

## **SHORT RESUME**

### **YIANNIS TSOMPANAKIS**

Yiannis Tsompanakis is Associate Professor in the Department of Applied Sciences of the Technical University of Crete, Greece, where he teaches structural and computational mechanics as well as earthquake engineering lessons. His scientific interests include computational methods in structural and geotechnical earthquake engineering, structural optimization, probabilistic mechanics, structural assessment and the application of artificial intelligence methods in engineering. As an internationally recognized researcher in these topics, Dr. Tsompanakis has published more than 25 journal papers, over 70 conference papers, 10 book chapters, 5 edited books and 2 conference proceedings. He has also prepared special issues in journals and organized several conferences, special sessions and mini-symposia. He is reviewer in many archival scientific engineering journals and member of the Editorial Board of Structures and Infrastructures Engineering Journal (JSIE, Taylor&Francis Publ).

### **PERSONAL DATA**

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### **Education**

Diploma of Civil Engineering, National Technical University of Athens.

Ph.D. in Computational Mechanics, Department of Civil Engineering National Technical University of Athens.

### **Research Interests**

Computational Mechanics, Linear and Non-linear Analysis of Structures, Structural Dynamics, Structural Optimization, Evolutionary and Mathematical Optimization Methods, Probabilistic Mechanics, Fuzzy Logic and Artificial Intelligence Paradigms in Engineering, Performance-based Design Earthquake Engineering: Structural, Geotechnical and Geoenvironmental Applications, Seismic Vulnerability Assessment and Retrofitting of Structures, Lifelines and Infrastructures.

## **Professional Experience**

Teaching undergraduate and postgraduate courses and supervision of Diploma, Master and PhD theses at Technical University of Crete.

Participation in research projects as coordinator and/or researcher.

Cooperation with scientific groups in Greece, USA, UK, Italy, Germany, France, Serbia, etc.

Design and construction of buildings as a civil engineer.

## **Memberships**

Editorial Board in Journal of Structures and Infrastructures Engineering (JSIE), Taylor&Francis Publ.

Organizing and Scientific board of several international conferences.

Technical Chambers of Greece.

Greek Civil Engineers' Association.

International Society of Structural and Multidisciplinary Optimization-ISSMO.

Greek Association of Computational Mechanics - GRACM.

International Association of Life-Cycle Civil Engineering-IALCCE.

International Association for Bridge Maintenance and Safety-IABMAS.

## **Referee for Scientific Journals**

Computer Methods in Applied Mechanics and Engineering (CMAME), ASCE Journal of Engineering Mechanics, ASCE Journal of Performance of Constructed Facilities, Soil Dynamics and Earthquake Engineering (SDEE), Structural and Multidisciplinary Optimization (JSMO), Engineering Optimization, Computers & Structures (CAS), Advances in Engineering Software (AES), AIAA Journal, Probabilistic Engineering Mechanics (PREM), Structures and Infrastructures Engineering (SIE), Engineering Structures (ES), Structural Safety (SS), Reliability Engineering and System Safety (RESS), Computational Mechanics (CM), Simulation Modelling Practice and Theory, Vibration and Control (VC), Natural Hazards, Journal of Engineering & Materials Sciences (JEMS), Solid Waste Technology and Management, Tectonophysics and for various Conferences.

## **Organizer of Scientific Conferences & Mini-symposia**

- Co-organizer (with B.H.V. Topping) of the 13th International Conference on Civil, Structural and Environmental Engineering Computing (CC2011), Chania, Crete, Greece, 6-9 September 2011.
- Co-organizer (with B.H.V. Topping) of the 2nd International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC2011), Chania, Crete, Greece, 6-9 September 2011.

