

TABLE OF CONTENTS

W. CECOT, M. OLEKSY	1-2
MULTISCALE FEM COUPLED WITH THE DISCONTINUOUS PETROV GALERKIN METHODOLOGY	
R. DERR, S. DIEBELS	3-4
CHARACTERIZATION OF AUXETIC METAMATERIALS FOR MODELING AND SIMULATION OF NEW LIGHTWEIGHT STRUCTURES	
F. DUVIGNEAU, S. DUCZEK	5-6
COMPARISON OF DIFFERENT HIGH-ORDER FINITE ELEMENT METHODS FOR INTERIOR ACOUSTICS	
A.E. GIANNAKOPOULOS, TH. ZISIS	7-8
STEADY-STATE ANTI-PLANE CRACKS IN FLEXOELECTRIC MATERIALS	
A.C. HANSEN-DÖRR, F. G. DAMMAß, M. KÄSTNER	9-11
PHASE-FIELD MODELING OF CRACK BRANCHING AND DEFLECTION IN HETEROGENEOUS MEDIA	
S. HARTMANN, R.R. GILBERT, A. KHEIRIMARGHZAR	13-14
TASKS FOR VALIDATING COMPOSITE SIMULATIONS	
T. JANKOWIAK, A. RUSINEK, G.Z. VOYIADJIS	15-16
DESIGN AND MODELING OF THE SPLIT HOPKINSON PRESSURE BARS TO CHARACTERIZE BRITTLE MATERIALS BEHAVIOR AT HIGH STRAIN RATES	
T. KAISER, A. MENZEL	17-18
DISLOCATION DENSITY TENSORS IN GRADIENT CRYSTAL PLASTICITY	
R. KIENZLER, P. SCHNEIDER	19-21
AN A PRIORI ESTIMATE FOR CONSISTENT PLATE THEORIES	
P. KOUTSIANITIS, G.K. TAIRIDIS, G.E. STAVROULAKIS	23-25
INVESTIGATION OF STOP-BANDS IN PERIODIC MICROSTRUCTURES	
Z.L. KOWALEWSKI, D. KUKLA, A. USTRZYCKA	27-28
EVALUATION OF FATIGUE DAMAGE DEVELOPMENT SUPPORTED BY NONDESTRUCTIVE TECHNIQUE	
M. KUCZMA, M. DEMBY	29-30
HIGH PERFORMANCE CONCRETE: MODELLING, SIMULATION AND TESTING	

W. KUŚ, A. MROZEK, T. BURCZYŃSKI OPTIMIZATION OF 2D ATOMIC STRUCTURES	31-32
R. LANDGRAF, E. OELSCH, J. IHLEMANN ON A FRAMEWORK FOR MODELING AND SIMULATION OF ADDITIVE MANUFACTURING PROCESSES	33-34
R. MÜLLER, C. KUHN, C. SCHREIBER PHASE FIELD MODELING OF FATIGUE FRACTURE	35-36
K. NAUMENKO, B. BAGHERI, H. ALTENBACH TRACTION-SEPARATION-LAWS FOR SELF-ADHESIVE POLYMERIC FILMS IDENTIFIED FROM T-PEEL TESTS	37-38
M. OPALA, J. KORZEB, S. KOZIAK, R. MELNIK SIMULATION ANALYSIS OF MECHANICAL INTERACTION OF THE FRICTION LINER IN A FRIGHT CAR SUSPENSION CENTRE BOWL	39-41
U. RÖMER, H.G. MATTHIES A BOOTSTRAP METHOD FOR UNCERTAINTY PROPAGATION IN DATA-DRIVEN COMPUTING	43-44
J. SCHÖNNAGEL, I. MARZEC, J. BOBIŃSKI, J. TEJCHMAN PERFORMANCE OF DIFFERENT CONSTITUTIVE LAWS IN SIMULATING REINFORCED CONCRETE CORNERS UNDER OPERNING BENDING MOMENTS	45-46
K. SZAJEK, W. SUMELKA, T. BLASZCZYK, K. BEKUS SELECTED COMPUTATIONAL SCHEMES FOR SPACE-FRACTIONAL MECHANICS	47-48
S. UEBING, L. SCHEUNEMANN, D. BRANDS, J. SCHRÖDER ON THE ANALYSIS OF RESIDUAL STRESSES ON DIFFERENT SCALES DURING COOLING OF HOT FORMING PARTS FOR THERMO-ELASTO-PLASTIC MATERIAL BEHAVIOR	49-50
Z. WIĘCKOWSKI MATERIAL POINT METHOD IN GRANULAR AND SOLID-LIQUID MIXTURE FLOWS	51-52
A. WOSATKO CONTINUUM DAMAGE MODEL WITH EVOLVING GRADIENT INFLUENCE	53-54
C. ZIESE, S. NITZSCHKE, E. WOSCHKE RUN UP SIMULATION OF A FULL-FLOATING RING SUPPORTED JEFFCOTT-ROTOR CONSIDERING TWO-PHASE FLOW CAVITATION	55-57