

Table of Contents

Preface

Detectors in Barrier Structures of Metal-Lamellar Semiconductors M. Mehrabova	1
The Influence of Some Technological Parameters on the Fracture Toughness of Ceramic Materials V. Goanta and M. Mares	11
Manufacturing of Carbonaceous Materials Based on Olive Stones Biomass for Electrochemical Applications A. Pikasi, P. Georgiou and J. Simitzis	23
Physicochemical and Electro-Rheological Characterization of Kaolinite / CMS / Silicone Oil Fluid T. Reiss, S. Laribi, J. Fleureau and J.F. Tassin	33
The Effect of the Cure Temperature on the Thermomechanical Characteristics of an Adhesive M. Ali, B. Lorrain, M. Karama and B. PUEL	43
Study of DGEBA and Novolac Adhesives Hydrothermal Ageing for a Ceramic/ Steel Substrates Bonding Assembly C. Gaußens, V. Nassiet and B. Hassoune-Rhabbour	51
Influence of Strain Rate on the Yielding Behavior and on the Self Heating of Thermoplastic Polymers Loaded under Tension I. Hadriche, E. Ghorbel, N. Masmoudi and F. El Halouani	63
Dynamic Response of Symmetric and Asymmetric E-Glass / Epoxy Laminates at High Strain Rates M. Tarfaoui, S. Choukri and A. Neme	73
Influence of Process and Material Parameters on Impact Response in Composite Structure: Methodology Using Design of Experiments C. Garnier, S. Mistou and O. Pantalé	83
Approximate Solution of the Structural Problems Using Probabilistic Transformation S. Ouhimmou, A. El Hami, R. Ellaia and M. Tkouat	91
Structural Shape Optimization Using an Adaptive Simulated Annealing W. El Alem, A. El Hami and R. Ellaia	101
Graft Interpenetrating Continuous Epoxy-Polysiloxane Polymeric Network T. Djilali, V. Nassiet and B. Hassoune-Rhabbour	111
Experimental and Numerical Modelling of LRI Process R. Brault, M. Niquet and S. Mistou	121
BEM Simulation of 3D Updated Resin Front for LCM Processes R. Gantois, A. Cantarel, J.N. Félices, N. Pirc and F. Schmidt	131
FEA of Dynamic Behavior of Top Hat Bonded Stiffened Composite Panel G. Mohamad, M. Tarfaoui and V. Bertram	137
Experimental Characterization of Behavior Laws for Titanium Alloys: Application to Ti5553 V. Wagner, M. Baili, G. Dessein and D. Lallement	147
Effect of Ductile Damage Evolution in Sheet Metal Forming: Experimental and Numerical Investigations F. Abbassi, O. Pantalé, S. Mistou, A. Zghal and R. Rakotomalala	157