechnical Engineering, 7(2). 178-186
33. Amini, F., Turnquest, B., and Ahlrich, R. (2012). "Construction Monitoring of Paving Fabrics Systems to Reduce Reflective Cracking." International Journal of Emerging Technology and Advanced Engineering, 2(6): 413-420.
34. Rao, X., Li, L., Amini, F., & Tang, H. (2012). "Numerical Study of Combined Wave and Surge Overtopping over RCC Strengthened Levee System Using Smoothed Particle Hydrodynamics Method." Journal of Ocean Eng., 54:101-109.

35. Xu, Y., Li, L., and Amini, F. (2012). "Slope Stability Analysis of Earthen Levee Strengthened by High Performance Turf Reinforcement Mat under Hurricane Overtopping Flow Conditions." Journal of Geotechnical and Geological Engineering, 30:893-905.
36. Pan, Y., Li, L., Amini, F., and Kuang, C. P. (2013). "Comparison of the Hydraulic Performances of Three Levee-Strengthening Systems and Hydraulic Equivalency Analysis between Steady and Intermittent Overtopping." Journal of Waterways, Coastal and Ocean Engineering, ASCE, 139(7), 256-266.
37. Pan, Y., Li, L., Amini, F., and Kuang, C. P. (2012). "Full scale HPTRM Strengthened Levee Testing under Combined Wave and Surge Overtopping Conditions: Overtopping Hydraulics, Shear Stress and Erosion Analysis." Journal of Coastal Research, DOI: 10.2112/JCOASTRES-D-12-00010.1., 29(10), 182-200.
38. Li, L., Pan, Y., Amini, F., and Kuang, C. P. (2012). "Full Scale Laboratory Study of Combined Wave and Surge Overtopping of a Levee with RCC Strengthening System." Ocean Engineering, 54(1): 70-86.
39. Li, L., Amini, F., Rao, X and Tang, H. (2012). "SPH Modeling of Surge Overflow over RCC Strengthened Levee." International Journal of Oceans Systems Engineering, 2(4): 200-208.
40. Xu, Y., Li, L., and Amini, F. (2012). "Slope stability Analysis of Earthen Levee Strengthened by Roller-Compacted Concrete under Hurricane Overtopping Flow Conditions." Journal of Geomechanics and Geoengineering, DOI: 10.1080/17486025. 2012.695400: 1-10
41. Rao, X., Li, L., Amini, F., and Tang, H. (2012). "SPH Modeling of Combined Wave and Surge Overtopping and Hydraulic Erosion of ACB Strengthened Levee System." Journal of Coastal Research, 28(6):1500-1511.
42. Yuan, S., Li, L., Amini, F. and Tang, H. (2013). "Shear Stress and Erosion Simulation Over a HPTRM Strengthened Levee under Turbulent Flow Condition." Journal of Coastal Research, 30 (1), January, 142-157.
43. Li, L., Amini, F., Rao, X., and Tang, H., (2013). "SPH Study of Surge Overflow and Hydraulic Erosion of Earthen Levee Armored by Articulated Concrete Blocks," Current Development in Oceanography, 6(2): 61-80.
44. Chatterjee, J. and Amini, F. (2013). "A Comparative Slope Stability Analysis of Sheet Pile Supported I-wall in New Orleans, Louisiana with Sheet Pile Penetrating into Sand Layer." Journal of Geomechanics and Geoengineering. DOI: 10.1080/17486025. 2012.726747: 1-7.
45. Li, L., Amini, F., Pan, Kuang, C. P., and Briaud, J. (2014). "Erosion Resistance of HPTRM Strengthened Levee from Combined Wave and Surge Overtopping." Journal of Geotechnical and Geological Engineering, Vol. 32, No. 4, 847-957.

