1. Record Nr. UNINA9910709795003321

Autore	Sturman John C.
Titolo	High-voltage, high-power, solid-state remote power controllers for aerospace applications / / John H. Sturman
Pubbl/distr/stampa	Washington, D.C. : , : National Aeronautics and Space Administration, Scientific and Technical Information Branch, , March 1985
Descrizione fisica	1 online resource (31 pages) : illustrations
Collana	NASA/TP ; ; 2437
Soggetti	Power supply circuits Circuit breakers High voltages Spacecraft equipment Direct current Space vehicles - Auxiliary power supply - Automatic control - Equipment and supplies Electric circuits - Direct current Electric circuit-breakers Electric switchgear
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"March 1985." Prepared at Lewis Research Center.
Nota di bibliografia	Includes bibliographical references (page 31).

2. Record Nr. UNINA9910784900403321

Titolo	Contributions to probability and statistics [[electronic resource]] : applications and challenges : proceedings of the International Statistics Workshop, University of Canberra, 4-5 April 2005 / / Peter Brown, Shuangzhe Liu, Dharmendra Sharma
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2006
ISBN	981-4476-47-1 1-281-37305-2 9786611373054 981-277-246-4
Descrizione fisica	1 online resource (324p.)
Altri autori (Persone)	BrownPeter LiuShuangzhe SharmaDharmendra
Disciplina	519.5
Soggetti	Mathematical statistics Probabilities
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Mathematics and Statistics in Society: Two Classification Methods of Individuals for Educational Data and an Application (A Hayashi); Measurement of Skill and Skill Change (R Kelly & P E T Lewis); Applications of Statistics: Estimating the Numbers of SARS Cases in Mainland China in 2002-3 (J Gani); A Fair Tennis Scoring System for Doubles in the Presence of Sun and Wind Effects -- An Application of Probability (G Pollard); Theoretical Issues in Probability and Statistics: Perturbed Markov Chains (J J Hunter); Matrix Tricks for Linear Statistical Models: A Short Review of Our Personal Top Fourteen (J Isotalo et al.); On the Approximate Variance of a Nonlinear Function of Random Variables (H Neudecker & G Trenkler); Probabilistic Models in Economics and Finance: When Large Claims are Extremes (R Gay); Shrinkage Estimation of Gini Index (R Ghori et al.); Numerical Methods: An Approximate Maximum a Posteriori Method with Gaussian Process Priors (M Hegland); Mining Multiple Models (G J Williams); Abstracts

	Without Papers: Properties of Nearest-Neighbour Classifiers (P Hall); Bootstrapping in Clustered Populations (A H Welsh); and other papers.
Sommario/riassunto	Features a range of topics in modern statistical theory and methodology, economics and finance, ecology, education, health and sports studies, and computer and IT-data mining. Some of the contributions contain illustrations of the applied methods or photos of historic mathematicians.

3. Record Nr. UNINA9910814878703321

Autore	Carrera Erasmo
Titolo	Beam structures : classical and advanced theories / / Erasmo Carrera, Gaetano Giunta, Marco Petrolo
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2011
ISBN	9786613204554 9781283204552 128320455X 9781119951049 1119951046 9781119978565 1119978564 9781119978572 1119978572
Edizione	[1st ed.]
Descrizione fisica	1 online resource (204 p.)
Classificazione	SCI041000
Altri autori (Persone)	GiuntaGaetano PetroloMarco
Disciplina	624.1/7723
Soggetti	Girders
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 index.
Nota di contenuto	Beam Structures; Contents; About the Authors; Preface; Introduction; References; 1 Fundamental equations of continuous deformable bodies; 1.1 Displacement, strain, and stresses; 1.2 Equilibrium equations in terms of stress components and boundary conditions; 1.3 Strain

displacement relations; 1.4 Constitutive relations: Hooke's law; 1.5 Displacement approach via principle of virtual displacements; References; 2 The Euler-Bernoulli and Timoshenko theories; 2.1 The Euler-Bernoulli model; 2.1.1 Displacement field; 2.1.2 Strains; 2.1.3 Stresses and stress resultants; 2.1.4 Elastica
2.2 The Timoshenko model 2.2.1 Displacement field; 2.2.2 Strains; 2.2.3 Stresses and stress resultants; 2.2.4 Elastica; 2.3 Bending of a cantilever beam: EBBT and TBT solutions; 2.3.1 EBBT solution; 2.3.2 TBT solution; References; 3 A refined beam theory with in-plane stretching: the complete linear expansion case; 3.1 The CLEC displacement field; 3.2 The importance of linear stretching terms; 3.3 A finite element based on CLEC; Further reading; 4 EBBT, TBT, and CLEC in unified form; 4.1 Unified formulation of CLEC; 4.2 EBBT and TBT as particular cases of CLEC
4.3 Poisson locking and its correction 4.3.1 Kinematic considerations of strains; 4.3.2 Physical considerations of strains; 4.3.3 First remedy: use of higher-order kinematics; 4.3.4 Second remedy: modification of elastic coefficients; References; 5 Carrera Unified Formulation and refined beam theories; 5.1 Unified formulation; 5.2 Governing equations; 5.2.1 Strong form of the governing equations; 5.2.2 Weak form of the governing equations; References; Further reading; 6 The parabolic, cubic, quartic, and N-order beam theories; 6.1 The second-order beam model, N =2
6.2 The third-order, N = 3, and the fourth-order, N = 4, beam models
6.3 N-order beam models; Further reading; 7 CUF beam FE models: programming and implementation issue guidelines; 7.1 Preprocessing and input descriptions; 7.1.1 General FE inputs; 7.1.2 Specific CUF inputs; 7.2 FEM code; 7.2.1 Stiffness and mass matrix; 7.2.2 Stiffness and mass matrix numerical examples; 7.2.3 Constraints and reduced models; 7.2.4 Load vector; 7.3 Postprocessing; 7.3.1 Stresses and strains; References; 8 Shell capabilities of refined beam theories; 8.1 C-shaped cross-section and bending-torsional loading
8.2 Thin-walled hollow cylinder 8.2.1 Static analysis: detection of local effects due to a point load; 8.2.2 Free-vibration analysis: detection of shell-like natural modes; 8.3 Static and free-vibration analyses of an airfoil-shaped beam; 8.4 Free vibrations of a bridge-like beam; References; 9 Linearized elastic stability; 9.1 Critical buckling load classic solution; 9.2 Higher-order CUF models; 9.2.1 Governing equations, fundamental nucleus; 9.2.2 Closed form analytical solution; 9.3 Examples; References; 10 Beams made of functionally graded materials; 10.1 Functionally graded materials
10.2 Material gradation laws

Sommario/riassunto

"Present a new, unified approach to both classical and advanced beam theory that is becoming established and recognised globally as the most important contribution to the field in the last quarter of a centuryBeam Structures: Classical and Advanced Theories proposes a new original unified approach to beam theory that includes practically all classical and advanced models for beams and which has become established and recognised globally as the most important contribution to the field in the last quarter of a century. This approach overcomes the problem of classical formulae that require different formulas for tension, bending, shear and torsion; it can be applied to any beam geometries and loading conditions, reaching a high level of accuracy, and can tackle problems that in most cases are solved by employing plate/shell and 3D formulations.Beam Structures: Classical and Advanced Theories presents both the classical and advanced beam theories in a form that is very suitable for computer implementation It is accompanied by dedicated software MUL2 that is used to obtain the

numerical solutions in the book, allowing the reader to reproduce the examples given in the book as well as to solve other problems of their own. The authors also include a number of static and dynamic problems and solutions that serve to further illustrate the advanced theories presented"--