- Co-organizer (with B.H.V. Topping) of the 1st International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC2009), Funchal, Madeira, Portugal, 1-4 September 2009.
- Co-organizer (with M. Papadrakakis, D.C.Charpmpis and N.D. Lagaros) of the 1st Thematic International Congress on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2007), Retymno, Greece, June 13-16, 2007.
- Co-organizer of Minisymposium “Innovative Approaches for Seismic Design using Nonlinear Analysis Methods” with M. Fragiadakis and C. Foley. In 1<sup>st</sup> Thematic International Congress on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2007), Retymno, Greece, June 13-16, 2007.
- Co-organizer of Minisymposium “Uncertainties in computational mechanics with emphasis on structural optimization applications” with D.M. Frangopol. In 8th World Congress on Computational Mechanics (WCCM8) & 5th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008), Venice, Italy, June 30–July 5, 2008.
- Co-organizer of Special Session “Soft Computing and Structural Engineering” with N.D. Lagaros. In CST2008: The 9th International Conference on Computational Structures Technology, Athens, Greece, 2-5 September, 2008.
- Co-organizer of Minisymposium “Uncertainties in civil structures & infrastructure engineering” with Amr Elnashai and N.D. Lagaros. In ICOSSAR09: 10th International Conference on Structural Safety and Reliability, Osaka, Japan, 13-17 September, 2009.
- Co-organizer of Minisymposium “Vulnerability assessment and risk-based life-cycle analysis and design” with D.M. Frangopol. In ICOSSAR09: 10th International Conference on Structural Safety and Reliability, Osaka, Japan, 13-17 September, 2009.
- Co-organizer of Special Session “Maintenance and Safety of Aging Infrastructure” with D.M. Frangopol. In ICASP11: 11th International Conference on Applications of Statistics and Probability in Civil Engineering, Zurich, 1-4 August, 2011.
- Co-organizer of Special Session “Risk and reliability of complex infrastructure systems” with Mauricio Sanchez Silva and Alaa Chateaufneuf Asian-Pacific Symposium on Structural Reliability and its Applications (APSSRA), 23-25 May, 2012.
- Member of organizing committee in COMPDYN 2011, COMPDYN 2009, HSTAM-2004.

## **PUBLICATIONS**

### **I. Edited books**

1. N.D. Lagaros and Y. Tsompanakis (Eds.), Intelligent Computational Paradigms in Earthquake Engineering, Idea Group Publishing, Inc. 2006.
2. Y. Tsompanakis N.D. Lagaros and Papadrakakis M. (Eds.), Structural optimization considering uncertainties, Structures and Infrastructures Series, Vol I, Book Series Editor: D.M. Frangopol, Taylor&Francis, 2008.
3. M. Papadrakakis, D.C.Charpmpis, N.D. Lagaros and Y. Tsompanakis (Eds.), Computational Structural Dynamics and Earthquake Engineering, Structures and

Infrastructures Series, Vol II, Book Series Editor: D.M. Frangopol, Taylor&Francis, 2009.

4. B.H.V. Topping and Y. Tsompanakis (Eds.), Soft Computing Technology in Civil, Structural and Environmental Engineering, Computational Science, Engineering and Technology Series No. 23, Saxe&Coburg Publ., 2009.
5. N.D. Lagaros, Y. Tsompanakis and Papadrakakis M. (Eds.), New trends in seismic design of structures, Saxe&Coburg Publ., 2010.

## **II. Conference Proceedings**

1. M. Papadrakakis, D.C.Charpis, N.D. Lagaros and Y. Tsompanakis (Eds.), CD-ROM Proceedings of COMPDYN 2007: 1st International Congress on Computational Methods in Structural Dynamics and Earthquake Engineering, June 13-16, 2007, Retymno, Greece.
2. B.H.V. Topping and Y. Tsompanakis (Eds.), CD-ROM Proceedings of CSC2009: 1st International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, 1-4 September 2009, Madeira, Portugal.

## **III. Journal Special Issues**

1. Frangopol D., and Tsompanakis Y., (Guest Eds.), Structural optimization considering uncertainties, Special Issue in Journal of Structural Safety, 31, 449-522, 2009.
2. Tsompanakis Y., (Guest Ed.), Advances in Vulnerability Assessment of Structures and Infrastructures, Special (Double) Issue in Journal of Structures and Infrastructures Engineering, Vol. 6, Nos. 1-2, 1-301, 2010.
3. Elnashai A., and Tsompanakis Y., (Guest Eds.), Uncertainties in Life-cycle Analysis and Design of Structures and Infrastructures, Special Issue in Journal of Structures and Infrastructures Engineering, 2010.