46. Yuan, S., Li, L., Amini, F., and Tang, H. (2014). "Turbulence Measurement of Combined Wave and Surge Overtopping over a Full Scale HPTRM Strengthened Levee." ASCE Journal of Waterways, Coastal and Ocean Engineering, 140 (4), July/August, 04014014-1 thr. 04014014-15. 10.1061/(ASCE)WW.1943-5460.0000230.
47. Zhao, G., Li, L., Li, C., Huan, Z., and Amini, F. (2014). "A Full Contact Flexible Mold for Preparing Sample Based on Microbial Induced Calcite Precipitation Technology," ASTM Geotechnical Testing Journal, Vol. 37, No. 5, Sept., doi: 1520/GTJ20130090. 917-921.
48. Li, L., Amini, F., & Wu, J. (2014). Turbulence and Seepage Effect on the Slope Stability of Earthen Levee Strengthened by High Performance Turf Reinforcement Mat, Journal of Geotechnical and Geological Engineering, August, Volume 33, Issue 1 (2015), Page 1-13, DOI: 10.1007/s10706-014-9813-0
49. Yuan, S., Li, L., Amini, F., and Tang, H., (2014). "Numerical Study of Turbulence and Erosion of an HPTRM Strengthened Levee under Combined Storm Surge Overflow and Wave Overtopping," Journal of Coastal Research, 30(1): 142-157.
50. Li, L., Yuan, S., Amini, F. and Tang, H. (2015). "Numerical Study of Combined Wave Overtopping and Storm Surge Overflow of HPTRM Strengthened Levee." Ocean Engineering, 97, 1-11.
51. Zhao, G., Li, L., Li, C., Huan, Z., & Amini, F. (2014). "Experimental Factors on Improvement of Engineering Properties of MICP-treated Soil Catalyzed by Bacteria and Urease," Journal of Materials, ASCE, 10.1061/(ASCE)MT.1943-5533.0001013 (Jan. 2, 2014).
52. Yuan, S., Li, L., Amini, F., Tang, H. (2015). Sensitivity of Combined Wave Overtopping and Storm Surge Overflow Response to Variations in Levee Geometry, Journal of Coastal Research, doi: 10.2112/JCOASTRES-D-14-00079.1.
53. Pan, Y., Li, L., Amini, F. & Kuang, C. (2015). "Erosion and Failure Mechanism of Earthen Levee Strengthened by Vegetated HPTRM System," Ocean Engineering, 96, 139-148.
54. Yuan, S., Tang, H., **Li, L.**, Amini, F., 2015, Combined Wave and Surge Overtopping Erosion Failure Model of HPTRM Levees: Accounting for Grass-Mat Strength, Ocean Engineering, 109, 256-269.
55. Li, C., Huang, H., Li, L., Gao, Y., Ma, Y., and Amini, F. (2015). Geotechnical Hazards Assessment on Wind-eroded Desert Embankment in Inner Mongolia Autonomous Region, North China, Natural Hazards, November, 76(1), 235-257, doi: 10.1007/s11069-014-1484-x.
56. Amini, F., and Li, L. (2015)., "Slope Stability of an Earthen Levee Strengthened by HPTRM under Turbulent Overtopping Condition," International Journal of Civil & Environmental Engineering, Vol. 9, No. 15, 456-459.

