

2008 College of Engineering & Computer Science Publications

Refereed Journal Publications

Civil, Environmental and Construction Engineering (CECE)

Abdel-Aty, M., R. Cunningham and V. Gayah, "Considering Dynamic Variable Speed Limit Strategies For Real-time Crash Risk Reduction On Freeways," *Journal of the Transportation Research Board*, Vol. 2078, 2008, pp.108-116.

Aviram, A., K.R. Mackie and B. Stojadinovic, "Effect of abutment modeling on the seismic response of bridge structures." *Earthquake Engineering and Engineering Vibration*, Vol. 7, No. 4, 2008, pp. 395-402.

Catbas, F.N., M. Gul and J. Burkett, "Conceptual Damage-Sensitive Features for Structural Health Monitoring: Laboratory and Field Demonstrations," *Journal of Mechanical Systems and Signal Processing*, Vol. 22, 2008, pp. 1650-1669.

Catbas, F.N., M. Gul and J. Burkett, "Structural Condition Assessment: Phenomenological Model Development and Laboratory Studies," *Journal of Smart Materials & Systems*, Vol. 17, 2008, pp. 12.

Catbas, F.N., M. Susoy and D. Frangopol, "Structural Health Monitoring and Reliability Estimation: Long Span Truss Bridge Application with Environmental Monitoring Data," *Journal of Engineering Structures*, Vol. 30, 2008, pp. 2347-2359.

Chandra, R.S. and H. Al-Deek, "Cross Correlation Analysis and Multivariate Prediction of Spatial Time Series of Freeway Traffic Speeds," *Journal of the Transportation Research Board*, Vol. 2061, 2008, pp. 64-76.

Chang, N.B., "Economic and Policy Instrument Analyses in Support of the Scrap Tires Recycling Program in Taiwan," *Journal of Environmental Management*, Vol. 86, 2008, pp. 435-450.

Chang, N.B. and E. Davila, "Municipal Solid Waste Characterization and Management Strategy for the Lower Rio Grande Valley, Texas," *Waste Management*, Vol. 28, 2008, pp. 776-794.

Chang, N.B. and E.A. Hernandez, "Optimal Expansion Strategy for a Sanitary Sewer System under Uncertainty," *Environmental Modeling and Assessment*, Vol. 13, No. 1, 2008, pp. 93-113.

Chang, N.B., G. Parvathinathan and J.B. Breeden, "Combining GIS with Fuzzy Multiple Attribute Decision Making for Landfill Siting in a Fast Growing Urban Region," *Journal of Environmental Management*, Vol. 87, 2008, pp. 139-153.

Chang, N.B., K.R. Srilakshmi and G. Parvathinathan, "Comparison of Models of Simazine Transport and Fate in Subsurface Environment in a Citrus Farm," *Journal of Environmental Management*, Vol. 86, 2008, pp. 27-43.

Chang, N.B., M. Wanielista, F. Hossain, L. Zhai and K.S. Lin, "Integrating Nanoscale Zero Valent Iron and Titanium Dioxide for Nutrient Removal in Stormwater Systems," *NANO Brief Reports and Reviews*, Vol. 3, No. 4, 2008, pp. 297-300.

Chen, J.C., W.H. Chen and N.B. Chang, "Diagnosis Analysis of a Small-scale Incinerator by Neural Networks Model," *Civil Engineering and Environmental Systems*, Vol. 25, No. 3, 2008, pp. 201-213.

Dixit, V., A. Pande, E. Radwan and M. Abdel-Aty, "Understanding the Impact of a Recent Hurricane on Mobilization Time During a Subsequent Hurricane," *Journal of the Transportation Research Board*, Vol. 2041, 2008, pp. 49-57.

Du, Q., N.B. Chang, C.H. Yang and K.R. Srilakshmi, "Combination of Multispectral Remote Sensing, Variable Rate Technology and Environmental Modeling for Citrus Pest Management," *Journal of Environmental Management*, Vol. 86, 2008, pp. 14-26.

Funakoshi, Y., S.C. Hagen and P. Bacopoulos, "Coupling of Hydrodynamic and Wave Models: A Case Study for a Hurricane Floyd (1999) Hindcast," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, Vol. 134, No. 6, November/December 2008, pp. 321-335.

Gul, M. and F.N. Catbas, "Ambient Vibration Data Analysis for Structural Identification and Global Condition Assessment," *Journal of Engineering Mechanics*, Vol. 134, No. 8, 2008, pp. 650-662.

Harb, R., E. Radwan, X. Yan, M. Abdel-Aty and A. Pande, "Environment, Drivers, and Vehicles' Risk Analysis for Freeway Work-Zone Crashes," *ITE Journal*, Vol. 78, No. 1, 2008, pp. 26-30.

Harb R., E. Radwan, X. Yan, A. Pande and M. Abdel-Aty, "Freeway Work-Zone Crash Analysis and Risk Identification Using Multiple and Conditional Logistic Regression," *ASCE Journal of Transportation Engineering*, Vol. 134, No. 5, 2008, pp. 203-214.

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Ko, A. and N.B. Chang, "Optimal Planning of Co-Firing Alternative Fuels with Coal in a Power Plant by Grey Nonlinear Mixed Integer Programming Model," *Journal of Environmental Management*, Vol. 88, 2008, pp. 11-27.

Lee, C. and M. Abdel-Aty, "Presence of passengers: Does it increase or reduce driver's crash potential?" *Accident Analysis & Prevention*, Vol. 40, No. 5, 2008, pp. 1703-1712.

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Electrical Engineering and Computer Science (EECS)

Abdel-Rahman, O., J. Abu-Qahouq, L. Huang and I. Batarseh, "Analysis and Design of Voltage Regulator With Adaptive FET Modulation Scheme and Improved Efficiency," *IEEE Transactions on Power Electronics*, Vol. 23, No. 5, 2008, pp. 896-906.

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