## **IV. Chapters in books**

1. Papadrakakis M., Tsompanakis Y., Lagaros N.D., Hinton E., Siens J., Thierauf G., and Cai J., Innovative computational methods for structural optimization, in Papadrakakis M., and Topping B.H.V. (eds.), Innovative computational methods in structural mechanics, Saxe-Coburg, 195-222, 1999.
2. M. Fragiadakis, N.D. Lagaros, Y. Tsompanakis and M. Papadrakakis, Improved seismic design procedures and evolutionary tools, in N.D. Lagaros and Y. Tsompanakis (Eds.), Intelligent Computational Paradigms in Earthquake Engineering, Idea Group Publishing Inc., pp 1-21, 2007.
3. N.D. Lagaros, Y. Tsompanakis, M. Fragiadakis and M. Papadrakakis, Soft computing techniques in probabilistic seismic analysis of structures, in N.D. Lagaros and Y. Tsompanakis (Eds.), Intelligent Computational Paradigms in Earthquake Engineering, Idea Group Publishing Inc, pp 248-269, 2007.
4. Lagaros N.D., Tsompanakis Y., Fragiadakis M., Plevris V. and Papadrakakis M., Metamodel-based computational techniques for solving structural optimization problems considering uncertainties, in Y. Tsompanakis N.D. Lagaros and M.

- Papadrakakis (Eds.), Structural optimization under uncertainties, Taylor and Francis, pp 567-597, 2008.
5. Tsompanakis Y., Dynamic interaction of retaining walls and retained soil and structures, in M. Papadrakakis, D.C.Charmpis, N.D. Lagaros and Y. Tsompanakis (Eds.), Computational Structural Dynamics and Earthquake Engineering, Taylor&Francis, pp 447-461, 2009.
  6. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, The effect of soil-structure interaction and site effects on dynamic response and stability of earth structures, in T. Schanz and R. Iankov (Eds.), Coupled site and soil-structure interaction effects with application to seismic risk mitigation, Springer, pp. 115-126 2009.
  7. Y. Tsompanakis, Issues related to the dynamic interaction of retaining walls and retained soil layer, in T. Schanz and R. Iankov (Eds.), Coupled site and soil-structure interaction effects with application to seismic risk mitigation, Springer, pp. 127-138, 2009.
  8. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Advances in dynamic response and stability of earth structures, in N.D. Lagaros, Y. Tsompanakis and Papadrakakis M. (Eds.), New trends in seismic design of structures, Saxe&Coburg Publ., 2010.
  9. Papazafeiropoulos G., Tsompanakis Y., Psarropoulos P.N., Dynamic interaction of concrete dams-reservoir-foundation: Analytical and numerical solutions, in M. Papadrakakis, N.D. Lagaros and M. Fragiadakis (Eds.), Computational Methods in Earthquake Engineering, ECCOMAS Series, Springer Publ., 2010.
  10. Tsompanakis Y., Issues related to seismic response of geosynthetically reinforced soil structures, in Topping B.H.V., Adam J.M. , Pallares F.J., Bru R. and Romero M.L. (Eds.), Computational Structures Technology, Saxe&Coburg Publ., 2010.

## **V. International Journal Papers**

1. Papadrakakis M., Tsompanakis Y., Hinton E., and Sienz J., Advanced hybrid solution techniques in topology optimization and shape sensitivity analysis, J. Engineering Computations, Vol. 13, No. 5, 57-90, 1996.
2. Papadrakakis M., Lagaros N.D., and Tsompanakis Y., Structural optimization using Evolution Strategies and Neural Networks, Computer Methods in Applied Mechanics and Engineering, 156, 309-333, 1998.
3. Papadrakakis M., Tsompanakis Y., and Lagaros N.D., Structural shape optimization using Evolution Strategies, Engineering Optimization, Vol. 31,515-540, 1999.
4. Papadrakakis M. and Tsompanakis Y., Domain decomposition methods for parallel solution of sensitivity analysis problems, International Journal of Numerical Methods in Engineering, 44, 281-303, 1999.
5. Papadrakakis M., Lagaros N.D., and Tsompanakis Y., Large-scale optimization of 3-D trusses using Evolution Strategies and Neural Networks, International Journal of Space Structures, Vol. 14, No. 3, 211-223, 1999.
6. Tsompanakis Y., and Papadrakakis M., Review of efficient computational methods for large-scale structural optimization, International Journal of Computational Engineering Science, Vol. 1, No. 2, 331-354, 2000.
7. Papadrakakis M., Lagaros N.D., Tsompanakis Y., and Plevris V., Large-scale structural optimization: Computational methods and optimization algorithms,