57. Pan, Y., Kuang, C. P. Li, L., & Amini, F. (2015). "Full-Scale Laboratory Study on Distribution of Individual wave Overtopping Volumes over a Levee under Negative Freeboard," Coastal Engineering, Vol. 97, 11-20, <http://dx.doi.org/10.1016/j.coastaleng.2014.12.007>
58. Amini, F., and Li, L., 2015, Slope Stability of an Earthen Levee Strengthened by HPTRM under Turbulent Overtopping Conditions, International Journal of Environmental, Ecological, Geological and Geophysical Engineering, Vol:9, No:5, 2015, 277-280.
58. Li, M., **Li, L.**, Ogbonnaya, U., Wen, K., Tian, A., and Amini, F., (2015). Impacts of Randomly Distributed Discrete Fiber on Geomechanical Properties of MICP-treated Sand, Journal of Materials in Civil Engineering, ASCE, DOI: 10.1061/(ASCE)MT.1943-5533.0001442.
59. Li, L., Rao, X., Amini, F., and Tang, H. (2015). "SPH Modeling of Hydraulics and Erosion of HPTRM Levee," Journal of Advanced Research in Ocean Engineering, Vol.1, No.1, 1-13.
60. Yuan, S., Li, L., Tang, H., & Amini, F. (2016). "The Erodibility of HPTRM-Strengthened Earthen Levees Against the Combined Storm Surge Overflow and Wave Overtopping," Journal of Earth Surface Processes and Landforms, under review.
61. Li, C., Zhu, W., **Li, L.**, Lu, B, Yao, D., and Amini, F., (2016). "A Study on Dynamic Initiation Mechanism of Debris Flows through Geotechnical Tests," Journal of Mountain Science, DOI: 10.1007/s11629-014-3258-z.
62. Pan, Y., Li, L., Amini, F., Kuang, C.P., and Chen, Y. (2016). "New Understanding on the Distribution of Individual Wave Overtopping Volumes over a Levee under Negative Freeboard," Journal of Coastal Research, 75: 1207-1211.
63. Li, C., Yao, D., Wang, Z., Liu, C., Wuliji, N., Yang, L., Li, L., and Amini, F., (2016). Model Test on Rainfall-induced Loess–mudstone Interfacial Landslides in Qingshuihe, China, Environmental Earth Sciences (IF=1.059), 75(9): 835, doi:10.1007/s12665-016-5658-6.
64. Li, C., Zhu, W., Li, L., Lu, B, Yao, D., and Amini, F., 2016, Experimental Analysis for the Dynamic Initiation Mechanism of Debris Flows, Journal of Mountain Science (IF=1.017), 13(4): 581-592.
65. Li, L., Wen, K., Li, C. and Amini, F., 2017, FIB/SEM Imaging of Microbial Induced Calcite Precipitation in Sandy Soil. Microscopy and Microanalysis, 23(S1), pp.310-311, doi: 10.1017/S1431927617002239
66. Wen, K., Li, L., Li, Y., L. M., Li. C., and Amini, F., 2017, Effects of Multiple MICP Treatment on Sandy Soil with Lower Cementation Media Concentration, Journal of Geotechnical and Geological Engineering.

67. Bu, C., Wen, K., Liu, S., Ogbonnaya, U., Li, L. and Amini, F., 2018, Development of a Rigid Full Contact Mold for Preparing Bio-Beams through Microbial Induced Calcite Precipitation, Geotechnical Testing Journal, ASTM, in print
68. Ogbonnaya, U., Wen, K. and Li, L., 2018, The Effects of Fine-Grained Content on Microbial Improved Sandy Materials, Journal of Geotechnical and Geological Engineering.
69. Amini, F., and Wen, K. (2017). "Long-Term Field Performance of Paving Fabric Interlayer Systems to reduce Reflective Cracking," International Journal of Civil & Environmental Engineering, Vol. 4, No. 5
70. Li, L., and Amini (2017). "Concept of Active Flipped Learning in Engineering Mechanics," International Journal of Geotechnical and Geological Engineering, Vo. 4, No. 7.

### **C. Peer Reviewed Articles in Monographs, Books, and Proceedings**

#### **C1. ASCE Publications**

71. Li, L., M., Ogbonnaya, U., Wen, K. & Amini, F. (2016). "Experimental Investigation of Discrete Randomly Distributed Fiber on the Mechanical Properties of Microbial-Induced Soil Improvement; ASCE Geotechnical Special Publication, No. 269, 52-61, ASCE, Reston, VA 2016.
72. Khan, M. S., & Amini, F. (2017). "Rainfall Induced Shallow Slope Failure in Yazoo Clay in Mississippi," ASCE Geotechnical Special Publication, ASCE, Reston, VA 2016.
73. Li, L., Li, M., Ogbonnaya, U., Wen, K., Xu, Y., and Amini, F. (2017). Study of a Discrete Randomly Distributed Fiber on the Tensile Strength Improvement of Microbial-Induced Soil Stabilization, Geotechnical Special Publication, No. 280: 12-19, ASCE.
74. Wen, K., Li, Y., Li, L., and Amini, F. (2018). Development of a Multiple Treatment Laboratory Method to Enhance Microbial-Induced Soil Stabilization, Proceedings, IFCEE 2018, Orlando, FL, March 5-10, 2018.
75. Li, L., M., Ogbonnaya, U., Wen, K. & Amini, F. (2016). "Experimental Investigation of Discrete Randomly Distributed Fiber on the Mechanical Properties of Microbial-Induced Soil Improvement; ASCE Geotechnical Special Publication, No. 268; 52-61. ASCE, Reston, VA 2016.
76. Amini, F., Li, L., Yi, P. Yuan, S. (2015). "Failure Mechanism of Earthen Levee Strengthened by Vegetated HPTRM System and Design Guideline for Hurricane Overtopping Conditions," ASCE Geotechnical Special Publication, No. 252, 15-157, Reston, VA 2015.

