

Iutam Symposium On Multi-functional Material Structures And Systems

[DOWNLOAD HERE](#)

Preface; Contributing Authors; Section I: New Materials A: Functionally Graded Materials & Shape Memory Alloys: Functionally Graded Shells with Distributed Piezo-Electric Sensors and Actuators for Active Vibration Control, by S.Narayanan and V.Balmurugan; A Numerical Investigation of the Dynamic Behaviour of Functionally Graded Foams, by Stephen Kiernan, Liang Cui and Michael. D. Gilchrist; Nonlinear Stability of Functionally Graded Plates subjected to Aero-Thermal- Mechanical Loads, by M.Ganapathi and T. Prakash and M. K. Singha; A Generalized Three Species Model for Shape Memory Alloys, by Ashish Khandelwal and Vidyashankar R. Buravalla; Use of SMA constitutive model in Finite Element Analysis of wire based actuators, by Prakash D Mangalgiri and Amol G Thakare; Time Dependent Deformations in Concrete A Multi-scale Approach, by Ananth Ramaswamy, Reddy and Harinadh; Higher Order Theories of Functionally graded beams and plates, by Tarun Kant, S.M.Shiyekar and C.Venkata Subbaiah; Section II: New Materials B: Nano Materials and Composites: Strain Sensor From a Polymer/Carbon Nano-tube/Nano-composites, by Ning Hu, Yoshifumi Karube and Hisao Fukunaga; A Hysteresis Compensator Based on A Modified Dynamic Preisach Model for Conductive Polymer Nanocomposites, by Mohammed R. Sunny and Rakesh K. Kapania; Multi-axial Behavior of Ferroelectrics with Two Types of Micro-Macro Mechanical Model, by K. Jayabal, A. Arockiarajan, A. Menzel, and S.M. Sivakumar; Active Single Walled Carbon Nanotube Polymer Composites, by Sujay Deshmukh and Zoubeida Ounaies; Modeling of fiber Formation and Oxygen permeability in Micro-/Nano-/Fibrillar Polymer Polymer Composites, by D.Bhattacharyya and R.J.Shields; Section III: Multifunctional Material Systems: Multi-scale Computational Analysis of Bio-mechanical Systems, by V. U. Unnikrishnan, G. U. Unnikrishnan and J. N. Reddy; Effect of magnetic-field on stress-strain behavior of magneto-sensitive elastomers, by Prashant Kumar Srivastava and Kartik Venkatraman; Effect of Functionalization on the Morphology, Cure Kinetics and Mechanical Behavior of Thermo-Setting Polymers, by Mahesh V. Hosur, Merlin Theodore and Shaik Jeelani; A Study on Polarization-Electric Field (P E) Nonlinearity in Smart Composite Structures, by V. L. Sateesh, C. S. Upadhyay and C.

Venkatesan; Multi-functional Components in Sodium Cooled Fast Reactor:Design and Development, by Baldev Raj and P.Chellapandi; Section IV: Smart Sensors, Structural Health Monitoring: From Structural Mechanics to Inspection Processes Getting Structural Health Monitoring into Application for Metallic Structures, by C. Boller, M. R. Mofakhami; Shaped Modal Sensors for Uncertain Dynamical Systems, by Michael I. Friswell and Sondipon Adhikari; Sensor Failure Detection using Interaction Matrix Formulation, by Zhiling Li, Satish Nagarajaiah and B. H. Koh; Resonant MEMS Sensors, by Rudra Pratap; Section V: Applications: Compressive Behavior of Fiber Reinforced Honeycomb Cores, by S.Rao, S.Banerjee, K.Jayaraman and D.Bhattacharyya; Strain-Space Solutionfor the Elasto-Plastic Analysis of Adhesively Bonded Single Lap-Joint, by B.M.Diwari and P.C.Pandey; Design and Development of a Smart Composite T-tail for Transport Aircraft, by Raja Samikkannu; Manufacturing of Multi-Functional composites, by Prasad Potluri and Robert Young; Section VI: Computational Methods- I: Iso-Spectral Rotating and Non-Rotating Beams, by Ananth Kumar and Ranjan Ganguli;Innovative energy absorption and load limiting via extension-torsion coupled stitch ripping composite tubes with crush foam filling, by C. Tiwari, Edward C. Smith, and Charles E. Bakis; Pseudo-Dynamical Systems Approach to Inverse Problems, by B. Banerjee and D. Roy; Force Reconstruction for Wave Based Damage Detection, by Agam Sharan and Mira Mitra; On Numerical Integration of Discontinuous Approximations in Partition Of Unity Finite Elements, by Sundararajan Natarajan and St ephane P. A. Bordas and D. Roy Mahapatra; Section VII: EAN/ISBN : 9789048137718 Publisher(s): Springer Netherlands, Springer Science & Business Media Format: ePub/PDF Author(s): Dattaguru, B. - Gopalakrishnan, Srinivasan - Aatre, V. Kasudev

[DOWNLOAD HERE](#)

Similar manuals: