PUBLICATIONS

SELECTED PUBLICATIONS (Partial List)

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

A1. Books

1. Li, L., Amini, F., Pan, Y, Yuan, S, and Cetin, B., (2021). *Hydraulics of Levee Overtopping*, CRC Press, Francis & Taylor, ISBN 978-0-367-27727-7.

A2. Refereed Chapters in Books

2. 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 <u>Artificial Neural Network for Civil Engineers: Fundamentals and Applications</u>, ASCE, Kartam, Flood, and Garrett, eds, ASCE, New York, N.Y. 92-123.

B. Refereed Journal Papers

- 1. Amini, F., Tawfiq, K. S., and Aggour, M. S. (1988). "Cohesionless Soil Behavior under Random Excitation Conditions," <u>Journal of Geotechnical Engineering Div.</u>, ASCE, 114(8), 896-914.
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- 3. Amini, F. (1990). "Dynamic Soil Properties Using Improved Transfer Function Methods," <u>Journal of Soil Dynamics and Earthquake Engineering</u>, Vol. 9, No. 6, November, 274-279.
- 4. Amini, F. (1993). "Effect of Confining Pressure on Dynamic Soil Properties Using Improved Transfer Function Estimators," <u>Journal of Soil Dynamics and Earthquake Engineering</u>, Vol. 12, 145-147.
- 5. Amini, F., (1995). "Time Effects on Dynamic Soil Properties under Random Excitation Conditions," <u>Journal of Soil Dynamics and Earthquake Engineering</u>, Vol. 11, No. 9. pp. 439-443.

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- 10. Fahoum, K., Aggour, M. S., and Amini, F., (1996). "Dynamic Properties of Cohesive Soils Treated with Lime," <u>Journal of Geotechnical Engineering, ASCE</u>, Vol. 122, No. 5, May, 382-389.
- 11. Khalilian, A. and Amini, F. (1996). "A Case of a Residential Foundation Failure and Preservation by Pressure Grouting," <u>Journal of Performance of Constructed Facilities, ASCE</u>, Vol. 10, No. 4, November, 159-163.
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- 13. Amini, F. (1996). Discussion of "System Identification and Its Application to Estimating Soil Properties by S. Glaser," <u>Journal of Geotechnical Engineering</u>, <u>ASCE</u>, Vol. 122, No. 10.
- 14. Amini, F. (1996). "Effect of Filter Thickness on the Efficiency of Sand Filter Water Quality Structure," <u>Water Quality Research Journal of Canada</u>, Vol. 31, No. 4, Nov., 801-807
- 15. Amini, F. and Khalilian, A. (1997). "Old Post Office Foundation Failure Investigation," <u>Journal of Performance of Constructed Facilities, ASCE</u>, 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," <u>Journal of Structural Control</u>, Vol. 5, No. 1. 27-43.

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C. Refereed Articles in Monographs, Books, and Proceedings (Partial List)

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- 109. Nobahar, M.; Salunke, R.; Khan, M.S.; and Amini, F. (2023), "Early Warning Protocol for Highway Slope Failures in Mississippi," <u>ASCE GeoCongress 2023</u>, Los Angeles, CA.
- 110. Nobahar, M., Khan M. S., and Ivoke J., Nur, M.S., Amini, F. (2021). "Coupled Hydro-Mechanical Analysis of Highway Slopes on Expansive Soil Subjected to Rainfall, <u>Proc. ASCE Geo-Extreme 2021</u> Savanah, GA from Nov 7-10.
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- 113. Wen, K., Li, Y., Li, L., and Amini, F. (2018). "Development of a Multiple Treatment Laboratory Method to Enhance Microbial-Induced Soil Stabilization," ASCE Geotechnical Special Publication, No. 296, 12-18, ASCE, Reston, VA.
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- 120. 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.
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- 123. 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,"

 <u>State of the Art and Practice in Geotechnical Engineering</u>, ASCE Geotechnical Special Publication No. 225, ASCE, Reston, Virginia. 507-515.