77. Li, L., Zhao, Q., Li, C., & Amini, F. (2015). "Development of a Flexible Mold for Bio-Mediated Soil," ASCE Geotechnical Special Publication, ASCE, ASCE, Reston, VA 2015.
78. Li, L. Amini, F., Pan, Y., Li, C. (2014). Stability Monitoring of Articulated Concrete Block Strengthened Levee in Combined Wave and Surge Overtopping Conditions, Geo Characterization and Modeling for Stability, ASCE Geotechnical Special Publication, No. 234, 262-271, ASCE, Reston, VA, 2014.
79. Li, L., Amini, F. and Yuan S. (2014). Modeling Study of Erosion of HPTRM Strengthened Levee in Turbulent Overtopping Flow Conditions, Geo Characterization and Modeling for Stability, ASCE Geotechnical Special Publication, No. 234, 1052-1061, ASCE, Reston, VA, 2014.
80. Amini, F., Li, L. and Xu Y. (2013). "Slope Stability Analysis of Three Innovative Earthen Levee Strengthening Systems under Hurricane Overtopping Flow Conditions." "Stability and Performance of Slopes and Embankments, ASCE Geotechnical Special Publication No. 231, ASCE, Reston, VA, 2013.1882-1891.
81. Li, L., Amini, F., and Pan, Y. (2013). "Erosion Resistance of Earthen Levee Strengthened by HPTRM System under Combined Wave and Surge Overtopping Conditions." "Stability and Performance of Slopes and Embankments, ASCE Geotechnical Special Publication No. 231, ASCE, Reston, VA, 2013. 1892-1901.
82. Chatterjee, J., and Amini, F, (2012). "An Investigation of the Design Criteria for the Analysis of I-wall in New Orleans, Louisiana for Flood Side Gap Condition," State of the Art and Practice in Geotechnical Engineering, ASCE Geotechnical Special Publication No. 225, ASCE, Reston, Virginia. 507-515.
83. Li, L., Santos, F., Wei, S., Qian, Z., and Amini, F. (2012),"Evaluation of Fly Ash and Soil Mixtures for Use in Highway Embankments," State of the Art and Practice in Geotechnical Engineering, ASCE Geotechnical Special Publication No. 225, ASCE, Reston, Virginia. 3672-3680 507-515.
84. Chatterjee, J., and Amini, F, (2011). "An Investigation of Effect of Seepage on the Stability of Sheet Pile Supported I-Wall in New Orleans, Louisiana," Advances in Geotechnical Engineering, ASCE Geotechnical Special Publication No. 211, ASCE, Reston, Virginia. 3536-3545.
85. Chatterjee, J., and Amini, F, (2010). "A Comparative Evaluation Unbalanced Loads in the Stability Analysis of T-Walls Subjected to Hurricane Loading," Advances in Analysis, Modeling, and Design, ASCE Geotechnical Special Publication No. 199, ASCE, Reston, Virginia. 2173-2181.
86. Amini, F. (2004). "Dynamic Cone Penetrometer in Quality Control of Compaction, State-of-the Art Report," in Geotechnical Engineering for Transportation Projects, ASCE Special Geotechnical Publication No. 126, ASCE, Reston, VA, 1023-1031.



87. Salami, M., and Amini, F. (2002). "Numerical Model for the Implementation of Discontinuous Deformation Analysis in Finite Element Mesh," In Discrete Element Methods; Numerical Modeling of Discontinua, ASCE, Reston, VA, , 151-154.
88. Rude, L. C. and Amini, F. (1989). "Foundations on Expansive Soils in Northern Virginia," in Foundation Engineering: Current Principles and Practices, Vol. 1, ASCE, New York, N.Y., 209-220.

