

**JOURNAL OF MECHANICS***Formerly The Chinese Journal of Mechanics, Series A***PAPERS**

1. A Parametric Study for Four Node Bilinear EAS Shell Elements ..... Cengiz Polat 431
2. Structural Responses of Surfac-Mounted Piezoelectric Curved Beams ..... R.-T. Wang 439
3. Cyclic Stress-Strain Behavior of BGA (Sn/3.5Ag/0.75Cu) Solder Joint Under Cyclically Oblique Displacement Tests and Endochronic Viscoplastic Predictions ..... C. F. Lee, T. K. Lee, T. T. Lin, H. Y. Lin 453
4. Numerical Study of Mach Reflection and Detonation by Using a Second-Order CE/SE Method ..... Deliang Zhang, S.-M. Liang 465
5. The First Damped Frequency with Maximum Sound Pressure of a Miniature Loudspeaker for Cellular Phones ..... Y. C. Shiah, Jin H. Huang, Y.-L. Xue 473
6. On the Efficiency of Analyzing 3D Anisotropic, Transversely Isotropic, and Isotropic Bodies in BEM ..... Y. C. Shiah, W. X. Sun 483
7. Fabrication and Evaluation of a MEMS Piezoelectric Bimorph Generator for Vibration Energy Harvesting ..... B. S. Lee, S. C. Lin, W. J. Wu 493
8. Effect of Impermeable Boundaries on the Propagation of Rayleigh Waves in an Unsaturated Poroelastic Half-Space ..... Y.-S. Chen, W.-C. Lo, J.-M. Leu, Alexander H.-D. Cheng 501
9. Structural Synthesis by Method of Centers in Force Formulation Under Size and Stress Constraints ..... B. Farshi, A. Alinia-ziazi 513
10. Magnetohydrodynamic Poiseuille-Couette Flow and Heat Transfer in an Inclined Channel ..... J. C. Umavathi, I-C. Liu, J. Prathap Kumar 525
11. Mathematical Modeling of Large-Amplitude Dynamic-Plastic Behavior of Circular Plates Subjected to Impulsive Loads ..... Asghar Zajkani, Hamidreza Sefidi Shirkoohi, Abolfazl Darvizeh, Mansour Darvizeh, Hashem Ghareh Babaei 533
12. Using Distributed Brillouin Fiber Sensor to Detect the Strain and Cracks of Steel Structures ..... C.-H. Chen, Y.-L. Shen, C.-S. Shin 547
13. The Effect of Non-Constant Young's Modulus in Modelling of Tension and Compression of Superelastic Ni-Ti Shape Memory Alloys ..... Andrej Puksic, Janez Kunavar, Miha Brojan, Franc Kosel 553

**TECHNICAL NOTE**

14. Modeling of Solder Fatigue Failure Due to Ductile Damage ..... K. Aluru, F.-L. Wen, Y.-L. Shen N23