- Archives of Computational Methods in Engineering – State of the art reviews, Vol. 8, No. 3, 239-301, 2001.
8. Tsompanakis Y., and Papadrakakis M., Reliability based structural optimization using advanced computational techniques, *Journal of Structural and Multidisciplinary Optimization*, 26, 429-440, 2004.
  9. Papadrakakis M., Tsompanakis Y., Lagaros N.D., and Fragkiadakis M., Reliability Based Optimization of Steel Frames under Seismic Loading Conditions using Evolutionary Computation, Special issue on Computational Intelligence, *Journal of Theoretical and Applied Mechanics*, Vol. 42, No.3, 585-608, 2004.
  10. Lagaros N.D., Fragkiadakis M., Papadrakakis M., and Tsompanakis Y., Evaluation of seismic analysis procedures in the framework of structural optimization, *Journal of Engineering Structures*, Vol. 28, 1623–1633, 2006.
  11. Psarropoulos P.N., Tsompanakis Y., and Karabatsos Y., Local site conditions and seismic response of municipal solid waste landfills, *Soil Dynamics & Earthquake Engineering Journal*, Vol. 27, 553–563 2007.
  12. Tsompanakis Y., Lagaros N.D., and Stavroulakis G.E., Hybrid soft computing techniques in parameter identification and probabilistic seismic analysis of structures, *Advances in Engineering Software Journal*, Vol. 39, 612–624, 2008.
  13. V. Zania, P.N. Psarropoulos, Y., Karabatsos and Y. Tsompanakis, Estimating the seismically developed acceleration levels on waste landfills, *Journal of Computers & Structures*, Vol. 86, 642–651, 2008.
  14. N.D. Lagaros, M. Papadrakakis, M. Fragkiadakis, G. Stefanou and Y. Tsompanakis, Recent developments in neural network aided stochastic computations and earthquake engineering, *Computer Assisted Mechanics and Engineering Sciences Journal*, Special Issue in Neural Networks and Soft Computing in Structural Engineering, Vol. 14, 251-275, 2007.
  15. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Seismic distress and slope instability of municipal solid waste landfills, *Journal of Earthquake Engineering*, 12(2), 312-340, 2008.
  16. Psarropoulos P.N., and Tsompanakis Y., Stability of tailings dams under static and dynamic loading conditions, *Canadian Geotechnical Journal*, Vol. 45, 663-675, 2008.
  17. Y. Tsompanakis, N.D. Lagaros, P.N. Psarropoulos and E. Georgopoulos, Simulating the seismic response of embankments using soft computing techniques, *Advances in Engineering Software Journal*, 40(8), 640-651, 2009, 2009.
  18. N.D. Lagaros, Y. Tsompanakis, P.N. Psarropoulos, and E. Georgopoulos, Computationally efficient seismic fragility analysis of geostructures, *Journal of Computers & Structures*, 87(19-20), 1195-1203, 2009.
  19. Y. Tsompanakis, N.D. Lagaros, P.N. Psarropoulos, and E. Georgopoulos, Probabilistic seismic vulnerability analysis of embankments, Special Issue “Vulnerability Assessment of Structures and Infrastructures”, *Journal of Structures and Infrastructures Engineering*, Vol. 6, Nos. 1–2, 179–191, 2010.
  20. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Base sliding and dynamic response of landfills, *Journal of Advances in Engineering Software*, Vol. 41, 349–358, 2010.
  21. Kramen A. and Tsompanakis Y., Application of dynamic programming to evaluate the slope stability of a vertical extension of a balefill, *Waste Management Journal*, (available on-line) 2010.