## **C2. Other Publications**

89. Li, L., Zhao, Q., Li, C., & Amini, F. (2015). "Development of a Flexible Mold for Bio-Mediated Soil Improvement," Proceedings, Geosynthetics 2015, Portland, Oregon, Feb.
90. Amini, F., and Wen, K.. (2017). "Long-Term Field Performance of Paving Fabric Interlayer Systems to Reduce Reflective Cracking," Proceedings of the 19<sup>th</sup> International Conference on Civil Engineering & Architecture, Montreal, Canada May.
91. Li, L., and Amini (2017). "Concept of Active Flipped Learning in Engineering Mechanics," Proceedings of the 19<sup>th</sup> International Conference on Civil, Geomechanical, and Geotechnical Engineering, Zurich, July.
92. Amini, F., and Wen, K. (2017). "Effect of Overlay Thickness Field Performance of Paving Fabric Interlayer Systems to Reduce Reflective Cracking," Proceedings of the 19<sup>th</sup> International Conference on Civil, Geomechanical, and Geotechnical Engineering, Zurich, July 2017.
93. Amini, F., Li, L., Wu, J. (2015). "Slope Stability of an Earthen Levee Strengthened by High Performance Turf Reinforcement Mat under turbulent Overtopping Conditions," International Conference on Civil & Building Engineering, Montreal, Canada, May.
94. Amini, F. and Li, L., (2013). Sensitivity Analysis of Extended Land-Side Slope to the Erosion Impact in the HPTRM Strengthened Levee, Proceedings, the 23rd International Offshore (Ocean) and Polar Engineering Conference, June 30–July 5, 2013, Anchorage, Alaska, 1217-1222.
95. Li, L., Wen, K., Li, C., and Amini, F., (2017). "FIB/SEM Imaging of Microbial Induced Calcite Precipitation in Sandy Soil," Proceedings Microscopy & Microanalysis Proceedings 23 (Suppl 1), 300-305.
96. Li, L., and Amini, F., (2017). Concept of the Active Flipped Learning in Engineering Mechanics, International Scholarly and Scientific Research & Innovation, 4(7), 1999.36/75040

97. Khan M. S., Nobahar M., Ivoke J., and Amini F. (2018), "Effect of Rainfall on Slope made of Yazoo Clay soil in Mississippi." Proc. 97th Annual Meeting of Transportation Research Board, Washington D.C.
98. Khan, M.S., Nobahar, M., Ivoke, J. and Amini, F., (2017). "Rainfall Induced Shallow Slope Failure Over Yazoo Clay In Mississippi", Proc. Pan-AM Unsat 2017, Dallas, Texas.
99. Li, L., Zhao, Q., Li, C., & Amini, F. (2015). "Development of a Flexible Mold for Bio-Mediated Soil Improvement," Proceedings, Geosynthetics 2015, Portland, Oregon, Feb.
100. Amini, F., Li, L., Wu, J. (2015). "Slope Stability of an Earthen Levee Strengthened by High Performance Turf Reinforcement Mat under turbulent Overtopping Conditions," International Conference on Civil & Building Engineering, Montreal, Canada, May.
101. Amini, F. and Li, L., (2013). Sensitivity Analysis of Extended Land-Side Slope to the Erosion Impact in the HPTRM Strengthened Levee, Proceedings, the 23rd International Offshore (Ocean) and Polar Engineering Conference, June 30–July 5, 2013, Anchorage, Alaska, 1217-1222.
102. Amini, F. and Li, L. (2013). Performance of RCC Strengthened Levee in Full-Scale Overtopping Tests." Proceedings of the USSD 33rd Annual Meeting and Conference, Phoenix, AZ, February 11-15, 2013.
103. Amini, F. and Li, L. (2013). Design guidelines of innovative levee strengthening systems under full-scale overtopping turbulence testing, Proceedings of Dam Safety, Providence, RI, September 8-12, 2013.
104. Li, L., & Amini, F. (2013). "Design of Earthen Levee Strengthening with High Performance Turf Reinforcement Mat for Hurricane Overtopping Conditions," Proceedings, Geosynthetics 2013, Long Beach, CA
105. Pan, Y., Li, L., Amini, F. & Kuang, C. (2013). ".Discussion of the Failure Mechanics of Levees under Combined Wave and Surge Overtopping" from the " Proceedings of 2013 IAHR World Congress, June.
106. Amini, F., Li, L. and Pan, Y. (2012). "Performance of HPTRM Strengthened Levee in Full-Scale Overtopping Tests." Proceedings of the 5th Annual National Dam Security Forum, Denver, CO, September 16-20, 2012, paper accepted for publication.
107. Santos, F., Li, L., Li, Y., and Amini, F. (2011). "Geotechnical Properties of Fly Ash and Soil Mixtures for Use in Highway Embankments," World of Coal Ash (WOCA), Denver, Colorado, <http://www.flyash.info/>.
108. Li, L., Peng, B., Santos, F., Li, Y., and Amini, F. (2011). "Groundwater Impacts from Leaching of Coal Combustion Products in Roadways Embankment Construction," Proceedings of the International Symposium on Testing and Specification of Recycled

