

List of Publications of Prof. Alexander M. Puzrin

Journals

1. Sorochan, E. A. & Puzrin, A. M. (1991). The stress-strain state of a slope during its construction. *Soil Mechanics and Foundation Engineering*, Vol. **27**, No. 4, 151-154.
2. Sorochan, E. A. & Puzrin, A. M. (1992). The analysis of an inclined footing with anchors during the construction on a creeping slope. *Soil Mechanics and Foundation Engineering*, Vol. **28**, No. 2, 46-52.
3. Frydman, S., Talesnick, M. & Puzrin, A. (1995). Colinearity of Stresses, Strains, and Strain Increments during Shearing of Soft Clay. *ASCE Journal of Geotechnical Engineering*, Vol. **121**, No. 2, 174-184.
4. Puzrin, A., Frydman, S. & Talesnick, M. (1995). Normalized Nondegrading Behavior of Soft Clay under Cyclic Simple Shear Loading. *ASCE Journal of Geotechnical Engineering*, Vol. **121**, No. 12, 836-843.
5. Puzrin, A. M., Frydman, S. & Talesnick, M. (1995). Kinematic Hardening of Soft Clay in Simple Shear. *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. **19**, No. 11, 769-791.
6. Puzrin, A. M. & Burland, J. B. (1996). A logarithmic stress-strain function for rocks and soils. *Geotechnique*, Vol. **46**, No. 1, 157-164.
7. Lagioia, R., Puzrin, A. M. & Potts, D. M. (1996). A new versatile expression for yield and plastic potential surfaces. *Computers and Geotechnics*, Vol. **19**, No. 3, 171-191.
8. Puzrin, A. M., Frydman, S. & Talesnick, M. (1997). Effect of degradation on seismic response of Israeli continental slope. *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, Vol. **123**, No. 2, 85-93.
9. Addenbrooke, T., Potts, D. M. & Puzrin, A. M. (1997). The influence of pre-failure soil stiffness on the numerical analysis of tunnel construction. *Geotechnique*, Vol. **47**, No. 3, 693-712.
10. Puzrin, A. M. & Burland, J. B. (1998). Non-linear model of small-strain behaviour of soils. *Geotechnique*, Vol. **48**, No. 2, 217-233.
11. Puzrin, A. M. & Tatsuoka, F. (1998). Elastic strain energy potential for uncemented granular materials. *Soils and Foundations*, Vol. **38**, No. 4, 267-274.
12. Housby, G. T. & Puzrin, A. M. (1999). The bearing capacity of a strip footing on clay under combined loading. *Proceedings of the Royal Society of London Series a-Mathematical Physical and Engineering Sciences*, Vol. **455**, No. 1983, 893-916.
13. Puzrin, A. M. & Burland, J. B. (2000). Kinematic hardening plasticity formulation of small strain behaviour of soils. *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. **24**, No. 9, 753-781.
14. Housby, G. T. & Puzrin, A. M. (2000). A thermomechanical framework for constitutive models for rate-independent dissipative materials. *International Journal of Plasticity*, Vol. **16**, No. 9, 1017-1047.
15. Puzrin, A. M. & Shiran, A. (2000). Effects of the constitutive relationship on seismic response of soils. Part I. Constitutive modeling of cyclic behavior of soils. *Soil Dynamics and Earthquake Engineering*, Vol. **19**, No. 5, 305-318.
16. Puzrin, A. M. & Shiran, A. (2000). Effects of the constitutive relationship on seismic response of soils. Part II. The site amplification study. *Soil Dynamics and Earthquake Engineering*, Vol. **19**, No. 5, 319-331.

