

Publications

Civil and Environmental Engineering Department

Year 2015

Journals

1. Awani, O., El Refai, A., and El-Maaddawy, T. (2015). "Bond Characteristics of Carbon Fabric-Reinforced Cementitious Matrix in Double Shear Tests." *Construction and Building Materials*, 101, 39-49.
2. El-Maaddawy, T., Bouchair, A., El-Dieb, A., Biddah, A. (2015). "Corrosion Aging of Reinforced Concrete T-Girders Strengthened with Near-Surface-Mounted Composites." *ASCE Journal of Composites for Construction*, 19(3), 04014053.
3. El-Maaddawy, T. A. (2015) "Restoration of Concrete Beams Presubjected to Cycles of Shear Damage", *ACI Structural Journal*, (112(3), 347-358.
4. Ahmed, F. and Hawas, Y. E. (2015) "An Integrated Real-Time Traffic Signal System for Transit Signal Priority, Incident Detection and Congestion Management". *Transportation Research Part C* 60, pp- 52–76 (November 2015)
5. Hawas, Y.E., and Alam, Md. D. (2015) "Evaluation of Seatbelt and Airbag Effectiveness in Reducing Severe and Fatal Injuries in the UAE". *Journal of Traffic and Logistics Engineering*, Vol. 3, No. 2, pp-87-93.
6. Hawas, Y.E. and Elsayed, H. (2015) "Autonomous Real Time Route Guidance in Inter-Vehicular Communication Urban Networks" *journal of Vehicular Communication*, 2, 36-46, <http://dx.doi.org/10.1016/j.vehcom.2015.01.001>.
7. Elmahdy S., and Mohamed, M. 2015. Automatic detection of near surface geological and hydrological features and investigating their influence on groundwater accumulation and salinity using remote sensing and GIS. *Geocarto International*. Volume 30, Issue 2, 32-144.
8. Elmahdy S, MM Mohamed, MM Marghany, 2015. Mapping and classification of hydrological parameters from digital terrain data in the Musandam Peninsula, UAE and Oman. *Geocarto International*, 30(3), 330-345.
9. Elmahdy S., and Mohamed, M. Probabilistic frequency ratio model for groundwater potential mapping in Al Jaww plain, UAE. *Arabian Journal of Geosciences* 8 (4), 2405-2416, 2015
10. Elmahdy S.I and Mohamed M.M.. Remote sensing and geophysical survey applications for delineating near-surface palaeochannels and shallow aquifer in the United Arab Emirates. *Geocarto International*, 30(7), 723-736, 2015

11. Mohamed, M. and Elmahdy S. Natural and anthropogenic factors affecting groundwater quality in the eastern region of the United Arab Emirates. *Arabian Journal of Geosciences* 8 (9), 7409-7423, 2015
12. Elmahdy S., and Mohamed, M. Groundwater of Abu Dhabi Emirate: a regional assessment by means of remote sensing and geographic information system, *Arabian Journal of Geosciences*, 8 (12), 11279-11292, 2015
13. Mohamed M. Towards Sustainable Groundwater Management in the Northeastern UAE. *Journal of Water Resource and Hydraulic Engineering*. Vol. 4 (4), PP. 332-338, 2015.
14. Mohamed M. Source Zone Characterization Tool for Contaminated Groundwater Aquifers. *International Journal of Environmental Science and Development*, V 6, issue 11, pp 828- 833. DOI: 10.7763/IJESD.2015.V6.707, 2015
15. Ismail M.A., Ahmed A.A., Hefny A.M. 2015. Modeling soil profile using GIS and Geostatistical algorithms *International Journal of Scientific & Engineering Research*, Vol. 6, No. 4, 2015, pp. 8-13.
16. Eid M.M., Ahmed A.A., Hefny A.M., El-Attar A.N. 2015. Study on some factors affecting Ground-pile-tunnelling interaction. *Journal of American Science*. Vol.11, No. 6, pp. 263-274.
17. Eid M.M., Ahmed A.A., Hefny A.M., El-Attar A.N. 2015. Tunneling effect on adjacent pile footings. *Journal of American Science*, Vol 11, No 1, pp. 88-98.
18. Chowdhury, R.K. (2015) Greywater reuse through a bioretention system prototype in the arid region, *Water Science and Technology*, 72(12): 2201-2211.
19. Rashid, M.M., Beecham, S. and Chowdhury, R.K. (2015) Statistical downscaling of CMIP5 outputs for projecting future changes in rainfall in the Onkaparinga catchment, *Science of the Total Environment* 530-531:171-182.
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22. Chowdhury, R.K., El-Shorbagy, W., Ghanma, M. and El-Ashkar, A. (2015) Quantitative Assessment of Residential Water End Uses and Greywater Generation in the City of Al Ain, *Water Science and Technology: Water Supply*, 15.1: 114-123.
23. Chowdhury, R. K., Beecham, S., Boland, J. and Piantadosi, J. (2015) Understanding South Australian rainfall trends and step changes, *International Journal of Climatology* 35 (3): 348-360. DOI: 10.1002/joc.3982.