Materials for Sustainable Geotechnical Construction, Baltimore, MD, February, ASTM, Feb.

109. Rao, X., Li, L. and Amini, F. (2010). "Modeling of Surge Overtopping and Hydraulic Erosion of an Earthen Levee using Smoothed Particle Hydrodynamics." Environmental Geotechnics for Sustainable Development, 1695-1698, McGraw Hill.
110. Rao, X., Li, L., and Amini, F. (2010). "Numerical Simulation of Wave Overtopping and Erosion of Levee," Engineering in Sustainable World, Proceedings of the Second Specialty Conference on Disaster Mitigation, Public Par Publishing Comp., Editors, Redacteur, and El-Salakawy, pp. DM-09-01- DM-09-05, June 2010.
111. Rao, X., Li, L. and Amini, F. (2009). "Numerical Simulation of Surge Overflow at a Levee using Shallow Water SPH Method." World Academy of Science, Engineering and Technology, 60: 331-334.
112. Chatterjee, J., and Amini, F. (2010). "Slope Stability Modeling of New Orleans Hurricane Protection Levees with Geotextile Reinforcements," Environmental Geotechnics for Sustainable Development, Tata\_McGraw Hill 1699-1704.
113. Amini, F. (2008). "Lessons Learned from Performance of Paving Fabric Systems to Reduce Reflective Cracking," Proc. MTI Conference, Choctaw, Mississippi, October.
114. Amini, F. (2008). "Effect of Frequency Content on Dynamic Behavior of Reinforced Soils Using Improved Transfer Function Methods," Proceedings, 14<sup>th</sup> World Conference on Earthquake Engineering, Beijing, China, October.
115. Amini, F. (2007). "Paving Fabric Systems and their Performances to Reduce Reflective Cracking," Proceedings of the 12<sup>th</sup> International Conference of Hong Kong Society for Transportation studies, Hong Kong, China, Dec.
116. Amini, F. (2006). "Performance of Paving Fabric Systems to Reduce Reflective Cracking," MTI Conference, Tunica, Mississippi, October.
117. Amini, F. (2004). "Effect of Frequency Content on Shear Moduli of Silty Sands under Random Excitation Conditions," Proceedings of the 22<sup>th</sup> International Modal Analysis Conference, Detroit, Michigan, Jan.
118. Amini, F. (2004). "Effect of High Confining Pressures on Shear Moduli of Clayey Soils under Random Excitation Conditions," Proceedings of the 22<sup>th</sup> International Modal Analysis Conference, Detroit, Michigan, Jan.
119. Amini, F. (2004). "Effect of Soil Plasticity on Damping of Clayey Silty Soils Using Improved Transfer Function Estimators," Proceedings of the 22<sup>th</sup> International Modal Analysis Conference, Detroit, Michigan, Jan.