- 124. Li, L., Santos, F., Wei, S., Qian, Z., and Amini, F. (2012), "Evaluation of Fly Ash and Soil Mixtures for Use in Highway Embankments," <u>State of the Art and Practice in Geotechnical Engineering</u>, ASCE Geotechnical Special Publication No. 225, ASCE, Reston, Virginia. 3672-3680 507-515.
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 <u>Advances in Analysis, Modeling, and Design, ASCE Geotechnical Special Publication No. 199, ASCE, Reston, Virginia. 2173-2181.</u>
- 127. Amini, F. (2004). "Dynamic Cone Penetrometer in Quality Control of Compaction, State-of-the-Art Report," in <u>Geotechnical Engineering for Transportation Projects</u>, ASCE Special Geotechnical Publication No. 126, ASCE, Reston, VA, 1023-1031.
- 128. Salami, M., and Amini, F. (2002). "Numerical Model for the Implementation of Discontinuous Deformation Analysis in Finite Element Mesh," In <u>Discrete Element Methods; Numerical Modeling of Discontinua</u>, ASCE, Reston, VA, 151-154.
- 129. Amini, F. (1995). "A Nonlinear Hydrograph for Volume Predictions," in <u>Water</u> Resources Engineering, ASCE, New York, N.Y., Vol. 1, 1091-1095.
- 130. Rude, L. C. and Amini, F. (1989). "Foundations on Expansive Soils in Northern Virginia," in <u>Foundation Engineering: Current Principles and Practices</u>, Vol. 1, ASCE, New York, N.Y., 209-220.

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- 132. Li, L., Amini, F., Yin, Y., (2019). "Concept of the AR-Integrated Learning in Engineering, Mechanics," ICCGGE 2019: 19th International Conference on Civil, Geomechanical and Geotechnical Engineering, Zurich, Switzerland, July 27-28, 2017

- 133. Khan M. S., Nobahar M., Ivoke J., and Amini F. (2018). "Effect of Rainfall on Slope Made of Yazoo Clay Soil in Mississippi." Proceedings, <u>97th Annual Meeting of Transportation Research Board</u>, Corundum of Papers, Washington D.C.
- 134. Khan, M.S., Nobahar, M., Ivoke, J. and Amini, F., (2017). "Rainfall Induced Shallow Slope Failure Over Yazoo Clay In Mississippi," Proc. <u>Pan-AM Unsat</u> 2017, Dallas, Texas.
- 135. 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.
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- 140. Amini, F. and Li, L., (2013). Sensitivity Analysis of Extended Land-Side Slope to the Erosion Impact in the HPTRM Strengthened Levee, <u>Proceedings</u>, the 23rd <u>International Offshore (Ocean) and Polar Engineering Conference</u>, June 30–July 5, 2013, Anchorage, Alaska, 1217-1222.
- 141. Li, L., Wen, K., Li, C., and Amini, F., (2017). "FIB/SEM Imaging of Microbial Induced Calcite Precipitation in Sandy Soil," Proceedings <u>Microscopy & Microanalysis</u> Proceedings 23 (Suppl 1), 300-305.
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- 149. Pan, Y., Li, L., Amini, F. & Kuang, C. (2013). "Discussion of the Failure Mechanics of Levees under Combined Wave and Surge Overtopping," Proceedings of 2013 IAHR World Congress, June.
- 150. Amini, F., Li, L. and Pan, Y. (2012). "Performance of HPTRM Strengthened Levee in Full-Scale Overtopping Tests." <u>Proceedings of the 5th Annual National</u> Dam Security Forum, Denver, CO, September 16-20, 2012.
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- 152. Li, L., Peng, B., Santos, F., Li, Y., and Amini, F. (2011). "Groundwater Impacts from Leaching of Coal Combustion Products in Roadways Embankment Construction," <u>Proceedings of the International Symposium on Testing and Specification of Recycled Materials for Sustainable Geotechnical Construction, Baltimore, MD, February, ASTM, Feb.</u>