24. Hilal El-Hassan and Yixin Shao, Early carbonation curing of concrete masonry units with Portland limestone cement, *Cement and Concrete Composites*, Vol. 62, pp. 168-177
25. Rashid, M. M., Beecham, S. and Chowdhury, R. K. (2015) Statistical characteristics of rainfall in the Onkaparinga catchment in South Australia, *Journal of Water and Climate Change* 06.2 (2015): 352-373.
26. M.M.E. Gamala, A.S. El-Dieb, K.M.E. Sawy, A.M.O. Mohamed, “Application of Modified Sulfur Concrete in the UAE Sewerage Systems”, *International Journal of Chemical and Environmental Engineering (IJCEE)*, 2015, Vol.6, No.6, pp.365-368.
27. T.A. El-Maaddawy, A. Bouchair, A.S. El-Dieb, A. Biddah, “Corrosion Aging of Concrete T-Girders Strengthened with Near-Surface-Mounted Composites”, *ASCE Journal of Composites for Construction*, 04014053-1 2015.
28. A.M.O. Mohamed, A.S. El-Dieb, K.M. El Sawy, M.M. El Gamal, “Durability of Modified Sulphur Concrete in Sewerage Environment”, *Environmental Geotechnics (ICE)*, 13.00026, 2015.
29. A.A. Zaher, A.A. Abdelrahman, A.S. El-Dieb, A.A. Mohamed, “Punching Shear Behavior of Lightweight Foamed RC Slabs”, *International Journal of Application or Innovation in Engineering and Management (IJAIEM)*, July 2015, Vol. 3, Issue 7, pp.67-74.
30. Maraqa MA, Imran HD and Hegazy S, Modeling changes in hydraulic conductivity due to siltation using packed soil columns from Alshuwaib dam sites, United Arab Emirates. *Environmental Earth Sciences* 74(5), 4345-4354, 2015, doi: 10.1007/s12665-015-4502-8.
31. Maraqa MA and Ghoudi K, Survey of public attitudes towards bottled and tap water quality in the UAE, *Global Nest Journal* 17(3), 607-617, 2015.
32. Mwafy, A.M., Hussain, N. and El-Sawy, K., 2015, “Seismic performance and cost-effectiveness of high-rise buildings with increasing concrete strength”, *The Structural Design of Tall and Special Buildings (SCI)*, Wiley, Vol. 24(4), 257–279. DOI: 10.1002/tal.1165
33. Mwafy, A.M., Hussain, N. and El-Sawy, K., 2015, “Assessment of Material Strength Implications on Seismic Design of Tall Buildings through Collapse Analysis”, *Advances in Structural Engineering (SCI)*, Vol. 18(12), 2017-2033. Doi: 10.1260/1369-4332.18.12.2017

Conferences

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2. Al-Nahyan, M.T., Sohal, A.S., Hawas, Y.E and Fildes, B.N. “Management Challenges and Critical Factors Affecting Transportation Infrastructure Projects in the United Arab Emirates”, *Proceedings of*

The International Conference on Organization and Management (ICOM), November 22-23, 2015, Abu Dhabi, UAE.