120. Amini, F. (2004). "Effect of Soil Plasticity on Damping of Silty Soils under Random Excitation Conditions," Proceedings of the World Confer. on Earthquake Engineering, Vancouver, Canada.
121. Amini, F. (2004). "Effect of Frequency Content on Dynamic Soil Behavior of Silty Soils Using Improved Transfer Function," Proceedings of the World Conference on Earthquake Engineering, Vancouver, Canada.
122. Biddlecome, T., Amini, F., Rahman, S., and Sharpe, M. (2004). "Scientific Visualization of Soil Liquefaction," Proceedings of the Army Science Conference, Orlando, Florida.
123. Amini, F. (2003)., "Clay Content effect on Soil Damping Using Improved Transfer Function Methods," Proceedings of the 21<sup>th</sup> International Modal Analysis Conference, Orlando, Fl.
124. Amini, F. (2003). "Effect of Soil Plasticity on Shear Moduli of Clayey Soils under Random Excitation Conditions," Proceedings of the 21<sup>th</sup> International Modal Analysis Conference, Orlando, Fl.
125. Amini, F. (2003). "High Confining Pressure Effects on Soil Damping Using Transfer Function Methods," Proceedings of the 21<sup>th</sup> International Modal Analysis Conference, Orlando, Fl.
126. Amini, F. (2002). "Soil Damping under Variable Frequency Content and Improved Transfer Function Estimators," Proceedings of the 20<sup>th</sup> International Modal Analysis Conference, Los Angeles, CA, Feb., 224-226.
127. Amini, F. (2002). "Artificial Neural Network Approach for Experimental Model Identification and Control," Proceedings of the 20<sup>th</sup> International Modal Analysis Conference, Los Angeles, CA, Feb., 1318-1321.
128. Amini, F. (2002). "Silt Content Effect on Soil shear Moduli Using Improved Transfer Estimators," Proceedings of the 20<sup>th</sup> International Modal Analysis Conference, Los Angeles, CA, Feb., 1224-1226.
129. Amini, F., and Duan, Z. (2002). "Centrifuge and Numerical Modeling of Liquefaction at Depth," Proceedings of the 15<sup>th</sup> ASCE Engineering Mechanics Conference, New York, N.Y. June.
130. Amini, F., and Duan, Z. (2002). "A Numerical Model for Liquefaction at Depth," Proceedings of the 14<sup>th</sup> U.S. National Congress on Theoretical and Applied Mechanics, Blacksburg, VA, June.
131. Amini, F. (2001). "Effect of Fines Content on Soil Damping Using Improved Transfer Function Estimators," Proc. ASCE-ASME-SES Symposium on Recent Developments in Geomechanics, San Diego, CA , June, 192.

132. Amini, F. (2001). "Behavior of Anisotropically Consolidated Layered Silty Sands under Liquefaction Conditions," Proc. ASCE-ASME-SES Symposium on Inelastic Behavior of Geomaterials, San Diego, CA, June, 109.
133. Amini, F., Rezvanian, O., and Amini, F (2000). "New Improvement in Predictive Pulse Active Control using Bounded State Algorithm," Proceedings of the First International Conference on Motion and Vibration, Sydney, Australia, Dec. 2000.
134. Amini, F. (1998). "Time Effects on Dynamic Soil Properties Using Improved Transfer Function Methods," in Developments in Theoretical and Applied Mechanics, C. T. Tsai and K. K. Stevens, eds. Vol. 19, 344-349.
135. Amini, F. and K. M. Sama (1998). "Effect of Sample Preparation on Liquefaction Behavior of Stratified Sand-Gravel Composites," Proceedings of the 11<sup>th</sup> European Conference on Earthquake Engineering, Paris, France, Sept., 1-4.
136. Amini, F. (1998). "Effect of Sample Preparation on Liquefaction of Layered Silty Sands," in Developments in Theoretical and Applied Mechanics, Tsai and K. K. Stevens, eds. Vol. 19, 340-344.
137. Amini, F. & H. J. Bastian (1998). "Time Effects on Damping and Shear Modulus Using an Improved FFT Technique," Proceedings of the 11<sup>th</sup> European Conference on Earthquake Engineering, Paris, France, Sept. 120-125.
138. Amini, F., Chen, H. M., Qi, G. Z., and Yang, J. C. S., (1997). "Generalized Neural Network Based Model for Structural Dynamic Identification, Analytical and Experimental Studies," in Intelligent Information Systems, IEEE Press, Dec., 138-142.
139. Amini, F., Chen, H. M., Qi, G. Z., and Yang, J. C. S., (1996). "Neural Network Based Active Control Experiments on Model Structure," in Structural Control, World Scientific Publishing Co., Vol. 1, 294-299
140. Amini, F. (1995). "A Nonlinear Hydrograph for Volume Predictions," in Water Resources Engineering, ASCE, New York, N.Y., Vol. 1, 1091-1095.
141. Amini, F., Chen, H. M., Qi, G. Z., and Yang, J. C. S. (1994). "Neural Network for Identification and Control of Structures," Proceedings of the First International Conference on Control, Pasadena, CA, Aug, 43-51.
142. Yang, J. C. S., Amini, F., Sirkus, J., Qi, G. Z. (1993). "Active Control of Structure Instrumented with Optical Fiber Sensors," Proc. of the First NSF Coordination Meeting, Ann Arbor, Michigan.
143. Amini, F. (1993). "Time Dependent Nature of Dynamic Soil Behavior under Earthquake Loading, State-of-the-Art," Proceedings of the Second International Conference on Soil Mechanics and Foundation Engineering, Tehran, Iran, Nov., 5-10.