22. P.N. Psarropoulos, Tsompanakis Y., and Papazafeiropoulos G., Nonlinear dynamic response of retaining walls, *Journal of Structures and Infrastructures Engineering*, (available on-line) 2010.
23. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Seismic displacements of landfills and deformation of geosynthetics due to base sliding, *Geotextiles and Geomembranes Journal*, Vol. 28, 491–502, 2010.
24. Papazafeiropoulos G., Psarropoulos P.N. and Tsompanakis Y., Analytical and numerical modeling of hydrodynamic distress of rigid and flexible concrete dams, *Journal of Computers & Structures* (under review) 2010.
25. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Papadimitriou A., Critical failure modes of waste landfills under seismic loading, *ASCE Journal of Geotechnical & Geoenvironmental Engineering*, (under review) 2010.
26. Papazafeiropoulos G., Psarropoulos P.N. and Tsompanakis Y., Development of a simplified equivalent volume model for the evaluation of the dynamic distress of rigid liquid storage tanks, *Journal of Fluids and Structures* (to be submitted) 2010.
27. Marano G., Quaranta G., Sgobba S., and Tsompanakis Y., Domination-based selection schemes for handling constraints in particle swarm optimization algorithms, *Journal of Advances in Engineering Software*, (to be submitted) 2010.
28. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Fault rupture impact on waste landfills. Part I: Problem definition, *Soil Dynamics & Earthquake Engineering Journal*, (to be submitted) 2010.
29. V. Zania, Y. Tsompanakis, P.N. Psarropoulos, Fault rupture impact on waste landfills. Part II: mitigation measures, *Soil Dynamics & Earthquake Engineering Journal*, (to be submitted) 2010.
30. I. Tzavara, Y. Tsompanakis, P.N. Psarropoulos, V. Zania, Seismic response of geosynthetic reinforced soil structures, *Geosynthetics International Journal*, (to be submitted) 2010.
31. V. Zania, Y. Tsompanakis, and P. N. Psarropoulos, Seismic performance of sliding structures: enhancements in Newmark's sliding block approach, *Earthquake Engineering & Structural Dynamics Journal*, (to be submitted) 2010.
32. G. Papazafeiropoulos, P.N. Psarropoulos and Y. Tsompanakis, "Translational and rotational stiffness of surface strip foundations adjacent to a retaining wall - Part I: Static conditions", *Soil Dynamics and Earthquake Engineering*, (to be submitted) 2010.
33. G. Papazafeiropoulos, P.N. Psarropoulos and Y. Tsompanakis, "Translational and rotational stiffness of surface strip foundations adjacent to a retaining wall - Part II: Dynamic conditions", *Soil Dynamics and Earthquake Engineering*, (to be submitted) 2010.
34. G. Papazafeiropoulos, P.N. Psarropoulos and Y. Tsompanakis, "Dynamic retaining wall-soil-structure interaction: Effects on the distress and response of the wall and the structure", *Earthquake Engineering & Structural Dynamics Journal*, (to be submitted) 2010.

## **VI. International Conferences Papers**

1. Spengemann F., Thierauf G., Tsompanakis Y., and Papadrakakis M., Decomposition of Structural Optimization Problems, *The First World Congress of Structural and Multidisciplinary Optimization (WCSMO-1)*, Goslar, Germany, May 28 - June 2, 1995.

