

10/01/2020 - 3/31/2021

Publications

1. Yu, P., Radmehr, A., Tajaddini, A., and Ahmadian, M., An Experimental Study of the Influence of the Amount of Top-of-Rail Friction Modifiers on Traction, Proceedings of the 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
2. Yu, P., Mast, T., Holton, C., and Ahmadian, M., Performance Evaluation of a Novel Optical Sensing System for Detecting Rail Lubricity Conditions,” Proceedings of the 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
3. Yu, P., Mast, T., Holton, C., and Ahmadian, M., Intermediate Distance Testing of Optical Tor Lubricity Sensors on a Remote-controlled Rail Cart, Proceedings of the 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
4. Hosseini, S-M, Hosseinian Ahangarnejad, A., Radmehr, A., Tajaddini, A., and Ahmadian, M., A Statistical Approach to Evaluating Wheel-Rail Contact Dynamics, Proceedings of the 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
5. Alsahli, A., Zaremski, A.M., and Attoh-Okine, N., Predicting Track Geometry Defect Probability Based on Tie Conditions Using Pattern Recognition Techniques, Proceedings of the ASME International Mechanical Engineering Congress and Exposition (IMECE2020), Portland, OR, November 2020. (University of Delaware)
6. Musazay, J., Zaremski, A. M. and Palese, J. W., Determining Track-Induced Lateral Thermal Expansion Forces on a Curved Railway Track, Proceedings of IMechE Part F: Journal of Rail and Rapid Transit, February 2021. DOI 10.1177/0954409721995318. (University of Delaware).
7. Ashley, G., and Attoh-Okine, N., Approximate Bayesian computation for railway track geometry parameter estimation, Journal of Rail and Rapid Transit, November 2020. DOI 10.1177/09544097209777726. (University of Delaware).
8. Hasnat, A. & Ghafoori, N. (2021). Abrasion Resistance of Ultra-High Performance Concrete for Railway Sleepers. Journal of Urban Rail Transit. Springer, DOI: 10.1007/s40864-021-00145-8. (University of Nevada Las Vegas)
9. Hasnat, A. & Ghafoori, N. (2021). Freeze-Thaw Resistance of Non-Proprietary Ultra-High Performance Concrete. Journal of Cold Regions Engineering. ASCE, DOI: 10.1061/(ASCE)CR.1943-5495.0000255. (University of Nevada Las Vegas)
10. Hasnat, A. & Ghafoori, N. (2021). Properties of Ultra-High Performance Concrete using Traditional Aggregates. Construction and Building Materials, Elsevier (under Revision) (University of Nevada Las Vegas)
11. Mortazavian, E., Wang, Z., Teng, H., Finite Element Investigation of Thermal-kinetic-mechanical Evolutions during Laser Powder Deposition as an Innovative Technique for Rail Repair", under review in Journal of Manufacturing Processes, Manuscript no. SMEJMP-D-20-02177. (Initial submission date: Oct 21, 2020) (University of Nevada Las Vegas)
12. Mortazavian, E., Wang, Z., Teng, H., Effect of Heat Treatment on Microstructure and Hardness of a Worn Rail Repaired using Laser Powder Deposition, revised version under review in International Journal of Transportation Science and Technology, Manuscript no. IJTST-D-20-00223R1. (revised submission date: Apr 03, 2021) (University of Nevada Las Vegas)

13. Mortazavian, E., Wang, Z., Teng, H., Finite Element Investigation of Residual Stresses during Laser Powder Deposition Process as an Innovative Technique to Repair Worn Rails, submitted to International Journal of Transportation Science and Technology. (Initial submission date: Apr 18, 2021) (University of Nevada Las Vegas)
14. Mortazavian, E., Wang, Z., Teng, H., Measurement of Residual Stresses in Laser 3D Printed Train Rail using X-Ray Diffraction Technique, to be submitted to Proceedings of the ASME 2021 International Mechanical Engineering Congress & Exposition, Manuscript no. IMECE2021-69822. (Abstract accepted on Mar 17, 2021) (University of Nevada Las Vegas)

Other publications, conference papers and Presentations

1. Yu, P., Radmehr, A., Tajaddini, A., and Ahmadian, M., An Experimental Study of the Influence of the Amount of Top-of-Rail Friction Modifiers on Traction, 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
2. Yu, P., Mast, T., Holton, C., and Ahmadian, M., Performance Evaluation of a Novel Optical Sensing System for Detecting Rail Lubricity Conditions, the 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
3. Yu, P., Mast, T., Holton, C., and Ahmadian, M., Intermediate Distance Testing of Optical Tor Lubricity Sensors on a Remote-controlled Rail Cart, 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
4. Hosseini, S-M, Hosseinian Ahangarnejad, A., Radmehr, A., Tajaddini, A., and Ahmadian, M., A Statistical Approach to Evaluating Wheel-Rail Contact Dynamics, 2021 Joint Rail Conference, St. Louis, Mo, April 20 – 21, 2021. (Virginia Tech)
5. Attoh-Okine, N., Shortcomings of Current Machine Learning Techniques in Railway Track Engineering, Big Data in Railroad Maintenance, virtual conference, December 2020. (University of Delaware)
6. Zaremski, A. M., Palese, J., Soufiane, K., and Grissom, G., How Do Failed Adjacent Ties Effect the Life of Wood Cross-ties, Railway Track and Structures, April 2021. (University of Delaware)
7. Zaremski, A. M., Using Data Science to Better Understand and Maintain Rolling Stock Performance, Railway Age, February 2021. (University of Delaware)
8. Zaremski, A. M., Using Data Science to Better Understand and Maintain Right of Way Performance, Railway Age, March 2021. (University of Delaware)