144. Amini, F. (1992). "Lessons Learned from Earthquake Losses and Prevention Systems in Urban Areas of the United States," Proceedings of the First International Conference on Disaster Prevention in Urban Areas, Tehran, Iran, 1992, 234-238
145. Qi, G. Z., Chen, H. M., Tsai, K. H., Yang, J. C. S., and Amini, F. (1992). "Neural Controller for Structures Subjected to Dynamic Loadings," Proceedings of the Joint US/China/Japan Workshop on Structural Control, China, October, 225-234.
146. Amini, F. (1992). "Analysis and Design of Concrete Face Rockfill Dams under Earthquake Loading," Proceedings of the Second International Conference in Concrete Design, Tehran, Iran, Nov. 1992, 442-449.
147. Amini, F. (1991). "Effect of Density on Damping and Shear Modulus of Soils Using Two New Estimators of the Transfer Function," in Constitutive Laws for Engineering Materials, ASME Press., New York, N.Y., 1991, 795-799.
148. Amini, F. (1991). "Effect of Random and Impulse Loading on Dynamic Soil Properties," Proceedings of the First International Conference on Seismology and Earthquake Engineering, Tehran, Iran, May, 419-427.
149. Amini, F. (1990). "Effect of Void Ratio on Dynamic Soil Properties Using an Improved FFT Technique," Proceedings of the Eighth International Modal Analysis Conference, Orlando, FL, Feb., 474-477.
150. Amini, F., and Rude, L. C. (1989). "Damping of Soils Determined by a New FFT Technique," Proceedings of the Seventh International Modal Analysis Conference, Vol. II, Feb., Orlando, FL, 1448-1452.
151. Aggour, M. S., Tawfiq, K. S., and Amini, F. (1987). "Effect of Frequency Content on Dynamic Properties of Cohesive Soils," in Soil Dynamics and Liquefaction, Elsevier Publishing Company, New York, N.Y., 31-39.
152. Tawfiq, K. S., Amini, F., and Aggour, M. S. (1987). "Effect of Time on Dynamic Soil Properties of Cohesive Soils," Proceedings of the VIII National Conference on Soil Mechanics and Foundation Engineering, Warsaw, Poland, Oct., 30-34.
153. Amini, F., Tawfiq, K. S., and Aggour, M. S. (1986). "Soil Properties Determined by Random Loading," Proceedings of the 8<sup>th</sup> European Conference on Earthquake Engineering, Lisbon, Portugal, Sept., 1-8.
154. Amini, F., Tawfiq, K. S., and Aggour, M. S. (1986). "Damping of Sandy Soils Using Autocorrelation Function," Proc., 8<sup>th</sup> Symposium on Earthquake Engineering, Roorkee, India, Dec., I, 181-188.

**D. Technical Report**

Author or co-author of more than 80 technical reports.