

Selected Papers Illustrating Statistical Applications in Civil Engineering

- Chryssanthopoulos, M.K.; Mansocchi, G.M.E.; Elnashai, A.S., "Probabilistic assessment of ductility for earthquake resistant design of steel members," *Journal of Constructional Steel Research*, v52 n1 1999
- Cruse, T.A.; Mahadevan, S.; Huang, Q.; Mehta, S., "Mechanical system reliability and risk assessment," *AIAA Journal*, v32 n11 1994
- Diniz, S.M.C.; Frangopol, D.M., "Reliability bases for high-strength concrete columns," *Journal of Structural Engineering*, v123 n 10 1997
- Duncan, J.M., "Use of back analysis to reduce slope failure risk," *Civil Engineering Practice*, v14 n1 1999
- Ellingwood, B. "Probability-based loading criteria for codified design," *Proceedings, Fourth International Conference on Application of Statistics and Probability to Soil and Structural Engineering*, 1983
- Galambos., T.; Ellingwood, B.; MacGregor, J.; Cornell, A., "Probability based load criteria: Assessment of current design practice," *ASCE, Journal of the Structural Division*, v108 nST5 1982
- Harraz, A.; El-Meligy, M.; Dif, A., "Probabilistic-based codified design of tunnels," *Journal of Engineering and Applied Science*, v46 n5 Oct 1999
- Kawakami, H.; Sharma, S., "Statistical study of spatial variation of response spectrum using free field records of dense strong motion arrays," *Earthquake Engineering and Structural Dynamics*, v28, 1999
- Liang, R.Y.; Nusier, O.K.; Malkawi, A.H., "Reliability based approach for evaluating the slope stability of embankment data," *Engineering Geology*, v54 n3 1999
- McCuen, R.H.; Rawls, W.J.; Whaley, B.L., "Comparative evaluation of statistical methods for water supply forecasting," *Water Resources Bulletin*, v15 n4 1979
- Mirza, S.A., "Reliability-based design of reinforced concrete columns," *Structural Safety*, v18 n2/3 1996
- Mrázik, A.; Križma, M., "Probability-based design standards of structures," *Structural Safety*, v19 n2 1997
- Rackwitz, R.; Fiessler, B., "Structural reliability under combined random load sequences," *Computers and Structures*, v9 1978
- Reed, J.W.; Blume, J.A., "Predicting damage probabilistically for buildings subjected to ground motion," *Proceedings, ASCE Specialty Conference on Probabilistic Methods in Engineering*, 1974
- Reid, S.G., "Probability-based patterned live loads for design," *Structural Safety*, v19 n1 1997
- Rosowsky, D.V.; Cheng, N., "Reliability of light-frame roofs in high-wind regions," *Journal of Structural Engineering*, July 1999
- Ross, G.A.; Seed, H.G.; Migliaccio, R.R., "Bridge foundation behavior in Alaska earthquake," *ASCE, Journal of the Soil Mechanics and Foundations Division*, v95 nSM4 1969
- Saito, T.; Abe, S.; Shibata, A., "Seismic damage analysis of reinforced concrete buildings based on statistics of structural lateral resistance," *Structural Safety*, v19 n1 1997
- Torng, T.Y.; Wirsching, P.H., "Fatigue and fracture reliability and maintainability process," *Journal of Structural Engineering*, v117 n12 1991
- Yang, L.; Xu, C., "Monte Carlo simulation and reliability analysis on the deformation of foundation pit," *Rock and Soil Mechanics*, v20 n1 1999

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