3. Hawas, Y.E., and Mohammad, M. S. A System for Incident Detection in Urban Traffic Networks. Proceedings of the IEEE 18th International Conference on Intelligent Transportation Systems, 15-18 September 2015, Palmas de Canarias, Spain
4. Hawas, Y.E., and Alam, Md. D. "Evaluation of Seatbelt and Airbag Effectiveness in Reducing Severe and Fatal Injuries in the UAE". Proceedings of the 2015 International Conference on Sustainable Automotive Engineering (ICSAE 2015), May 24-25, 2015, Madrid, Spain.
5. B. El-Ariss, S.A. Elkholy, "External Mitigating Technique for Progressive Collapse of Framed Structures", in Proceedings of the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing, Civil-Comp Press, Stirlingshire, UK, Paper 92, 2015. doi:10.4203/ccp.108.92.
6. S.A. Elkholy, A.A. Elsayed, B. El-Ariss, S.A. Sadek, "Towards Optimal Finite Element Modeling for the Analysis of Liquid Storage Tanks", in Proceedings of the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing, Civil-Comp Press, Stirlingshire, UK, Paper 104, 2015. doi:10.4203/ccp.108.104.
7. El-Maaddawy, T. (2015). "Development and Assessment of Learning Outcomes of Graduate Course on Structural Rehabilitation." Taylor's 8th Teaching and Learning Conference 2015 (TTLC 2015), Taylor's University, 28 – 29 November, Selangor, Malaysia.
8. El-Maaddawy, T. and El Refai, A. (2015). "Rehabilitation of Corrosion-Aged Concrete T-Girders with Textile-Reinforced Mortar", 4th International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICRRR 2015), 05 - 07 October, Leipzig, Germany.
9. El-Maaddawy, T. (2015). "Development of a Multi-Disciplinary Graduate Course on Rehabilitation of Structures", 4th International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICRRR 2015), 05 - 07 October, Leipzig, Germany.
10. El-Maaddawy, T., Al-Saidy, A., Al-Sallamin, A. (2015). "Residual Strength of Glass Fiber-Reinforced Polymer Bars in Seawater- Contaminated Concrete." 5th International Conference on Construction Materials (ConMat'15). Performance, Innovations, and Structural Implications, 19-21 August, Whistler, Vancouver, Canada.
11. El-Dieb, A.S., El-Maaddawy, T., and Al-Sallamin, A. (2015). "Reinforcement Corrosion Monitoring and Durability Indices of Self-Curing Concrete." 5th International Conference on Construction Materials (ConMat'15). Performance, Innovations, and Structural Implications, 19-21 August, Whistler, Vancouver, Canada.
12. Awani, O., El Refai, A., El-Maaddawy, T. (2015). "Bond Characteristics and Failure Mechanism of Carbon Fabric in Mortar and Epoxy Adhesives in Double Shear Tests." 5th International Conference