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- 157. Amini, F. (2008). "Lessons Learned from Performance of Paving Fabric Systems to Reduce Reflective Cracking," Proc. <u>MTI Conference</u>, Choctaw, Mississippi, October.
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- 159. Amini, F. (2007). "Paving Fabric Systems and their Performances to Reduce Reflective Cracking," <u>Proceedings of the 12th International Conference of Hong Kong Society for Transportation Studies</u>, Hong Kong, China, Dec.
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- 161. Amini, F. (2004). "Effect of Frequency Content on Shear Moduli of Silty Sands under Random Excitation Conditions," <u>Proceedings of the 22nd International Modal Analysis Conference, Detroit, Michigan, Jan.</u>
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- 168. Amini, F. (2003). "Effect of Soil Plasticity on Shear Moduli of Clayey Soils under Random Excitation Conditions," <u>Proceedings of the 21st International Modal Analysis Conference</u>, Orlando, Fl.
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- 170. Amini, F. (2002). "Soil Damping under Variable Frequency Content and Improved Transfer Function Estimators," <u>Proceedings of the 20th International Modal Analysis Conference</u>, Los Angeles, CA, Feb., 224-226.
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- 176. Amini, F. (2001). "Behavior of Anisotropically Consolidated Layered Silty Sands under Liquefaction Conditions," <u>Proc. ASCE-ASME-SES Symposium on Inelastic Behavior of Geomaterials</u>, San Diego, CA, June, 109.
- 177. Amini, F., Rezvanian, O., and Amini, F (2000). "New Improvement in Predictive Pulse Active Control using Bounded State Algorithm," <u>Proceedings of the First International Conference on Motion and Vibration, Sydney, Australia, Dec. 2000.</u>
- 178. Amini, F. (1998). "Time Effects on Dynamic Soil Properties Using Improved Transfer Function Methods," in <u>Developments in Theoretical and Applied Mechanics</u>, C. T. Tsai, and K. K. Stevens, eds. Vol. 19, 344-349.
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- 188. Amini, F. (1992). "Analysis and Design of Concrete Face Rockfill Dams under Earthquake Loading," <u>Proceedings of the Second International Conference in Concrete Design, Tehran, Iran</u>, Nov. 1992, 442-449.
- 189. Amini, F. (1991). "Effect of Density on Damping and Shear Modulus of Soils Using Two New Estimators of the Transfer Function," in <u>Constitutive Laws for</u> Engineering Materials, ASME Press., New York, N.Y., 1991, 795-799.
- 190. Amini, F. (1991). "Effect of Random and Impulse Loading on Dynamic Soil Properties," <u>Proceedings of the First International Conference on Seismology and Earthquake Engineering</u>, Tehran, Iran, May, 419-427.
- 191. Amini, F. (1990). "Effect of Void Ratio on Dynamic Soil Properties Using an Improved FFT Technique," <u>Proceedings of the Eighth International Modal</u> Analysis Conference, Orlando, FL, Feb., 474-477.
- 192. Amini, F., and Rude, L. C. (1989). "Damping of Soils Determined by a New FFT Technique," <u>Proceedings of the Seventh International Modal Analysis Conference</u>, Vol. II, Feb., Orlando, FL, 1448-1452.
- 193. Aggour, M. S., Tawfiq, K. S., and Amini, F. (1987). "Effect of Frequency Content on Dynamic Properties of Cohesive Soils," in <u>Soil Dynamics and Liquefaction</u>, Elsevier Publishing Company, New York, N.Y., 31-39.
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D. Technical Reports (Partial List)

- Author or co-author of more than 70 technical reports. A partial list is shown below. A complete list is available.
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- 199. Amini, F. (1991). "Dynamic Soil Behavior under Impulse Loading Conditions Considering Nonlinear Effects," Faculty Senate Research Report, University of the District of Columbia, 1991.
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- 202. Matheson, M. M., Schneider, J., Zmijewski, D., and Amini, F. (1994). "Definition of Groundwater Flow in the Water Table Aquifer of the Southern Anacostia River Basin," D.C. Water Resources Research Center Report No. 147.
- 203. Amini, F., and Chang, F. F. M. (1994). "Model of a Storm Water Management Facility," A Report to the Environmental Regulation Administration, Government of the District of Columbia. April.
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- 212. Amini, F. (1996). "Research Equipment for Soil Dynamics Testing Study of the Effect of Time on Dynamic Soil Properties," Progress Report, National Science Foundation, 1996.
- 213. Amini, F. (1997). "Behavior of Stratified Sand-Gravel Composites under Seismic Liquefaction Conditions, "Progress Report, National Science Foundation, 1997.
- 214. Amini, F. (1998). "Microstructure Features and Dynamic Macro-Behavior of a Multiphase Particular Material," Defense Technical Information Center (DTIC) Report No. ADA321514, Report Submitted to the Air Force Office of Scientific Research, March 1998.
- 215. Amini, F. (1998). "Lessons Learned from Nuclear Explosion Tests in Southwestern Alaska, The Long Shot Experiment," Technical Research Report Prepared for BMDO, July 1998.
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