

1. Record Nr.	UNINA9910458246003321
Titolo	Structural Engineering, Mechanics, and Computation [[electronic resource]] : proceedings of the International Conference on Structural Engineering, Mechanics, and Computation, 2-4 April 2001, Cape Town, South Africa . Volume 1 // edited by A. Zingoni
Pubbl/distr/stampa	Amsterdam ; ; New York, : Elsevier, 2001
ISBN	1-282-88672-X 9786612886720 0-08-054192-5
Edizione	[1st ed.]
Descrizione fisica	1 online resource (863 p.)
Altri autori (Persone)	ZingoniAlphose
Disciplina	624 624.1 624.1 21
Soggetti	Structural analysis (Engineering) Structural engineering Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Front Cover; Structural Engineering, Mechanics and Computation; Copyright Page; Contents; Foreword; Preface; Local Organising Committee, International Scientific/Technical Advisory Board, Sponsoring Organisations; PART 1: STABILITY OF THIN-WALLED MEMBERS; Chapter 1. Interaction buckling design concepts for thin-walled members; Chapter 2. Degenerate Hopf bifurcation phenomena of a cantilever beam on elastic foundation; Chapter 3. Simplified computational procedure for postbuckling equilibrium branches in ideal and imperfect plates; Chapter 4. Dynamic stability of thin-walled members Chapter 5. The compound spline finite strip method for the elastic stability of U and C built-up columnsPART 2: VIBRATION AND DYNAMIC ANALYSIS; Chapter 6. Stochastic transient variational principle in vibration analysis; Chapter 7. Efficient automatic selection of tolerances in nonlinear dynamic analysis; Chapter 8. An elasto-plastic free-free

beam subjected to pulse load at tip; Chapter 9. Robust convergence for the dynamic analysis of MDOF elastoplastic systems; Chapter 10. Free vibration analysis of slantlegged skew bridge; PART 3: VIBRATION CONTROL AND SEISMIC ANALYSIS

Chapter 11. Placement and elimination of vibration controllers in buildings; Chapter 12. Viscous damping system for optimal structural seismic design; Chapter 13. Reducing vibratory screen structural loading using a vibration absorber; Chapter 14. Acceptability vibration criterion for floors with walking occupants; Chapter 15. A comparative study of a storey vs. element hysteretic nonlinear model for seismic analysis of buildings; Chapter 16. Predicting earthquake ground motion descriptions through artificial neural networks for testing the constructions

PART 4: SEISMIC DESIGN OF STEEL STRUCTURES; Chapter 17. Contributing effect of cladding panels in the seismic design of MR steel frames; Chapter 18. Ductility formulations of steel structural members; Chapter 19. Seismic analysis of MR steel frames accounting for connection topology; Chapter 20. A survey of ductile design of MR steel frames; PART 5: SEISMIC DESIGN OF CONCRETE STRUCTURES; Chapter 21. Behavior of rectangular columns with low lateral confinement ratio; Chapter 22. Behavior of full-scale lightly reinforced concrete interior beam-column joints under reversed cyclic loading; Chapter 23. Experimental and analytical assessment of simple bridge structures subjected to near-fault ground motions; Chapter 24. Seismic response of reinforced concrete frames using nonlinear macro-element behaviour; Chapter 25. Designing the concrete dual system; PART 6: ANALYSIS AND DESIGN FOR BLAST AND IMPACT; Chapter 26. Parametric study on the drop-impact behaviour of mini hi-fi audio products; Chapter 27. Deformation and tearing of uniformly blast-loaded quadrangular stiffened plates; Chapter 28. Non linear response and energy absorption of vehicle frontal protection structures; Chapter 29. Non-linear design of blast/containment reinforced gunite walls for coal mines in SA

Sommario/riassunto

Following on from the International Conference on Structural Engineering, Mechanics and Computation, held in Cape Town in April 2001, this book contains the Proceedings, in two volumes. There are over 170 papers written by Authors from around 40 countries worldwide. The contributions include 6 Keynote Papers and 12 Special Invited Papers. In line with the aims of the SEMC 2001 International Conference, and as may be seen from the List of Contents, the papers cover a wide range of topics under a variety of themes. There is a healthy balance between papers of a theoretical nature, concerned wit