- on Construction Materials (ConMat'15). Performance, Innovations, and Structural Implications, 19-21 August, Whistler, Vancouver, Canada.
13. El-Maaddawy, T. (2015). "Assessment of Learning Outcomes of Reinforced Concrete Design Courses: UAEU Experience." 7th International Forum on Engineering Education (IFEE2015), Quality Assurance in Engineering Education. 17-19 March, Sharjah, UAE.
 14. Mohamed M. Estimation of Bacterial Growth Parameters Using Inverse Analysis. The International Conference on Energy, Water & Environmental Sciences (ICEWES). Ras Al Khaimah, UAE, in December 15-17, 2015.
 15. S. Parimalarenganayaki, MM Mohamed, and AA Murad. Utilization of isotopes in hydrogeological studies in UAE: A review. International Conference on Engineering Geophysics, Al Ain, United Arab Emirates, 15-18 November 2015: pp. 236-239, 2015.
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 18. Elmahdy, S. I., and Mohamed M.M, (2015). Remote sensing and geophysical investigations of paleochannels and shallow aquifer in the United Arab Emirates INSPIRE-GEOSPATIAL WORLD FORUM, Lisbon, Portugal 25-29, May 2015.
 19. S.A. Elkholy, A.A. Elsayed, B. El-Ariss, S.A. Sadek, "Towards Optimal Finite Element Modeling for the Analysis of Liquid Storage Tanks", in J. Kruis, Y. Tsompanakis, B.H.V. Topping, (Editors), "Proceedings of the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing", Civil-Comp Press, Stirlingshire, UK, Paper 104, 2015. doi:10.4203/ccp.108.104.
 20. B. El-Ariss, S.A. Elkholy, "External Mitigating Technique for Progressive Collapse of Framed Structures", in J. Kruis, Y. Tsompanakis, B.H.V. Topping, (Editors), "Proceedings of the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing", Civil-Comp Press, Stirlingshire, UK, Paper 92, 2015. doi:10.4203/ccp.108.92
 21. Hilal El-Hassan and Yixin Shao, Accelerated Carbonation Curing of Lightweight Concrete Masonry Units, Proceedings of the Fifth International Conference on Accelerated Carbonation for Environmental and Material Engineering (ACEME 2015), New York City, NY, June 21-24, 2015.
 22. Hilal El-Hassan and Yixin Shao, Performance of Carbonation-Cured Concrete with Portland Limestone Cement, ACI Fall 2015 Convention, Denver, CO, November 8-12, 2015.

23. Hilal El-Hassan and Yixin Shao, Carbonation Curing of Concrete Blocks to Mitigate Carbon Emission, Proceedings of the Conference on Carbon Capture, Utilization, and Storage, Pittsburgh, PA, April 28-May 1, 2015.
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28. Jaroor KJ, Maraqa M and El-Tarabily K, Effects of lining concrete water tanks on the growth of Legionella pneumophila, International Conference on Civil and Environmental Engineering, 20-23 May, 2015, Cappadocia, Turkey.
29. S.T. Aly, A.S. El-Dieb, M.M. Reda Taha, “Self-Compacting Concrete Incorporating Ceramic Waste Powder”, UAE University Annual Research and Innovation Conference (UAEU-ARIC), Al Ain, UAE, 24-25 Nov. 2015.
30. M.M. El Gamal, A.S. El-Dieb, K.M. El Sawy, A.M.O. Mohamed, “Application of Modified Sulfur Concrete in the UAE Sewerage Systems”, The 4th International Conference on Chemical and Biological Processes (ICCBP-2015), Dubai, UAE, 22-24 Nov. 2015. (Corresponding Author)
31. A.S. El-Dieb, D. M. Kanaan, “Ceramic Waste Powder as Supplementary Cementing Material in Concrete Mixtures”, Implementing Innovative Ideas in Structural Engineering and Project Management, The Eighth International Structural Engineering and Construction Conference, Sydney, Australia, Nov. 23-28, 2015, 769-774, doi: 10.14455/ISEC.res.2015.74 (Corresponding Author)
 - A. Mwafy, A.S. El-Dieb, A. Lazkani, “Experimental Assessment of Concentrically Loaded Prestressing Concrete-Filled Steel Tubular Columns”, Implementing Innovative Ideas in Structural Engineering and Project Management, The Eighth International Structural Engineering and Construction Conference, Sydney, Australia, Nov. 23-28, 2015, 93-98, doi: 10.14455/ISEC.res.2015.165
32. A.S. El-Dieb, T.A. El-Maaddawy, A. Al Sallamin, “Reinforcement Corrosion and Durability Indices of Self-Curing Concrete”, Fifth International Conference on Construction Materials: Performance

Innovations and Structural Implications (CONMAT'15), Whistler, Canada, Aug. 19-21, 2015.
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