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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Computational Mechanics, Materials and Engineering Applications; Preface, Sponsors and Organizers; Table of Contents; Chapter 1: Building Materials; Using of Furfural to Modify the Ordinary Portland Cement; The Use of Stress Reduces in suddenly Changed Section of Rounded Shafts; Influence of Compressive Strength of Self-Compacting Concrete on Shear Behavior of Prestressed RC Beams; Strengthening of Concrete Beams Having Shear Zone Openings Using Orthotropic CFRP Modeling; Secondary Reinforcement in Concrete Corbel Strength Properties of Recycled Aggregate Concrete Mixed with Polypropylene FiberStudy on the Behaviors of CFRP Confining Concrete Specimens Exposed to Fire, Acid and Alkaline Environments; Mechanical

Properties of Concrete Added with Chicken Rachis as Reinforcement;
Chapter 2: Computational Mechanics and Engineering Applications;
Chongqing Bridge and its Combination Bridge; The Sustainable Indoor
Environment Research and Design of Earth Buildings for Rural People;
Concrete Bridge Durability Design and Maintenance
Structural Analysis of the First Iron Bridge in the World Using the Finite
Element Method Deflection Analysis of Sleeve Jointed Purlin Systems
with Non-Linear Rotational Stiffness; Application of Genetic
Programming for Estimation of Soil Compaction Parameters;
Experimental Study on the Effect of Froude Number on Temporal
Variation of Scour around a T Shaped Spur Dike in a 90 Degree Bend;
Comparing Steel Plate Shear Wall Behavior with Simple and Corrugated
Plates; Safety Evaluation of Pier under Impact of Bridge Girder Erection
Machine
Three Dimensional, Linear and Nonlinear Finite Element Modeling of
FRP to Concrete Pull-Off Test Comparative Analysis of Axially Loaded
Composite Columns; Study on the Effect of Sewage Concentration on
Treatment Efficiency of Artificial Wetland of Plateau Lake; Singular
Perturbation Method for Solving Non-Linear Vibration of Stay Cable (I) -
Theory Research; Singular Perturbation Method for Solving Non-Linear
Vibration of Stay Cable (II) - Engineering Application; Double Non-
Linear Mechanical Characteristics of Transmission Tower Structure
Based on Model Amendment
An Experimental Study on Material and Structural Properties of
Structural Insulated Panels (SIPs) Study and Practice on the Performance
of Soundproofing for Office Building Wall; Symplectic Solutions in
Singularity Problems of Anisotropic Beams; The Finite Element Analysis
on Mechanical Properties of the Meridians Stair Skeleton of Medical
Exhibition Center in Taizhou City; Structural Defects of Existing RC
Buildings in Eskisehir Province; Reliability Assessment of Fatigue Life of
Hangers in Large-Span Suspension Bridges
Maintenance Strategies of Main Cable for Large Span Suspension
Bridges Considering Different Scales

Sommario/riassunto

Following the great progress made in Computational Mechanics and
Materials, the 2011 International Workshop on Computational
Mechanics, Materials and Engineering Applications (CMMEA 2011)
aimed at providing a forum for the presentation and discussion of
state-of-the-art developments in Computational Mechanics and
Engineering Applications, Building Materials, Geotechnical & Soil
Engineering and Materials Science and Engineering Applications. The
emphasis was placed on basic methodologies, scientific developments
and engineering applications. Review from Book News Inc.: This
publication consists