2. Papadrakakis M., Tsompanakis Y., Hinton E., and Sienz J., Advanced solution methods in topology optimization and shape sensitivity analysis, in Sotiropoulos D.A., and Beskos D.E. (eds.), Proceedings of the 2nd National Congress on Computational Mechanics, 593-601, Chania, Crete, Greece, June 26 - 28, 1996.
3. Papadrakakis M., and Tsompanakis Y., Parallel and serial solution methods in topology optimization and shape sensitivity analysis, "Algorithms for Sparse Large Scale Linear Algebraic Systems: State of the Art and Applications in Science and Engineering", NATO-ASI, Las Palmas, Gran Canaria, Spain, June 26 - July 6, 1996.
4. Papadrakakis M., Lagaros N.D., and Tsompanakis Y., Structural optimization using Evolution Strategies and Neural Networks, The Fourth U.S. National Congress on Computational Mechanics, San Francisco, U.S.A., August 6-8, 1997.
5. Papadrakakis M., Tsompanakis Y., and C. Apostolopoulou, Parallel applications of a two-level domain decomposition algorithm, The First Euro-Conference on Parallel and Distributed Computing for Computational Mechanics, Lochinver, Scotland, 26 April - 1 May, 1997.
6. Papadrakakis M., Tsompanakis Y., and Lagaros N.D., Structural optimization of space roofs using Evolution Strategies and Neural Networks, ICCSS'97, Taiwan, 1997.
7. Papadrakakis M., Lagaros N.D., and Tsompanakis Y., Recent advances in structural optimization, in Recent advances in Computational Mechanics, 10-12 July, Xanthi, Greece, 1998.
8. Papadrakakis M., Lagaros N.D., and Tsompanakis Y., Computationally efficient techniques for structural optimization, in IV World Congress on Computational Mechanics, 29 June - 2 July, Buenos Aires, Argentina, 1998.
9. Tsompanakis Y., and Papadrakakis M., Computationally efficient techniques for reliability-based structural optimization, in 4th Colloquium on Computational Methods for Shell and Spatial Structures IASS-IACM, 4 June - 7 June, Chania, Greece, 2000.
10. Tsompanakis Y., Lagaros N.D. and Papadrakakis M., "Innovative computational methods for shape optimization", in Tsahalis D. (ed.) GRAGM 2002 Proceedings, 4th GRACM Congress on Computational Mechanics, Patra, Greece, June 27-29, 2002.
11. Lagaros N.D., Tsompanakis Y. and Papadrakakis M., "Reliability based structural optimization", in Tsahalis D. (ed.) GRAGM 2002 Proceedings, 4th GRACM Congress on Computational Mechanics, Patra, Greece, June 27-29, 2002.
12. Tsompanakis Y., Papadopoulos V., Lagaros N.D., and Papadrakakis M., Reliability analysis of structures under seismic loading conditions, in Mang H.A., Rammerstorfer F.G., Eberhardsteiner J. (eds.) WCCM-V 2002 Proceedings, 5th World Congress on Computational Mechanics WCCM-V, Vienna, Austria, 7-12 July, 2002.
13. Lagaros N.D., Tsompanakis Y., and Papadrakakis M., Optimum design of structures with inelastic behaviour under seismic loading conditions, in Mang H.A., Rammerstorfer F.G., Eberhardsteiner J. (eds.) WCCM-V 2002 Proceedings, 5th World Congress on Computational Mechanics WCCM-V, Vienna, Austria, 7-12 July, 2002.
14. Lagaros N.D., Tsompanakis Y., and Papadrakakis M., Optimum design under dynamic loading conditions, in Grundmann H. (ed.) Eurodyn 2002 Proceedings, 5th European Conference on Structural Dynamics, Munich, Germany, 2-5 September 2002.



15. Tsompanakis Y., Papadrakakis M., Lagaros N.D., and Fragkiadakis M., Optimization of steel frames subjected to seismic excitation, 7th National Congress on Mechanics Proceedings, Chania, Crete, Greece, June 24-26, 2004.
16. Tsompanakis Y., Papadrakakis M., Lagaros N.D., and Fragkiadakis M., Reliability based optimization of steel frames under seismic loading, 7th National Congress on Mechanics Proceedings, Chania, Crete, Greece, June 24-26, 2004.
17. Papadrakakis M., Tsompanakis Y., Lagaros N.D., and Fragkiadakis M., Reliability Based Optimization of Structures under Seismic Excitation, 4th European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS-2004 Proceedings, Jyvaskyla, Finland, 24-28 July, 2004.
18. P. Psarropoulos, Y. Tsompanakis, Impact of local site effects in the seismic design of solid waste landfills, HELECO-05, February 3-6, 2005.
19. Y. Tsompanakis, N.D. Lagaros, M. Papadrakakis, and M. Fraghiadakis, Recent advances in reliability-based structural optimization under earthquake loading, 6th World Congress on Structural and Multidisciplinary Optimization, WCSMO-6, Rio de Janeiro Brasil, May 30-June 3, 2005.
20. N.D. Lagaros, D.C. Charmpis, Y. Tsompanakis, and M. Papadrakakis, Structural design in the framework of cascade evolutionary optimization, 6th World Congress on Structural and Multidisciplinary Optimization, WCSMO-6, Rio de Janeiro Brasil, May 30-June 3, 2005.
21. N.D. Lagaros, V. Plevris, Y. Tsompanakis, and M. Papadrakakis, Multi-performance robust optimum design of steel structures, 6th World Congress on Structural and Multidisciplinary Optimization, WCSMO-6, Rio de Janeiro Brasil, May 30-June 3, 2005.
22. Y. Tsompanakis, N.D. Lagaros, M. Fragkiadakis and M. Papadrakakis Performance-based optimum design of structures considering uncertainties, 5th GRACM Congress on Computational Mechanics, Limessol, Cyprus, June 29 – July 1, 2005.
23. N.D. Lagaros, M. Papadrakakis, M. Fragkiadakis, G. Stefanou and Y. Tsompanakis, Recent developments in neural network aided stochastic computations and earthquake engineering, NNSC-2005, International Symposium on Neural Networks and Soft Computing in Structural Engineering, Cracow, Poland, June 30 - July 2, 2005.
24. N.D. Lagaros, M. Papadrakakis, D.C. Charmpis and Y. Tsompanakis Advanced soft computing techniques in structural optimization, NNSC-2005, International Symposium on Neural Networks and Soft Computing in Structural Engineering, Cracow, Poland, June 30 - July 2, 2005.
25. Tsompanakis Y., Lagaros N.D., and Stavroulakis G.E., Efficient neural network models for structural reliability analysis and identification problems, 8th International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (AICC 2005), Rome, Italy, 30 August - 2 September 2005.
26. Tsompanakis Y., Psarropoulos P.N., and Karabatsos Y., Local site conditions and seismic design of municipal solid waste landfills, 8th The Tenth International Conference on Civil, Structural and Environmental Engineering Computing (CC 2005), Rome, Italy, 30 August - 2 September 2005.
27. Papadrakakis M., Lagaros N.D., Fragiadakis M., and Tsompanakis Y., “Large-scale structural reliability-based optimization of steel frames under seismic loading”, 6th European Conference on Structural Dynamics (EURODYN 2005), Paris, France, Septemeber 4-7, 2005.
28. Sarris E., Xiroudakis G., Tsompanakis Y., and Psarropoulos P.N., “Stability of Tailings Dams – Part I: Static Loading”, International Workshop in Geoenvironment and Geotechnics (GEOENV-2005), 12-14 September 2005, Milos, Greece.