17. Puzrin, A. M. & Kirshenboim, E. (2001). Kinematic hardening model for overconsolidated clays. *Computers and Geotechnics*, Vol. **28**, No. 1, 1-36.
18. Puzrin, A. M., Houlsby, G. T. & Burland, J. B. (2001). Thermomechanical formulation of a small-strain model for overconsolidated clays. *Proceedings of the Royal Society of London Series a-Mathematical Physical and Engineering Sciences*, Vol. **457**, No. 2006, 425-440.
19. Puzrin, A. M. & Randolph, M. F. (2001). On the superposition of plastically dissipated work in upper bound limit analysis. *Proceedings of the Royal Society of London Series a-Mathematical Physical and Engineering Sciences*, Vol. **457**, No. 2007, 567-586.
20. Puzrin, A. M. & Houlsby, G. T. (2001). Fundamentals of kinematic hardening hyperplasticity. *International Journal of Solids and Structures*, Vol. **38**, No. 21, 3771-3794.
21. Puzrin, A. M. & Houlsby, G. T. (2001). On the non-intersection dilemma in multiple surface plasticity. *Geotechnique*, Vol. **51**, No. 4, 369-372.
22. Puzrin, A. M. & Houlsby, G. T. (2001). Strain-based plasticity models for soils and the BRICK model as an example of the hyperplasticity approach. *Geotechnique*, Vol. **51**, No. 2, 169-172.
23. Puzrin, A. M. & Houlsby, G. T. (2001). A thermomechanical framework for rate-independent dissipative materials with internal functions. *International Journal of Plasticity*, Vol. **17**, No. 8, 1147-1165.
24. Puzrin, A. M. (2001). On the superposition of work dissipation in Coulomb's soil. *International Journal of Solids and Structures*, Vol. **38**, No. 38-39, 6815-6827.
25. Houlsby, G. T. & Puzrin, A. M. (2002). Rate-dependent plasticity models derived from potential functions. *Journal of Rheology*, Vol. **46**, No. 1, 113-126.
26. Einav, I. & Puzrin, A. M. (2002). Discussion on Hashiguchi K. & Collins I. (2002): Stress rate-elastic stretching relations in elastoplastic constitutive equations for soils. *Soils and Foundations*, Vol. **42**, No. 1, 159-160.
27. Puzrin, A. M. & Einav, I. (2002). Discussion of "Associated and Nonassociated Aspects of the Constitutive Laws for Coupled Elastic/Plastic Materials" by I. F. Collins. *ASCE International Journal of Geomechanics / September 2003 / 129*, Vol. **2**, No. 2, 259-267.
28. Puzrin, A. M. & Randolph, M. F. (2003). Generalized framework for three-dimensional upper bound limit analysis in a Tresca material. *ASME Journal of Applied Mechanics*, Vol. **70**, No. 1, 91-100.
29. Puzrin, A. M. & Houlsby, G. T. (2003). Rate-dependent hyperplasticity with internal functions. *ASCE Journal of Engineering Mechanics*, Vol. **129**, No. 3, 252-263.
30. Einav, I., Puzrin, A. M. & Houlsby, G. T. (2003). Continuous hyperplastic models for overconsolidated clays. *Mathematical and Computer Modelling*, Vol. **37**, No. 5-6, 515-523.
31. Puzrin, A. M. & Randolph, M. F. (2003). New planar velocity fields for upper bound limit analysis. *International Journal of Solids and Structures*, Vol. **40**, No. 13-14, 3603-3619.
32. Einav, I., Puzrin, A. M. & Houlsby, G. T. (2003). Numerical studies of hyperplasticity with single, multiple and a continuous field of yield surfaces. *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. **27**, No. 10, 837-858.
33. Randolph, M. F. & Puzrin, A. M. (2003). Upper bound limit analysis of circular foundations on clay under general loading. *Geotechnique*, Vol. **53**, No. 9, 785-796.
34. Einav, I. & Puzrin, A. M. (2003). Evaluation of continuous hyperplastic critical state (CHCS) model. *Geotechnique*, Vol. **53**, No. 10, 901-913.

Conference Contributions

1. Puzrin, A. M. (1997). Seismic behaviour of Israeli continental slope", in T.S. Tan, S.H. Chew, K.K. Phoon & T.G. Ng (eds) "Geotechnical Engineering in Asia: 2000 and Beyond. *Proceedings of the Third Asian Young Geotechnical Engineers Conference, Singapore*, 539-548.
2. Housby, G. T. & Puzrin, A. M. (1999). An approach to plasticity based on generalised thermodynamics. *Proceedings of the Third European Conference on Constitutive Modelling of Granular Materials, Horton, Greece*, 319-331.
3. Puzrin, A. M. & Kirshenboim, U. (1999). Evaluation of a small strain model for overconsolidated clays. *Proceedings of IS Torino 99: Pre-Failure Deformation Characteristics of Geomaterials, Torino, Italy* 1, 483-490.
4. Puzrin, A. M. (2001). Application of hyperplasticity to modeling of small strain behaviour of soils. *Proceedings of the IS Torino 99: Pre-Failure Deformation Characteristics of Geomaterials, Torino, Italy* 2, 1377-1383.
5. Einav, I. & Puzrin, A. M. (2003). A thermomechanical model for clays. *Proceedings of the 3rd. International Symposium on Deformation Characteristics of Geomaterials, Lyon, France*, 1079-1086.
6. Mayne, P. W., Puzrin, A. M. & A., E. (2003). Field characterization of small- to high-strain behavior of clays. *Proceedings of the 12th Panamerican Conference on Soil Mechanics and Geotechnical Engineering, Boston, USA* 1, 307-313.
7. Puzrin, A. M. (2003). Elasticity in constitutive modeling of soils. *Proceedings of the European Conference GeoMath3, Horton, Greece* 13, 55-76.
8. Puzrin, A. M. & Germanovich, L. N. (2003). Shear band propagation in an infinite slope. *Proceedings of the ASCE Conference on Engineering Mechanics, Seattle, USA*.
9. Puzrin, A. M. & Randolph, M. F. (2003). Recent advances in the upper bound limit analysis of Tresca's material. *Proceedings of the Second MIT conference on Computational Fluid and Solid Mechanics, Boston, USA* 1, 595-597.
10. Puzrin, A. M. & Germanovich, L. N. (2003). The Mechanism of Tsunamigenic Landslides. *Proceedings of the First Japan-US Workshop on Testing, Modeling and Simulation in Geomechanics, Boston, USA*, 421-428.