1. Record Nr. UNINA9910696210003321

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| Autore | Aloise Gene |
| Titolo | Combating nuclear terrorism [[electronic resource] ] : federal efforts to respond to nuclear and radiological threats and to protect key emergency response facilities could be strengthened : testimony before the Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia, Committee on Homeland Security and Governmental Affairs, U.S. Senate / / statement of Gene Aloise |
| Pubbl/distr/stampa | [Washington, D.C.] : , : U.S. Govt. Accountability Office, , [2007] |
| Descrizione fisica | 19 pages : digital, PDF file |
| Collana | Testimony ; ; GAO-08-285 T |
| Soggetti | Emergency management - United States<br>Dirty bombs<br>Nuclear warfare |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Title from title screen (viewed on Nov. 16, 2007).<br>"For release ... November 15, 2007."<br>Paper version available from: U.S. Govt. Accountability Office, 441 G St., NW, Rm. LM, Washington, D.C. 20548. |
| Nota di bibliografia | Includes bibliographical references. |
| Sommario/riassunto | This testimony discusses (1) the benefits of using DOE's aerial background radiation surveys to enhance emergency response capabilities and (2) the physical security measures in place at DOE's two key emergency response facilities and whether they are consistent with DOE guidance. |

2. Record Nr. UNINA9910784539103321

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| Autore | Ottosen Niels Saabye |
| Titolo | The mechanics of constitutive modeling [[electronic resource] /] / Niels Saabye Ottosen, Matti Ristinmaa |
| Pubbl/distr/stampa | Amsterdam ; ; London, : Elsevier, 2005 |
| ISBN | 1-281-02469-4<br>9786611024697<br>0-08-052569-5 |
| Descrizione fisica | 1 online resource (759 p.) |
| Altri autori (Persone) | RistinmaaMatti |
| Disciplina | 620.105015118 |
| Soggetti | Mechanics, Applied - Mathematical models<br>Mathematics |
| 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 (p. [705]-735) and index. |
| Nota di contenuto | Front Cover; The Mechanics of Constitutive Modeling; Copyright Page; Contents; Preface; Chapter 1. Notations and Cartesian tensors; 1.1 Matrix notation; 1.2 Cartesian coordinate system; 1.3 Index notation; 1.4 Change of coordinate system; 1.5 Cartesian tensors; 1.6 Example of tensors - Isotropic tensors; Chapter 2. Strain tensor; 2.1 Introduction; 2.2 Small strain tensor; 2.3 Rigid-body motions; 2.4 Physical significance of the strain tensor; 2.5 Change of coordinate system; 2.6 Principal strains and principal directions - Invariants; 2.7 Extremum values of the normal strain<br>2.8 Cayley-Hamilton's theorem2.9 Deviatoric strains; 2.10 Important strain invariants; 2.11 Change of coordinate system - Mohr's circle; 2.12 Special states of strain; Chapter 3. Stress tensor; 3.1 Introduction; 3.2 Change of coordinate system; 3.3 Principal stresses and principal directions - Invariants; 3.4 Stress deviator tensor; 3.5 Change of coordinate system - Mohr's circle; 3.6 Special states of stress; 3.7 Equations of motion; 3.8 Weak formulation - Principle of virtual work; Chapter 4. Hyper-elasticity; 4.1 Strain energy and hyper-elasticity<br>4.2 Complementary energy and hyper-elasticity4.3 Linear hyper-elasticity  Anisotropy; 4.4 Linear elasticity - Matrix formulation; 4.5 Change of coordinate system when using matrix format; 4.6 Anisotropy in linear hyper-elasticity; 4.7 Initial strains - Thermoelasticity; 4.8 Most |

general isotropic hyper-elasticity; 4.9 Isotropic linear elasticity; 4.10 Nonlinear isotropic Hooke formulation; 4.11 Plane strain; 4.12 Plane stress; 4.13 Incompressible linear hyper-elasticity; Chapter 5. Cauchy-elasticity; 5.1 Response function, principle of coordinate invariance and isotropic tensor function
5.2 Most general isotropic Cauchy-elasticity5.3 Proof of most general form of isotropic Cauchy-elasticity; 5.4 Nonlinear isotropic Hooke formulation; Chapter 6. Representation theorems; 6.1 Scalar functions; 6.2 Second-order tensor functions; 6.3 Thermoelasticity; 6.4 Viscoelasticity; 6.5 Orthotropic linear elasticity; 6.6 Transverse isotropic linear elasticity; Chspter 7. Hypo - elasticity; 7.1 Time-independent response; Chapter 8. Failure and initial yield criteria; 8.1 Haigh-Westergaard coordinate system - Geometrical interpretation of stress invariants
8.2 Symmetry properties of the failure or initial yield curve in the deviatoric plane8.3 von Mises criterion; 8.4 Drucker-Prager criterion; 8.5 Coulomb criterion; 8.6 Mohr's failure mode criterion; 8.7 Tresca criterion; 8.8 Experimental results for metals and steel - von Mises versusTresca; 8.9 Rankine criterion and modified Coulomb criterion; 8.10 Experimental results for concrete versus the modified Coulomb criterion; 8.11 4-parameter criterion; 8.12 Experimental results for concrete versus the 4-parameter criterion; 8.13 Anisotropic criteria; Chapter 9. Introduction to plasticity theory
9.1 Change of yield surface due to loading - Hardening rules

Sommario/riassunto

Constitutive modelling is the mathematical description of how materials respond to various loadings. This is the most intensely researched field within solid mechanics because of its complexity and the importance of accurate constitutive models for practical engineering problems. Topics covered include:Elasticity - Plasticity theory - Creep theory - The nonlinear finite element method - Solution of nonlinear equilibrium equations - Integration of elastoplastic constitutive equations - The thermodynamic framework for constitutive modelling - Thermoplasticity - Uniqueness and discont