29. Psarropoulos P.N., Tsompanakis Y., Karabatsos Y., Xiroudakis G., and Sarris E., “Stability of Tailings Dams – Part II: Dynamic Loading”, International Workshop in Geoenvironment and Geotechnics (GEOENV-2005), 12-14 September 2005, Milos, Greece.
30. Psarropoulos P.N., Tsompanakis Y., Karabatsos Y., “Impact of local site conditions and dynamic soil – structure – interaction on the seismic response of embankments”, 1st Greece–Japan Workshop: Seismic Design, Observation and Retrofit of Foundations, 11-12 October 2005, Athens, Greece.
31. Psarropoulos P.N., Tsompanakis Y., Karabatsos Y., The role of dynamic interaction in the seismic response of landfills, 5<sup>th</sup> Hellenic conference of geotechnical & geoenvironmental engineering, Xanthi, Greece, 2006.
32. E. Georgopoulos, N.D. Lagaros, P.N. Psarropoulos, Y. Tsompanakis, Simulating the Seismic Response of an Embankment using Soft Computing Techniques, 6th European conference on numerical methods in geotechnical engineering - NUMGE06, 6-8 September 2006, Graz, Austria.
33. B. Zania, Y. Tsompanakis, P.N. Psarropoulos, Efficient numerical simulation of waste landfills’ seismic response, 6th European conference on numerical methods in geotechnical engineering - NUMGE06, 6-8 September 2006, Graz, Austria.
34. Y. Tsompanakis, Lagaros N.D., Fragiadakis M., Papadrakakis M., Soft computing based reliability-based optimization of real world structures under seismic loads, 13<sup>th</sup> European conference on earthquake engineering, September 2006, Geneva, Switzerland.
35. Y. Tsompanakis, V. Avrana, V. Zania, P.N. Psarropoulos, Dynamic Interaction between Retaining Walls and Retained Structures/Geostructures, 13<sup>th</sup> European conference on earthquake engineering, September 2006, Geneva, Switzerland.
36. Tsompanakis Y. and Paspatis L., Assessment and retrofitting of existing structures in the Performance-based Earthquake Engineering perspective, International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN-2007, 13-15 June 2007, Rethymno, Greece.
37. V. Zania, Y. Tsompanakis & P.N. Psarropoulos, Seismic slope stability and sliding of geostructures, International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN-2007, 13-15 June 2007, Rethymno, Greece.
38. E.C. Georgopoulos, Y. Tsompanakis, N.D. Lagaros & P.N. Psarropoulos, Probabilistic seismic analysis of embankments, International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN-2007, 13-15 June 2007, Rethymno, Greece.
39. Tsompanakis Y., Lagaros N.D., Fragkiadakis M. and Papadrakakis M., Performance-based and reliability-based optimum design of structures via soft computing, International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN-2007, 13-15 June 2007, Rethymno, Greece.
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